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by Tao Zhang, Yong Ge and Ruxian Zhao

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# CREATING THE CHINESE DREAM

A practitioner's guide to impact investing in China's green SMEs

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## Introduction

This report reflects a combination of on-the-ground experiences of China Impact Fund (CIF) and New Ventures China (NVC), and points of view from emerging impact investing practitioners active in mainland China. It aims to consider the important but often overlooked role of impact investing in the potential transformation of China's society over the coming decades, especially on the environmental front.

After over 30 years of rapid economic development, China is facing an economic slow-down that not only reflects a global economic recession, but also very real limits to the nation's development model in recent years. China is now at the crossroads where innovative but realistic approaches will need to be introduced and tested to overcome the host of challenges it is confronted with that may endanger continued stable growth. In his recent article *China Needs Its Own Dream*,<sup>1</sup> New York Times columnist Thomas Friedman pointed out that China would need to manage 'all the downsides' of its economic growth, namely 'from widening income gaps to massive rural-urban migration to choking pollution and environmental destruction.' Further, he argues that 'the only way to square all that is with a new Chinese dream that marries people's expectations of prosperity with a more sustainable China.' We wholeheartedly agree, and also firmly believe that impact investing is a key approach to promote in financing this dream.

Despite the fact that China is now the world's second largest economy, it is still a developing country and will remain so for a long time to come. China ranks 90th worldwide in terms of per capita GDP,<sup>2</sup> barely half the world's average, and China still has a population of at least 150 million people below the UN poverty line of USD 1 a day per person.<sup>3</sup> Coupled with the country's genuine need to introduce innovative development concepts and mechanisms, these trends define a space where international impact investors can play a meaningful role in helping to create the Chinese Dream.

### Our Impact Vision for China's Environmental SMEs

In 2020, new, innovative small- and medium-sized businesses are helping China solve critical environmental problems, creating jobs, and providing investors with solid financial returns. Environmentally-focused entrepreneurs are receiving needed investment and key assistance in transforming their ideas into successful, growing companies that are helping reduce pollution, increase clean energy, protect biodiversity and improve the quality of life. These successes are the products of an impact ecosystem, a systematic effort to provide China's green entrepreneurs with the business savvy and access to capital and markets they need to make a profit – and a difference.

This ecosystem must see a higher volume and better quality of environmental business being launched and scaled than is seen today, and make the appropriate forms of impact capital available at each stage of venture development.

1. The article was published on October 3, 2012 as part of Thomas Friedman's New York Times op-ed column series

2. International Monetary Fund, 2011

3. China remains a developing country despite GDP growth, February 15, 2011, Xinhua News Agency

Over the course of nine years' work in supporting environmental entrepreneurs in China, we have increasingly felt it important to provide a structured view of China's impact investing landscape, including the need to enhance the strategic role of impact investing, and how to conduct impact investing in alignment with China's unique development pattern. Compared to the vigorous activities occurring to build impact investing in other developing countries, the Chinese market remains a relative 'white elephant' in such discourses. Yet, the global importance and inter-linkages of the Chinese economy, and its growing influence in other emerging markets, is increasingly apparent. This suggests that impact investors who are concerned with the international emergence of this asset class cannot afford to remain disengaged from its development in this country.

To inform our insights, the CIF/NVC team has distilled high-level lessons from our extensive experience in working with environmental small and medium enterprises (SMEs), and examined relevant government policies. We have selectively interviewed industry practitioners and academics to incorporate their perspectives on impact investing in China into this document.

This report is primarily concerned with the environmental impact of financially sustainable impact investing, with a minor focus on the social aspects of this emerging investment asset class. However, many of the concepts, mechanisms and recommendations discussed in this report are equally applicable to both.

Our focus is on impact investing in China through equity investments, given that this seems to be the only viable financial return-generating investment instrument that impact investors outside China can realistically pursue in the short term, primarily due to the legal structures that are available. Also, equity investment is generally regarded as an appropriate form of capital for early-stage SMEs. Other investment instruments that are common to impact investing in emerging markets, i.e. grant-making, debt, mezzanine finance, or microfinance, are therefore not covered in this report.



Leading Chinese solar heating company

*‘ For me the holy grail is that in the future, there will not be an “impact investing” asset class, as every investment will be assessed based on the total value it generates - financial, social and environmental. ’*

*Annie Chen, Chair of the RS Group*

## Definitions of impact investing and SMEs

A common understanding of ‘impact investing’ remains unsettled across several communities engaged with this emerging asset class. For the purposes of this report, we adopt the Global Impact Investing Network’s definition:

*‘Impact investments are investments made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return. Impact investments can be made in both emerging and developed markets, and target a range of returns from below market to market rate, depending upon the circumstances.’<sup>4</sup>*

This definition likely excludes the traditional philanthropic model of making 100% loss-making grants, usually to non-profit organizations. This being said, we recognize that there is a role for philanthropy in the scaling of the impact investing market, and that loss-making grants conducted in the style of venture philanthropy can share some characteristics with impact investing.\* However, we have left exploration of these topics beyond the scope of the current report.

We acknowledge that impact investors can also take many forms – it is a term that broadly refers to a community of individual direct investors, individual investors in investment vehicles, commercial-style fund teams, non-profit organizations that preside over funds, or other investment intermediaries. In some cases, it can also include government agencies where these organizations are direct investors or contributors to funds channeled through other intermediaries. In this report, the term ‘impact investor’ is used interchangeably to refer to any of these specific roles in impact investing.

SMEs are defined differently across various markets. In this report and in the work that CIF/NVC pursues with environmental SMEs in China, the broad definition adopted is that of China’s Ministry of Industry and Information Technology (MIIT), which sets out specific thresholds for defining SMEs in

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4. GIIN, <http://www.thegiin.org/cgi-bin/iowa/resources/about/index.html>

\* See, for example, Acumen Fund, *From Blueprint to Scale: The Case for Philanthropy in Impact Investing* (2012)

various industries, based on a combination of employees, revenue and total assets thresholds (see Table 1). These definitions are widely implemented in the Chinese economy and are also used in applying other regulations related to SME development.

**Table 1: Definition of SMEs (only industries relevant to environmental SMEs)**

Industry	Size	Employees	Revenue	Total Assets
General industry (including mining, manufacturing, electricity, heat, gas and water production and supply industry)	Small	20 – 300	RMB 3m – 20m (USD 480k-3m)	n/a
	Medium	300 – 1,000	RMB 20m – 400m (USD 3m-64m)	n/a
Agriculture, forestry, animal husbandry, fisheries	Small	n/a	RMB 50k – 500k (USD 8k-80K)	n/a
	Medium	n/a	RMB 500K – 200m (USD 80k-32m)	n/a
Not otherwise classified industries (including scientific research & technical services, water conservancy, environment & public facilities management.)	Small	10 – 100	n/a	n/a
	Medium	100 – 300	n/a	n/a

Source: Ministry of Industry and Information Technology, 'About the issuance of the notice of the provisions of the SME program standards', 2011: No. 300, available at [http://www.gov.cn/zwgg/2011-07/04/content\\_1898747.htm](http://www.gov.cn/zwgg/2011-07/04/content_1898747.htm)

# OVERVIEW



- 1 Why China needs impact investing** **7**

*We examine macro trends and challenges in China's green development that support the case for impact investing. We explain why 'missing middle' companies in the environmental sector don't have access to finance from conventional venture investors and why they need assistance from impact investors.*
- 2 Current status of impact investing in China** **24**

*We briefly review the current state of impact investing in China, estimate the potential size of the market of opportunities to invest in environmental SMEs, and the risks associated with overhyping the concept of impact investing in the China context.*
- 3 Environmental impact investment opportunities** **29**

*We take a closer look at industry trends, SME challenges and opportunities, impact investor priorities, and case studies for four sub-sectors of the environmental industry: energy efficiency, sustainable energy, sustainable agriculture, and pollution prevention and waste management. The value proposition of environmental companies in China for 'base of the pyramid' (BoP) population is also briefly discussed.*
- 4 Ecosystem for impact investing** **46**

*We outline the services needed by China's environmental SMEs and discuss the importance of constructing an ecosystem for undertaking impact investing more effectively by engaging multiple interested stakeholders. Other enabling infrastructure is considered, specifically, the need for impact metrics, facilitative policies, and legal frameworks.*
- 5 Recommendations for successful impact investing in China** **61**

*We set out eleven practical, action-oriented recommendations for investors who are interested in impact investing in China. These recommendations address current market needs for more efficient intermediation, better enabling infrastructure and stronger absorptive capacity for capital.*





# 1

## Creating the Chinese Dream

# Why China needs impact investing

We examine macro trends and challenges in China's green development that support the case for impact investing. We explain why 'missing middle' companies in the environmental sector don't have access to finance from conventional venture investors and why they need assistance from impact investors.

### Takeaways:

1. Private sector companies, including SMEs, usually have more agile business models, meaning they are better positioned than state-owned enterprises to undertake the kind of innovation that will de-couple GDP growth from environmental degradation, and promote inclusive development.
2. Current government law and policy on the green economy, including the 12th Five Year Plan, is creating a broader enabling environment in which environmental SMEs can thrive, improving their attractiveness as an investment target.
3. Chinese environmental SMEs are in need of improved access to capital, as they often fall into the 'missing middle' of enterprises that is underserved by commercial investors.
4. Serving the 'missing middle' will strengthen the overall pipeline of smaller deals for venture, growth and later-stage commercial funds, addressing imbalances in China's financial market.
5. Broader reforms are introducing greater liquidity into financial markets, and improving the attractiveness of SMEs as an investment target.

This Part outlines a number of economic, political and industry trends that are converging to make investing in environmental SMEs in China an activity of interest to impact investors. There are several potential motives for impact investing in China – from values-based reasons to strategic commercial reasons – which cannot be comprehensively covered here. In this section, we highlight trends that reflect a cross-section of issues relevant to the environmental SMEs that CIF/NVC works with.

## Environmental and social trends

### GDP growth and environmental degradation

The problems that severe environmental degradation is causing for urbanization patterns and public health have made the environmental limits of rapid economic growth an urgent priority to China's central government, state-owned enterprises, and privately-owned businesses. Private sector companies, which tend to have more agile and innovative business models, are best able to position themselves at the forefront of green innovation to convert China's growth pattern into a sustainable one.

Data that has been gathered by the Institute of Environmental Planning of the Ministry of Environmental Protection (MEP) since 2004, based on a method adapted from European Union countries, has attempted

to record and quantify the value of environmental damage to China's economy. That is, there are environmental and ecological 'subsidies' that underpin GDP growth which take the form of economic behavior that relies on 'cheaper', more polluting development choices, and the deferral of costs of repairing related environmental damage.

From results published in 2004, 2008 and 2009, a general trend can be extrapolated of a consistent increase in the absolute environmental costs of GDP growth over time (Figure 1). As the publication of these statistics is a process mediated by a number of central government agencies, local governments and academics, we regard this data as likely to be relatively conservative.

Figure 1: Statistics report on China's environmental economics (reported and estimated)

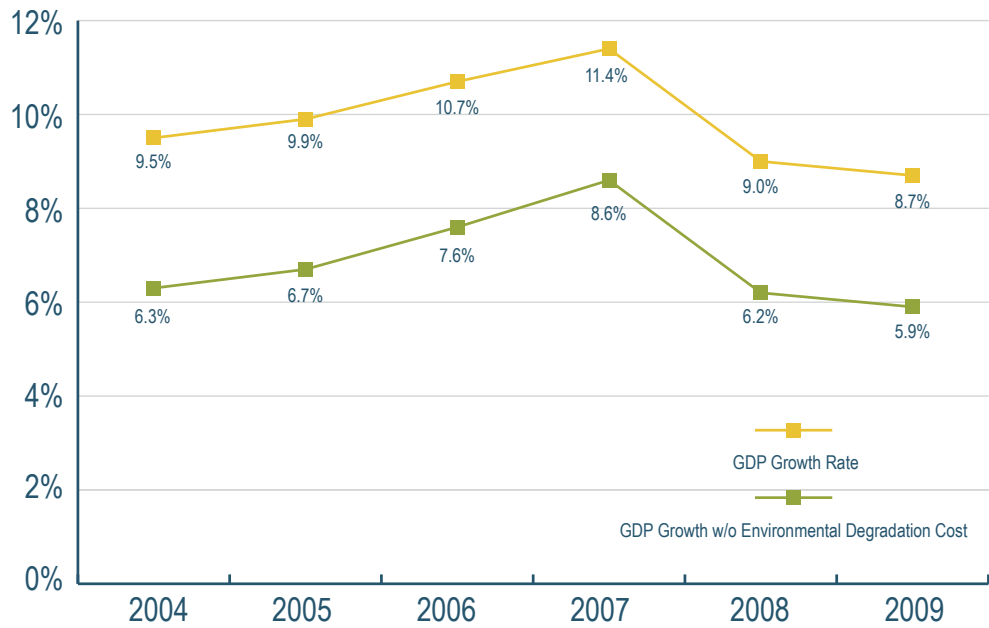
Year	2004	2005	2006	2007	2008	2009
Environmental Degradation Cost	511.80	592.67	666.54	733.41	894.76	970.11
% of GDP	3.2%	3.2%	3.1%	2.8%	2.9%	2.9%
Ecological Degradation Cost	na	na	na	na	379.82	421.51
% of GDP	0	0	0	0	1.2%	1.2%
Environmental Treatment Cost	287.40	na	na	na	504.31	na
GDP Increase	1.8%	na	na	na	1.6%	na
% of GDP	9.5%	9.9%	10.7%	11.4%	9.0%	8.7%

The environmental degradation data of 2005 and 2006 are estimated based on the method of linearization between 2004 and 2007.  
Unit: One billion RMB

Source: China Impact Fund & New Ventures China analysis, based on data released by the Institute of Environmental Planning of the MEP

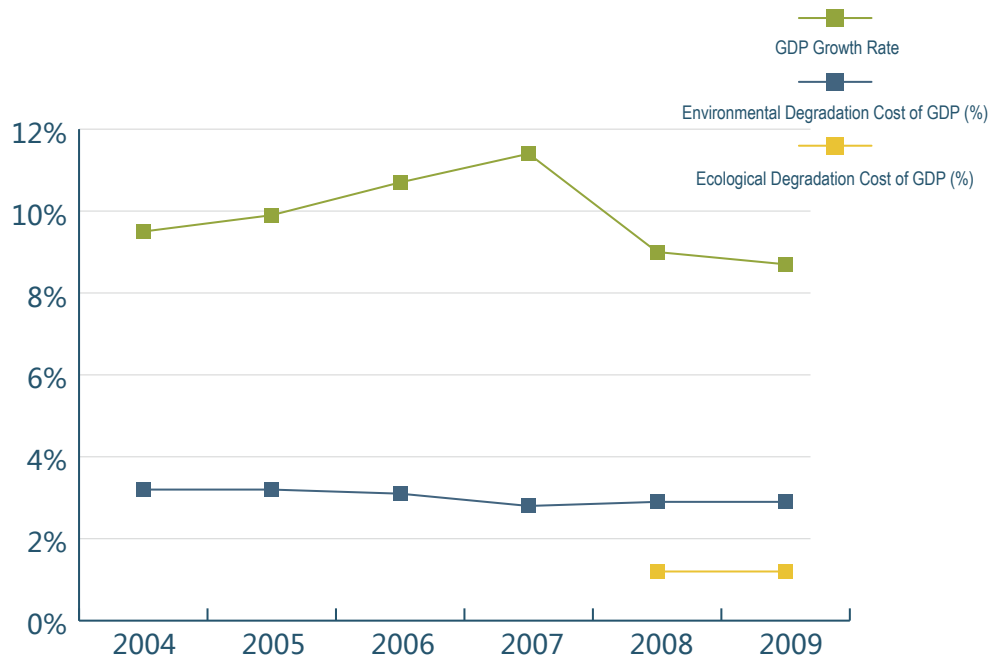
Figure 2 illustrates the substantial environmental subsidy implicit in Chinese GDP growth, and Figure 3 aggregates the trend lines onto one chart to illustrate that the environmental degradation costs (and ecological degradation costs) have remained constant at about 3% of China's GDP despite fluctuations in its growth over the 2004-09 period. Therefore, economic growth in China remains addicted to an environmental and ecological subsidy, and recent years have not witnessed efficiency gains to decouple GDP growth from environmental degradation.

Figure 2: The environmental subsidy of China's GDP growth



Source: China Impact Fund & New Ventures China analysis, based on data released by the Institute of Environmental Planning of the MEP

Figure 3: Rate of GDP growth compared to trend of proportional environmental costs



Source: China Impact Fund & New Ventures China analysis, based on data released by the Institute of Environmental Planning of the MEP

Decoupling growth from environmental damage will not be simple. To various extents, government officials at all levels are facing a dilemma to maintain economic growth while also avoiding further environmental degradation. Both concerns are now directly linked to questions of social stability, as evident in the instances of recent local unrest linked with environmental damage. For example, the Shifang (Sichuan Province) incident in July 2012 and Ningbo (Zhejiang Province) incident in October of the same year both saw industrial projects shut down due to environmental concerns rising up from the local community.

China's economy is sorely in need of feasible, sustainable and innovative business models that offer an alternative form of economic development. From this perspective, we strongly believe that the need – and opportunities – for green SMEs to develop are immense. Dalberg Global Development Advisors argues that SME growth has an indirect impact on GDP growth through fostering innovation and macro-economic resilience, based on the logic that smaller firms tend to be more innovative and diversify the structure of a domestic economy.<sup>5</sup> This reflects our experience in China: SMEs are a critical source of innovative ideas for the Chinese economy, and are at the cutting edge of developing profitable business models that commercialize green energy, build safer food supply chains, and reduce energy usage, among many other benefits.

*China's economy is sorely in need of feasible, sustainable and innovative business models that offer an alternative form of economic development.*

## GDP growth and social equality

The growth of SMEs in China will have a positive counter-impact on growing income disparity and the concurrent tensions this is causing for social cohesion. This is aligned with the Chinese government's policy of promoting 'inclusive growth' such that economic growth does not sacrifice social equality.<sup>6</sup>

Rapid economic development and urbanization over the last decade has delivered impressive results for reducing absolute poverty in China. The rural population living in poverty was reduced from 94 million (10.2% of the total rural population) in 2001 to 27 million (2.8%) in 2010, and the average annual income in the poorest rural counties increased from RMB 1,276 to

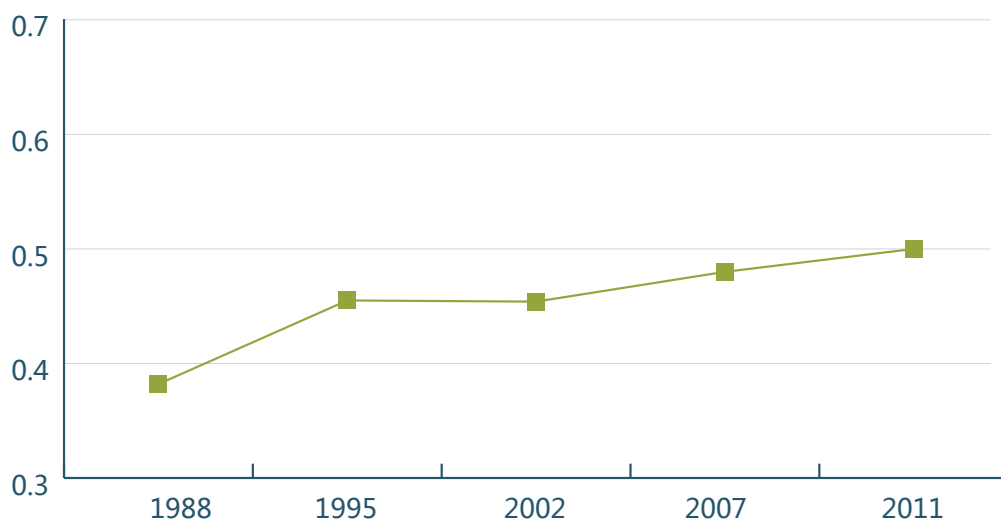
5. Dalberg Global Development Advisors, Report on Support to SMEs in Developing Countries through Financial Intermediaries (November 2011), pp9, 13

6. Hu Jintao, the President of China, 'To deepen the communication to realize the inclusive growth', Opening speech at an APEC ministerial meeting, Beijing, September 2010. This concept was later written into the 12 FYP as the underlying theme

RMB 3,273 over that period (~USD 203 to 520, an annualized increase of about 11%). Thus, China became the first country to attain the United Nations' Millennium Development Goal to 'halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day.' Based on this criterion, over 500 million Chinese have moved out of absolute poverty in the last 30 years.

However, an analysis of trends in income disparity over a similar period tells a different story. Results from surveys conducted by the Chinese Academy of Social Sciences over the course of 20 years show that income disparity has been growing in China, as represented by the Gini coefficient, an indicator of a population's income or wealth distribution (see Figure 4). A Gini coefficient of 0.4 is considered to be the 'critical' turning point above which 'high risk' inequality exists in a society. Very few countries have a Gini coefficient above 0.49,<sup>7</sup> whereas China has been in a high risk zone for over 15 years.

Figure 4: Gini coefficient trend line for China



Source: Cui, Yuan and Liu, Shuyu, 'China Gini Coefficient, not Reported in the Recent 10 Years', *The Time Weekly*, 5 January 2012

There is not a large body of literature that examines the impact of SMEs on overall economic development and social stability. However, some broad benefits can be identified. First of all, the SME sector is a primary contributor

7. In a 2010 CCTV interview, a senior expert working for a Chinese central government think tank stated that at the end of 2006, China's Gini coefficient was about 0.49. This expert estimated that in 2010 there were about 10 countries with a Gini coefficient higher than 0.49. In 2009, the US Gini coefficient was 0.468, 0.23 for Sweden, and 0.70 for Namibia

to employment – the OECD reports that 60% of private sector employment is in the SME sector,<sup>8</sup> a figure that is likely to be much higher in China in the foreseeable future because private sector companies are relatively younger than large state-owned enterprises dominating the economy. An MIIT government official that CIF/NVC has worked with has verbally confirmed that SMEs account for at least 50% of China’s employment, and MIIT data indicates that SMEs account for over 80% of China’s urban employment.<sup>9</sup> SME growth also has a direct impact on GDP through increasing a nation’s available taxation base – according to further data from MIIT, SMEs contribute over 60% of China’s GDP and 50% of government tax revenue.

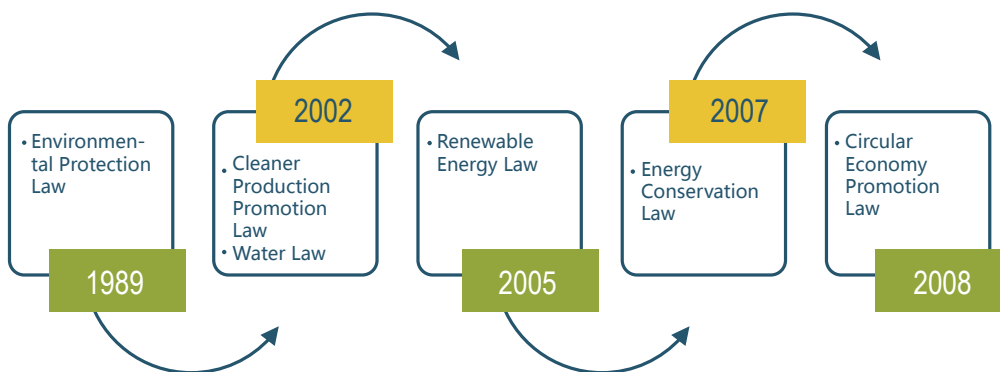
## Policy trends on the Green Economy

China’s green economy, similar to that of many other countries, is a largely policy-driven market. Since 1989, six national laws have been passed by the National People’s Congress, China’s top legislative body, to form the basis of a green economy (Figure 5). Such laws are implemented through further policies and regulations issued by the central and local governments. The 2002 Cleaner Production Promotion Law was the first high-level document to conceptualize China’s economic transformation in light of its environmental impact. Since then, a large number of environmental NGOs, academic and research organizations focused on investment in and research into green technologies, and other organizations seeking opportunities in green markets, have emerged.

*‘China’s new development model calls for more SMEs across the board, because they tend to bring more innovation on the table and help increase the vitality of China’s economy.’*

*Yong Huang, Professor of Law and Anti-Monopoly Expert, University of International Business and Economics*

Figure 5: Six fundamental laws on the Green Economy, 1989 to 2008



Source: China Impact Fund & New Ventures China analysis

The table below highlights the laws that are most relevant to the operations and strategy of environmental SMEs in China. Some policies have ‘demand push’ intent, i.e. to create market demand for certain environmental

8. Dalberg Global Development Advisors, Report on Support to SMEs in Developing Countries through Financial Intermediaries (November 2011), p7  
 9. MIIT, The Growth Plan for SMEs in the 12th Five Year Plan, <http://www.miit.gov.cn/n11293472/n11293832/n11293907/n11368223/14178245.html>

technologies, products and services. For instance, the Environmental Protection Law promotes ‘demand push’ forces as it restricts enterprise behavior and imposes costs where the law is not followed. Others have ‘demand pull’ intent, i.e. to encourage and guide the development of new markets and new industries. Thus, the Circular Economy<sup>10</sup> Law provides benefits and incentives if the law is fulfilled.

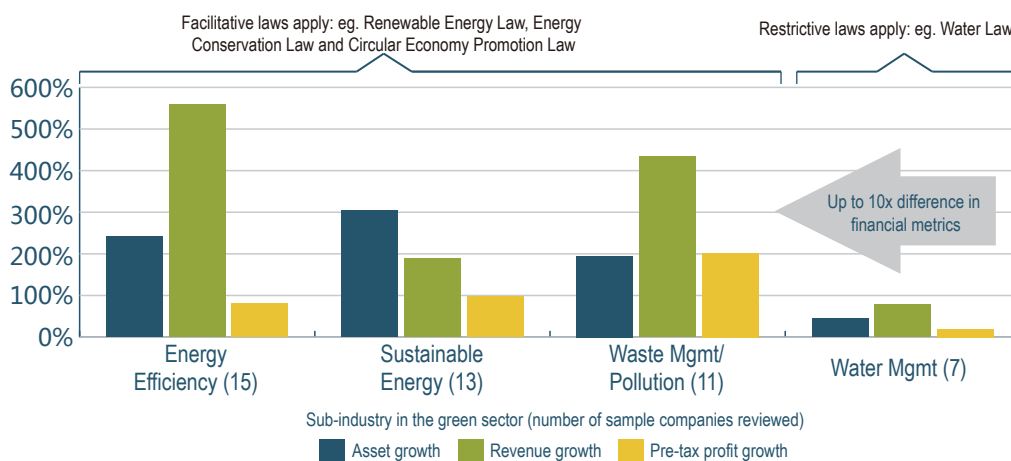
**Table 2: The function and effect of laws in relation to the Green Economy**

Law	Basic Function	Implementing instrument	Effect on Green Economic Development
Environmental Protection Law	Restrict	Penalties & fines	"Push" to provide solution
Water Law	Restrict	Penalties & fines	"Push" to provide solution
Clean Production Law	Incentivize & Restrict	Monetary concessions	"Pull" & "Push" to provide solution
Renewable Energy Law	Incentivize	Monetary concessions	"Push" to provide solution
Energy Efficiency Law	Incentivize & Restrict	Penalties & fines; monetary concessions	"Pull" to provide solution
Circular Economy Law	Incentivize	Monetary concessions	"Push" to provide solution

Source: China Impact Fund & New Ventures China analysis, 2012

A New Ventures/MIIT survey of 56 green SMEs has collected data on company asset, revenue and pre-tax profit growth rates over 2008-2010. The trends demonstrate that demand pull laws tend to be more effective at creating favorable conditions for innovative development as they emphasize new technologies, new applications and the development of new markets (see Figure 6).

**Figure 6: Asset, revenue and pre-tax growth of green SMEs, 2008-2010 (sample size 40)**



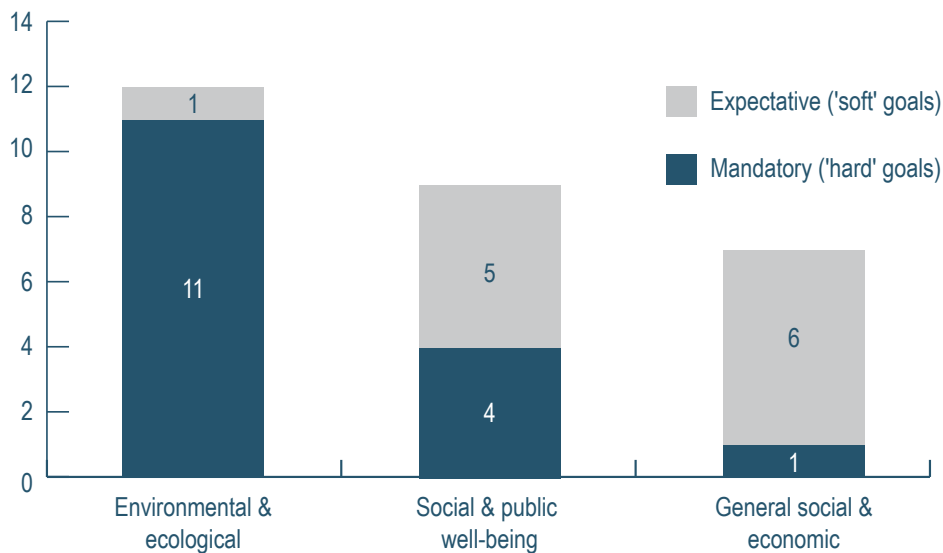
Source: Adapted Impact Report on Green SMEs in China (2012), p29, New Ventures Global, Institute for Environment and Development, and MIIT

10.The circular economy is a generic term for an industrial economy that is, by design or intention, restorative and in which materials flows are of two types: biological nutrients, designed to reenter the biosphere safely, and technical nutrients, which are designed to circulate at high quality without entering the biosphere.



Significant government involvement and influence over the Chinese market economy is further manifested as a top-down planning system, expressed through the central government’s five-year economic plans. The goals in the five-year plans provide the framework by which the specific social and economic performance measures for each level of government are defined. The current Twelfth Five Year Plan 2011-2015 (12FYP) emphasizes environmentally-sound economic development as its 28 goals are heavily weighted towards environmental and ecological concerns (see Figure 7).

Figure 7: Comparison of 12<sup>th</sup> Five-Year Plan goals



Source: China Impact Fund & New Ventures China analysis, 2012

The rationale underpinning the environmental targets include maintaining a positive rate of growth and investment in a more sustainable manner; addressing resource constraints through stronger energy security; fostering a competitive economy via technological advancement; and lending credibility to China’s international involvement in climate change and energy debates. Parallel and related developments include seven regional pilot carbon trading schemes that are due to be launched in early 2013, the ongoing development of a climate change law, and continued reform of the resources tax. Thus, the policy environment, now and in the foreseeable future, emphasizes green development and support for the environmental sector alongside other priorities of economic growth such as innovation, competitiveness and social development. This is filtering through to environmental SMEs. The New Ventures/MIIT report found that 50% of SMEs surveyed had received some combination of subsidies, grants, and tax benefits due to their contributions to energy saving, water saving, recycling or other environmental intent.<sup>11</sup>

11. Information Center of MIIT, IED, New Ventures Global, *Impact Report on Green SMEs in China* (2012), p33

## Financial sector trends

### The 'missing middle' of growth capital finance

SMEs in China inhabit the 'missing middle' of growth capital finance. That is, their capital needs outstrip that which can be readily sourced through entrepreneurs' personal networks, and yet remain too small to pose an appealing value proposition to most commercially-oriented forms of investment.

Global surveys of SMEs have consistently indicated that financing constraints are a serious obstacle to growth, in contrast to the experience of large firms. The International Finance Corporation (IFC) estimates that the East Asian region, where the Chinese economy dominates, represents the largest quantifiable and proportional need for credit among all emerging market regions (with an estimated value of between USD 250-310 billion at the end of 2010).<sup>12</sup> The persistence of a finance gap undermines economic prosperity in lower-income countries, where the finance gap is more keenly felt.<sup>13</sup> Figure 8 opposite represents a mapping of companies that CIF/NVC has dealt with in the past that have benefitted from available finance options over the lifecycle from start up to listing, and highlights the typical block for those caught in the 'missing middle'.



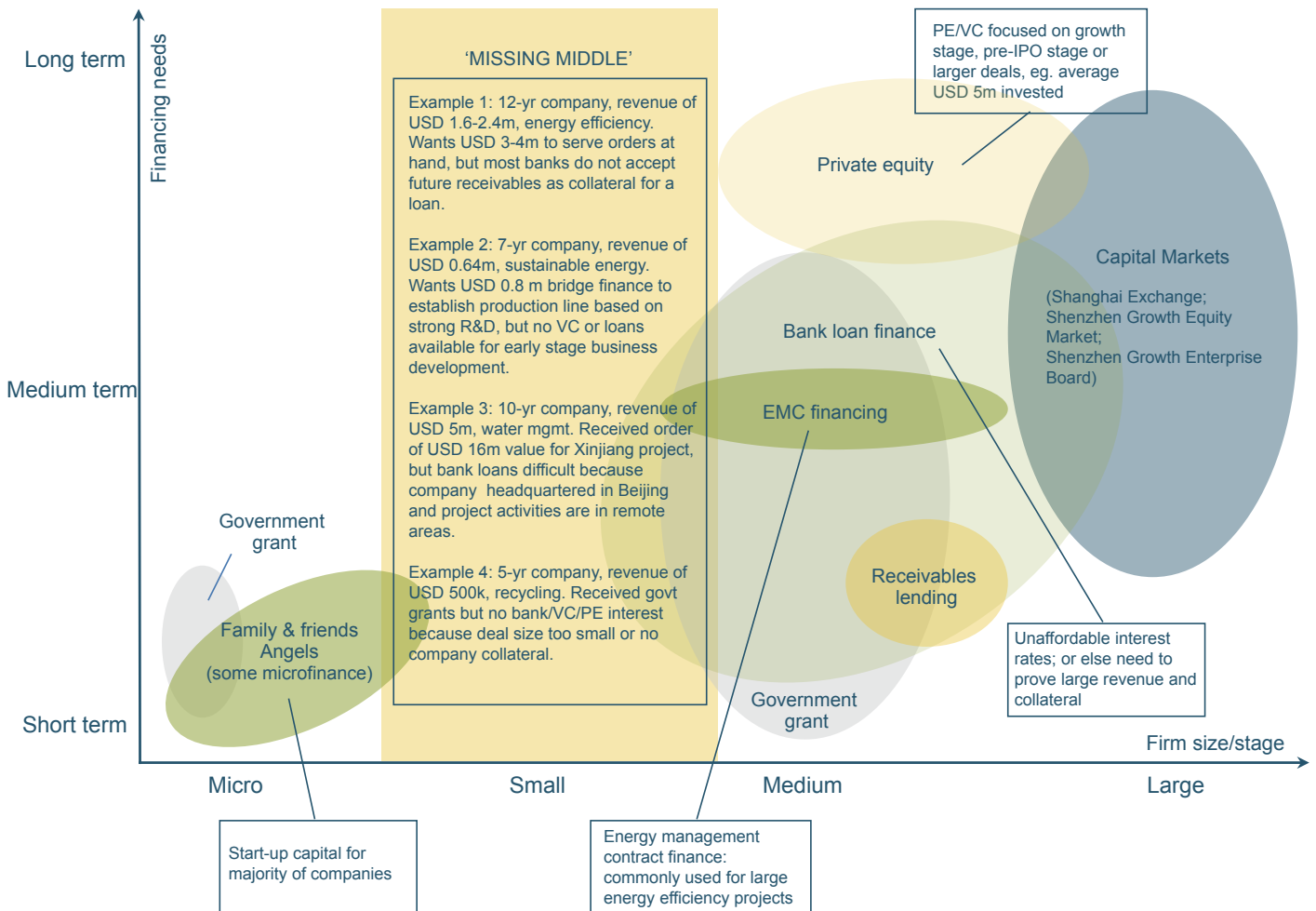
**Eco-friendly toilets from a CIF/NVC company commissioned for 2008 Beijing Olympic Games**

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12. International Finance Corporation, cited in McKinsey and IFC, *Two Trillion and Counting* (2010), p5

13. Dalberg Global Development Advisors, *Report on Support to SMEs in Developing Countries through Financial Intermediaries* (November 2011), pp9-10

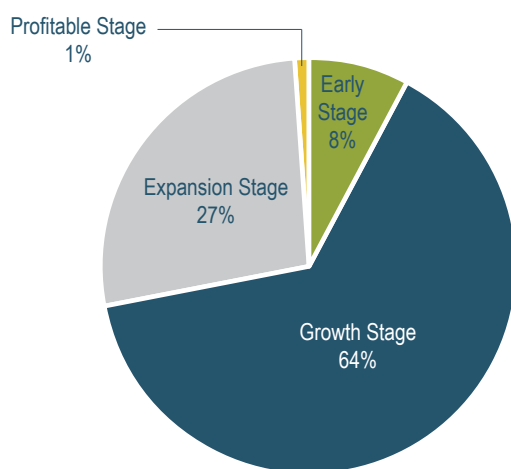
Figure 8: Financing options for Chinese SMEs



Source: Adapted from chart in McKinsey & IFC, *Two Trillion and Counting* (2010), p8 based on China Impact Fund & New Ventures China's experience

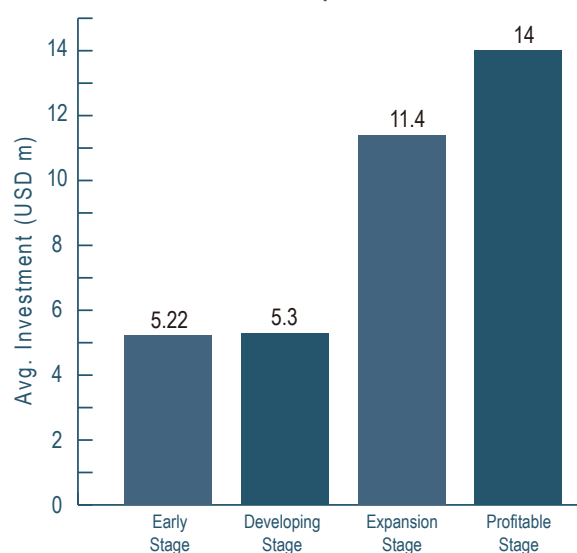
Data on current trends in China's venture capital (VC) and private equity (PE) industry also point towards a need for a strengthened pipeline of finance to quality earlier stage companies. A 2011 China Venture Group study documented a total of 803 invested deals by VC firms during 2010.<sup>14</sup> Of these, 64 deals (8%) occurred at the venture's early stage and 512 deals (64%) at the development stage (Figure 9). The estimated average VC fund investment size at these stages of venture development were USD 5.2 million for early stage, and USD 5.3 million for development stage (variance is unknown) (Figure 10).

**Figure 9: Concentration of VC investments by stage of venture development**



Source: China Impact Fund & New Ventures China analysis, based on data from ChinaVenture Group annual report

**Figure 10: Average VC investment size by stage of venture development**



Source: China Impact Fund & New Ventures China analysis, based on data from ChinaVenture Group annual report

This data leads to two conclusions. Firstly, considering that there are about 10 million industrial SMEs in China,<sup>15</sup> the reach of venture capital into funding this sector is very narrow – these figures point to less than 1,000 invested cases, accounting for only a tiny portion of SMEs and start-ups in the country. Given that VC investment has made little inroads into the SME market, we believe the potential pool of SME candidates for impact investors, even taking into account an extra layer of impact criteria, is sizeable.

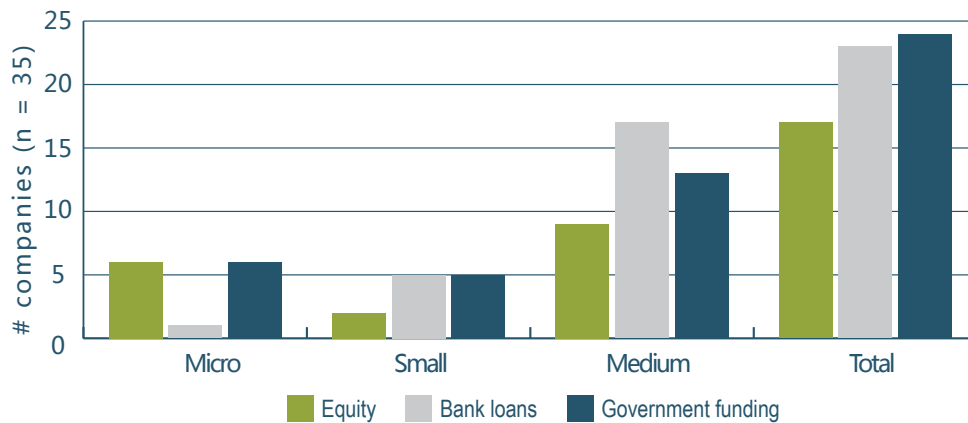
Secondly, data on deal stage and deal size supports the notion that there is a 'missing middle' of investment at the under USD 5 million size in China,

14. ChinaVenture Group annual report, 2010

15. MIIT, The Growth Plan for SMEs in the 12th Five Year Plan, <http://www.miit.gov.cn/n11293472/n11293832/n11293907/n11368223/14178245.html>

as the conventional VC community is not heavily engaged in smaller deal sizes. Findings of the New Ventures/MIIT study also lend further empirical evidence that the ‘missing middle’ dilemma also affects environmental SMEs, with growth-stage (medium) enterprises being better able to access equity, debt and government funding than micro and small businesses, as illustrated in Figure 11. This trend is also reflected in New Ventures China’s nine years of experience during which most of the SMEs it has worked with have been disqualified by VCs on the basis of deal size. Figure 12 illustrates the average deal size according to different funding sources, based on information from 32 investments made into 19 companies New Ventures China has worked with over the period 2008-2011.

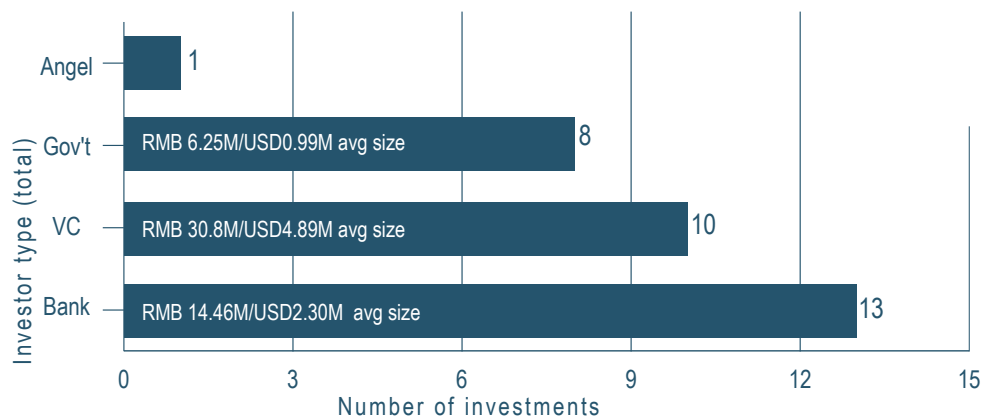
**Figure 11: Analysis of external finance by sample company size**



Source: Adapted Impact Report on Green SMEs in China (2012), p30, New Ventures Global, Institute for Environment and Development, and MIIT

**Figure 12: Average investment size by funding source:**

Analysis of 32 investments into 19 companies over the period 2008-2011



Source: China Impact Fund & New Ventures China, 2012

*There is room in the market for impact investors interested in supporting 'early stage' and 'growth stage' companies that need amounts of capital under USD 5 million.*

In fact, the lack of attention by the VC/PE sector on the vast majority of Chinese SMEs and a perceived lack of quality early stage deals may be exacerbating over-valuations in pre-IPO deals. Fast economic growth, a fragmented private sector dominated by small companies, a quick influx of domestic and foreign investment capital in the last few years, and the historically weaker M&A market in China, have converged to see most VC/PE activity focus on pre-IPO companies. The holding period for these investments tends to be shorter than in other markets, with exits often realized within three years. Thus, a 2011 survey indicated that the biggest challenges identified by VC/PE industry players were the overvaluation of projects increasing exit risk (25.5% respondents) and lack of quality deal flow (23.8% respondents).<sup>16</sup>

Therefore, there is room in the market for impact investors interested in supporting 'early stage' and 'growth stage' companies that need amounts of capital under USD 5 million. Impact investing in SMEs will not necessarily compete directly with conventional VC funds, but will be complimentary to their activity. It also has the potential to support a healthier ecosystem of finance for private enterprises in China and reduce the propensity for bubble-and-bust cycles in the VC/PE industry, to the extent that the pipeline of quality deals for commercially-oriented investors is widened.

### Structural reasons for the missing middle

Factors that contribute to a severe credit and investment gap for SMEs in emerging markets have been explored in a number of previous studies.<sup>17</sup> The most pertinent factors to the Chinese market are:

- **Lenders and investors are not incentivized to take on the additional perceived risk posed by the SME market** or innovate to develop SME-appropriate models or platforms, as high returns are available in their core markets. In the case of lending, those large state-owned or state-controlled financial institutions have favored lending to other large state-owned enterprises irrespective of their performance. Adding to the conservatism of lending in China is the fact that all commercial loans must go through the banking system, ostensibly as a way to foster stability in the financial system.

16. China Venture Capital Research Institute, 'China Venture Industry Report, the First Half Year 2011' (August 2011)

17. These factors are helpfully summarized in Dalberg Global Development Advisors' Report on Support to SMEs in Developing Countries through Financial Intermediaries (November 2011), pp17-19, which synthesizes findings from a large body of research into SMEs' lack of access to capital in developing countries

- Loans to or equity investments in SMEs are smaller than for large companies, however, **transaction costs for loan issuance/equity investing are relatively constant regardless of size.** In recent years in China, there has been sufficient need from larger, pre-IPO companies for both equity and debt finance to satiate the supply-side demand for investable deals.
- **Lenders and investors have limited access to information related to the growth patterns of SMEs across various industrial sectors.**<sup>18</sup> Information gaps include default rates, asset registers, and credit registers, which in turn limits the ability of banks, for example, to engage in cash flow-based lending. Most lenders in China continue to rely on asset- or collateral-based lending, which tends to exclude SMEs with fewer total assets in their early growth phase, especially those in the environmental sector who are more service and/or technology-oriented.
- **Lenders and investors have limited skills related to the SME sector,** which leads to difficulties in establishing credit-worthiness and analyzing risk. The Chinese banking system is characterized by these deficiencies in talent and skill.<sup>19</sup>
- The above factors **compound the high cost of capital for SMEs,** leading to self-reinforcing market failure.
- **Entrepreneurs in China tend to be more comfortable or familiar with debt capital than equity finance,** which can dry up some appetite for venture capital or private equity.
- **Uncertainties around access to liquidity options in China,** such as small enterprise listing platforms or the absence of a strong M&A market, also militate against long-term risk capital.

*SMEs are challenged by a high barrier for successfully accessing government funds and subsidies.*

18. New Ventures, Institute for Environment and Development, and MIIT, *Impact Report on Green SMEs in China* (English edition, July 2012), p6

19. Lingling Wei, Dinny McMahon and Tom Orlik, 'China Tests Financial Relaxation in Wenzhou', *the Wall Street Journal*, March 28, 2012

- **SMEs are challenged by a high barrier for successfully accessing government funds and subsidies.** Some policies on energy conservation and environmental protection that provide subsidies and other monetary concessions to support green innovation present high eligibility thresholds. Thus, the design of such policies means that access to this capital can still be biased towards large enterprises.<sup>20</sup>

### Pending financial reforms

The need for improved access to capital by the SME sector is being increasingly recognized by Chinese regulators. This is particularly so after the shadow banking 'crisis' that emerged in late 2011 in Wenzhou, Zhejiang province, during which a number of businesses defaulted on private loans subject to high interest rates.<sup>21</sup>

Responses have included, for example, the State Council's October 2011 announcement of financial measures to assist SMEs, including low reserve requirements for small bank lending to SMEs, greater use of bond instruments by SMEs to raise capital, improved tax concessions and financial services for SMEs.<sup>22</sup> Further, in early 2012, the State Council announced a pilot program of financial reforms in Wenzhou to allow private lenders to buy into local banks or investment companies, thus formalizing the underground lending sector in that economic cluster.<sup>23</sup> While these recent policy moves may indicate increased attention on the SME sector in China to date, the outcomes and the adequacy of these initiatives for addressing the long-term structural reasons remain to be seen.

Recent indications that the Chinese central government is seriously considering boosting liquidity for small, private firms also indicates a trend in support of more robust SME growth. For example, news that emerged in late March 2012 indicated that a planned equity exchange, likely to be based in Beijing, will establish an over-the-counter market system, with an initial focus on technology companies.<sup>24</sup> The exchange builds on the trial share transfer

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20. New Ventures, Institute for Environment and Development, and MIIT, Impact Report on Green SMEs in China (English edition, July 2012), p5

21. See, e.g., 'China's SMEs now stranded in credit crunch', The People's Daily, September 30, 2011; Rahul Jacob and Simon Rabinovitch, 'China SMEs rely on shadow financing for growth', *Financial Times*, October 18, 2011

22. State Council Announces Financial Measures to Help SMEs', *China Briefing*, October 13, 2011

23. Wei, McMahon and Orlik, above n11; Zhou Xin and Lucy Hornby, 'China gives go-ahead to Wenzhou financial reforms', *Reuters*, March 28, 2012

24. See 'China Weighs Launch of a New Equity Exchange', *the Wall Street Journal*, March 23, 2012



platform that has been operating since 2006 in the Zhongguancun Science and Technology Zone, often referred to as China's Silicon Valley. Already, one of the companies CIF/NVC has worked with over some years has recently relocated its head office to Beijing in anticipation of these developments in China's capital markets. This exchange would be complementary to other pre-existing market infrastructure such as the Growth Enterprise Market of the Shenzhen Stock Exchange (a listing forum for small companies).

The China Securities Regulatory Commission has also indicated that the Shanghai Stock Exchange and the Shenzhen Stock Exchange will be allowing small companies to issue privately raised bonds, at a higher return rate ceiling than the benchmark debt interest rate. Companies located in provinces such as Zhejiang will be among the first eligible to benefit from the new private bonds.<sup>25</sup>



**Young laborer harvesting crabs from sustainably-managed wetlands**

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<sup>25</sup>'Government Works on New Programs to Aid Small Business', China Daily, April 6, 2012, available at <http://english.cri.cn/6826/2012/04/06/2561s691824.htm>.

# 2

## Creating the Chinese Dream

### Current status of impact investing in China

We briefly review the current state of impact investing in China, estimate the potential size of the market of opportunities to invest in environmental SMEs, and the risks associated with overhyping the concept of impact investing in the China context.

This Part provides an overview of the current state of China’s impact investing marketplace, based on CIF/ NVC’s experiences in providing venture acceleration services to environmental SMEs, and in operating amongst the nascent impact investing community.

## Nascent impact investing community

Impact investing is a very new concept in mainland China that is unfamiliar to the vast majority of local investors, which remain very commercially focused in their objectives. Our interviews with various investment professionals (including foreign government investors, venture capitalists, and international agencies) confirmed their ultimate focus on financial returns (usually, at least 15% IRR), and that there was a very low awareness of impact investing. Aside from development-focused organizations such as IFC and the Asian Development Bank, there are only a handful of self-identifying social and/or environmental impact investors in China (see Table 3 below). A few are gaining early traction or establishing a presence on the ground, but actual impact investing transactions remain few and far between. A recent report on social enterprise in China identified only a few deals that have been made with the recognition that they were ‘impact investing’ transactions.<sup>26</sup> Therefore, impact investors face a deep challenge to build the basic infrastructure needed for a healthy impact investing

### Takeaways:

1. Very few impact investments into mainland Chinese organizations have occurred to date.
2. Some emerging players in the impact investing market have become increasingly active in identifying and encouraging potential deals. These are potential partners for interested impact investors outside China.
3. There are thousands of potential deals among environmental SMEs in China, although these businesses rarely explicitly identify themselves as ‘social enterprises’.



School students using the reverse vending machine designed by Green Channel

26. Three investment deals were identified, however, this may not be an exhaustive list: see Foundation for Youth Social Entrepreneurship, 2012 China Social Enterprise Report, p28.

**Table 3: Known impact investors and/or intermediaries operating in mainland China**

	Organization Overview	Geographic Coverage
CIF/NVC	Focused on supporting environmental 'missing middle' companies in China, with an impact investment plus accelerator twin model	China
Schoenfeld Foundation	Supports innovative, for-profit solutions to social and environmental challenges through a combination of investment and charitable giving	Mainland China, Hong Kong, US
LGT Philanthropy	Offers grants, soft loans, equity investment to social enterprises	Global, including China
SOW Asia	Supports sophisticated early-stage to growth-stage social businesses that create positive impact on a self-sustaining basis	Greater China, Southeast Asia
Venture Avenue	Provides capability enhancement and social impact tracking and evaluation for social ventures, NGOs and their investors. Manages the Yu Fund which invests in early-stage social enterprises	Shanghai, China
Lanshan Capital	Focus on agriculture, environment, services for BoP and social industry infrastructure	Beijing, China
Avantage Ventures	An Asian-based social investment and advisory company, which has a social investment vehicle called the Avantage Ventures Impact Fund that is dedicated to investing in profitable Asian companies that strive for significant social and environmental impact	Mainland China, Hong Kong Southeast Asia
Synergy Social Ventures	Non-profit organization that works with early-stage social ventures in Asia	Hong Kong, Asia
E+Co	Makes clean energy investments in developing countries, with some presence in Yunnan, a province in southwest China	Yunnan, China
Tsing Capital	China-focused cleantech venture capital firm which makes investments via its China Environment Fund and Yiyun Cleantech Fund series	Beijing, China
Small Enterprise Assistance Fund (SEAF)	A provider of risk capital and capacity building assistance to SMEs. SEAF launched in Asia in 2001 through the establishment of the SEAF Sichuan SME Investment Fund	Sichuan, Head office in Washington DC

ecosystem in China.

Although impact investing is currently a new, if not totally foreign, concept in China, it should be recognized that the philosophy embodied by impact investing is deeply rooted in China's traditional culture. In an interview, a regional impact investment practitioner highlighted that the spirit of impact investing could actually be traced back to some of China's traditional cultural concepts such as 仁 (meaning benevolence or humanity especially towards disadvantaged groups).<sup>27</sup> Another old Chinese proverb also speaks to an ancient philanthropic impulse: while an underprivileged person should maintain his own integrity, a wealthy person should contribute to the welfare of the society (穷则独善其身, 达则兼济天下). From this perspective, though it will take time, the impact investing concept could resonate with local business community if properly stewarded.

## Scale of potential market

The complexity of social and environmental issues in China provides great scope for impact investing to take root in the foreseeable future. The scale of China's population and markets also means there is potentially a great depth of opportunity. We applied some high-level assumptions to estimate potential market size, based on observations from our work with environmental SMEs.

According to government statistics, there were over 10 million SMEs at the end of 2010, excluding sole trader entities that were estimated to number in excess of 30 million.<sup>28</sup> There are no official statistics available that indicates the distribution of these SMEs across different sectors. However, our estimate is that up to 5% have some environmental benefit inherent in their business models, either intentionally or not.<sup>29</sup> This is supported by the fact that in 2010, the total output of the energy conservation and environmental protection industry was RMB 2 trillion (~USD 317 billion), representing 5% of RMB 40 trillion (~USD 6.35 trillion) in GDP.

Further, of the some 400 green SMEs New Ventures China has worked with since 2008, 32 commercial investments have been facilitated into 19 enterprises – that is, an investable deal rate of some 5%. Thus, given the potential size of the environmental SME market, and in light of CIF/NVC's experience of those green SMEs that are investible from a commercial perspective (which is a higher standard than those investible with more

*'Given the number of potential impact investment deals in China and also the fact that impact investors are far and few between in China, the untapped potential of impact investing, without a doubt, is enormous.'*

*Weijia Ye, Senior Advisor to CIF & Former Director of NVC*

27. Interview with Richard Roque, Managing Director of SA Capital Limited

28. MIIT, The Growth Plan for SMEs in the 12th Five Year Plan, <http://www.miit.gov.cn/n11293472/n11293832/n11293907/n11368223/14178245.html>

29. Weijia Ye, former Country Director of New Ventures China

flexible financial return expectations, as is common for impact investors) – a conservative estimate of the potential market size is some 25,000 companies that may be appropriate for impact investment. These assumptions apply only to environmentally-focused companies, and could result in a larger potential market size if social benefit-oriented companies are taken into account.

A final observation is that the potential market for ‘impact investments’ is larger if impact investors are willing to work with established companies or business models to gradually increase consciousness of environmental and social impact, rather than limiting their deal sourcing activities to those organizations that already explicitly self-identify as ‘social’ or ‘environmental’ businesses (refer to BoP value proposition of environmental SMEs in Part 3; and Building a culture of impact metrics in Part 4).

### **The risk of over-hype in the China context**

However, we also note growing concern among regionally-active impact investing practitioners that over-hype could be very detrimental to the development of the impact investing community and industry. There is a danger to this nascent industry that lack of proven success cases could lead to a perception of ‘all talk and no action’ on the part of those involved.

Chinese culture traditionally encourages less talk and more action (君子讷于言而敏于行), and thus, hype created by impact investing practitioners in China without sufficient supporting actions especially bears a risk of losing the confidence of potential new impact investors, Chinese policy-makers, the business community, and the public at large. This in turn would put action-ready practitioners in a difficult position to get further needed support. From this perspective, it is especially important that impact investing organizations try to avoid over-hyping the concept while there is little action demonstrated to back up their words, and need to manage investor expectations about the financial returns and impact returns that can be achieved.

The recommendations at the end of this report provide practical suggestions for moving the impact investing market in China forward.

# 3

## Creating the Chinese Dream

### Environmental impact investment opportunities

We take a closer look at industry trends, SME challenges and opportunities, impact investor priorities, and case studies for four sub-sectors of the environmental industry: energy efficiency, sustainable energy, sustainable agriculture, and pollution prevention and waste management. The value proposition of environmental companies in China for the 'base of the pyramid' population is also briefly discussed.

### Takeaways:

1. Energy efficiency SMEs can significantly assist energy-intensive clients to reduce carbon emissions. They are quickly multiplying due to policy support in China. Therefore, experience is required to identify promising investees.
2. SMEs that support the spread of sustainable energy through supplementary services or distributed energy resources utilization business models help address underlying resource constraints in China.
3. Sustainable agriculture SMEs can benefit from increasing concern about food safety in China, and improve the welfare of rural communities.
4. More support for pollution prevention and waste reduction SMEs, particularly in recycling, is needed to achieve the resource reclamation and efficiency impacts of these business models.
5. There are opportunities to achieve positive impacts for China's 'base of the pyramid' across all industries in which SMEs operate.

This Part looks in closer detail at the industry trends, SME challenges and opportunities, and impact investor priorities, of four green industries that are representative of opportunities across the Chinese economy: energy efficiency and sustainable energy (representative of the industrial sector); sustainable land use (representative of the primary sector); and pollution prevention and waste management (representative of business models that reflect policy emphasis on the 'circular economy'). It uses case studies drawn from the SMEs that CIF/NVC has supported over the years.

## Favorable policy framework for green SME development

The National Development and Reform Commission (NDRC) classifies Chinese industries as follows: incentivized industries, open industries, restricted industries and protected industries (see Table 4). These classifications are material to investors because they indicate the degree of regulatory intervention and 'push/pull' policies (such as tax breaks and subsidies) that may be incorporated into the business model of an enterprise.

In the 12FYP, the central government also introduced the concept of 'green development' for the first time. In doing so, it emphasizes that the sustainability of economic development should be realized by adjusting the current economic growth model. Alongside the 12FYP, the government has also identified seven 'strategic emerging industries' in which China will seek to develop advanced capabilities. Among these are energy saving and environmental protection industries, new energy industries (nuclear, solar, wind), new materials industries, and clean energy vehicles.

Importantly, for foreign investors, the NDRC's industrial classifications, and the emphasis of the 12FYP, point to the economic sectors that encourage foreign investment. Clearly, there is a strong emphasis on development of environmental sectors.



Table 4: Four classifications of China's industries

Type of Policies	Industries	Ownership	Policy Influence	Type of Competition
Incentivized	Energy efficiency, renewable energy, environmental protection, new agriculture	State & private	Strong	Full competition
Open	Textile, machinery, processing, electronics	State & private	Weak	Full competition
Restricted	Cement, iron and steel, automobile	State & private	Medium	Full competition
Protected	Energy, telecommunication, railways, finance	State-owned	Strong	Oligopoly

## Overview of selected environmental sub-sectors

### Energy efficiency

#### Introduction

Energy efficiency refers to a range of both hardware and software installations that reduce the energy usage rates of equipment and appliances, with the effect of increasing the overall efficiency of a business. For the purposes of this report, the energy efficiency sector includes companies that manufacture new energy-saving technologies as well as companies that implement energy-reducing technologies and retrofits for customers (typically known as energy-saving companies or ESCOs).

Energy efficiency companies tend to rely on upfront investments in equipment (costs which are sometimes born by the customer, and sometimes shared between the customer and the service provider), baseline measurements and pricing of energy usage, and a payback period of several years derived from the costs saved on energy expenditure. Improvements in energy efficiency reduce the need for investments in energy infrastructure, decrease reliance on fossil fuels, and can significantly reduce greenhouse gas emissions and local air pollution.

### SME challenges

SMEs naturally proliferate in the energy efficiency sector because:

- In general, size of projects is not large
- The energy efficiency market is a retail market, i.e. companies serve end users directly and every solution must be tailored to each customer's needs
- Resource and capacity constraints mean that energy efficiency service providers tend to be regionally-restricted

SMEs operating in the energy efficiency sector face the following key challenges:

- **Financing:** The Energy Management Contract model is popular among Chinese energy efficiency projects. This model requires that service providers cover the high upfront costs of replacing current inefficient technologies in insulation, appliances, and heating, ventilation and cooling systems. The small size of many energy efficiency projects, their difficulty in being bundled, and their perceived high risks (high upfront costs followed by a variable payback period of six months to five years) – have discouraged traditional investors and commercial banks from supporting the sector. A lack of technical understanding of the business model patterns and successful implementation of energy efficiency projects among these providers of capital mean such projects tend to be regarded as requiring too high a level of due diligence and supervision relative to profit potential. Third-party finance is urgently needed for the sector.
- **Credibility:** Related to the above, as energy efficiency is not yet a mature industry and its industry value chain is not yet well understood, lenders tend to lack faith in the business model. This in turn means that established relationships of mutual trust between borrowers and lenders have difficulty taking root.

### Opportunities for investors

The ongoing growth of China's economy will be matched by continued increases in energy demands. Certain industries stand to particularly benefit

*A lack of technical understanding of the business model patterns and successful implementation of energy efficiency projects among these providers of capital mean such projects tend to be regarded as requiring too high a level of due diligence and supervision relative to profit potential.*

from innovation in energy efficiency:

- **Industrial sectors:** The industrial sectors are the dominant end user of energy, accounting for around 70% of energy demand in 2010.<sup>30</sup> To meet massive demands for infrastructure and manufactured goods, China has become the largest global producer of energy-intensive heavy industrial materials, meaning that even small improvements in average efficiency are materially significant. The largest amount of potential energy savings can be found in this sector, especially among SMEs themselves which potentially form a base of customers in need of cost savings.
- **Building sector:** Tremendous potential also exists for energy saving in China's commercial and residential buildings. According to the National Bureau of Statistics, it is estimated that China builds about four billion square meters of new floor space every year.<sup>31</sup> The building sector represents 25% of the country's total final energy consumption.<sup>32</sup> Energy efficiency standards for consumer appliances and office equipment, demand for which is growing quickly in China, have already saved large amounts of energy, and introduction of gradually tighter standards holds promise of further savings.

Commercially oriented investors tend to focus on investing in the larger energy efficiency players that appear likely to grow into sector leaders.

Impact investors have a role to play in:

- seeking out innovative business models or energy efficiency technologies characterized by great potential, but which may also present some risk – this is important for the industry to keep innovating and for the most effective models to scale across a variety of industries;
- developing the service capabilities of qualified yet smaller energy efficiency providers with sound operations.

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30. Statistics from the Ministry of Industry and Information Technology

31. National Bureau of Statistics, 2009

32. International Energy Agency statistics, 2010

### Investment risks

The main challenge for all investors in the energy efficiency sector is how to determine the quality of a potential investee. This is particularly the case as in the last 12 months there has been a rapid expansion of players in the market, especially among SMEs. Investors new to the field may lack capacity and experience with the energy efficiency business model, expertise in energy data management, and a full understanding of the financing of energy efficiency.

### Energy efficiency SME example: Beijing Sinen Entech Co., Ltd. (Sinen Entech)



#### Business model

Sinen produces waste water treatment solutions for clients such as Sinopec and PetroChina in the oil and gas industry. Its patented systems purify used steam from industrial boilers into high temperature water, which is reused or safely disposed of without the need for further treatment. It is the exclusive developer and provider of high-temperature condensed water recovery technology, reducing energy intensity and water usage, which is a key concern for the oil refinery, petrochemical, steel, metallurgical, electricity, coal, pharmaceuticals, textiles, and fertilizer industries. It provides complete and integrated after-sales service and maintenance systems to ensure quality.

As one of the pioneers of the energy performance contracting (EPC) business model in China, it was listed as one of the model companies by IFC's China Utility-based Energy Efficiency Finance Program in 2010 and has developed integrated energy efficiency solutions to its clients using the EPC model. Over the last five years, it has worked together with over 30 industry experts to set up a semi-open R&D collaborative platform to maintain and improve its technology advantages.

#### Financial information

Year founded: 2004  
2010 Revenue: RMB 46.8 million (USD 7.43m)  
2008–2010 revenue CAGR: 35%

#### Environmental impact

Producing the steam required for industrial production often consumes a lot of water and energy, and discharges wastewater. The used steam is polluted with metals and organic particles. Unless treated, it cannot be recycled back into the system and reused. Conventional treatment technology can only operate at normal temperatures to filter metal and organic particles from the used steam condensate. This leads to heat waste and high costs because water needs to be reheated after filtration for reuse. Sinen Entech's technologies can filter steam under high temperatures, which ensures that water is recycled while using significantly less energy, thus reducing CO<sub>2</sub> emissions.

For every million dollars of revenue, Sinen helps its clients save the equivalent of 10,000 tonnes of coal per year from the avoided energy use for reheating. In 2010 alone, the company helped its customers save 200,000 tons of coal, 520,000 tons of carbon dioxide, and 20 million tons of water.

#### Social impact

By 2010, the company provided employment for 184 people.

#### Attractiveness for investment

- Advanced technology products – international standards with patent protection
- Pioneer in EPC business model
- Industry leading research and development – team set up a new R&D collaborative platform to maintain technology advantages
- Quick user payback – less than 18 months

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## Sustainable energy

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### Introduction

Sustainable (or renewable) energy refers to energy that is drawn from nature and can be renewed and reused without causing any harm to ecological systems. Players in this sector supply sustainable energy to users for payment. This sector can be divided into two major categories, with the latter one being most relevant for SMEs given the size of projects:

- Forms of energy that are heavily dependent on high technology and patents (e.g. solar and wind energy);
- Forms of energy that rely on traditional energy generation practices (e.g. bio-energy and small-scale hydrogen power).

### Characteristics of sustainable energy SMEs

Sustainable energy technologies are diverse and have varying relevance to the SME sector. High-efficiency biomass energy is a helpful example of a variety of sustainable energy that is well-suited to development by SMEs. Through legalizing the use of animal and poultry waste, the Chinese government has supported biogas development, particularly in rural areas. Recent years have seen a significant decline in the rate of low-efficiency biomass energy consumption in rural areas, with the replacement of old technologies with fuel-wood saving stoves, biogas and solar energy innovations.

Currently, all sustainable energy technologies – other than small-scale hydrogen power – are still less cost-effective than traditional fossil fuels. Therefore, the sector requires abundant, long-term funding in conjunction with strong government policy support. Against this backdrop, Chinese SMEs in the sustainable energy sector can potentially flourish in the following two areas:

- Supplementary services provided along the industry value chain, including manufacturing, operating and after-sales services;
- Distributed energy resources utilization (i.e. small-scale wind power, thermal power, biomass energy, etc.), is potentially an attractive market for SMEs. Currently, this is contingent on increased government support and subsidies.

### Opportunities for investors

The case for private investment in sustainable energy in China is based on the following factors:

- China's demand for energy will continue to grow and any investments in the energy sector are likely to be welcomed and, equally important, provide attractive returns. A report from the United Nations Environmental Program revealed that investment in sustainable energy in China in 2010 reached USD 48.9 billion, an increase of 28% year-on-year.
- The current emphasis on sustainable energy and energy efficiency in the 12FYP is a clear signal that investments in these areas will be encouraged through a variety of financial incentives and subsidies. Given the growth ambitions and resource constraints of the Chinese economy, investors can have reasonable confidence in the longevity of public policy support beyond the 12FYP.

Commercially oriented investors tend to focus on making large investments in industry leaders. Impact investors have a role to play in:

- seeking out SMEs situated at key points of the industry value chain and which have the capacity to exert influence over the sector's development;
- seeking out SMEs in the distributed energy field that are both environmentally viable and also social impact-oriented in the BoP market.

### Investment risks

Despite the strong policy support for sustainable energy and the projected ongoing rise in demand for energy overall, there are certain risks to the successful growth of the sector, including:

- **Need for structural reforms of the electricity market:** in particular, to scale, the sustainable energy industry needs greater certainty of grid access and full pricing of traditional energy sources. Currently electricity distribution companies are not incentivized to purchase a portion of their power needs from sustainable sources;

**Sustainable energy SME example: Beijing Shengchang Bioenergy S&T Co., Ltd (Shengchang)**



**Business model**

Shengchang manufactures and sells biomass briquettes and related equipment to provide its customers with heating system solutions. It also conducts biomass combustion research and development. Its business model forms a connected bioenergy industrial chain, from raw material collection to biomass briquette production and heating applications. It targets two types of customers: the public sector through government bidding on heating boilers using biomass briquettes, and rural farmers with biomass cook and heating stoves. For the latter segment, Shengchang has a concentrated marketing network, and has traditionally focused on promoting stoves in the surrounding areas of Beijing; however, it is now starting to expand its sales to rural areas in northeast China.

**Financial information**

Year founded: 2006  
 2010 Revenue: RMB 40 million (USD 6.07m)  
 2008-2010 revenue CAGR: 54%

**Environmental impact**

Biomass briquettes provide a clean and environmentally friendly alternative to coal, reducing carbon emissions and lowering agricultural waste. Shengchang transforms agricultural and forest waste into a usable and efficient energy source. In the past three years, Shengchang has sold over 100,000 tons of biomass briquettes, provided clean heating for buildings totaling over 5 million square meters, and replaced 60,000 tons of standard coal. Nearly 150,000 tons of agricultural and forest waste were used in the production of

the biomass briquettes, reducing about 150,000 tons of CO2 and over 1,000 tons of SO2.

**Social impact**

These efforts have not only reduced the safety risks and environmental dangers associated with the burning of agricultural and forest waste, but have also offered farmers additional income opportunities through the selling of leftover materials to Shengchang. Besides this, the use of Shengchang's cook and heating stoves by farmers has improved the indoor air quality in their homes and reduced the acute respiratory disease rate. By the end of 2010, about 20,000 cook stoves had been sold to farmers.

In recent years, the company successfully completed more than 10 projects for the public sector, specifically the Ministry of Science and Technology, the Beijing Development and Reform Commission, the Beijing Science Committee, the Ministry of Agriculture and the Beijing Agriculture Commission. In addition, Shengchang has received subsidies from the Ministry of Finance to research and implement straw utilisation as a potential energy source in their biomass briquettes.

**Attractiveness for investment**

- Integrated value chain
- Government support through subsidies on R&D and as a buyer
- New market creation – converting waste into revenue streams
- Capacity to work with farmers and rural communities – secure supply of raw materials

- **Policy implementation:** there is some degree of uncertainty around the specific policy instruments (and associated costs/benefits to businesses) that will be deployed year to year to deliver China's climate change objectives. However, overall, the policy environment remains favorable;
- **Unreliable data and market based schemes:** the scaling of market-based schemes, such as emissions trading, may not occur as quickly as hoped due to a lack of robust energy and environmental data, among other reasons.

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## Sustainable land use

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### Introduction

Sustainable land use generally refers to a collection of business models in sub-sectors that include sustainable agriculture, forestry, animal husbandry and fisheries. Relevant business models could be commercial enterprises that generate profits through restorative products/services; or which implement production processes that do not impair the long-term sustainability of resource use by negatively affecting the ecosystem, or the species on which the use depends.

Sustainable agriculture is of particular note here. This refers to farming practices and technologies that increase farm productivity and profitability while reducing the negative environmental impacts of farming and which, ideally, rebuild ecological resources. Green agriculture can involve a broad spectrum of sustainable farming practices – from natural methods of pest and weed management and organic sources of fertilizer and seed at one end, to the highly efficient and precise use of water, inorganic fertilizers, pest controls and technological solutions (including recycling) at the other.<sup>33</sup>

### The characteristics of sustainable land use SMEs

SMEs can respond to opportunities in sustainable land use as follows:

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<sup>33</sup>See UK Government Office for Science, *Foresight: The Future of Food and Farming: Challenges and choices for global sustainability* (2011), 29.



- Leveraging investor interest that is being attracted to the sector due to the government's push to industrialize the agricultural sector, and to scale-up green development;
- SMEs are able to serve BoP segments, including fair trade agriculture, because the nature of this market is inherently fragmented, diverse and irregular;
- SMEs that take the form of community and farmer-based cooperatives.

### Opportunities for investors

Opportunities to invest in sustainable land use businesses in China are largely driven by an increasing consumer demand for sustainably produced food. The most significant factor contributing to an increasing need for food in China is population growth, with the current population of more than 1.3 billion forecast to reach 1.5 billion by 2030. Demand for meat and processed food is rising as the population becomes more affluent. The increasing concerns about food safety in recent years have also supported this trend.

Impact investors interested in this sector can potentially generate significant social impacts through focusing on the following areas:

- Organic food, which adds value to current products and helps farmers increase their income;
- Distribution channel efficiency, which increases the profitability of traditional agriculture through utilization of, for example, new technologies on storage and transportation;
- Improvement of farmers' livelihoods and welfare through support of their grassroots businesses/entrepreneurship;
- Supporting community or farmers-based cooperatives, which improve the sustainability of land use because of the local community's long-term interest in the viability of their land.

## Sustainable land use SME example: Beijing Organic Farm Development Co., Ltd (Organic Farm)



Organic Farm

### Business model

Organic Farm focuses on developing a sustainable agricultural eco-system through organic food production and marketing. It not only harvests, processes, distributes and sells organic food, but also promotes organic and sustainable techniques to agricultural farms.

Organic Farm owns six organic food farms and manages more than 10 other organic food farms in various locations around China, many of which have been approved by local governments as a demonstration site for sustainable agriculture. The company has a nationwide distribution system designed to deliver fresh organic food to large supermarkets, including Wal-Mart, Carrefour, Metro and Jusco, in several large cities including Beijing, Shanghai, Guangzhou, Shenzhen, Chengdu and Shenyang. Through this distribution system, Organic Farm provides over 60 different types of fresh organic food for customers daily.

### Financial information

Year founded: 2000  
2010 Revenue: RMB 71 million (USD 10.77m)  
2008-2010 revenue CAGR: 42%

### Environmental impact

Unlike the mainstream farming methods used in China, Organic Farm refrains from using chemical fertilisers and pesticides in food production. Its environmentally sound land

management practices have significantly reduced environmental pollution in agricultural land, and have contributed to food safety.

Organic Farm's farms have not only become production models for other farms, but have also contributed to the standardized development of the organic industry through plant technology research and promotional activities. The company frequently gives training on organic plant technology to other farms, such as fermentation and use of organic fertilizers, and protecting against different kinds of pests. Since its inception in 2000, the company has transformed the use of 2,400 hectares of land into sustainable methods. Its self-owned six farms have avoided using 250 tons of chemical fertiliser and its 10 managed organic food farms have avoided using 15,000 tons of chemical fertilizer that would have been used on similarly-sized traditional farms.

### Social impact

In its self-owned farms, the company has employed over 500 employees from local areas. It also works with local communities/ cooperatives to not only provide employment opportunities in the organic food business, but also promote the development of the sustainable agriculture industry.

### Attractiveness for investment

- Strict organic standards to ensure safety and quality of product, enhancing customer trust and supporting brand loyalty among large supermarkets
- Efficient distribution network reduces spoilage and exposure to pollution during transportation
- One of the industry leaders in the organic food industry
- Qualified supplier to multinationals (Wal-Mart, Carrefour, etc.)

## Investment risks

The sustainable land use sector can present a challenge to investors to the extent that it involves working with community-based rural village enterprises – these are both hard to reach and require a high cost for capacity building.

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## Pollution prevention and waste management

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### Introduction

At present, the main sources of environmental pollution in China are industrial emissions, agricultural waste and household refuse. Pollutants and waste easily pose direct or indirect threats to ecology, animal species, and human health. The enterprises involved in pollution prevention and waste management generally generate profits through products, services, or production processes that seek to minimize air- or land-based pollution, as well as actively manage solid, landfill, and hazardous waste.

### Characteristics of SMEs in the sector

While it is hard for SMEs in the sector to compete directly with the state-backed garbage-collecting enterprises, they are more often operating in the sectors that require industrial and household waste treatment. Generally they bear the following characteristics:

- Low technological demand for the recycling sector vs. high technological demand for industrial emissions and waste treatment sector;
- Labor-intensive;
- Highly reliant on government policies;
- Specific geographic focus or relevance.

### Opportunities for investors

This industry receives relatively less policy support and consumer awareness, and generally features lower margins and a particular geographic focus of operations. These factors have made it more challenging for traditional investors to locate appealing investment opportunities, and they usually

target those companies with distinctive technological advantages and a certain market share. Impact investors, however, have an important role to play in strengthening the industry, especially in the recycling segment, in order to achieve significant social impacts in:

- Helping those companies with strong potential to improve resource reclamation efficiency and create high value-add with the waste collected;
- Improving the welfare of low-income people and promoting social equality (e.g. the vast number of garbage-takers among the urban poor) by either absorbing them into existing SMEs or helping them to form urban garbage collection cooperatives.

### **Investment risks**

- Low level of market maturity of the industry, and relatively less access to supportive government policies and consumer awareness;
- Difficulty in evaluation due to low asset levels and lack of proper financial books;
- Fierce competition from the existing large number of garbage-takers in materials supplies.

## Pollution prevention and waste management SME example: Nanjing Ecostar Printing Solution Co., Ltd. (Ecostar)



### Business model

Ecostar refurbishes, sells, and leases copiers at a discounted price to small Chinese print shops, and is now China's leading provider of refurbished copiers. It is overhauling China's photocopying industry by changing the traditional 'workshops' into standardized and scalable production lines. Its core competence lies not only in its competitive price (charging only one third of the price of brand new photocopiers), but also in its unique selling mode of payment by per-page print.

Based in southeast China, the company has nationwide distribution channels including over 500 agents and leasing companies, as well as 16 after-sales service centres nationwide, making it the top seller in China in the last three consecutive years, both in new and second-hand markets. Its main customers are small and medium-sized print shops that have difficulty affording new high-speed photocopiers, and which lease Ecostar's products under a flexible payment agreement. Ecostar also forged a long-term relationship with global distributors and partners to sell overseas, with South-east Asia and the Middle East being its main target markets.

Apart from aiming to become one of the world's leading recyclers of office products, it also plans to manufacture its own branded office products and provide a leading example of sustainable enterprise development for the global community.

### Financial information

Year founded: 1992  
 2010 Revenue: RMB 171.36 million (USD 27.2m)  
 2008-2010 revenue CAGR: 16%

### Environmental impact

The company recycles and remanufactures used copiers to improve the performance of original machines, and thus increases resource utilization rate. Compared with new copiers, one set of remanufactured copiers can save more than 90% in raw materials and reduce energy consumption by more than 95%. The business of renting recycled machines can prolong the service life of quick printing equipment by an average of five years. In 2010, the company reduced discharge of 6,000 tons of solid waste, and electronic waste containing more than 1,000 toxic metals.

### Social impact

With its unique leasing model, Ecostar supports and promotes the development of small print shops, which struggle to grow under a traditional business model (i.e. buying expensive new high-speed photocopiers to provide printing service for their customers). The company creates jobs, and promotes entrepreneurship as well as the industry development. According to its estimates, with its 100,000 units of equipment sold nationwide, the company creates 70,000 jobs in the downstream industry.

### Attractiveness for investment

- Pioneer in the remanufacturing market, with strong R&D capacity
- Diverse revenues generated through resource recycling, sales, and service
- Diverse sales channels both domestically and abroad

### BoP value proposition of environmental SMEs

In China's context, the 'base of the pyramid' (BoP) refers to low-income people and disadvantaged groups, including rural villagers with a below-average living standard, the vast population of migrant workers and their children, and the so-called 'ant citizens' in urban areas whose salary barely covers the costs of reaching a basic living standard. While detailed examination of relationship of China's BoP to impact investing is beyond the scope of this study, it is worth noting at this point that environmental SMEs do offer a strong BoP impact value proposition in their operations. BoP issues tend to be community-based issues, and by their nature, SMEs are well positioned to contribute to impact on BoP living conditions mainly because:

- SME employees often come from the BoP segment, particularly those SMEs in labor-intensive industries;
- SME supply chains are integrated with other businesses or services provided by the BoP segment.

For these reasons, SMEs can better understand and identify needs arising from local living conditions in China than large companies that mainly operate in big urban centers or focus on higher-value markets.

On a related note, it is worth pointing out that the development of social enterprise as narrowly defined (i.e. those focused purely on addressing the needs of the disadvantaged people) has been slow to take root in China compared to other places in the world. This is related to the fact that in China's socialist economy, the social services provided by community and non-profit organizations is a space that has been traditionally occupied by the government, and which has not been open to market influences and foreign involvement. Therefore, it is suggested that impact investors with an interest in BoP issues may consider working with commercial SMEs to build a BoP value proposition into a company's strategy and operations. We observe that environmental SMEs provide strong opportunities in this regard.

For example, a report by the Beijing Academy of Social Sciences estimated that there are around 300,000 garbage takers in Beijing alone<sup>34</sup> that live beyond the social welfare system. Some companies in the recycling sector,

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34. 'A research paper on Garbage-takers' by Beijing Academy of Social Sciences, 2008

*Environmental SMEs can better understand and identify needs arising from local living conditions in China than large companies that mainly operate in big urban centers or focus on higher-value markets.*

instead of competing directly with these garbage takers, have forged a relationship with these people to ensure a stable waste supply by providing proper training and equipment to them. Companies in the sustainable agriculture sector often employ women in the villages left behind by their husbands who migrate to the cities, and consequently provide income for the women and promote gender equality. In summary, these examples indicate the kinds of BoP benefits associated with environmental SMEs can be as follows:

- increased employment and income;
- improved quality of life, through improved environmental conditions;
- enterprise solutions to underlying issues of social inequality through providing the BoP population with a role or place in society.



**Organic farming business combining traditional and modern farming techniques**

# 4

## Creating the Chinese Dream

### Eco-system for impact investing

We outline the services needed by China's environmental SMEs and discuss the importance of constructing an ecosystem for undertaking impact investing more effectively by engaging multiple interested stakeholders. Other enabling infrastructure is considered, specifically, the need for impact metrics, facilitative policies, and legal frameworks.



This Part fosters an awareness of the ‘ecosystem’ in which impact investing operates, and which supports the growth of environmental SMEs in China. It also highlights relevant issues in impact metrics, enabling policy and legal considerations.

## Ecosystem for growing environmental SMEs in China

Growth-stage enterprises in China face a myriad of challenges in sustaining and scaling their businesses over the long term, and environmental entrepreneurs face an added layer of complexity as they operate in a relatively new and emerging domain. Impact investors must recognize the very real resource and capacity constraints faced by Chinese SMEs (see Figure 13). Addressing these gaps requires a hands-on, operational approach to venture development. If impact investors are not equipped to provide the necessary services to address an investee’s individual needs, as outlined over page, they need to consider building a network of service partners and other low-cost or pro bono providers to partner with in doing so.

### Takeaways:

1. The nature of green SMEs and the industries in which they operate mean that specialized technical assistance provided within an ecosystem of support must be paired with investment.
2. Investors need to work proactively with investees to raise awareness of impact metrics and build the management systems to track them.
3. To foster a facilitative policy environment, impact investing pioneers should establish long-term, working relationships with policy makers.
4. For the foreseeable future, the industry must rely on legal frameworks geared towards commercial investors.
5. Impact investors need to have a holistic understanding of existing market dynamics when operating in a new market, such as China, and identify ways to contribute to building the marketplace.



Organic Farm employee at work

Figure 13: SME resourcing challenges in China

Chinese SME growth challenges			Green entrepreneurs' extra challenges
Access to finance	Resources & support	Human capital	Environmental markets
<ul style="list-style-type: none"> <li>● Intermediation services</li> <li>● Fewer investors</li> <li>● Flexible or appropriate finance</li> </ul>	<ul style="list-style-type: none"> <li>● Networks (especially government)</li> <li>● Access to legal, accounting, other professional services</li> <li>● Publicity &amp; profile</li> </ul>	<ul style="list-style-type: none"> <li>● Management skills &amp; reliability (family-owned businesses)</li> <li>● Skilled technical labour</li> </ul>	<ul style="list-style-type: none"> <li>● Developing new technologies</li> <li>● Testing new service delivery models</li> <li>● Defining new markets/customer segments</li> </ul>
Services SMEs need to succeed			
<ul style="list-style-type: none"> <li>● Improved investment-readiness through coaching</li> <li>● Introductions to investors</li> <li>● Facilitated negotiations when necessary</li> </ul>	<ul style="list-style-type: none"> <li>● Introductions to government agencies &amp; trade associations</li> <li>● Public forums that showcase the best</li> <li>● Media exposure</li> <li>● Networking with other entrepreneurs</li> </ul>	<ul style="list-style-type: none"> <li>● Access to experienced mentors</li> <li>● Training saloons/workshops</li> <li>● Media exposure</li> <li>● Pro-bono/semi pro-bono legal &amp; financial services</li> </ul>	<ul style="list-style-type: none"> <li>● Business model development</li> <li>● Market education through media exposure &amp; info dissemination</li> <li>● Policy advocacy &amp; support</li> </ul>

Source: China Impact Fund & New Ventures China analysis, 2012

Figure 14 below depicts a proven methodology for providing technical assistance to and seeing SMEs through to success, based on our experience to date. It outlines a replicable process for identifying and developing SMEs that are potentially financially sustainable and with potentially high environmental impact, with each step in the process being underpinned by an operating value or principle. The activities conducted in support of each step are included in CIF/NVC's current suite of services to environmental SMEs.

Figure 14: Success methodology for SME technical assistance

PROCESS	Build network of entrepreneurs (pipeline)	Identify high-performing companies	Select portfolio companies	Develop portfolio companies	Invest in portfolio companies	Showcase portfolio companies	Connect commercial investors
PRINCIPLES	Build culture of and market for environmental businesses	Develop trusting relationship with entrepreneurs over time	Triple bottom line criteria	Build environ impact into company DNA	<b>Finance “missing middle” companies for best impact</b>	Build culture of and market for environmental businesses	Refer best enterprises to trusted investors
SERVICES / ACTIVITIES	<ul style="list-style-type: none"> <li>• Source companies through four main channels</li> </ul>	<ul style="list-style-type: none"> <li>• Company visits, meet management</li> <li>• Keep contact with high-potential companies</li> </ul>	<ul style="list-style-type: none"> <li>• Become NV portfolio company on invitation</li> </ul>	<ul style="list-style-type: none"> <li>• Acceleration Program</li> <li>• Mentors</li> <li>• Workshops</li> <li>• One-on-one skill building</li> <li>• Public forums</li> <li>• Government relationships</li> <li>• Impact measurement</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Increase confidence of investors</b></li> <li>• <b>Incentivize companies to be impact-oriented</b></li> <li>• <b>Become self-sustainable</b></li> </ul>	<ul style="list-style-type: none"> <li>• Public forums</li> <li>• Media initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Public forums</li> <li>• Individual meetings &amp; introductions</li> <li>• Mentoring for investment readiness</li> </ul>

Source: China Impact Fund & New Ventures China, 2012

Although this model helps address many of the challenges faced by environmental SMEs in China, reliable sources of SME finance remain a missing and crucial piece. Impact investors must understand their role in assisting and accelerating an investee’s success relative to the ecosystem of support that surrounds that investee.

Informed by CIF/NVC’s experience with working with various stakeholders to support environmental entrepreneurs, we have come to a firm belief that an ecosystem involving multiple stakeholders is indispensable to healthy, long-term growth of the environmental SME sector. For the impact investing market to scale up and gain significant traction in China’s environmental sector, one or even a few impact funds are obviously far from enough. Further, the ecosystem certainly cannot just consist of entrepreneurs and investors, but also must include relevant government organizations, policy makers, corporate buyers, intermediaries, accelerator services and professional services firms focused on serving these SMEs.

Investors who are cognizant of this ecosystem will provide for relationship- and coalition-building in their business models, and will see themselves as active participants in constructing a sustainable system of support for Chinese SMEs.

Figure 15: Ecosystem of environmental impact investing



Source: China Impact Fund & New Ventures China, 2012

The remainder of this Part considers other enabling infrastructure that various stakeholders in the SME development and impact investing ecosystem must collaborate to build: a system of impact metrics, facilitative policies, and appropriate legal frameworks.



Entrepreneur pitches to investors at New Ventures Global Investor Forum 2011

## Impact metrics

### Underlying principles for impact metrics

As a new asset class, defining appropriate metrics for measuring and comparing the social and environmental performance of investees is a key area of industry development. It is beyond the scope of this report to undertake a detailed review of the discussion occurring in international forums on this issue. Our starting point is that some form of extra-financial metrics is necessary, and in the Chinese SME context should be based on the following over-arching principles:

- **Simple:** Metrics must be simple to understand and adopt. This implies both that the inherent environmental and social value of each metric must be straightforward, and that the language of the metrics must be accessible and able to be discussed between experts and non-experts – as exemplified by the notion of the ‘triple bottom line’. At this stage of industry development, impact investors will find it easier to win over stakeholders to the idea of simple metrics.
- **Measurable:** Metrics must be measurable, preferably through automated or semi-automated internal management systems. This is especially important given the various resource constraints of Chinese SMEs already discussed (see Figure 13 above), which inhibits the adoption of metrics that add undue complexity to management systems. As SMEs grow in size, resources and capacity, consideration of more nuanced metrics may be possible over time.
- **Scalable:** Related to simplicity, metrics that can be used across many industries should be prioritized for development. This supports the fast proliferation of impact investing concepts through the China market.

*‘Impact metrics are the heart and soul of impact investments.’*

*Weijia Ye, Senior Advisor to CIF & Former Director of NVC*

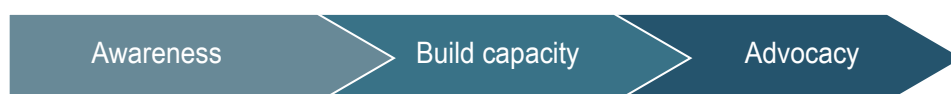
### Cultivating a system of impact indicators

CIF/NVC works with entrepreneurs to increase awareness and use of environmental and social impact metrics. From 2009, New Ventures China, supported by the World Resources Institute, began to develop a set of indicators to help green companies to measure their environmental and social impact. On the basis of these indicators, the first green impact report for 18 Chinese SMEs was launched in 2010. From 2011, NVC started collaborating with the Information Center of Ministry of Industry and Information

Technology on a Green SME Impact Role Model Initiative, which seeks to put forward and promote a potential industry-wide set of environmental indicators for Chinese SMEs.

Here, we offer the benefit of this experience for impact investors considering the China market. Three broad stages can be observed in the process of Chinese SMEs adopting a system of extra-financial metrics (Figure 16).

Figure 16: Three-stage process for company metric adoption



**1. Grow awareness of environmental and social impact:** Economic conditions in China mean that the vast majority of SMEs are established on commercial principles and with little to no awareness of environmental and social impact. Further, behavior of Chinese investors in China tends to perpetuate the view that extra-financial impact is irrelevant unless there is a clear financial benefit to the company. CIF/NVC has found that the triple bottom line is a groundbreaking concept for an entrepreneur that enables them to better understand the interrelationships between their business and the wider society. This concept can be an empowering one for entrepreneurs in that it provides a meta-value system by which to further grow and commit to their business.

#### Example: Growing awareness with a sustainable agriculture business

An organic food-growing and delivery business built its business model around hiring local women, and engaging in teaching urban children the fundamentals of food sourcing, biodiversity and nature. 'Actually we are already doing it but I didn't realize what the triple bottom line was,' remarked the founder in a conversation with NVC that seeded the idea of impact metrics. Until then, the entrepreneur had not tracked any nonfinancial data.

The triple bottom line concept allowed the founder to develop a language of environmental and social impacts that has fundamentally changed the company's investor preference. The company has found that most Chinese investors actively discourage consideration of non-financial metrics and push the company to grow in a very revenue-oriented manner. Now, the company prefers to work with an impact investor that will support the company to grow true to its ethical core.

**2. Build indicators into company management:** CIF/NVC trains entrepreneurs on calculating their environmental and social contribution (e.g. energy saved, CO2 emissions reduced, land protected, etc.). Assistance is provided to companies to design and implement management systems that allow them to measure and articulate their environmental and social impacts. Embedding these internal procedures into a company's management systems is key to

enabling a company to start to assign a value to its environmental/social contribution, and to take such factors into account in formulating company strategy.

**Example: Working with industry leaders to develop environmental accounting systems**

The annual Green SMEs Impact Role Model Initiative run by NVC, which provides a platform for companies to raise their profile in front of the government and potential investors in terms of the triple-bottom line principle, incentivizes SMEs to adopt impact metrics. Reporting of environmental and social indicators is a precondition to companies being considered for selection as a 'role model' company, and is sometimes the first time companies have been faced with such metrics. The selected companies (total of 15 in 2011) are offered assistance to develop environmental accounting processes that can better track year-by-year energy and water consumption, and environmental emissions. In 2011, a biomass renewable energy company, selected to be a role model company under the program, worked with leading international carbon management consultants and as a result received a carbon accounting report on their operations. The data in the report also helped the company identify ways to improve energy efficiency in their operations.

**3.Support companies to become an impact advocate:** In our work to showcase and connect entrepreneurs to investors, CIF/NVC requires companies to report on its environmental and social achievements and contributions when presenting at annual investor forums. Over time, entrepreneurs realize that utilizing data on environmental and social achievements reflects positively on their company's management capabilities. Further, this data can be leveraged as a selling point or competitive advantage for their business. In some cases, entrepreneurs even start engaging with other ecosystem players (investors, government, and suppliers) to promote further awareness of the importance of environmental and social impact in valuing companies.

**Example: Impact metrics advocacy from a waste reduction business**

When an entrepreneur was first introduced to the triple bottom line concept in 2009, it was alien and the company had no means to measure resources recycled or energy saved. NVC worked with the company to improve its awareness and measurement systems. As of 2011, the founder now speaks fluently about the company's environmental benefits to investors, the government, media contacts and other stakeholders – even turning its environmental achievements into a strong selling point for his business. The company's strong environmental profile assisted the company to obtain direct investment from the government on favorable commercial terms, and a subsidized piece of land on which to establish an industrial park for the companies operating in related industries. The company's leading role in this initiative has meant that 'green development' is one of the founding principles of the industrial park.



Stakeholders at New Ventures China Investor Forum 2011

## Policy support for impact investing in China

For impact investing to take root in China, policy support for impact investing is indispensable given the dominant role the Chinese government plays in every walk of life. Dedicated international impact investors can learn to partner with the government at different levels to build a supportive ecosystem in China.

### Policy framework for impact investing in China

As a concept or investment asset class, ‘impact investing’ does not really have a Chinese-language equivalent in China’s financial services industry and is rarely mentioned in local media. It should be recognized that impact-oriented NGOs, which have existed in China for over two decades, are still struggling with a lack of clear and consistent policy and regulatory framework guiding this sector. By extension, it is not surprising that China currently does not have a specific system of policy and regulatory support for impact investing. The onus is on impact investors to proactively study the existing policies, regulations and laws that may have a bearing on their work in China.

To have a more productive discussion of this topic, we should understand the Chinese government’s high-level social and economic development priorities over the coming years: 1) managing the ‘soft landing’ process of its economic development; 2) changing the current economic development model that is highly dependent on natural and labor resources to one that is more knowledge-based and environmentally-friendly; and 3) narrowing income disparity. Impact investing practitioners will be able to play a much



more productive role if its mission could be aligned or even associated with China's incumbent development policies and regulations on multiple fronts. In our experience, there are five policy areas where impact investors can align or associate their activities in order to benefit from the corresponding policy support: SME development, green economy development, poverty alleviation, technology innovation, and policies on agriculture, rural areas and farmers ( 三农政策 ). These five policy areas also cover a large number of the investment targets that impact investors are potentially interested in.

Figure 17: Relevant policy framework for Chinese SMEs



Source: China Impact Fund/New Ventures China analysis, 2012

Though we do not have the space to elaborate on all the five policy areas and their details in this report, an example illustrates the importance of closely following and understanding government policies for the benefit of being a more effective impact investor in China. In September 2011, the Chinese government made an announcement to define the size of commercial enterprises registered in China according to size: large, medium, small, and micro. This announcement was then followed by a policy issued by the State Council (China's cabinet equivalent) in April 2012 that was more specifically focused on providing support, including income tax deductions, to Chinese SMEs that have suffered during the global economic downturn. This policy must be understood not just as a short-term solution; its broader objective is to assuage public concerns over unfair advantages of state-owned enterprises, and the policy also signals the building of a support ecosystem for SMEs moving forward.

## Barriers for impact investors related to policy

There are at least three major barriers or challenges that impact investors, especially those from overseas, should be acutely aware of and have solutions in place for before they embark on their China road.

Firstly, it is worth pointing out that impact investing, as a fresh and foreign concept, could easily be negatively perceived if not communicated appropriately in China. In the Western context, discourse on impact investing often links the concept with philanthropy for the purpose of distinguishing it from conventional financial investing. However, this kind of discourse, if led by foreigners in China, may well provoke skepticism from local policy and business stakeholders. Therefore, we suggest that impact investing be introduced to China as a stand-alone concept or mechanism rather than a ‘spin-off’ or derivative of philanthropy.

Secondly, social and economic policy lobbying and advocacy in China predominantly occurs internally within the government system or from a group of quasi-governmental academic researchers and professors. Forging working relationships with these ‘internal’ advocates takes a long time and a dedicated effort. The following table is intended to help pinpoint those government bodies that could have a role in the five policy areas recommended to impact investors.

**Table 5: Government bodies involved in areas of SME Policy**

Relevant Policy Area	Government Ministries/Agencies Involved
Green Economy	National Development and Reform Commission (NDRC), Ministry of Industry and Information Technology (MIIT), Ministry of Environmental Protection (MEP), Ministry of Agriculture (MOA), Ministry of Commerce (MOC), National Energy Bureau, Ministry of Science and Technology (MOST), Ministry of Housing and Urban-Rural Development (MOHURD)
SME	NDRC, MIIT, MOC, MOST, Ministry of Finance (MOF), Ministry of Labor (MOL), State Administration for Industry and Commerce (SAIC)
Technology & Innovation	NDRC, MIIT, MOST, MOF, MOHURD, MOA
Agriculture	NDRC, MOA, MOHURD, MOF
Poverty Alleviation	NDRC, MOA, Ministry of Civil Affairs, the State Council Leading Group Office of Poverty Reduction & Development

*Source: China Impact Fund/New Ventures China analysis, 2012*

Thirdly, given the two points above, it is imperative that a China-focused impact fund should have key team members who know how to track and intuitively take advantage of favorable policy tools, as well as forge the necessary local connections and/or partnerships to the benefit of their impact investing work.

## Leveraging existing policies for impact investing

China has adopted a development model and related policies that are much different from those in many other countries, especially more developed nations in North America and Western Europe. However, the end goal of impact investing, i.e. social equality and environmental protection, remains the same despite China's differences in development model and policy frameworks. In China's context, again, one of the key tasks for any ambitious impact investor is to sort out how to leverage existing policies and in the process of doing so, even enlighten new policies in this regard.

Compared to other countries, the key point of interest for impact investing from a public policy point of view is the 'green economy' transition. Government policies and regulations in China in this regard are plenty and comparatively clear, and therefore the corresponding market mechanisms are relatively mature. In contrast, the market mechanisms for supporting the society's disadvantaged groups are far from perfect. This may explain to some degree why the Chinese government has long played a leading role in most of China's poverty alleviation projects. Further, this largely unique dynamic creates a dilemma for the establishment of social enterprises that seek to take advantage of market mechanisms.

As far as China is concerned, we believe that impact investing should start with areas where government policy is relatively mature and sources of investments are not restricted, e.g. energy, environment and ecology.

## Long-term goal for China's impact investing policies

Though mapping impact investing to the existing policy framework is a feasible short-term solution, in the future China will still need specific policies and regulations in this area so impact investing can not only take root in China, but more importantly become part of mainstream investment over the long run. Compared with Western countries where there is already an established and comprehensive legal system, China may have a comparative advantage in this regard because its policy and legal system will significantly evolve over the coming years or decades.

*'I feel that the Chinese government can certainly do things to help with the impact investing industry, though it does not necessarily mean they put in the money themselves. Government action could be more on the company side, i.e. to come up with relevant policies to make them more innovative.'*

*Christopher Marquis, Associate Professor at the Harvard Business School*

It is highly important that impact investing practitioners in China work together to steward government policies towards constructing a well-functioning ecosystem. At the same time, they should try to make the best use of existing policies to get some real work done, i.e. sound impact investments that can help serve as success cases to convince and cultivate their advocates among policy makers.

### Legal considerations

The kinds of legislative incentives and regulatory mechanisms that are conducive to the development of impact investing are still being identified by industry experts globally. This certainly remains the case in mainland China. Thus, in the immediate term, impact investors need to use existing legal vehicles and concepts to conduct their work. Further, they must remain aware of the fact that despite increasing moves to liberalize the financial sector infrastructure, the mainland Chinese market continues to be highly regulated and subject to the purview of several regulatory authorities. Strict foreign currency controls remain the norm.

Equity investment in China, whether conducted by domestic or foreign investors, is governed by a number of industrial policies and administrative rules at both the national and local level. At the national level alone, approximately 19 laws and regulations currently regulate the establishment, management and operating conditions of equity investors in China. The Chinese government has initiated schemes to specifically allow foreign investors to conduct private equity-style investing in China. Two schemes that are particularly relevant currently are the Foreign Invested VC Enterprise (FIVCE) scheme and the Qualified Foreign Limited Partner program (QFLP).

Any investor that seeks to enter the China market must obtain specialist, tailored legal advice. However, broadly, the current schemes create the following categories of legal concerns:

- **‘Onshore’ vs. ‘offshore’ fund structures:** Schemes that allow foreign investors to invest through an ‘onshore’ structure, in theory, enable such funds to benefit from particular local regulatory concessions and favorable foreign exchange conversion rules that may make investing in local entities easier.
- **Size of funds:** Foreign investors generally must put up a minimum amount of capital to establish equity-investing entities. For example,

under the FIVCE scheme, the minimum for some legal structures is USD 5 million, and the minimum capital contribution of each investor to the fund is USD 1 million. This means that impact funds in China will likely need to be larger or require larger commitments from investors than funds in other jurisdictions.

- **Investor background:** The provisions of all schemes reflect a preference for the involvement of institutional investors, particularly acting as anchor investors in equity-investing vehicles. Certain minimum funds under management are generally required of a sponsoring investor, for example, USD 100 million under the FIVCE scheme.
- **Government approval:** Foreign investors will likely need to adjust their expectations as to the level of administrative oversight and approval required from various government bodies. For example, quotas apply under the QFLP scheme, which likely orients administrative approval towards favoring sizeable funds started by reputable private equity investors, and where committed capital can be demonstrated. Further, administrative approval is generally required before an investee can receive funds, with such approval taking months in some cases.
- **Impact on investee legal structure:** Foreign-backed investment, even when occurring through an 'onshore' vehicle, requires investees to change their legal structure to a Sino-foreign joint venture. This requires approval from relevant authorities such as the local offices of the Ministry of Commerce, the State Administration of Foreign Exchange, and others.
- **Use of capital:** The schemes are heavily geared towards foreign capital being used for purchases of equity that assist with the investee's capital expenditure needs. Use of funds for other purposes may be restricted, for example, paying down debt.
- **Evolving legal frameworks:** Investors need to adjust their strategies for a rapidly evolving legal landscape. For example, the QFLP scheme continues to exist only in 'pilot' form in large Tier 1 cities such as Shanghai and Beijing, and the mechanics of fund approval and investment placement approval are not always consistent or

transparent across each pilot. A revised draft law on securities investment funds is now being considered by the National People's Congress, which will likely see the consolidation of laws related to private equity investing incorporated into the national fund law. All such developments will likely affect the recommended legal strategies for impact investors moving forward.

# 5

## Creating the Chinese Dream

### Recommendations for successful impact investing in China

We set out eleven practical, action-oriented recommendations for investors who are interested in impact investing in China. These recommendations address current market needs for more efficient intermediation, better enabling infrastructure and stronger absorptive capacity for capital.

What differentiates impact investing from conventional venture investments is its focus on providing an economically viable solution to sustainable development of a given society. From this standpoint, we believe it is vitally important that impact investors, especially those from developed countries, build and examine their model and plan of action in the specific context of any developing country in which they are interested – and China is no exception. Success in this market requires a serious understanding and factoring in of its multiple characteristics as explored in this report.

Based on CIF/NVC's encounters with impact investing to date, we make the following eleven key recommendations and associated observations for impact investors to pioneer in this industry in China. The recommendations have been mapped to the institutional challenges previously outlined by the Monitor Group,<sup>35</sup> and as such provide a 'roadmap' for building the impact investing ecosystem.



**Water treatment facility managed and operated  
by a water management company in a third-tier Chinese city**

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35. Monitor Institute, *Investing for Social & Environmental Impact: A design for catalyzing an emerging industry* (2009), pp15, 19-23.



Challenge	Definition	Evidence	Recommendations to investors in China
<p><b>Lack of efficient intermediation</b></p>	<p>The market for impact investing activity lacks sufficient intermediation, i.e. clearing houses, syndication facilities, independent third-party sources of information, or investment consultants</p>	<ul style="list-style-type: none"> <li>▪ lack of a new generation of money managers</li> <li>▪ difficult to solve technical complexities</li> <li>▪ no peer group to network and share experiences</li> <li>▪ lack of mechanisms for aggregation, rising fixed costs in sourcing deals and conducting due diligence</li> </ul>	<ol style="list-style-type: none"> <li>1. Committed leadership of this sector</li> <li>2. Find the right team with an impact focus</li> <li>3. Commitment to this geography</li> </ol>
<p><b>Lack of enabling infrastructure</b></p>	<p>The market for impact investing lacks the models, theories, policies, protocols, standards, and established language enabling it to flourish (taken for granted in established industries)</p>	<ul style="list-style-type: none"> <li>▪ no metrics or ratings to help define and compare financial risk and impact</li> <li>▪ lack of regulatory and policy support</li> <li>▪ lack of legal, regulatory and tax reforms</li> <li>▪ difficult to conduct deal valuations</li> <li>▪ lack of standards to classify the nature of deals</li> <li>▪ no coherent set of terms and phrases to define the sector and facilitate communication</li> </ul>	<ol style="list-style-type: none"> <li>4. Impact investing must seek out ‘additionality’</li> <li>5. Impact assessment must be simple, measurable and scalable</li> <li>6. Pursue advocacy partnerships</li> <li>7. Identify practical legal solutions</li> <li>8. Investors need realistic expectations</li> </ol>
<p><b>Lack of sufficient absorptive capacity for capital</b></p>	<p>Lack of sufficient deal flow, particularly large, bankable opportunities, or proven investable business models into which investors can place significant amounts of capital</p>	<ul style="list-style-type: none"> <li>▪ lack of sufficient deal flow</li> <li>▪ target markets are relatively expensive to serve (e.g. the poor or environmental issues)</li> <li>▪ lack of effective and scalable business model</li> <li>▪ need for substantial capacity building of entrepreneurs</li> <li>▪ long runway required to nurture businesses</li> </ul>	<ol style="list-style-type: none"> <li>9. Marriage of impact investing and capacity building</li> <li>10. Prove the model with “shiny nuggets” in a focused sector</li> <li>11. Align mission with government policies</li> </ol>

### Efficient intermediation

#### Recommendation 1: Demonstrate committed leadership to grow the sector

There is a need for visionary leadership in this sector on the part of investors, fund teams, policy-makers, and other relevant stakeholders. They must be committed to long-term stewardship, and pursue initiatives which aim to set industry-wide best practice examples and standards. These early pioneers in impact investing in China need to perceive their impact not only through the individual organizations they fund and/or support, but also need to be acutely aware of their inescapable role in leaving a ‘birth mark’ on the future industry. Impact investors must proactively seek to differentiate themselves from conventional investors and non-profit organizations by demonstrating that they have the ‘head’ as well as the ‘heart’ underpinning investment decisions.

There is some risk the sector could falter or face unnecessary setbacks if policy-makers and business leaders perceive that the industry’s own advocates are not treating it with sufficient seriousness or backing up their words with solid action. In a sense, over the long-term, the risk of the sector failing at the wholesale level outweighs the potential failure of any individual impact fund or group.

#### Recommendation 2: Find the right team with an impact focus

Professional investment talent in China has become both expensive and difficult to retain. Further, all impact funds at this point in China’s development are or will be first time funds, likely staffed by teams with non-traditional financial backgrounds. Ultimately, five skill sets are core to impact investing groups and funds:

- Sector or market experience to assist with target selection
- Expertise in impact analysis and management
- Networking and deal-sourcing abilities
- Financial analysis skills
- Policy analysis and interpretation skills

It is difficult to build a local team with all these skills in equal measure. Where choices must be made, we suggest that the first three be prioritized in China’s context. As a new asset class, the distinguishing feature of impact

investing is its ability to deliver and articulate impact, rather than replicate profit-driven models of the financial sector. By extension, the fund team's ability to realize a balance between impact and financial returns is a core skill that underpins the value proposition of impact investing.

Ideally an impact fund management team will consist of people who bring a balanced mixture of impact- and investment-related experiences and skill sets. The team must consist of individuals who truly understand and are passionate about impact investing, while being business and policy savvy at the same time.

### **Recommendation 3: Impact investors must commit to this geography**

Impact investors which are based overseas and are interested in investing in China must commit to this geography. For similar reasons that commercial investment into China is difficult from afar – due to issues of communication, trust, transparency, cultural and business context, and the highly regulated and relatively protected nature of the Chinese market – these issues are equally applicable to impact investors from outside China. A corollary of this is that in and of itself, China must be understood as a collection of diverse markets among which development concerns differ – it is not a homogenous market.

To date, few foreign-based impact investors have committed sufficient resources to set up a local office or hire staff on the ground in China, or to develop strong partnerships with local funds or intermediaries, which in turn will make it harder for their efforts in China to be successful.

This requisite commitment must not only be expressed through a willingness to invest in in-country resources. More importantly, impact investors must commit to a long-term vision of why and how their impact investing work supports the new development model that China desperately needs in the coming decades. This also implies that impact investors need to seriously consider what solutions from their past experiences are most applicable to China under its evolving circumstances, and what creative adjustments are necessary to make their efforts effective.

## Enabling infrastructure

### **Recommendation 4: Impact investing must seek out ‘additionality’, through complementing the existing investment market or finding companies that will accelerate strategic industries**

In an interview, representatives of an international investment and development organization expressed this concept as a motivating factor for their investing – that is, they invest where a market gap is perceived and do not seek to compete directly where vibrant and strong commercial interest already exists. The wisdom of this has been confirmed in our witnessing some impact investors fail to obtain access to deals in their attempt, either intentional or otherwise, to compete with conventional investors on commercial terms. Given the crowded VC/PE landscape in China, such a commercial approach that is lacking a differentiated impact value proposition has little chance of being successful.

However, in China’s context, the ‘additionality’ of deals may also be achieved in an investment with potential to deliver commercially-acceptable returns where the company in question could grow to become an industry role model or scale a particularly innovative approach to solving an environmental problem, especially if the entrepreneur shows potential to become an impact-oriented industry advocate. In saying this, it should certainly be acknowledged that it is still rare to find a company that can deliver equally on financial and impact returns.

Thus for example, impact investors with an environmental focus could define the following targets for inclusion in their investment portfolio:

- Growth-stage companies with proven commercial success and quantifiable environmental and social impact who can serve as role models to their industry peers and potentially become best practice case studies that impact funds can leverage to build credibility for this emerging asset class in China. Commercially competitive returns may be possible.
- Early-stage environmental companies with innovative business models or technologies that are designed to bring disruptive but positive changes to their industry or sectors, or which can significantly help China combat climate change and/or ecological

crisis (such as water shortage), and enhance its resilient capacity. Commercially competitive returns may be possible.

- Businesses which strongly align with the country's agenda for transforming its development model, meet the criteria of inclusive development, and/or address the United Nations' Millennium Goals (e.g. environmental companies with a BoP proposition). Below-market returns are most likely.

### **Recommendation 5: Impact assessment must be simple, measurable and scalable**

Impact investing will be easier to prove in China, as in other markets, where the impact metrics used by investors and investees are easy to express, understand and are as tangible as possible. Working with an experienced third-party organization to build a system of impact measurement indicators that is credible and implementable should be considered.

Equally important, entrepreneurs must commit to impact assessment and measurement in the sense that they accept the concepts and incorporate them into their normal business conduct and management decision-making processes. Impact investors need to see that a core part of their role is to be proactive in capacity building, and providing technical assistance in impact measurement.

### **Recommendation 6: Pursue advocacy partnerships**

To expedite and encourage the emerging impact investing market, thought leadership and education will play an indispensable role. This requires impact investors to work with credible academic institutions and NGOs on a broader scale to share their experiences and bridge the information/knowledge gap among various stakeholders.

### **Recommendation 7: Identify practical legal solutions**

The current legal framework regulating equity investing in China is fast-evolving. Serious impact investors will need to invest in professional legal advice to identify a custom and appropriate structure that serves their purpose. Investors will need to track legal developments to identify opportunities to reduce administrative costs and benefit from tax advantages as the market slowly trends towards greater liberalization.

### **Recommendation 8: Investors need realistic expectations**

Monitor Institute's 'impact first' and 'finance first' definition of types of impact investors has been widely discussed and is a useful tool for investors to identify the ultimate 'floor' to their investment.<sup>36</sup> That is, 'impact first' investors have minimum financial return expectations for investees, beyond which they seek to maximize social/environmental returns; whereas 'finance first' investors use minimum expectations for an investee's social/environmental impact as a qualifier for consideration, and then make a selection seeking to maximize financial returns.

Given that impact investing still needs to be proven in China, we recommend that impact investors clarify their investing intentions – that is, what tolerance they have for risk to either financial or impact-related returns – and consistently pursue this approach so as not to cause confusion in the market.

### **Absorptive capacity**

#### **Recommendation 9: Marry impact investing with capacity building**

Generally speaking, impact investors can reduce the risk of their investments by partnering with capacity building organizations to address specific resource constraints and skill gaps among entrepreneurs. Therefore, investors must be able to provide pro bono or heavily subsidized capacity building services to address these gaps, or partner with another organization that can provide this technical assistance. Philanthropic capital has an important role to play in supporting this piece of the impact investing market.

Specifically in China, entrepreneurs are mostly less experienced in managing a business based on internal rules and processes. So capacity building in this area must pay particular attention to governance issues. Investing in capacity building of these SMEs upfront will help impact investors increase their

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36. Monitor Institute, *Investing for Social and Environmental Impact: A Design for Catalyzing an Emerging Industry* (2009), p32. See also: Steven Godeke & Raúl Pomares, Rockefeller Philanthropy Advisors, 'Solutions for Impact Investors: From Strategy to Implementation' (November 2009); Antony Bugg-Levine & Jed Emerson, *Impact investing, Transforming How We Make Money While Making a Difference* (2011); Bridges Ventures, 'Investing for Impact, Case Studies across asset classes 2010', (2010); Marco Arosio, *Responsible Research, 'Impact Investing in Emerging Markets'* (May 2011); JP Morgan, 'Impact Investments, An emerging asset class' (Nov 2010); ClearlySo, 'Investor Perspectives on Social Enterprise Financing' (2010); K. Harji & T. Hebb, *The Quest for Blended Value Returns* (2010)

chances of nurturing SMEs that not only have long-term business growth potential, but also lasting environmental and social impact.

### **Recommendation 10: Prove the model with ‘shiny nuggets’<sup>37</sup> in a focused sector**

To get buy-in for impact investing from various stakeholders in the ecosystem, early impact investors need to invest in and create role models that can prove the inclusive development model espoused by impact investing. Such role models must have proven financial sustainability and quantifiable environmental/social impact. Success stories have the capacity to influence the way the inclusive development concept and mechanisms are implemented at the macro policy level.

Given the stage of development in China’s market economy, we recommend that impact investors initially focus on those industry sectors where:

- Government policy is relatively mature and clear, and supportive of SME development – this helps minimize risks that include deal sourcing and exit risks;
- Foreign investment is encouraged;
- Market-based mechanisms are relatively well developed;
- Impact investors can bring specialized expertise of value to entrepreneurs.

At this time, the environmental, energy and nature conservation industries appear to offer an attractive proposition based on the above criteria.

Impact fund teams should consider whether the search for ‘shiny nuggets’ may be more fruitfully pursued through working to integrate social and environmental impact criteria into the mission of an established commercial business, and building into those businesses ‘impact DNA’.

*‘An impact fund, when getting started, should ensure that its first investment is truly a success and does exemplify the type of investments the fund will pursue. This implies having a good set of metrics, so as to track the performance of the investment on all impact parameters as promised.’*

*Richard Roque,  
MD of SA Capital  
Limited*

37.This term has been borrowed from Antony Bugg-Levine and Jed Emerson, *Impact Investing* (2011)

### **Recommendation 11: Align investing mission with government goals**

This alignment is often an underappreciated element in bringing foreign capital to China – not only in terms of being able to obtain the relevant regulatory approvals and licenses, but also so that investees receive support to scale their solutions or innovations and thus achieve broader-scale impacts. Supporting the government’s ‘harmonious development’ goals through a fund’s investment mission is therefore more likely to focus the fund team on sectors where there is supportive financial incentives and subsidies, and therefore a possibility of a larger pipeline of attractive deals.

Beyond this, it is equally important that impact investors learn to be fluent in understanding China’s system and politics with the objective of being able to identify policies that offer material, tangible support for SMEs in environmental or other sectors. From this standpoint, the success of impact investing in China will depend on the investment team’s ability to leverage relevant government policies in order to minimize the financial risks of investing.



*‘ If this field of work can attract significantly more of China’s best and brightest, impact investing will not just change China - it will change the world. ’*

*Wayne Silby, Founding Chair of  
Calvert Funds/Foundation*

## Acronyms used in this report

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12FYP	Twelfth Five Year Plan 2011-2015
BoP	Base of the Pyramid
CIF	China Impact Fund
FIVCE	Foreign-invested venture capital enterprise
IRR	Internal rate of return
MEP	Ministry of Environmental Protection
MIIT	Ministry of Industry and Information Technology
NDRC	National Development and Reform Commission
NVC	New Ventures China
OECD	Organization of Economic Co-operation and Development
PE	private equity
QFLP	qualified foreign limited partner
SME	small and medium-sized enterprise
VC	venture capital

# Authors

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**Tao Zhang** is Co-Founder and Managing Director of China Impact Fund. Prior to this, he was COO of New Ventures Global, the center for environmental entrepreneurship housed at the World Resources Institute. During his two years' time at New Ventures, he successfully led its global network of six local centers (Brazil, China, Colombia, India, Indonesia and Mexico) in nearly doubling investments into New Ventures companies to USD 377 million. Tao has a BA from Beijing Foreign Studies University, an MBA from Wake Forest University and an MPA from Harvard University. Tao also writes for the Wall Street Journal Chinese as a columnist, with a focus on impact investing and enterprise solutions to environmental and social issues.

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**Yong (Walter) Ge** is Co-Founder of China Impact Fund and Director of New Ventures China. He also heads up Beijing-based Institute for Environment and Development (IED), a Chinese 'think' and 'do' tank specializing in enterprise solutions to environmental and social problems. Apart from his work in providing business acceleration and investment facilitation services to SMEs with social/environmental intent, he leads the IED team in analyzing green industry trends and investment potential for policy makers and investors. Walter holds an MBA from the University of Ballarat, Australia and an MA from Beijing Normal University.

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**Ruxian (Emily) Zhao** is Director of Operations of China Impact Fund. She was a funds management lawyer with international firm Baker & McKenzie, and is a co-founder of the Equilibrium Partnership, a boutique consultancy focused on the emerging impact investing and social business industry. She has served as a board member and project manager for a number of non-profit and international organizations active in women's development, climate change and homelessness issues. Ruxian holds an MBA (distinction) from the University of Oxford Said Business School, and a Bachelor of Arts and Laws from the University of Melbourne.

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## China Impact Fund (CIF)

CIF is China's first impact investor focused on 'missing middle' environmental SMEs, including those with an environmental value proposition for the country's Base of the Pyramid (BoP) population. CIF works in close partnership with New Ventures China on enterprise acceleration and impact assessment of its portfolio companies. To date, CIF has selectively invested in New Ventures China companies from several different environmental subsectors.

[www.cifund.cn](http://www.cifund.cn)  
[info@cifund.cn](mailto:info@cifund.cn)

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## New Ventures China (NVC)

NVC is a non-profit venture acceleration program founded by the World Resources Institute and Beijing-based Institute for Environment and Development (IED) in 2003. Over the last nine years, NVC has supported over 500 Chinese green SMEs with pro bono capacity-building services, and has facilitated investment of over USD 170 million into some of these companies.

[www.new-ventures.org.cn](http://www.new-ventures.org.cn)  
[info@ied.cn](mailto:info@ied.cn)

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