

The role of China's banking sector in providing green finance

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THE ROLE OF CHINA'S BANKING SECTOR IN PROVIDING GREEN FINANCE

YUNWEN BAI,[†] MICHAEL FAURE^{††} & JING LIU^{†††}

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INTRODUCTION

In the development of human society, production and consumption of various industries have greatly impacted the environment. Banks play a crucial role in supporting companies and projects and thus exerts significant influence on their clients’ operations and, further, on the environment.¹ However, in case of serious environmental accidents, it is usually the directly responsible parties, not the funding banks, that are exposed to liability risks.² Though not directly exposed to environmental

1. For the discussion about banks’ role in promoting sustainability, *see* HENRI CLAUDE DE BETTIGNIES, *FINANCE FOR A BETTER WORLD: THE SHIFT TOWARDS SUSTAINABILITY* (Henri Claude De Bettignies ed., 2009); SUSTAINABLE BANKING: *THE GREENING OF FINANCE* (Jan Jaap Bouma et al. eds., 2001); MARCEL JEUCKEN, *SUSTAINABLE FINANCE AND BANKING: THE FINANCIAL SECTOR AND THE FUTURE OF THE PLANET* (2001) [hereinafter JEUCKEN, *SUSTAINABLE FINANCE AND BANKING*]; OLAF WEBER, *SOCIAL BANKS AND THE FUTURE OF SUSTAINABLE FINANCE* (2010); Marcel Jeucken, *Sustainability in Finance, A Retrospective Exploration* (2004) (published Ph.D. thesis).

2. *See* MICHELLE CHAN-FISHEL, *FRIENDS OF THE EARTH, TIME TO GO GREEN:*

liability, it is still in banks' interests to incorporate environmental concerns, to prevent economic losses from closed un-environment-friendly projects and reputation losses. Green finance policies, especially green banking policies, have been developed in recent decades as a response to those concerns.³

A green banking policy has also started developing in China in recent years. With the rapid development of the economy, Chinese banks are enhancing their capacity quickly and are becoming an emerging force on the international financial stage.⁴ In 2013, when western banks were still struggling with the overwhelming global financial crisis, four Chinese banks were listed into the world's top ten banks ranked with Tier 1 Capital.⁵ In 2011, the total profit from Chinese banks listed in the Top 1000 accounted for 20.7% of global banking profits, which is far higher than the 4.6% it was in 2007.⁶ China's lending to developing countries in 2009 and 2010 had reached US\$110 billion in total, which has surpassed the commitments of US\$100.3 billion from the World Bank assistance.⁷ This immense amount of available cash provides Chinese banks an environment

ENVIRONMENTAL RESPONSIBILITY IN THE CHINESE BANKING SECTOR (2007), available at http://www.banktrack.org/download/time_to_go_green_environmental_responsibility_in_the_chinese_banking_sector/0_0_070509_chinese_bank_public_report_final.pdf. It is also worth noting that in some jurisdictions, environmental liability can be extended to lenders. See, e.g., Mattheu Ahrens & David Langer, *Lender Liability Under CERCLA, Environmental Risks for Lenders Under Superfund: A Refresher for the Economic Downturn*, 3 BLOOMERG CORP. L.J. 482, 483 (2008); Daniel Fishel, *The Economics of Lender Liability*, 99 YALE L. J. 131 (1989); Eberhard Fees, *Lender Liability for Environmental Harm: an Argument against Negligence Based Rules*, 8 EUR. J. L. ECON. 231 (1999); Rohan Pitchford, *How Liable Should a Lender Be? The Case of Judgement-Proof Firms and Environmental Risk*, 85 THE AM. ECON. REV. 1171 (1996); Kathleen Segerson, *Liability Transfers: An Economic Assessment of Buyer and Lender Liability*, 25 J. ENVTL. ECON. & MGMT. S-46 (1993).

3. For an introduction to the development of green finance policies, see Oren Perez, *The New Universe of Green Finance: From Self-Regulation to Multi-Polar Governance*, in RESPONSIBLE BUSINESS: SELF-GOVERNANCE IN TRANSNATIONAL ECONOMIC TRANSACTIONS (Olaf Dilling, Martin Herberg & Gerd Winter eds., 2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=962633.

4. See Matthew Robinson & Cheis Hilson, *The West and China: Shake-up in Global Banking?*, 53 THUNDERBIRD INT'L. BUS. REV. 457 (2011) (Following the global recession of 2007 – 2009, Chinese banks have emerged as significant players in the global banking market due to changes in bank independence, profitability, market focus, business models and talent).

5. *ICBC Tops the Global Banking League in Terms of Tier 1 Capital*, INDUSTRIAL AND COMMERCIAL BANK OF CHINA (July 23, 2013), <http://www.icbc.com.cn/icbc/newsupdates/icbc%20news/ICBC%20Tops%20the%20Global%20Banking%20League%20in%20Term%20of%20Tier%201%20Capital.htm>.

6. Jane Cooper, *China's March to Global Dominance Continues*, THE BANKER, June 18, 2012. The three Chinese banks were ICBC, BOC, and CCB.

7. Geoff Dwyer et al., *Scale of China's Lending Revealed*, FIN. TIMES CHINESE (Jan. 18, 2011), <http://www.ftchinese.com/story/001036539/en>.

for excessive lending and investments.⁸ However, some of their reckless decisions have already led to irretrievable environmental problems.⁹ In this situation, an important concern in China becomes how bank policies and management can be “greened” to promote sustainable development.

The main goal of this article is to examine the development of China’s green bank policies and to analyse how Chinese banks incorporate environmental principles into their financing activities. After this introduction, we will provide a theoretical framework of sustainable banking and green finance, together with a brief discussion of the role of Chinese banking industry (Section 2). Section 3 will use the theoretical framework to analyse the development of green finance in China and to examine the current environment performance of Chinese banks. This will be followed by a discussion of the challenges and opportunities facing Chinese banks, and the role of banks and stakeholders to improve performance (Section 4). Section 5 offers concluding remarks.

I. BACKGROUND: SUSTAINABLE BANKING AND THE CHINESE BANKING INDUSTRY

A. *Sustainable Banking and Green Finance in the Banking Sector*

In this section, we analyse (1) the correlation between banks and the environment, (2) the four phases to achieve sustainable banking, and (3) the banks’ pathway to achieve green finance.

1. *The Correlation Between Banking and the Environment.* Banks and the environment are closely related. On the one hand, environmental risks can create challenges for banks’ performance.¹⁰ On the other hand, banks can also influence the environment both directly and indirectly.

8. See, e.g., Liu Xinhua & L. Randall Wray, *Excessive Liquidity and Bank Lending in China – A Modern Perspective*, 39 INT’L. J. POL. ECON. 45, at 45–63 (2010) (analyzing two views on excess liquidity in both theoretical and practical terms).

9. See, e.g., KEVIN P. GALLAGHER ET AL., INTER-AMERICAN DIALOGUE, *THE NEW BANKS IN TOWN: CHINESE FINANCE IN LATIN AMERICA* 3 (2012), available at http://www.thedialogue.org/PublicationFiles/TheNewBanksinTown-FullTextnewversion_1.pdf (“[T]he composition and volume of Chinese loans are potentially more environmentally degrading than Western banks’ loan portfolios . . . Chinese banks require less demanding environmental standards.”).

10. Banking’s environmental risks mainly relate to commercial banks within debt transactions. Investment banks run risks mainly from the effect of environmental liabilities that influence the value of companies in which they own equity. See Brian Murray et al., *Review of Environmental Risk Management at Banking Institutions and Potential Relevance of ISO 14000* (Research Triangle Inst., Working Paper No. 5774-4, 1997), available at <http://www.epa.gov/p2/pubs/iso14000.pdf>.

Environmental risks can lead to economic and reputational losses.¹¹ Once their clients stop halfway with environmental problems, or have been punished for violating environmental regulations, banks may not get their loans back and have to face reputational risks.¹² In addition to loan default risks by debtors, other risks include reduced value of collateral, changing market, and so on.¹³

The banking industry has both a direct and an indirect influence on the environment.¹⁴ Direct impacts are related to the operations within banks, such as energy consumption for lighting, heating, using PCs and ATM machines, water and paper usage, waste disposal, and business travels. Indirect impacts, also called external environmental impacts, refer to the impact caused by banks' clients who are provided with financial services.¹⁵ This covers a wide range including selling financial products, deposits, and lending transactions. These activities are important for the world economy, but can have severe impacts on the environment.¹⁶ Compared with direct environmental impacts, the indirect ones seem more significant and therefore deserve more consideration.¹⁷

Considering the correlation between banking and the environment, incorporating environmental principles into banking policies becomes very important. It can save the banks losses caused by environmental risks, and at the same time, promote environmental protection. In other words, greening the banking industry plays a desirable role in achieving sustainable development.¹⁸

11. A mining company whose project pollutes a local river would be sued and fined with over a million dollars for environmental damage compensation. Its financier may not get the loan back due to the financial penalty, or may also be publicly blamed for its irresponsible lending or investment.

12. See, e.g., JEUCKEN, SUSTAINABLE FINANCE AND BANKING, *supra* note 1, at 129–34. Environmental risks faced by banks include direct liability, damage to the bank's reputation and negative publicity, and the consequences of environmental risks created by borrowing clients.

13. For the details on risks facing banking industry as a result of environmental problems, see OLAF WEBER ET AL., GOE, INTEGRATION OF ENVIRONMENTAL RISKS INTO THE CREDIT RISK MANAGEMENT PROCESS OF BANKS (2005); see also Murray et al., *supra* note 10.

14. DELPHI INT'L, THE ROLE OF FINANCIAL INSTITUTIONS IN ACHIEVING SUSTAINABLE DEVELOPMENT 2 (1997) [hereinafter DELPHI, THE ROLE], available at <http://ec.europa.eu/environment/archives/finserv/fisum.pdf>.

15. See Marcel Jeucken & Jan Jaap Bouma, *The Changing Environment of Banks*, in SUSTAINABLE BANKING: THE GREENING OF FINANCE, *supra* note 1, at 24, 30.

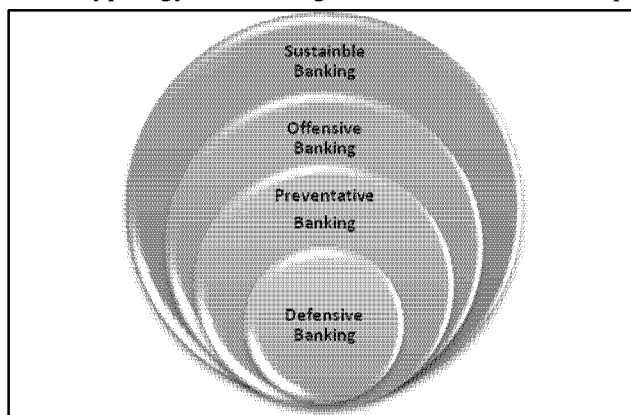
16. See Marcel H.A. Jeucken & Jan Jaap Bouma, *The Changing Environment of Banks*, GREENER MGMT. INT'L, Sep. 22, 1999, at 23–26.

17. See DELPHI, THE ROLE, *supra* note 14. As far as internal impact is concerned, the banking sector is usually regarded as a clean sector.

18. Some earlier research has shown that there is a positive correlation between banks' environmental performance and financial performance. See Gary Simpson & Theodor Kohers, *The Link Between Corporate Social and Financial Performance: Evidence from the Banking Industry*, 35 J. BUS. ETHICS 97 (2002).

2. *The Development of Banking Policies.* Though banking policies are very important for sustainable development, the integration of banking policies and environmental considerations is only realized gradually. In his book “Sustainable Finance and Banking,” Jeucken identified four phases of action that banks should take for sustainability.¹⁹ As illustrated in Figure 1, the phases are sequentially defensive banking, preventative banking, offensive banking, and sustainable banking.²⁰

FIGURE 1: A Typology of Banking and Sustainable Development²¹



In the defensive phase, the bank remains inactive or even resists emerging environmental regulations since its interests may be damaged or indirectly affected by the damage of its clients. The cost for environmental management tends to be avoided.²²

In the preventative phase, the bank merely integrates organizational environmental management and environmental risk management into its daily business, due to the potential to save costs, the driving force from governments, NGOs, and reputational risks.²³

In the offensive phase, the bank recognizes an environmental concern as competitive opportunity in the financial market. It will then develop corresponding environmentally-friendly products or services as a response and then market them.²⁴ Though banks are expected to reach the win-win

19. JEUCKEN, SUSTAINABLE FINANCE AND BANKING, *supra* note 1, at 71.

20. *Id.*

21. *Id.*

22. *Id.*

23. *Id.*

24. For example, in North America, Citigroup and Citizens Bank of Canada have provided energy

solution, such cases will hardly lead to sustainability, because environmental costs in reality are not completely internalized into the current price system.

The ultimate stage is the sustainable phase. In this stage, “the bank does not look for the highest financial rate of return, but for the highest sustainable rate of return, while being profitable in the long run.”²⁵ However, in reality, such strategy would result in loss of profit, since most of their businesses could not be financed by shareholders in that way. It will only work if all banks act on a similar basis.²⁶

3. *Green Finance in the Banking Sector.* Sustainable banking requires concrete measures. Frequently, such measures are taken in the broad context of the financial sector but not exclusively for banks. Since the 1990s, some related initiatives and policies have been adopted.²⁷

Green finance has been developed to improve sustainable development and to promote economic growth for the financial industry. Green finance refers to diverse financial services and products provided by financial institutions for sustainable development.²⁸ Though there is no consensus on the definition of green finance yet, a few core elements have been broadly accepted. According to previous studies and literature reviews,²⁹ green finance, within the banking sector, includes a wide spectrum of market-based lending or investing businesses, involving retail banking,³⁰ project financing, asset management, types of loans and investment finance that are all responsible for environment and society.³¹

efficient mortgages products to customers. Energy efficient mortgages, also referred to as green mortgages, provide considerably lower interest rates than market rates for consumers who buy energy efficient homes and retrofitting with energy efficient appliances or clean power. Additionally, Green Card Visa, linked to emission offsets, is currently available in a Dutch bank. See UNITED NATIONS ENV'T PROGRAMME FIN. INITIATIVE N. AM. TASK FORCE, GREEN FINANCIAL PRODUCTS AND SERVICES—CURRENT TRENDS AND FUTURE OPPORTUNITIES IN NORTH AMERICA, app. 1 at 57 (2007), available at http://www.unepfi.org/fileadmin/documents/greenprods_01.pdf.

25. SUSTAINABLE BANKING: THE GREENING OF FINANCE, *supra* note 1, at 34.

26. *Id.*

27. See, e.g., Perez, *supra* note 3, at 24.

28. For some examples of the green finance products and services, see UNITED NATIONS ENV'T PROGRAMME FIN. INITIATIVE N. AM. TASK FORCE, *supra* note 24.

29. See Perez, *supra* note 6; ANDREA DURBIN ET AL., WORLD WILDLIFE FUND & BANKTRACK, SHAPING THE FUTURE OF SUSTAINABLE FINANCE: MOVING FROM PROMISES TO PERFORMANCE (2006), available at <http://assets.wwf.org.uk/downloads/sustainablefinancereport.pdf>; UNITED NATIONS ENV'T PROGRAMME FIN. INITIATIVE N. AM. TASK FORCE, *supra* note 24.

30. Retail banking refers to financial services provided to consumers, including payment services, savings, loans, mortgages, insurance, pensions and other services. See BARBARA CASU ET AL., INTRODUCTION TO BANKING, at 54–55 (2006).

31. See, e.g., Perez, *supra* note 6, at 4–19.

In the banking industry, green finance implies that it should not only reduce environmental impacts in its financing, but also that the banking industry should proactively finance green companies and technologies, develop new green financial products, as well as further develop a market for low-carbon economic growth.³² Since the 1990s, a series of emerging policies and initiatives at different levels have been forcing banks to improve the environmental performance in their financing services.³³ Those policies include international environmental agreements and treaties,³⁴ initiatives of UN agencies or the OECD,³⁵ national environmental financial policies,³⁶ international initiatives & standards developed by business or bank alliances and civil society,³⁷ and individual bank policies.³⁸

32. See JEUCKEN, *supra* note 1, at 73–74.

33. The policies or initiatives identified in this section are associated with environmental aspects. Social aspects including human rights, child labour, fighting corruption, protecting indigenous people, will not be addressed in this article in particular.

34. Though these agreements are not directly binding upon financial institutions, they can provide the framework for green finance development. For example, under the UNFCCC and the Kyoto Protocol, the Annex B countries have the obligation to reduce the emission of greenhouse gases. The financial sector does not have a direct obligation based on the treaties. However, the financial sector can play an important role to promote the realization of the goals. For example, financial institutions can act as brokers for carbon trading, as financiers for clean technology and adaptation projects. Besides, banks can also help to promote socially responsible investment. See Benjamin J. Richardson, *Climate Finance and Its Governance: Moving to Low Carbon Economy Through Socially Responsible Financing?*, 58 INT'L. & COMP. L. Q. 597 (2009).

35. Many well-known guidelines fall into this category, such as the “OECD Guidelines for multinational enterprises”; the “UNEP Finance Initiative”; the “UN Global Compact” and the “UN Principles for Responsible Investment” (UNPRI). See ORG. FOR ECON. CO-OPERATION & DEV., THE UN PRINCIPLES FOR RESPONSIBLE INVESTMENT AND THE OECD GUIDELINES FOR MULTINATIONAL ENTERPRISES: COMPLEMENTARITIES AND DISTINCTIVE CONTRIBUTIONS, available at <http://www.oecd.org/dataoecd/62/37/38783873.pdf>. For information about the UN Global Compact, see *Overview of the UN Global Compact*, UNITED NATIONS GLOBAL COMPACT, <http://www.unglobalcompact.org/AboutTheGC/index.html> (last updated Apr. 22, 2013).

36. For example, China has adopted the “Green Credit Policy” of 2007 and guideline 2012. For details, see *infra* Part II.B. The Dutch government has drafted as early as 1998 a “Policy Document on Environment and Economy,” which is specifically addressed to financial institutions. A Green fund system has also been established in the Netherlands as a cooperation between the government and the financial sector. See Jeucken & Bouma, *supra* note 16. For the details on how the green fund works in the Netherlands, see Theo van Belleghem, *The Green Fund System in the Netherlands*, in SUSTAINABLE BANKING: THE GREENING OF FINANCE, *supra* note 1, at 234–44.

37. The “Extractive Industries Transparency Initiative (EITI),” “The Climate Principles,” the “Global Reporting Initiative” (GRI), and the “Equator Principles” (EPs) are such examples.

38. Banks can develop policies with regards to both their internal process and their credit policies, for more information on how European banks develop sustainable finance policies, see Olaf Weber, *Sustainability Benchmarking of European Banks and Financial Service Organizations*, 12 CORP. SOC. RESP. & ENVTL. MGMT. 73, 77 (2005). A variety of green financial products has also been developed. For a discussion of such products in North America, see UNITED NATIONS ENV'T PROGRAMME FIN. INITIATIVE N. AM. TASK FORCE, *supra* note 24. The banks are also facing higher social reporting

In order to gain insights into these collective standards related to green finance at the global scale, we will now discuss several collective policies or initiatives that can be adopted by financial institutions especially by banks wishing to incorporate environmental policy into their practices. Although they are voluntary-based global initiatives, there are incentives for banks to sign up. To adopt an initiative or standard is regarded as a commitment by the bank to integrate certain criteria of sustainability into its banking services.³⁹ However, whether the commitment is truly fulfilled depends on further integration of the criteria with the bank's internal policy for lending or investment.⁴⁰ To provide a basic understanding, five essential guidelines will be presented:

UNEP Finance Initiative

The United Nations Environment Program Finance Initiative (UNEP FI) was launched in 1992 and applies to many types of financial institutions.⁴¹ It focuses on promoting clean and renewable energy investment by financial institutions, but not on other environmental issues, such as climate change, biodiversity loss, and hazardous emissions.⁴² The initiative does not restrict banks' financial transactions and does not contain any of the essential industry that may bring crucial impacts. Moreover, there is no external inspection to verify the banks' compliance.⁴³

The Equator Principles

The Equator Principles (EPs) were launched in 2003 and serve as "a set of voluntary standards for determining, assessing and managing social and environmental risk in project financing".⁴⁴ The adopting entities, known as Equator Principles Financial Institutions (EPFIs), make their own social and environmental policies, procedures and standards for their financing activities, and ensure not to give loans to projects where the borrowers do not comply with the standards. They also provide guidance to

requirements, see Concetta Carnevale et al., *Corporate Social Reporting in European Banks: The Effects on a Firm's Market Value*, 19 CORP. SOC. RESP. & ENVTL. MGMT, 159 (2012).

39. Interview with Mr. Like, Bank of Comm'ens, Beijing Branch, in China (June 11, 2011).

40. *Id.*

41. *About UNEP FI*, UNITED NATIONS ENVIRONMENT PROGRAMME FIN. INITIATIVE, <http://www.unepfi.org/about/index.html> (last visited Jan. 3, 2014).

42. *Id.*

43. *Id.*

44. For an introduction about Equator principles, see EQUATOR PRINCIPLES, A FINANCIAL INDUSTRY BENCHMARK FOR DETERMINING, ASSESSING AND MANAGING SOCIAL AND ENVIRONMENTAL RISK IN PROJECT FINANCING (2006), available at http://www.equator-principles.com/resources/equator_principles.pdf.

borrowers on incorporating the principles into a planned project. These principles can be applied to all new projects with total capital costs equal to or above US\$10 million wherever domestically or globally.⁴⁵ Different from the UNEP FI statement, the EPs specifically provide sector standards that guide financial institutions who adopt the Equator Principle to respectively manage and govern the policies by themselves. So far, there have been nearly 70 financial institutions on a global scale adopting and implementing the EPs.⁴⁶ In 2009, it was estimated that less than 2% of an average bank's financing activities were covered by the EPs.⁴⁷

UN Global Compact

The UN Global Compact (UNGC) contains ten voluntary principles.⁴⁸ The signatory banks commit to avoiding human rights violations and corruption, complying with labour standards, and protecting the environment.⁴⁹ The UNGC does not require banks to verify whether companies that they invest in have similarly adopted principles.⁵⁰

UN Principles for Responsible Investment

In 2005 the UN Secretary-General invited some international investors to develop the Principles for Responsible Investment (PRI).⁵¹ After a year-long discussion, six principles were agreed upon, which include: incorporating environmental, social and corporate governance (ESG) into investment analysis and decision process; incorporating ESG issues into ownership policies and practices; seeking appropriate ESG information disclosure from the entities that they invest in; promoting the acceptance and implementation of the Principles in the investment industry;

45. EQUATOR PRINCIPLES, A FINANCIAL INDUSTRY BENCHMARK FOR DETERMINING, ASSESSING AND MANAGING ENVIRONMENTAL AND SOCIAL RISK IN PROJECTS 3 (2013), available at http://www.equator-principles.com/resources/equator_principles_III.pdf.

46. See Interview with Mr. Like, *supra* note 42.

47. JAN WILLEM VAN GELDER ET AL., BANKTRACK, CLOSE THE GAP: BENCHMARKING INVESTMENT POLICIES OF INTERNATIONAL BANKS at 103 (2010), available at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCwQFjAA&url=http%3A%2F%2Fwww.altreconomia.it%2Fsite%2Fdownload.php%3Falleghato%3DphpQ06WZ65530.pdf&ei=MfjGUouQJc3PkQeU_4CgBw&usq=AFQjCNEg4C21NySTVe_SyrXAWob6rgGDKg&sig2=UMGEcuo9SdlR7e2UKr-iqg&bvm=bv.58187178,d.eW0&cad=rja.

48. For the introduction of the ten principles, see *The Ten Principles*, UNITED NATIONS GLOBAL COMPACT, <http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html> (last visited Jan 3, 2014).

49. *Id.*

50. VAN GELDER ET AL., *supra* note 50.

51. *History*, PRINCIPLES FOR RESPONSIBLE INVESTMENT, <http://www.unpri.org/about-pri/about-pri/history/> (last visited Jan. 3, 2014).

cooperation; and due reporting.⁵² Over 1000 investment institutions have signed the initiative with approximately US\$ 30 trillion under their management.⁵³

Carbon Disclosure Project

The Carbon Disclosure Project (CDP) is a non-profit organization that induces corporations, investors and other organizations to disclose the greenhouse gas (GHG) emissions of their operations and to assess their potential exposure to climate change related risks. But there is no obligation for companies borrowing from banks to disclose their carbon emissions.⁵⁴

As a whole, each of these initiatives has been signed by a group of banks worldwide.⁵⁵ The accession to international financial norms helps banks with international experiences and innovative practices to increase their reputation, public's recognition and investors' favours. At the same time, these banks may also face additional challenges including the public's supervision with stricter standards and increasing demand for transparency, which might bring losses in the short term.

B. The Chinese Banking Industry

The banking sector plays a dominant role in facilitating capital flow within China's financial system.⁵⁶ Bank deposits represented 83.1%, 80.5%, and 75.2% of financial stock in China in 2008, 2009 and 2010

52. For more details about the six principles, see *Principles for Responsible Investment Hit US\$ 8 Trillion Mark on First Year Anniversary*, PRINCIPLES FOR RESPONSIBLE INVESTMENT, <http://www.unpri.org/press/principles-for-responsible-investment-hit-8-trillion-mark-on-first-year-anniversary/> (last visited Jan. 3, 2014).

53. See *About the PRI Initiative*, PRINCIPLES FOR RESPONSIBLE INVESTMENT, <http://www.unpri.org/about-pri/about-pri/> (last visited Jan. 3, 2014).

54. For more information about CDP, see CARBON DISCLOSURE PROJECT, <http://www.cdproject.net> (last visited Jan. 3, 2014); VAN GELDER ET AL., *supra* note 47.

55. For the members of the Equator Principles, see *Members & Reporting*, EQUATOR PRINCIPLES, <http://www.equator-principles.com/index.php/members-reporting/members-and-reporting> (last visited Jan. 3, 2014). For the members of the UNPRI, see *Signatories to the Principles for Responsible Investment*, PRINCIPLES FOR RESPONSIBLE INVESTMENT, <http://www.unpri.org/signatories/signatories/> (last visited Jan. 3, 2014). For the members of the UNEP Finance Initiative, see *Our Members*, UNITED NATIONS ENVIRONMENT PROGRAMME FIN. INITIATIVE, <http://www.unepfi.org/signatories/index.html> (last visited Jan. 3, 2014).

56. See DIANA FARRELL ET AL., MCKINSEY GLOBAL INST., *PUTTING CHINA'S CAPITAL TO WORK: THE REAL VALUE OF FINANCIAL SYSTEM REFORM (2006)*, available at http://www.mckinsey.com/~/media/McKinsey/dotcom/Insights%20and%20pubs/MGI/Research/Financial%20Markets/Putting%20Chinas%20capital%20to%20work/MGI_Putting_Chinas_capital_to_work_Full_Report.ashx.

respectively.⁵⁷ Meanwhile, bank lending is the major source of corporate financing. According to the China Banking Regulatory Commission Annual Report, the outstanding loans⁵⁸ made by Chinese banking institutions went up to RMB50.9 trillion (US\$8.06 trillion⁵⁹) in 2010 and RMB58.2 trillion (US\$9.22 trillion) in 2011, and is still growing. In addition to playing an important role in the domestic market, Chinese banks have become an emerging force to compete on the international market, especially in lending to developing countries.⁶⁰

In terms of different attributes, the Chinese banking system is composing of four basic bodies: the Central bank, the Supervisory authority, Policy banks and Commercial banks.⁶¹ This can be illustrated below in Figure 2.

FIGURE 2: Composition of the Chinese banking system (in 2011)⁶²

Attribute	Sub-category	Name of individual bank	Amount
Central bank		People's Bank of China (PBC)	1
Supervisory authority		China Banking Regulatory Commission	1
Policy banks		China Development Bank (CDB); Export and Import Bank of China (Chexim); Agricultural Development Bank of China (ADBC)	3
Commercial banks	State-owned commercial	Industrial Commercial Bank of China (ICBC);	5

57. *Development for Chinese Commercial Banks in Post Financial Crisis*, GLOBAL FIN., <http://finance.ifeng.com/opinion/finob/20110509/3998204.shtml> (last visited May 10, 2011).

58. The concept of outstanding loans, also referred to as the loan balance, is not the total amount of loans, but the loans that have to be repaid. As the exact data about total loans cannot be found from public free sources, this figure of outstanding loans is cited here to present the growing trend of lending by Chinese banks.

59. Exchange rate RMB USD 0.16, July 21, 2012.

60. Chinese overseas lending to developing countries in 2009 and 2010 has reached US\$110 billion. This loan size has surpassed the commitments of US\$100.3 billion from the World Bank assistance. See Chris Hogg, *China Banks Lend More than World Bank*, BBC NEWS (Jan. 11, 2011, 00:34 ET), <http://www.bbc.co.uk/news/world-asia-pacific-12212936>.

61. Hung-gay Fung & Qingfeng 'Wilson' Liu, *The Banking System—Development and Current Issues*, in CHINA'S CAPITAL MARKETS: CHALLENGES FROM WTO MEMBERSHIP 119, at 119–23 (Kam C. Chan et al. eds., 2007).

62. *Id.* For further discussion of the banking system in China, see Fung & Liu, *supra* note 64, at 119–23.

	banks	Bank of China (BOC); China Construction Bank (CCB); Agricultural Bank of China (ABC); Bank of Communications	
	Joint-stock commercial banks	E.G.: China Merchants Bank; China CITIC Bank; Shenzhen Development Bank; Industrial Bank; Huaxia Bank	12
	City commercial banks	Too many to list	144
	Rural cooperative banks and rural credit cooperatives	Too many to list	2,455
	Locally incorporated foreign banking institutions and foreign bank branches	Too many to list	134
Other banking institutions ⁶³	Too many to list		

The People's Bank of China (PBC) is the central bank of China, which is responsible for China's macroeconomic management including regulating money supply, controlling interest rates, formulating a monetary

63. According to CBRC, other banking institutions include 66 trust companies, 127 finance companies of corporate groups, 18 financial leasing companies, four money brokerage firms, 14 auto financing companies, four consumer financing companies, 635 village or township banks, ten lending companies and 46 rural mutual cooperatives. Overall, banking institutions numbered 3,800. *See CHINA BANKING REGULATORY COMM'N, 2011 ANNUAL REPORT 24 (2012), available at <http://www.cbrc.gov.cn/EngdocView.do?docID=5D84696CBE8549E689320D94FBF9D475>.*

policy, and regulating the financial market.⁶⁴ The responsibility of the China Banking Regulatory Commission (CBRC) is to regulate and supervise banking institutions by formulating governing rules, authorizing banks' business, testing senior managerial personnel, as well as producing reports and statistics for the whole banking sector in China.⁶⁵ The policy banks are operated under the governmental directives and macroeconomic policies.⁶⁶ Policy banks provide loans to develop basic and mainstay industries, agriculture, large-scale infrastructures, and overseas financing.⁶⁷ Most banks in China are commercial banks, including five large state-owned commercial banks, twelve joint-stock commercial banks,⁶⁸ 144 city commercial banks,⁶⁹ over 2,455 rural cooperative banks, and rural credit cooperatives.⁷⁰ Additionally, about 130 foreign banking institutions and foreign bank branches have been pouring into the Chinese banking sector.⁷¹

The commercial banks can be divided into different echelons: the "five big" state-owned commercial banks as the first echelon and twelve joint-stock commercial banks as the second echelon. These two types of banks have around 47.3% and 16.2% of China's total banking assets in 2011.⁷² They play a very important role in China's economic development. The big five provide over 50% of the loans in China.⁷³ Joint-stock commercial banks are usually smaller in size and market share, but they are expected to be flexible to give loans to more innovative projects or technologies that help shift traditional industrial lending towards a

64. See *About PBC*, THE PEOPLE'S BANK OF CHINA, <http://www.pbc.gov.cn/publish/english/952/index.html> (last visited Jan. 3, 2014).

65. For the main functions of the CBRC, see *The Main Functions of the CBRC*, CHINA BANKING REGULATORY COMMISSION, <http://www.cbrc.gov.cn/showyjhhjindex.do> (last visited Jan. 6, 2014).

66. Liu Gang & Bai Dun, *Woguo Zhengcexing Yinhang Jidai Lifa* [Chinese Policy-Oriented Bank Acts to be Enacted], 20 GUANGDONG UNIV. J. FIN. 34, 34 (2005), available at http://d.wanfangdata.com.cn/periodical_hnjryj200501006.aspx (in Chinese).

67. HUANG BIHONG, TOKYO MEIJI GAKUIN UNIV., 2006 ANNUAL REPORT: NON-PERFORMING LOAN OF CHINA'S BANKING SYSTEM (2006), available at http://www.meijigakuin.ac.jp/econ/academics/publications/annual/PDF/23_asia%20east_4.pdf.

68. As Figure 2 showed, by the end of 2011, there were a total of 12 joint-stock commercial banks namely China Merchants Bank, China CITIC Bank, Shenzhen Development Bank, Industrial bank, Huaxia Bank, Shanghai Pudong Development Bank, Evergrowing Bank, China Everbright Bank, China Zheshang Bank, Guangdong Development Bank, Shenzhen Development Bank and China Bohai Bank. See CHINA BANKING REGULATORY COMM'N, *supra* note 63, at 116.

69. CHINA BANKING REGULATORY COMM'N, *supra* note 63, at 129.

70. *Id.*

71. Ying Shi & Yanjuan Chen, *The Comparison of Opening Up in Banking Industry Between U.S. and China*, INT. J. BUS. & MGMT., July 2009, at 160, 163.

72. CHINA BANKING REGULATORY COMM'N, *supra* note 63, at 24.

73. *Id.* at 25.

knowledge-based economy.⁷⁴

Despite the rapid development of Chinese banks, many problems have arisen. The current banking model has exposed Chinese banks to various dangers and risks that have resulted in an increase of the non-performing loans (NPLs).⁷⁵ Most Chinese commercial banks have established both a credit risk management system and a business development system to manage credit risks.⁷⁶ However, accurate risk information is not always available,⁷⁷ skills for credit risk assessment remain deficient, loan pricing is poor in many branches of banks,⁷⁸ and many banks are still subject to political influence concerning lending decisions.⁷⁹ Furthermore, most of Chinese banks have not yet approached international standards of corporate governance and transparency.⁸⁰

II. CHINESE BANKS FOR GREEN FINANCE

A. *Green Regulations and Green Finance Policies*

The rapid economic development has been accompanied by serious environmental problems in China and also in the countries in which it invests. In 2007, China overtook the US as the world's largest carbon dioxide emitter.⁸¹ Air and water pollution have now become a major concern that is threatening Chinese people and the state's stability.⁸² It is

74. Liu Shujie & Luo Hua Ping, *The Calculation of the Profit of the Chinese City Commercial Banks*, KNOWLEDGE-BASED ECONOMY, 2013, ISSUE 5; [HTTP://MALL.CNKI.NET/MAGAZINE/ARTICLE/ZZJJ201305059.HTM](http://mall.cnki.net/magazine/article/ZZJJ201305059.htm) (CHINESE).

75. Jamil Anderlini, *Uniform Results Highlight Risks Building Up for China's Lenders*, FIN. TIMES CHINESE (Aug. 31, 2010, 3:06 PM), <http://www.ftchinese.com/story/001034388/en>; Sidahang zhongjian yewu qianbannian zengshou 1200 yi. [Banks' intermediary services increased 120 billion], <http://finance.sina.com.cn/china/jrxw/20100903/23118601754.shtml>.

76. CHINA BANKING REGULATORY COMM'N, 2010 ANNUAL REPORT 56–59 (2011), available at <http://zhuanli.cbrc.gov.cn/subject/subject/nianbao2010/english/zwqb.pdf>.

77. The credit reference centre was established in 2006 by the Chinese central bank, which also refers to the Credit Information System Bureau. It is responsible for building up a credit reporting system and database by collecting and providing credit information of individuals and enterprises, in order to solve the information asymmetry in the development of the credit market. However, banks themselves have not strictly and proactively collected information since then. See *Credit Reference Centre*, THE PEOPLE'S BANK OF CHINA, <http://www.pbccrc.org.cn> (last visited Jan. 6, 2014).

78. FARRELL ET AL., *supra* note 56, at 13.

79. *Id.*

80. CHAN-FISHEL, *supra* note 2, at 5.

81. John Vidal & David Adam, *China Overtakes US as World's Biggest CO₂ Emitter*, THE GUARDIAN (June 19, 2007, 1:23 EDT), <http://www.theguardian.com/environment/2007/jun/19/china.usnews>.

82. See generally THE WORLD BANK & THE STATE ENVTL. PROT. ADMIN., *COSTS OF POLLUTION IN CHINA: ECONOMIC ESTIMATES OF PHYSICAL DAMAGES* (2007).

estimated that from 1981 to 2007, the annual expenses in pollution control have been growing with average annual growth rates of 20.8%. Until 2007, the investment in pollution control measures amounted to 1.36% of GDP.⁸³

In response to the explosion of environmental and social costs, since the mid-1980s, the Chinese government has announced a group of stringent environmental regulations to curb pollution and energy consumption for different industries.⁸⁴ Essentially, environmental policymaking in China in the past decade has also gone through a period converting from end-of-pipe, command and control-based regulation to more market-based instruments such as “Green public procurements”, “Environmental taxes” and “Green trade” policies.⁸⁵ Given the important role played by the financial sector in China’s industrial development, the government started promoting the development of green finance.⁸⁶

Many financial institutions in other countries have established their own financing policies and utilized different international voluntary guidelines to implement their environmental agendas.⁸⁷ However, due to the characteristics of the Chinese financial system, few Chinese financial institutions have adopted international environmental and social standards on a voluntary basis. Hence, the Chinese government decided to intervene to integrate environmental protection into the financial system reform.⁸⁸ Since 1995, several governmental authorities started collectively releasing a series of directive-based regulations to set principles for investments and lending performances and substantially forced banks to design their own policies.⁸⁹

The first green regulations relevant to bank lending were presented in 1995.⁹⁰ They are the “Announcement on credit policy for environmental protection” released by the People’s Bank of China⁹¹ and the “Announcement on making use of credit policy for promoting environmental protection” issued by State Environmental Protection

83. CHINA ENV’T CHAMBER OF COMMERCE, RESEARCH ON CHINA’S ENVIRONMENTAL INDUSTRY (2009), available at <http://www.cecc-china.org/uploads/ftb/20090319/huanjingchanyeyanjiu009.pdf>.

84. Motoko Aizawa & Chaofei Yang, *Green Credit, Green Stimulus, Green Revolution? China’s Mobilization of Banks for Environmental Cleanup*, 19 J. ENV’T & DEV. 119, 119–20 (2010).

85. *Id.* at 123.

86. *Id.*

87. *Id.* at 120. For some of the examples, see JEUCKEN, SUSTAINABLE FINANCE AND BANKING, *supra* note 1, at 185–203.

88. Aizawa & Yang, *supra* note 84, at 120.

89. *Id.* at 126.

90. *Id.*

91. People’s Bank of China, Announcement on Credit Policy for Environmental Protection, 24 Yinfa (Feb. 6, 1995).

Administration.⁹² Both required financial institutions to pay attention to environmental protection in their lending policies.⁹³ However, these first attempts did not make it into the implementation phase, as economic growth at that time was the top priority and collaboration between different governmental authorities was not sufficient.⁹⁴

Between 1996 and 2003, the Chinese government did not enact any green policies targeting the financial sector.⁹⁵ As of 2004, the National Development and Reform Commission (NDRC), jointly with the PBC and the CBRC, issued the “Announcement on further strengthening industrial policy and credit policy to control credit risks,” which intended to accelerate the upgrading of the industrial structure and a strict control of credit risks to solve the problems of explosive growth in lending and blind expansion of certain industries.⁹⁶ In the appendix of this announcement, a list of redundant low-level constructions, including a portion of polluted production facilities, were banned and restricted.⁹⁷ Then, in 2005 and 2006, another two policies, the “Regulation on accelerating adjustment of industrial structure” and the “Announcement on accelerating adjustment of industrial structure with excess capacity”, were released by the State Council, which required financial institutions and other administrative departments to adjust national industrial structures with excess capacity by optimizing loan structures and land supply.⁹⁸ Both policies provide that bank lending should not fund projects and enterprises phased out due to severe pollution.⁹⁹ However, these policies neither specified environmental risks in particular nor identified a specific due diligence of the financial sector, and thus they could not be perceived as real environmental financial policies.¹⁰⁰

92. State Env'tl. Prot. Admin., Announcement on Making Use of Credit Policy for Promoting Environmental Protection, 105 Huanji (Feb. 14, 1995). In March 2008, the State Environmental Protection Agency was upgraded to the administrative level of ministry – an equal weight as other Chinese ministries, and is later called the Ministry of Environmental Protection (MEP).

93. Aizawa & Yang, *supra* note 84, at 126.

94. *Id.*

95. *Id.*

96. *Id.*

97. China Banking Regulatory Comm'n, People's Bank of China & Nat'l Dev. & Reform Comm'n, Announcement on Further Strengthening Industrial Policy and Credit Policy To Control Credit Risks, 746 Fagaichanye (Apr. 30, 2004), available at <http://www.miit.gov.cn/n11293472/n11505629/n11506277/n11510857/n11511082/12011960.html>.

98. State Council, Regulation on Accelerating Adjustment of Industrial Structure, available at http://www.ndrc.gov.cn/zcfb/zcfbqt/zcfb2005/t20051222_54302.htm (in Chinese); State Council, Announcement on Accelerating Adjustment of Industrial Structure with Excess Capacity, 11 Guofa (Mar. 12, 2006), available at http://tzs.ndrc.gov.cn/xkxmq/xkxmyj/t20060321_78937.htm (in Chinese).

99. Aizawa & Yang, *supra* note 84, at 126.

100. *Id.*

It was not until July 2007 that the first series of real green finance policies were officially launched by the Chinese government.¹⁰¹ This was considered as a new approach to curb environmental pollution and as the most powerful element influencing green finance in China today.¹⁰² These green finance policies, enacted by the Ministry of Environmental Protection (MEP) and by financial regulatory departments, make use of the power of the financial sector to provide incentives or restrictions to their clients in terms of pollution level or energy use.¹⁰³ These policies are referred to as the “Green Credit Policy”, the “Green Securities Policy”, and “Green Insurance” respectively. As their names suggest, each policy has its own focus: the “Green Credit Policy” is to regulate bank lending, which is also a core policy that contributes to Chinese banking for green finance.¹⁰⁴ The “Green Insurance” system is to regulate insurance companies to ensure that companies take responsibility for environmental accidents and guarantee victims to receive compensation. The “Green Securities Policy” has put pressure on thirteen heavily polluting industries, regulated listed companies approaching China’s capital market, to pass environmental assessments before pursuing an initial public offering (IPO) or refinancing.¹⁰⁵

In addition to these policies adopted by government, the banking sector has started its own effort to green its activities. In 2009, to promote banks’ social performance, China banking association issued the “Guidelines on Corporate Social Responsibility for the Chinese banking sector”. The guidelines indicate that financial institutions in the banking sector should take responsibility in economic, social, and environmental aspects, and are required to issue an annual report on their corporate social responsibility (CSR).¹⁰⁶ As far as the environmental aspects are concerned, the Guidelines require the banking sector to take environmental responsibility in supporting national industrial policies and environmental policies, saving resources, protecting the natural environment and promoting the sustainable development.¹⁰⁷ Another important feature of the guidelines is that it encourages the institutions to study the experience of the Equator Principles and to understand related international environmental treaties, norms and standards.

101. *Id.* at 133–34.

102. POLICY RESEARCH CTR. OF ENV’T & ECON., MINISTRY OF ENVTL. PROT., REPORT OF CHINA GREEN FINANCE DEVELOPMENT (2010) (in Chinese).

103. *Id.* at 120.

104. *Id.* at 137.

105. CHAN-FISHEL, *supra* note 2.

106. Aizawa & Yang, *supra* note 84, at 126.

107. Article III (3) of the Guidelines.

After the adoption of the 2007 Green Credit Policy, the MEP and financial regulatory department have published several other documents to further clarify and broaden the application of the policy and to provide a more detailed implementation guidance.¹⁰⁸ These include the documents to promote the environmental information sharing between environmental agencies and banks, such as the “Information Communication and Sharing Agreement” in 2008 and “the Notice on Implementing Credit Policy and Improving Information Sharing” in 2009.¹⁰⁹ There are also some other documents on the role of financial sector to support the adjustment of the industrial structure. The most important development in the past few years is the “Guidelines on Green Credit” adopted by the Chinese Bank Regulatory Commission in 2012.¹¹⁰ Compared to the “Green Credit Policy”, this guideline provides more detailed guidance to the banks to support the green economy and to prevent environmental and social risks.¹¹¹ It covers bank organization and management, capacity building, the process of providing credit, information disclosure and monitoring.¹¹²

The following figure illustrates the development of the regulations concerning China's green finance:

FIGURE 3: Green finance regulations relevant to China's banking sector (1995-2012)

Date	Document	Issuing Org.	Relevant contents
1995-2-6	Announcement on credit policy for environmental protection	PBC	To pay attention to environmental protection in their lending
1995-2-14	Announcement on making use of credit policy for promoting environmental protection	SEPA	
2004-4-30	Announcement on further strengthening	NDRC PBC	To accelerate upgrade of industrial

108. See POLICY RESEARCH CTR. OF ENV'T & ECON., *supra* note 102, at 10.

109. *Id.*

110. China Banking Regulatory Comm'n, Guidelines on Green Credit, 4 Yinjianfa (Feb. 24, 2012).

111. See Notice of the CBRC on Issuing the Green Credit Guidelines, CHINA BANKING REGULATORY COMM'N, <http://www.cbrc.gov.cn/EngdocView.do?docID=3CE646AB629B46B9B533B1D8D9FF8C4A> (last visited Jan. 7, 2014).

112. *Id.*

	industrial policy and credit policy to control credit risks	CBRC	structure and credit risks control to prevent explosive growth
2005-12-2	Regulation on accelerating adjustment of industrial structure	State Council	To optimize lending structure for adjustment of national industrial structures
2006-3-12	Announcement on accelerating adjustment of industrial structure with excess capacity	State Council	
2007-7-12	Opinions on preventing credit risks and implementing policy of environmental protection	MEP PBC CBRC	Green Credit Policy
2009-1-12	Guidelines on corporate social responsibility for Chinese banking sector	China Banking Association	To take environmental responsibility in supporting national industrial policies and environmental policies
2012-2-24	Guidelines on Green Credit	CBRC	To define the responsibilities and accountability of bank's management in Green Credit, requires full disclosure of Green Credit information,

We will now focus in more detail on the content of the “Green Credit Policy” of 2007.

*B. Green Credit Policy in China's Banking Sector*¹¹³

The 2007 Green Credit Policy provides the framework to develop green credit. It consists of three relevant components.¹¹⁴

The first aim is to strengthen commercial banks in the management of their environmental performance. It means banks have to consider the state industry policy and borrowers' environmental practices when granting a loan. Specially, banks should neither lend money to disqualified companies and new projects that cause heavy pollution or run with energy intensity, nor to projects that fail environmental impact assessments.¹¹⁵ For the companies that received loans before the policy was issued, lending should not be provided any longer if they are later reported in violation of environmental regulation.¹¹⁶ If projects are included in the phase-out list designed by the state industry policies, banks must stop the lending and the existing loan must be called in. Conversely, loans should be directed towards projects favouring energy conservation and emission reduction.¹¹⁷

The second aim of the 2007 Green Credit Policy is to establish an environmental information sharing scheme between environmental regulatory departments and the financial institutions.¹¹⁸ The policy "requires that all levels of environmental protection departments should provide the financial sector with accurate environmental information. This also involves releasing a credit blacklist with companies who illegally obtain discharge permits and exceed standards of sewage discharging and projects which have been set up but have not passed Environmental Impact Assessments".¹¹⁹ Meanwhile, environmentally-friendly enterprises will be listed as good examples to be more competitive. The People's Bank of China and the China Banking Regulatory Commission should work with environmental authorities to assist banks to integrate this information into the existing credit risk management system, and supervise banks' implementations.¹²⁰ Based on such information, banks can inspect companies' environmental performances. Furthermore, all these participants should strengthen communication and training on a regular

113. Although, as we made clear above, green finance is a much broader concept than green credit (also including green securities and green insurance), we will now mostly focus on green credit.

114. Aizawa & Yang, *supra* note 84, at 125.

115. *Id.*

116. State Env'tl. Prot. Admin., People's Bank of China & China Banking Regulatory Comm'n, Opinions on Preventing Credit Risk and Implementing the Policy of Environmental Protection, 108 Huanfa (July 12, 2007).

117. Aizawa & Yang, *supra* note 84, at 119–44.

118. Green Credit Policy, *supra* note 120, section 3.

119. *Id.*

120. *Id.*

basis. Note, however, that this information sharing is weakly formulated as a duty for public authorities; the opinions do not impose a duty on financial institutions to disclose environmental information.¹²¹

Third, the provisions identify liabilities for violation of the policy. More specifically, if staff members of environmental authorities violate laws, regulations or any other guidelines, relevant administrative sanctions will be imposed. If a commercial bank extends loans to projects that violate environmental regulations or the credit policy, severe penalties will also be imposed in accordance with the law.¹²²

Having drawn a lesson from the first-generation green policy, which was announced in 1995, this Green Credit Policy of 2007 was created along with the national environmental agenda, and it has been increased to a higher level since it is produced by three ministries.¹²³ Three responsible authorities MEP, PBC and CBRC, working closely together, intend to establish a solid platform for environmental information sharing in order to ensure the implementation of the policy.¹²⁴

As a whole, the launch of the Green Credit Policy has received broad support and positive comments from the central government and the Chinese banking sector.¹²⁵ It has been considered to form an initial framework on green lending and assists China's banking sector to move forward towards green finance.

The Green Credit Policy provides a general guidance; further details are provided in the Guideline on Green Credit of 2012.¹²⁶ The main goal of Green Credit Policy is to prevent credit risks caused by environmental issues. The Guideline is more comprehensive and explores the role of green credit to promote green, low carbon, and a circular economy, and to prevent environmental and social risks.¹²⁷ In other words, it is closer to the "sustainable banking" concept than to the Green Credit Policy. In addition to these abstract goals, the Guideline also provides more concrete ways to achieve them. It requires the board of directors of banks to consider green credit principles in its decision making and requires the banks to have specific persons or departments in charge of green credit issues.¹²⁸ The

121. Interview with Mr. Guo. P.Y. Syntao, General Manager, conducted a PhD study on Chinese companies' CSR in 2004, in China (Mar. 2, 2011).

122. Aizawa & Yang, *supra* note 84, at 119–44.

123. POLICY RESEARCH CTR. OF ENV'T & ECON., *supra* note 102.

124. Aizawa & Yang, *supra* note 84, at 131.

125. *Id.* at 147.

126. China Banking Regulatory Comm'n, Guideline on Green Credit, 4 Yinjianfa (Feb. 24, 2012).

127. *See id.*

128. *Id.* at ch. 2.

banks need to adopt concrete policies, procedures and standards to implement green credit policy.¹²⁹ The Guideline also regulates the whole process of credit granting, from the inspection *ex ante* to the monitoring after granting.¹³⁰ The Green Credit Policy places an obligation of information disclosure mainly on environmental agencies. The Guideline requires banks to do internal green credit auditing, to establish an assessment, encouragement and punishment regime for staffs, and to publish their green credit strategy and policy. If the credit granting involves significant environmental and social risks, the banks should disclose relevant information and accept the monitoring from the market and other stakeholders. When necessary, they can designate eligible and independent third parties to evaluate and audit their activities.¹³¹ The Guideline also covers monitoring and inspection issues.¹³²

C. Challenges in the Implementation of the Green Credit Policy

The Green Credit Policy has had a substantial impact in at least two aspects. The policy responds to curb the increasing energy demand and pollution of China. Besides, banks attain their inherent appeals to control credit risks from lending, as they can find out information about companies that violated environmental regulations or caused severe environmental incidents through the environmental information sharing scheme, so as to minimize economic losses from their lending decisions.

1. *Implementation of the Green Credit Policy.* Different from the many international initiatives that are signed by banks on a voluntary basis, China's banks need to respond to the mandatory rules in the Green Credit Policy and Guideline,¹³³ as it is enforced by the state government. Because the Guideline has only been adopted recently, how it will be implemented in practice remains to be seen. This research mainly examines the implementation of the 2007 Green Credit Policy. The Green Credit Policy particularly requires from Chinese banks the following: (1) establishing an internal credit policy; (2) data collection on loans called-in or withheld; and (3) extending green credit to energy efficiency and other environmentally friendly projects. We will now examine how these requirements have been implemented.

Of the commercial banks, some banks have started developing their

129. *Id.* at ch. 3.

130. *Id.* at ch. 4.

131. *Id.* at ch. 5.

132. *Id.* at ch. 6.

133. These two documents include both mandatory and optional provisions.

own internal systems, including a database, as well as measures and procedures for implementing this national policy in line with the “opinion”.¹³⁴ These bank-level credit policies vary as far as the degree of specified guidelines is concerned. For instance, one of the “big five” state-owned commercial banks, ICBC, has developed a set of lending policies to stress the “two high” industries and explicated the lending goal and implementation measures for the next three years.¹³⁵ Moreover, ICBC has set up a database of clients’ environmental risks.¹³⁶ As of February 2008, for approximately 47,000 of its 60,000 clients, environmental information has been recorded.¹³⁷ The CCB has also created credit guidelines especially for high environmental risk industries and developed an early-warning system to remind its sub-departments when they get close to the quotas for lending to energy intensive sectors designated by headquarters. Particularly, the CCB has issued a quarterly newsletter which addresses the banking industry about monitoring risks and the “early-warning signals” to remind relevant industries to adjust their business strategies as well as to catch emerging green opportunities.¹³⁸ The Bank of Communication reported that it has defined different levels of categories to identify environmental impacts of its clients and has upgraded the credit risk system to timely monitor environmental records of its borrowers.¹³⁹ The Industrial Bank, which has a superior performance in adopting the Equator Policy, has developed the policy of “Environmental and Social Risk Management”,¹⁴⁰ which indicates specific rules for approving certain industries’ access to credit. Particularly, by the end of 2010, nine listed banks, including the ICBC, CCB, BOC, ABC, Bank of Communications, Industrial Bank, Shenzhen Development Bank, Ningbo Bank, and the China CITIC Bank, have also proposed a “one vote veto” system as prerequisite in approving a credit application, which means they will deny lending to enterprises with environmental violations and, moreover, also suspend loans to companies and projects that have been restricted by

134. *SEPA Makes Public the Stage-Based Progress in Green Credit Policy*, MINISTRY OF ENVTL. PROTECTION (Feb. 13, 2008), http://english.sepa.gov.cn/News_service/news_release/200803/t20080310_119113.htm.

135. INDUSTRIAL & COMMERCIAL BANK OF CHINA, 2009 CORPORATE SOCIAL RESPONSIBILITY REPORT 47–50 (2009), available at <http://www.icbc-ltd.com/ICBCLtd/SocialResponsibility/Corporate%20Social%20Responsibility/2009/>.

136. *Id.*

137. *Id.*

138. Interview with a representative of the Beijing Branch Credit Manager, Indus. and Commercial Bank of China, in China (May, 3 2011).

139. Interview with Mr. Like, Bank of Commc’ns, in China (Apr. 8, 2011).

140. Aizawa & Yang, *supra* note 84, at 133.

industrial policy. That essentially means that they are phased out.¹⁴¹

According to the 2009 CSR report¹⁴² on China's banking sector issued by the China Banking Association, the loan balance of China's coke industry was RMB27 billion (US\$4.32 billion) in total; this constitutes a RMB23 billion (US\$3.58 billion) decrease compared to the level of 2008. In the thermal power industry, the total loans in 2009 were RMB269 billion (US\$43.04 billion), RMB188 billion (US\$48.88 billion) less than the figure in 2008. In 2009, 2,348 clients, involved in the "two high" industries, had been withdrawn from bank' loans, which constitutes an increase of 823 compared to 2008.¹⁴³ In the latest statistics of the 2010 CSR report¹⁴⁴, the lending to over-capacity industries including steel, cement, flat glass, coal chemical, and shipbuilding accounts for 3.57% of the total lending, which is a 0.37% decrease compared with 2009.¹⁴⁵

Meanwhile, banks have increased investments in green industries and projects. See Figure 4: In 2009, RMB856 billion (US\$136.96 billion) from China's banking sector was loaned to support 6,412 energy efficiency and environmental protection projects covering 4,099 enterprises. This constitutes an increase of 3,429 compared to the 2007 level.¹⁴⁵ In 2010, the only data found from the report is an 18.07% increase of total green lending compared to the amount of 2009.¹⁴⁶ This increasing trend can be observed from the following table:

141. YU XIAOGANG, ZHONGGUO YINHANGYE HUANGJING JILU (2010) [Environmental Report on Chinese Banks in 2009], available at <http://d.kmwzjs.com:10125/uploadfile/jyhjij2009.pdf>.

142. CHINA BANKING ASS'N, 2009 NIANDU ZHONGGUO YINHANGYE SHEHUIZEREN BAOGAO (2010) [Chinese Banking Social Responsibility Report of 2009] [hereinafter CHINA BANKING ASS'N, 2009 REPORT], available at <http://www.china-cba.net/bencandy.php?fid=65&id=5299>.

143. CHINA BANKING ASS'N, 2010 NIANDU ZHONGGUO YINHANGYE SHEHUIZEREN BAOGAO (2011) [Chinese Banking Social Responsibility Report of 2010] [hereinafter CHINA BANKING ASS'N, 2010 REPORT], available at http://www.china-cba.net/upload_files/emag/shehuizerenbaogao2010.rar.

144. *Id.*

145. CHINA BANKING ASS'N, 2009 REPORT, *supra* note 142.

146. CHINA BANKING ASS'N, 2010 REPORT, *supra* note 143.

FIGURE 4: The Statistics of Loans to Energy Saving and Environmental Protection Projects by China's Banking Sector (2007–2010)¹⁴⁷

Year	Investment to energy saving and environmental protection projects (billion) (RMB)	Percentage of total loans (%)	Projects involved in the investment	Enterprises involved in the investment
2007	341.1 (US\$54.576 billion)	2.70	2,715	3,505
2008	371.0 (US\$59.36 billion)	3.11	2,983	3,615
2009	856.0 (US\$136.96 billion)	8.93	6,412	4,099
2010	1010.7 (US\$161.712 billion)	-----	-----	-----

Although such statistics indicate that the launch of Green Credit Policy has fundamentally changed the landscape of Chinese banking towards green financing, there is still a group of banks that are not willing to provide information to the public about their compliance with the Green Credit Policy, such as joint-stock city commercial banks.¹⁴⁸ There is thus still potential for more commercial banks to engage in this process.

2. *Challenges.* Converting a concept into practice requires a long and dynamic transition process. The same is true for banks for implementing new bank policies. In the past, with increasing loan demands for rapid development in China, the mode of seeking profits without consideration of environmental and social impacts was the main way for banks to make decisions on lending. For example, in the early 1990's, heavy polluting industries but with higher return, including inefficient thermal power plants, coal mines and cement production, always received sufficient lending support.¹⁴⁹ To change their traditional operations in financing to a responsible practice, banks have, in their perception, to go through a tough transition process, including systemic reformation and actual practices.

Since the innovative "Green Credit Policy" was launched in 2007, most Chinese banks have made progress and gained experience from their

147. CHINA BANKING ASS'N, 2009 REPORT, *supra* note 142; CHINA BANKING ASS'N, 2010 REPORT, *supra* note 143.

148. YU, *supra* note 141.

149. Interview with Mr. Like, *supra* note 139.

loan operations in compliance with general guidelines and national environmental standards. Despite many efforts done by banks and governments, there are still some remaining challenges for incorporating this policy into the current banks' transactions. To evaluate a policy comprehensively is a complex and time-consuming task. Many scholars have already intended to evaluate the Green Credit Policy from different perspectives.¹⁵⁰

First, the Green Credit Policy is based on "opinions," but most of the resulting practical standards are still mainly at principle level. Even though banks in China are in principle obliged to implement the green Credit Policy (mandatory rules), the obligations are so vague that it is difficult to actually enforce them. Due to lack of expertise concerning the evaluation of environmental risks of borrowers, banks may have difficulties in setting detailed implementation guidelines for supervising companies' performance.

Second, another obstacle is that the blacklist issued by the MEP is far from enough to achieve the goal of emission reductions in 2020. At present, although some banks have been taking the lead in defining credit guidelines for "two high" industries including mining, chemical production, coke, textile, papermaking, and cement production, this is still not sufficient to cover other industries with high environmental and social risks. Particularly in China, 78% of power generation relies on coal, and this rate is expected to continue without significant change until 2020.¹⁵¹ Also, some banks still list environmental-sensitive projects in their green portfolios. For example, as the CCB indicated in its CSR report of 2009, hydropower, nuclear power plants, and coal fired plants with clean combustion technology have been listed as supportive projects of "Green Credit".¹⁵² Whether these projects can all be considered as alternatives for green energy is controversial, to say the least, as they often do not constitute a sustainable solution. For example, nuclear power can potentially cause catastrophes and coal fired plants can contribute to other social concerns such as climate change.¹⁵³ However, few or none of those environmental-sensitive projects have already been blacklisted by the MEP

150. POLICY RESEARCH CTR. OF ENV'T & ECON., *supra* note 102.

151. ADINA MATISOFF & MICHELLE CHAN, FRIENDS OF THE EARTH & BANKTRACK, THE GREEN EVOLUTION: ENVIRONMENTAL POLICIES AND PRACTICE IN CHINA'S BANKING SECTOR 15 (2008), available at http://www.banktrack.org/download/the_green_evolution_environmental_policies_and_practice_in_the_chinese_banking_sector/green_evolution_2008_foe_final.pdf.

152. CHINA CONSTR. BANK, 2009 ANNUAL REPORT (2010), http://www.ccb.com/en/investor/20100429_1272548677/eng_full.111341752021278338176.pdf.

153. YU, *supra* note 141.

in 2007.¹⁵⁴

Third, the policy only applies to large enterprises that are able to obtain loans from banks. A large group of small and medium size enterprises which nevertheless pose high pollution risks do not have access to credits through banks, but turn to private capitals. These private financing channels that are open to them without asking environmental requirements are currently hardly controlled.¹⁵⁵

Fourth, implementing the Green Credit Policy without corresponding assistance from local governments presents difficulties. China's local governments are used to protecting their local industries or companies, sometimes even heavy polluters, since they are often a major tax contributor to the local economy.¹⁵⁶ Local environmental agencies, who take responsibility in collecting data from polluting companies and enforcing sanctions to control them, are managed by the local government instead of by the MEP.¹⁵⁷ However, this situation has been improving after the MEP was upgraded to the ministry level. Due to this regional protectionism, barriers are created for both local banks and environmental agencies.¹⁵⁸

Fifth, scrutiny of the implementation of GCP in Chinese banking reveals a lack of transparency in information disclosure. Civil society groups, including Green Watershed, WWF and International Rivers argued in recent reports,¹⁵⁹ that banks might hide key data concerning their lending practices, especially for the environmental and social impacts behind controversial projects, such as developing nuclear power and dam constructions. Information from banks about the annual loan amount and the distribution of borrowers are insufficient.¹⁶⁰ In addition, borrowing enterprises sometimes may attempt to hide environmental information which also leads to information asymmetry between the borrower and the

154. See Interview with Mr. Guo. P.Y. Syntao, *supra* note 121.

155. BEIJING CHINA COUNCIL FOR INT'L COOPERATION ON ENV'T & DEV., NENGYUAN XILV HE HUANJINGBAOHU JINGJI ZHENGCE - GUOHEHUI ZHENGCE YANJIU BAOGAO 2009 [2009 POLICY RESEARCH REPORT: ECONOMIC INSTRUMENTS FOR ENERGY EFFICIENCY AND THE ENVIRONMENT], available at <http://www.cciced.net/enciced/policyresearch/policyreport/>.

156. Interview with Mr. Like, *supra* note 139.

157. Interview with Ms. Yangshuying, Policy Research Ctr. of Env't and Econ., in China (Feb. 10, 2012).

158. INT'L RIVERS, NEW FINANCIERS AND THE ENV'T: TEN PERSPECTIVES ON HOW FINANCIAL INSTITUTIONS CAN PROTECT THE ENVIRONMENT (2008), available at http://www.burmarive.snetwork.org/chinese/images/stories/publications/english/newfinanciers_eng.pdf; MATISOFF & CHAN, *supra* note 151; YU, *supra* note 141.

159. Interview with Ms. Grace Mang, China Representative of International Rivers, in China (Apr. 6, 2011).

160. Interview with Mr. Futao, Editor-in-Chief, China Dev., in Beijing, China (Apr. 8, 2011).

lending bank.¹⁶¹

Lastly, existing employees of banks often lack sufficient knowledge of environmental legislation and standards. As a consequence, they often merely review loan applications in accordance with a paper approval of the Environmental Impact Assessment, and consequently make a loan decision on the basis of an ambiguous judgment. This jeopardizes effective implementation of the Green Credit Policy.¹⁶²

D. Other Indexes to Examine Environmental Performance

1. *Selection of Indexes and Banks.* Besides banks' compliances with the Green Credit Policy, there is also a series of indexes to evaluate the environmental performance of banks from other perspectives. For example, in a recent report "Close the Gap"¹⁶³ issued by Banktrack, an international NGO for tracking operations of banks on their effect on people and the environment, a benchmark to monitor banking institutions has been developed by identifying specific industrial sectors and their corresponding environmental impacts. For instance, the sectors include agriculture, fishery, forestry, mining, oil and gas, and power generation while their impacts are from biodiversity, climate, toxics emission, transparency, and so on.¹⁶⁴ However, as green finance initiatives for Chinese banking are just in their infancy, it is not appropriate to evaluate the environmental practices of Chinese banks by using such international benchmarks. Therefore, in this part, we will refer to some key indexes to examine a group of representative banks, in order to have a thorough understanding of the environmental conduct of Chinese banks with regard to their lending activities. We selected a few Chinese banks and examined the extent to which they have adhered to international sustainability indexes.

The examined banks were primarily selected on the basis of two criteria. One criterion is being a member of the fourteen listed banks, a list that can represent the asset size of the bank, and the other is being a member of the top 15 Chinese Banks based on their tier 1 capital¹⁶⁵ that represents the banks' strength (See Appendix II). Among them, nine banks

161. Interview with Dr. Yu Xiaogang, Green Watershed, in China (Mar. 3, 2012).

162. *Id.*

163. VAN GELDER ET AL., *supra* note 47, at 6.

164. *Id.*

165. Tier 1 capital, also called core capital, includes paid-up shares and common stock, which is a common characteristic to show the bank's strength in the banking system. See *Private Sector AAG Definitions and Sources*, WORLD BANK, <http://econ.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:21323537~menuPK:1192714~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html> (last visited Jan. 9, 2014).

appear on both lists. They are the ICBC, CCB, BOC, Bank of Communications, Industrial Bank, China Merchant Bank, Huaxia Bank, China Minsheng Bank, and China CITIC Bank. Using these two lists has two limits: first, listed banks normally possess adequate capital and loan transactions. The assets of the fourteen listed banks have contributed over half of the total assets of Chinese banking. In addition, the five big commercial banks and the nine of twelve joint-stock commercial banks that appear in either of the two lists already accounted for over 60% of the total banking assets of the banking sector,¹⁶⁶ and can thus be seen as a backbone for taking more responsibilities in their financing strategy. Second, China's relevant national laws and regulations have set higher demands for listed banks on corporate governance, information disclosure, and social responsibility.

The elementary evaluation indexes are partly taken from Yu in his study on recording the listed Chinese banks on environmental performances.¹⁶⁷ This includes parameters such as: "environmental policies and measures," "adoption of international principles or initiatives," "information disclosure on banks' environmental efforts," and "Environmental conducts for overseas investment."¹⁶⁸ As the index of "environmental policies and measures" has already been examined above in the discussion on the implementation of the Green Credit Policy, the following part will examine the other four indexes respectively.¹⁶⁹ We already introduced the intentional principles above. We will now examine to what extent they are adopted by Chinese banks.

2. *Adoption of International Principles or Initiatives.* Committing to international principles or initiatives means Chinese banks have to apply even more stringent standards than merely based on the current implementation of the Green Credit Policy, and therefore Chinese banks have historically avoided adopting them.¹⁷⁰

However, in recent years, more and more Chinese banks have been competing on the international market.¹⁷¹ In order to establish a global presence and build a responsible image, they gradually realize the

166. China Banking Regulatory Comm'n, *supra* note 63, at 25.

167. YU XIAOGANG, 2011 ZHONGGUO YINHANGYE HUANGJING JILU [2011 Environmental Report on Chinese Banks] (2012) [hereinafter XIAOGANG, 2011 ENVIRONMENTAL REPORT], available at <http://d.kmwzjs.com:10125/uploadfile/jyhjjj2011.pdf>.

168. *Id.*

169. XIAOGANG, 2011 ENVIRONMENTAL REPORT, *supra* note 167, at sec. III.C.1.

170. Interview with Ms Yang, *supra* note 157.

171. See Robinson & Hilson, *supra* note 4.

importance of commitment to these international standards, and begin applying this idea. For example, the China Development Bank, one of the three policy banks, was the first Chinese bank to sign the UN Global Compact in 2006.¹⁷² Of the commercial banks, three joint-stock commercial banks (the Industrial Bank, China Merchants Bank, and Shenzhen Development Bank), and one city commercial bank, Bank of Shanghai, have successively signed the UNEP FI Statement on the Environment and Sustainable Development.¹⁷³ The Industrial Bank is leading as far as the commitment to green initiatives is concerned among the commercial banks in China. It has, for example, been the only Chinese bank that joined the Carbon Disclosure Project¹⁷⁴ and has also been the only Chinese bank that proactively adopted the EPs which had already been widely adopted by other international commercial banks.¹⁷⁵

Moreover, the Industrial Bank has been building its internal policies and procedures for integrating environmental and social considerations into the current credit review processes, and has established a Sustainable Development Unit to implement the EPs.¹⁷⁶ In contrast, the “five big” state-owned commercial banks have not acceded to any green financing standards or principles until now. This involvement can be summarized as follows¹⁷⁷:

172. *Overview of the UN Global Compact*, UNITED NATIONS GLOBAL COMPACT, <http://www.unglobalcompact.org/AboutTheGC/index.html> (last updated Apr. 22, 2013).

173. *UNEP Statement by Financial Institutions on the Environment & Sustainable Development*, UNEP FINANCE INITIATIVE, <http://www.unepfi.org/statements/fi/> (last visited Jan. 9, 2014).

174. CHINA DEV. BANK, <http://www.cdb.com.cn> (last visited Jan. 9, 2014).

175. *Members & Reporting*, *supra* note 55.




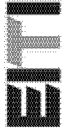


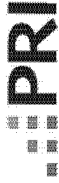
176. Aizawa & Yang, *supra* note 84, at 133.

177. This table is constructed based on information collected from various sources. *See, e.g.*, CARBON DISCLOSURE PROJECT, CDP GLOBAL 500 CLIMATE CHANGE REPORT 6 (2012);

EITI Countries, EXTRACTIVE INDUS. TRANSPARENCY INITIATIVE, <http://eiti.org/countries> (last visited Jan. 9, 2014); *Members & Reporting*, *supra* note 55; *Overview of the UN Global Compact*, UNITED NATIONS GLOBAL COMPACT, <http://www.unglobalcompact.org/AboutTheGC/index.html> (last visited Apr. 22, 2013); *UNEP Statement by Financial Institutions on the Environment & Sustainable Development*, UNEP FINANCE INITIATIVE, <http://www.unepfi.org/statements/fi/> (last visited Jan. 9, 2014); *Reports List*, GLOBAL REPORTING INITIATIVE,

<http://www.globalreporting.org/ReportServices/GRIReportsList> (last visited Jan. 9, 2014).

FIGURE 5: Participation of Chinese Banks in Global Initiatives

Principles/Initiatives	Global Signatories /users (Approx.)	Signatories /users in China	Signatories /users of China's banks	Bank names
 EPIs	72 financial institutions	1	1	Industrial Bank
 Global Reporting Initiative™	1800 organizations	80	6	BOC; ICBC; CCB; CDB; China Merchants Bank; China CITIC Bank;
 UNEP FI	190 financial institutions in 40 countries	4	4	Shenzhen Development Bank; Industrial Bank; China Merchants Bank; Bank of Shanghai
 EITI	51 companies and 17 countries	None	None	None
 UN Global Compact	8,000 participants, including 5,300 businesses in 130 countries	220	1	CDB, 2006
 CARBON DISCLOSURE PROJECT	534 financial institutions	4	1	Industrial Bank
 PRI	892 organizations in 49 countries	1	None	None

Data sources: UNGCC, 2011; UN PRI, 2011; UNEP, 2010; EPIs, 2010; EITI, 2011; GRI, 2011; CDP, 2011

The table shows that Chinese banks are still at the threshold of participating in global standards and initiatives. However, larger commercial banks have already expressed their interests in accession.¹⁷⁸ For example, the CCB has drafted an internal processing rule to guide their clients for loan application in line with the EPs, and is preparing to adopt the EPs in the near future.¹⁷⁹ China CITIC Bank has also composed a pamphlet about “Shaping a future for sustainable finance – Interpretation of the Equator Principles” in 2009 to better comprehend the EPs.¹⁸⁰

3. *Information Disclosure on Banks' Environmental Efforts.* At present, there are no mandatory regulations or standards to exert pressure upon banks to disclose environmental information.¹⁸¹ Chinese banks always provided their environmental information on a voluntary basis, through public disclosure media, such as websites, CSR reports, annual reports, released internal policies, institutional bulletins, and pamphlets. In June 2006, the Shanghai Pudong Development Bank issued the first CSR report of China's banking sector which contained policies and initiatives that contribute to economic development, social welfare, and volunteering activities to protect the environment.¹⁸² Afterwards, the CCB, BOC, CDB, and ICBC successively published their first CSR reports in 2007 and 2008. To date, all of the examined banks have already issued their annual CSR reports and theoretically described procedures and principles in applying environmental responsibilities.¹⁸³ Six banks, including the ICBC, BOC,

178. Charles Piggott, *Top 1000 World Banks 2009*, THE BANKER (June 24, 2009, 12:00 am), <http://www.thebanker.com/Top-1000-World-Banks/Top-1000-world-banks-2009>.

179. Yu Dongzhi & Wu Xi, *Chidaoyuanze: Yinhang Lvsexindai Yu Kechixu Fazhan de Baipishu* [The Equator Principles: Green Credit of Banking and White Paper for Sustainable Development], 24 FIN. MGMT. & RES. 1 (2009).

180. See China CITIC Bank Corporation Ltd., *China CITIC Bank 2009 CSR Report*, available at http://bank.ecitic.com/eabout/eabout_07.shtml (2010).

181. Recall that the Green Credit Policy of 2007 did establish a forum for environmental information sharing. It does not, however, oblige individual banks to disclosing environmental information. The Guideline, though, provides an obligation on the banks to disclose environmental information, given its rather short history, the actual effects still wait to be seen.

182. Shanghai Pudong Development Bank, Jiji Jianxing Zeren, Pufayinhang Fabu 06 Qiye Shehui Zeren Baogao [Taking Responsibilities, SPD Released 06 CRE Report] (2007), http://www.spdb.com.cn/docpage/C419/200706/0628_419_14914.aspx.

183. See BANK OF CHINA, CORPORATE SOCIAL RESPONSIBILITY REPORT 2009 (2009), available at <http://pic.bankofchina.com/bocappd/report/201008/P020100804592807644803.pdf>; BANK OF COMM'NS., CORPORATE SOCIAL RESPONSIBILITY REPORT (2009), available at <http://www.bankcomm.com/BankCommSite/cn/detail.jsp?id=1270000477100&type=CMS.STD> (Chinese); CHINA CONSTRUCTION BANK, 2009 ANNUAL REPORT, available at http://www.ccb.com/en/investor/20100429_1272548677/eng_full.111341752021278338176.pdf;

CCB, CDB, China Merchants Bank, and China CITIC Bank, have also started using the GRI framework in their sustainability reporting.¹⁸⁴ However, the extent of environmental information reporting varies from bank to bank. Some CSR reports still focus on the banks' charity activities, donations, and initiatives for local community development. Regarding their environmental responsibility, banks tend to describe them in a theoretical way, such as whether they have complied with governmental environmental regulations and how they incorporated the Green Credit Policy into their internal policies.¹⁸⁵ Banks rarely provide data related to actual environmental impacts and lending policy.

4. *Environmental Conduct in Overseas Investment.* The only statistics that can be found about how China's commercial banks are involved in overseas investment is from a the report issued by Chinese Academy of Sciences.¹⁸⁶ It mentions that the Industrial and Commercial Bank of China (ICBC), the Bank of China (BOC), the China Construction Bank (CCB), and the Agricultural Bank of China (ABC), the Bank of Communications, the China Merchants Bank, the China Minsheng Bank, as well as the Export-Import Bank and CDB have been gradually engaging in "Greenfield Investment"¹⁸⁷ and "Equity Investment"¹⁸⁸ in varying degrees during recent years. However, regarding lending abroad and project financing, relevant data concerning the involvement of banks are not publicly available. Hence, it is impossible to further know their environmental performance in this area through public disclosure. Moreover, according to Yu's initial

CHINA MERCHANT'S BANK (2009), available at <https://file.cmbchina.com/CMBIR//201004/6e405296-5366-41f0-b22d-1f3cf0038918.pdf> (Chinese); CHINA MINSHENG BANK, available at http://www.cmbe.com.cn/news/gb_tzgx/qyshzr/shzr2009.shtml (Chinese); HUAXIA BANK (2010), available at <http://www.hxb.com.cn/chinese/abouthxb/show.jsp?cid2=12161018860150011&cid3=12161023188430035&id=13012755116680011> (Chinese); INDUSTRIAL BANK, 2009 ANNUAL SUSTAINABILITY REPORT (2009), available at http://download.cib.com.cn/netbank/download/en/Sustainability/2009_report.pdf; INDUSTRIAL & COMMERCIAL BANK OF CHINA, 2009 CORPORATE SOCIAL RESPONSIBILITY REPORT (2009), available at <http://www.icbc-ltd.com/ICBCLtd/SocialResponsibility/Corporate%20Social%20Responsibility/2009/>; and China CITIC Bank (supra note 180).

184. See supra note 183 and sources cited therein.

185. *Id.*

186. Li Zhongmin, *Zhongguo Jinrongye Haiwaitouzi: Jiyu, Tiaozhan Yu Thanhve Zhuanxing* [Overseas Investment of China's Financial Sector: Opportunity, Challenge and Strategic Transition] 2 (7) FIN. DEV. REV. 50 (2011).

187. Greenfield Investment is a mode of foreign direct investment. When a firm enters into a foreign market, it can either acquire an existing plant or set up an entirely new plant. The latter mode is called greenfield investment. See Horst Raff et al., *The Choice of Market Entry Mode: Greenfield Investment, M&A and Joint Venture*, 18 INT'L REV. ECON. & FIN. 3, 3 (2009).

188. Equity Investment means to invest money in a firm by owning or holding its shares. For example, a bank can hold stock shares of another bank through mergers or acquisitions.

findings on the monitoring of the environmental records of Chinese banks,¹⁸⁹ only two of the listed Chinese-funded banks gave a direct response to this query. In the responses, the China Merchants Bank reported that its overseas investment was primarily in the US, Europe, Asia and Africa, covering industries like natural gas and oil exploitation, mining, manufacturing, renewable energy and overseas trades. Their investment amounted to US\$1.34 billion in 2009, which represented an increase of 0.29% compared to the amount in 2008.

Additionally, the China Merchants Bank said they had started complying with international environmental standards, but did not indicate which standards specifically.¹⁹⁰ The Industrial Bank reported that it had not been involved in any overseas investment. For the other listed banks, information is not available. Based on the current findings and the available data, environmental information disclosure related to Chinese banks' lending transactions abroad is not sufficient.

E. Environmentally Contentious Projects

Despite having established internal green policies in compliance with the national credit policy, the real test of a bank's environmental performance should look into the actual impacts induced by the bank's transactions in practice. We provide two examples of environmentally-controversial projects financed by Chinese banks inside and outside of China. However, due to limited data available from banks and companies, these two examples have been largely overlooked by the government and banks. They have both been disclosed by civil society groups and international media.

1. *Dalian Oil Pipeline Explosion.* A pipeline was on fire and then exploded during the night of 16 July 2010 in Dalian Xingang crude oil port in the Liaoning province of China. Further investigation into the incident revealed that the leakage of additives in oil of a Panama oil tanker was responsible for setting off the inferno and for the resulting leakage of oil, as gasoline gushing from a ruptured pipeline exploded. In addition, the branch company of China National Petroleum Corporation in Xingang Port and Port Dalian Corporation were both blamed for failing to repair the breakdown gasoline pumps which could not cut off the pipeline to prevent the fire from spreading. This incident triggered a catastrophe for the

189. YU, *supra* note 141, at 11.

190. CHINA MERCHANT'S BANK, 2009 ANNUAL REPORT (2010), available at <http://www.cninfo.com.cn/finalpage/2010-04-14/57808942.PDF>.

environment. Oil leaked from the tanker containing poisonous chemical components severely threatening the health of the marine wildlife. More importantly, these chemicals are hardly disposable by natural processes so that the great impact would carry on for ten years or more. In previous documents, this project of the Dalian crude oil port, which contains high environmental and safety risks, had been criticised publicly four years before. It was, *inter alia*, criticized for not having undergone an Environmental Impact Assessment, but no punishment was imposed and not a single improvement was witnessed since then.¹⁹¹

Through scrutiny into the offering bond's prospectus, two names of Chinese banks including the Bank of Communications and the China Construction Bank¹⁹² were found as mainly funding this branch petroleum company, but the exact financier behind and the precise amount of financing were not disclosed even after this severe accident happened. This case shows that a lack of transparency and disclosure requirements make it hard for the public at large to monitor and assess the possible role of banks in financing this project. Hence, it is unknown to what extent banks have played a (positive or negative) role in facilitating the project and what joint liability they should undertake in terms of the pollution. It thus shows that further obligations of information disclosure would be crucial.¹⁹³

2. *Gilgel Gibe III Dam*. The Gibe III Dam is an under construction project over the Omo river in Ethiopia with an expected output of about 1,870 Megawatt (MW). The dam transcends any other kind in Ethiopia in

191. *Dalian Oil Pipeline Explosion*, NETEASY (July 16, 2010), <http://news.163.com/special/00014IUM/dalianexplode.html> (Chinese).

192. See DALIAN PORT CORP. LIMITED, PROSPECTUS (2010), available at <http://istock.jrj.com.cn/article,hk02880,1641466.html> (Chinese); YU, *supra* note 141.

193. As for the information disclosure, in the US and some European financial institutions go much further. For example, in the US, an environmental disclosure regime for financial institutions was established by the US Securities and Exchange Commission in the 1970s. See Elizabeth Geltman, *Disclosure of Contingent Environmental Liability by Public Companies Under the Federal Securities Laws*, 16 HARV. ENVTL. L. REV. 129, 144 (1992). In some European countries, a similar disclosure obligation was established for the pension funds system; in Australia, such obligation was introduced for the financial sector by the Financial Services Reform Act of 2001. See Benjamin Richardson, *Enlisting Institutional Investors in Environmental Regulation: Some Comparative and Theoretical Perspectives*, 28 N.C.J. INT'L L. & COM. REG. 247, 321-29 (2002). Some voluntary efforts have also been made to promote the sustainable reporting of companies, including financial sectors, such as the Global Reporting Initiative. See Halina Szejnwald Brown, *Building Institutions Based on Information Disclosure: Lessons from GRI's Sustainability Reporting*, 17 J. CLEANER PROD. 571, 571 (2009). Noting that a compulsory information disclosure system does not guarantee a better performance in environmental disclosure in the banking sector. The performance depends also on the institutional background, such as regulative, normative, and cultural norms. See Elise Crawford & Cynthia Williams, *Should Corporate Social Reporting be Voluntary or Mandatory? Evidence from the Banking Sector in France and the United States*, 10 CORP. GOVERNANCE 512, 512 (2010).

terms of total investment which is up to US\$1.75 billion. 85% of the construction expenses, 4.59 thousand million dollars was agreed to be financed by the ICBC according to its contract.¹⁹⁴ However, this project has been severely opposed by the local government, NGOs and inhabitants for the lack of EIA before construction which allegedly contradicted the “Convention on Biological Diversity,” the “UN Declaration on the Rights of the indigenous peoples” as well as local environmental law.¹⁹⁵ The dam would also cause a substantial threat to the local ecosystem.¹⁹⁶ Since the Omo River is the only source of water available to inhabitants living in the southwest of Ethiopia and the north of Kenya, the dam would evidently disturb flood cycles of the river, threatening the health of marine wildlife, the balance of ecosystem and thus lives of inhabitants.¹⁹⁷ Hearing the voices of disapproval from international and local NGOs, international financiers such as the World Bank and the African Development Bank have already delayed their financing until reports on this project until an EIA had been received. Hence the lack of capital became another challenge facing the great dam.¹⁹⁸

In May of 2010, an open letter jointly from three NGOs including International Rivers, BankTrack, and Friends of the Lake Turkana has been written to the chairman of ICBC presenting the argument that the dam would lead to ecological destruction and pointing at the bank's environmental responsibility.¹⁹⁹

III. CHALLENGES AND OPPORTUNITIES CONCERNING GREEN FINANCE

As discussed in Section III, Chinese banks have been making great progress, although the Green Credit Policy and other relevant green regulations are still at an early stage of implementation. However, based on the four phases typology of banking and sustainable development,²⁰⁰ banks

194. Peter Bosshard, *The Gibe 3 Dam – A Test Case for China's Role in Africa*, INT'L RIVERS (Aug. 9, 2010, 5:31 pm), <http://www.internationalrivers.org/blogs/227/the-gibe-3-dam---a-test-case-for-china's-role-in-africa>.

195. *Id.*

196. *Id.*

197. *Id.*

198. *Id.*

199. See Peter Bosshard, *Hydro Industry Shuts Out Critical Voices*, INT'L RIVERS (Apr. 16, 2013, 11:15 am), <http://www.internationalrivers.org/blogs/227/hydro-industry-shuts-out-critical-voices>; Zhang Ke, *Pohuaishengtai? gonghang feizhou shuili daikuan xiangmu yinzhengyi* [Ecological Destruction? Controversial Hydropower Project Financed by ICBC] (2010), <http://bank.jrj.com.cn/2010/06/3002187688071.shtml>.

200. JEUCKEN, SUSTAINABLE FINANCE AND BANKING, *supra* note 1, at 30.

in China at present are just in a transition period from a preventive stage to an offensive stage,²⁰¹ as many of them have started integrating environmental risks into their credit risk management while some leading banks have proactively promoted green projects in their lending policies. Compared with the environmental performances of international pioneering peers, much work remains. For example, earlier research shows that many European banks have already reached the offensive stage in the early 2000s.²⁰² At that time, they have already started to develop environmental investment funds, to finance sustainable energy and report their environmental activities. Some niche players even started to incorporate the goal of sustainable banking, such as providing debt-for-nature swaps.²⁰³ Thus, efforts from Chinese banks themselves, as well as from government and civil society can still be made to accelerate the “greening” processes of Chinese banking by facing the challenges and seizing the opportunities.

A. *Main Challenges and Opportunities for Greening Chinese Banks*

Currently the challenge has no longer been the lack of awareness from the banks themselves, but the focus has now shifted to the question how to implement a Green Credit Policy. The main challenges for banks that may influence their future environmental performance will be identified and discussed below. Further, these challenges could be corresponding opportunities for Chinese banks to catch up.

1. *Collective Standards and Localisation.* As discussed above, few Chinese banks have applied stringent international standards or norms. For example, according to The Banker magazine’s indicating the Top 1000 World Banks for 2013, four big state-owned commercial banks including the ICBC, CCB, ABC and BOC, have been ranked into the Top 10 World banks based on their tier 1 capital.²⁰⁴ By making use of this ranking, the gap for signing to the Equator Principles for Financial Institutions (EPFIs)

201. Noting that a more cautious approach may lead to the classification of Chinese banking sector in just the preventive stage. See Miao Chang et al., *Development of Environmental Management System in China’s Financial Sector*, 2 (2) FRONTIERS ENVTL. SCI. ENGINEERING CHINA 172, 172 (2008).

202. SUSTAINABLE BANKING: THE GREENING OF FINANCE, *supra* note 1, at 34.

203. For example, DNS bank exempted some developing countries partly from their outstanding debt by requiring them to make measurable effort in nature conservation. For more details on how western banks perform to promote sustainable banking, see Marcel Jeucken & Jan Jaap Bouma, *The Changing Environment of Banks*, in SUSTAINABLE BANKING: THE GREENING OF FINANCE, *supra* note 1, at 24, 33–35.

204. Liyao, *Top 20 banks in the world of 2013*, http://www.china.org.cn/top10/2013-07/16/content_29436994.htm (July 16, 2013).

has been exposed in comparison with other banks. This is shown in Figure 6 below. Obviously, four of six banks who have not been EPFIs yet, are Chinese banks.

FIGURE 6: Adoption of the EPs for the Top 20 World Banks based on Tier 1 Capital of 2013²⁰⁵

Rank	Bank	Country	EPFI or not
1	Industrial and Commercial Bank of China	China	N
2	JP Morgan Chase & Co	US	Y
3	Bank of America Corp	US	Y
4	HSBC Holdings	UK	Y
5	China Construction Bank	China	N
6	Citigroup	US	Y
7	Mitsubishi UFJ Financial Group	Japan	N
8	Wells Fargo & Co	US	Y
9	Bank of China	China	N
10	Agricultural Bank of China	China	N
11	BNP Paribas	France	Y
12	Royal Bank of Scotland	UK	Y
13	Credit Agricole Group	France	N
14	Banco Santander	Spain	Y

205. *See id.* (for the top 20 banks lists); *see also Members & Reporting*, EQUATOR PRINCIPALS, <http://www.equator-principles.com/index.php/members-reporting> (showing the membership of EPFI).

15	Barclays	UK	Y
16	Sumitomo Mitsui Financial Group	Japan	Y
17	Mizuho Financial Group	Japan	Y
18	Lloyds Banking Group	UK	Y
19	Goldman Sachs	US	N
20	Deutsche Bank	Germany	N

As Chinese banks help more Chinese businesses to “go global” with their tremendous lending, pressures to sign international standards and initiatives from both international society and the domestic trend of accession are increasing, particularly for adopting the EPs for project financing.²⁰⁶ At the global level, other international banks adopting international principles are urging China’s peers to take the same measures to avoid competition disadvantages. Hence, those Chinese banks with overseas transactions, mainly including the two policy banks, Chexim and CDB, are primarily under pressure of adopting the EPs for their project financing work in host countries.

Within the domestic banking industry, the EPs are often considered as well-known international standards for environmental and social sustainability, although project financing is not very common to comparably smaller-sized Chinese banking institutions. The problem is that the equator principles are only applicable to project financing in which the smaller Chinese banks do not engage. As a result, the EPs do not apply to them. During interviews with bank personnel, all of them have expressed their intentions to adopt strict environmental standards in line with the EPs, but they similarly expressed concerns about the difficulties in finding intentional standards to fit the particular context of China. For example, the EPs require banks to produce loan documentation in terms of ten principles for implementation when making a lending decision, which is not a conventional transaction procedure for banks in China. To date, only the Industrial Bank has adopted the EPs in 2008.²⁰⁷ However, the question of how to integrate these standards into current transaction procedures in

206. Interview with Mr. Li, Analyst at Credit Comm. Export-Import Bank of China, in Beijing, China (May 3, 2011).

207. See *Members & Reporting*, *supra* note 55.

China is not worked out. Most Chinese banks are still taking a watch and see attitude, and if any, they are willing to follow compulsory national policy which applies to all banks. The banks are concerned about the loss of competitiveness, hence in case of voluntary application, they do not want to be the first mover.²⁰⁸

A trend can be seen from the current participation of banks in green initiatives as this appears in Figure 5: some medium size joint-stock commercial banks, not fully owned by the state, have shown to be active in adopting and implementing international green standards and norms.²⁰⁹ The Industrial Bank is one of the leading representatives of this group, who firstly adopted the EPs and the Carbon Disclosure Project and is also as a signatory to the UNEP FI, jointly with three other banks—the China Merchants Bank, the Shenzhen Development Bank and the Bank of Shanghai. In contrast, policy banks and big state-owned commercial banks have shown to be less active in joining EPs.²¹⁰ The reason may be that medium size joint-stock commercial banks have greater flexibility in managing smaller lending portfolios and may have a stronger desire to raise their global profile and industrial reputation by applying international norms.²¹¹ At the same time, EPs that merely apply to the project financing of over US\$10 million do not affect their core businesses since those banks mostly do not meet this criteria.²¹² In the annual report on the implementation of the Equator Principles, the Industrial Bank (2009) has indicated that it intended to become the greenest bank in China.²¹³ This shows that applying international principles would not negatively affect profitability but may improve the quality of bank lending. Moreover, these comparably smaller banks, as pilots, have been showing possibilities to implement green financing.

2. *Environmental Conduct Abroad.* The “Go Out” strategy was formally issued in 2001 by the Chinese government for China’s tenth 5-year plan (2001-2005),²¹⁴ which meant to encourage Chinese enterprises to

208. Interview with Mr. Chen (a pseudonym), China Banking Regulatory Commission, in Beijing, China (Feb. 10, 2012).

209. See Fig. 5 *supra*.

210. See Fig. 6 *supra*.

211. CHAN-FISHEL, *supra* note 2, at 65.

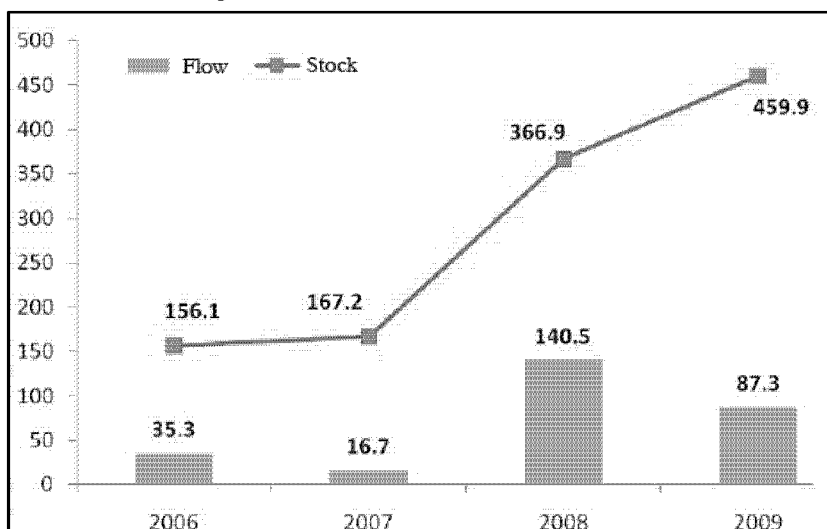
212. Chen, *supra* note 194.

213. INDUS. BANK, GREEN DECLARATION - ANNUAL REPORT FOR THE IMPLEMENTATION OF THE EQUATOR PRINCIPLES (2009), available at http://www.cib.com.cn/netbank/cn/Sustainable_Finance/Report/20090709_3.html.

214. GLOBAL ENVIL. INST., ENVIRONMENTAL POLICIES ON CHINA'S OVERSEAS INVESTMENT 37 (2010).

expand overseas. When the policy was launched, the main barrier for Chinese enterprises concerning expansion abroad was the lack of financing.²¹⁵ In order to solve this problem, the government has made an effort to mobilize China's banking sector, by supporting adequate capital, corporate mergers and acquisitions'.²¹⁶ First, the state government stimulated activities of its two policy banks, the Export-Import Bank and the CDB, to expand overseas lending activities.²¹⁷ Then, as Chinese enterprises began expanding abroad, big commercial banks especially the ICBC and the BOC, have also been motivated to develop their financing activities abroad.²¹⁸ According to statistics, Foreign Direct Investment (FDI) from China's financial industry has rapidly increased, reaching 45.99 US billion in 2009.²¹⁹ This is illustrated in the following figure:

FIGURE 7: Foreign Direct Investment of China's Financial Sector²²⁰



In addition, as reported by the Financial Times, Chinese overseas lending to developing countries in 2009 and 2010 has reached US\$110

215. *Id.* at 42.

216. CHAN-FISHEL, *supra* note 2, at 23.

217. GLOBAL ENVTL. INST., GOING GLOBAL – THE ENVIRONMENTAL AND SOCIAL CHALLENGES OF CHINA'S INVESTMENT, TRADE AND AID ABROAD 123 (2013), available at http://www.geichina.org/_upload/file/book/2013goingglobal_abstract.pdf.

218. *Id.* at 125.

219. Li, *supra* note 186.

220. *Id.*

billion.²²¹ This has surpassed the loan commitments of US\$100.3 billion from the World Bank assistance in response to the global financial crisis during the years 2009 and 2010.²²²

Having utilized loans, Chinese companies are engaged in many projects outside China, and consequently may create environmental and social impacts to host countries and local communities.²²³ In recent years, some international NGOs, such as Banktrack, Friends of the Earth, and International Rivers, have already pointed out that Chinese companies investing in Africa and Southeast Asia did not have a sufficient track record with regard to labour and environmental standards and criticized certain Chinese banks for supporting these businesses behind the scene.²²⁴

In response to growing FDI and potential investment risks, the government has successively issued three primary policies. These are the “Nine Principles on Encouraging and Standardizing Foreign Investment” (Apr. 5, 2007); the “Guidelines on Sustainable Management of Overseas Forests by Chinese Enterprises” (Sep. 3, 2009); and the “Announcement on Strengthening Regulation on investment of the State-owned companies (Sep. 19, 2008)”. In 2010, the Chinese Academy for Environment Planning (CAEP) of the Ministry of Environmental Protection (MEP) has also issued the “Guidelines for Environmental Practices in Foreign Investment Activities of Chinese Enterprises”. These require compliance with the laws of China and the host country as well as enhancing transparency. The different measures can be summarized in Figure 8.

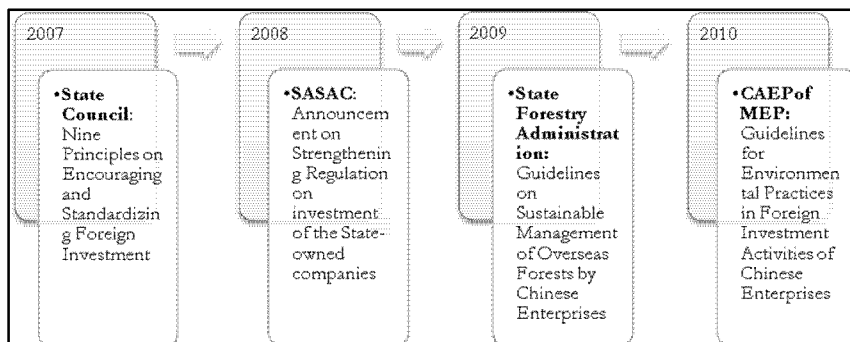
221. Geoff Dyer, Jamil Anderlini & Henny Sender, *China's Lending Hits New Heights*, FIN. TIMES, Jan. 17, 2011, available at <http://www.ft.com/intl/cms/s/0/488c60f4-2281-11e0-b6a2-00144feab49a.html>.

222. *Id.* <http://www.ftchinese.com/story/001036539/en>.

223. GLOBAL ENVTL. INST., *supra* note 217.

224. CHAN-FISHEL, *supra* note 2, at 18–22; INT'L RIVERS, *supra* note 158.

FIGURE 8: China's Emerging Standards for Banks & Enterprises Overseas Investments (2007–2010)²²⁵



However, most documents mentioned above, such as reporting guidelines for sustainable investment, have so far not received sufficient attention from the financial institutions in China. For example, by examining the banks' materials for public disclosure, few Chinese commercial banks have mentioned their overseas business and involvement in international project finance. This might be for two reasons: first, in the past few years, commercial banks in China did not have a close connection with the international stage. Therefore, most of their lending activities did not have a large exposure on a global scale and relevant financial policies and transactions were designed in the context of the Chinese market. Second, although CSR and green credit have been frequently adhered to by most of the Chinese banks at home, socially responsible investment out of China is still relatively new. Hence, it was considered difficult for them to have a global CSR focus in this early stage.²²⁶

This is, however, changing as more Chinese banks are emerging on the global market. Some Chinese banks have felt pressure from global stakeholders, including international peers and civil society groups. This was, for example, the case with respect to the Gibe III Dam project in Ethiopia, where the ICBC was severely criticized for the irresponsible funding by international and local NGOs. To become a leading global brand, Chinese banks should be more cautious about their lending abroad and project financing in terms of environmental and social aspects.

225. For the discussion about the emerging standards for Chinese overseas investment, see Kirk Herbertson, *Leading While Catching Up? Emerging Standards for China's Overseas Investment*, 11 SUSTAINABLE DEV. L. & POL'Y 22 (2011).

226. Interview with Michele Chan, Friends of the Earth, in U.S. (Apr. 8, 2011); Interview with Dr. Yu Xiaogang, Green Watershed (May 3, 2011).

3. *Transparency in Information Disclosure.* Information disclosure is essential for banks. The UNEP has defined this in Principle 7 of the “Goals and Principles of Environmental Impact Assessment (EIA)”: “Before a decision is made on an activity, government agencies, members of the public, experts in relevant disciplines and interested groups should be allowed appropriate opportunity to comment on the EIA.”²²⁷ It listed demands for disclosure of environmental information and transparency in general.

In China, information disclosure is also stipulated in a series of national policies or consortium standards, including the “Commercial bank Law of the People’s Republic of China”²²⁸, the “Company Law of the People’s Republic of China”²²⁹, the “Administrative Measures on Information Disclosure by Listed Companies”²³⁰, and the “Measures on Information Disclosure of Commercial Banks” (July 3, 2007).²³¹ In 2009, the China Banking Association issued the “Guidelines on Corporate Social Responsibility for financial Institutions of China’s banking”, which requires banks to take their corporate responsibilities for economic, social and environmental aspects.²³² This evolution is sketched in Figure 9 below. According to these provisions, banks are required to disclose information publicly and release an annual report and a CSR report, they should equally pay attention to satisfy the public’s right to know and they have to be open to public supervision.

227. UNITED NATIONS ENV’T PROGRAMME, GOALS AND PRINCIPLES OF ENVIRONMENTAL IMPACT ASSESSMENT (1990), available at <http://www.unep.org/regionalseas/publications/reports/RSRS/pdfs/rsrs122.pdf>.

228. Standing Comm. of the National People’s Congress, promulgated on May 10, 1995, and revised on Dec. 27, 2003, effective as of Feb. 1, 2004, available at http://www.gov.cn/flfg/2005-06/27/content_9859.htm.

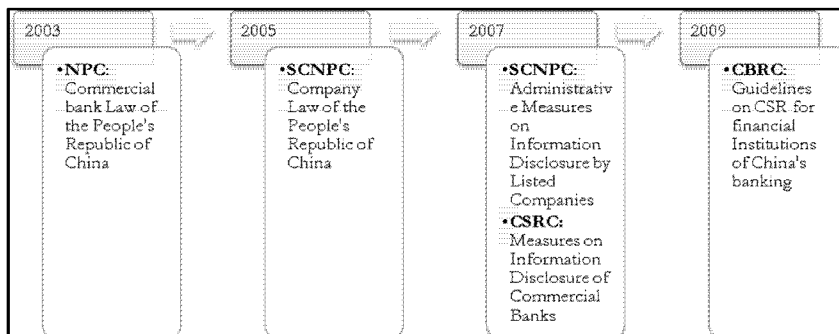
229. Standing Comm. of the National People’s Congress, promulgated on Dec. 29, 1993, revised on Oct. 27, 2005, effective as of Jan. 1, 2006, available at http://www.gov.cn/flfg/2005-10/28/content_85478.htm.

230. CHINA BANKING REGULATORY COMM’N, issued on Dec. 13, 2006, effective as of Jan. 30, 2007, available at http://www.gov.cn/gongbao/content/content_823793.htm.

231. CHINA BANKING REGULATORY COMM’N, issued on Dec. 8, 2006, effective as of July 3, 2007, available at http://www.gov.cn/flfg/2007-07/27/content_698898.htm.

232. CHINA BANKING ASS’N, 2009 Niandu zhongguo yinhangye shehuizeren baogao [Chinese Banking Social Responsibility Report of 2009], available at <http://www.docin.com/p-281617256.html>.

FIGURE 9: China's Emerging Standards for Information Disclosure (2003–2010)



In the past, Chinese banks have not disclosed their efforts and impacts on sustainability, and thus banks' CSR reports or annual reports that publicly report internal environmental risk control and relevant environmental policies are relatively rare. To date, when more Chinese banks are being listed at publicly traded stock markets for financing inside and outside of China, the disclosure of such information is increasingly expected both by banks' shareholders as well as by other stakeholders.

Reporting environmental information is an essential component of information disclosure for the banking sector. However, among all these "announcements" and "guidelines" mentioned above, there is no governmental authority to assess the extent and accountability of the information provided by banks. The public disclosure of environmental information issued by a dozen representative Chinese banks.²³³ We found that some banks have proper policies, internal guidelines, procedures, and due diligence requirements that are related to their primary transaction. Nevertheless, some significant information and relevant data related to the bank lending transaction are not publicly available. In other cases the information provided is not sufficient to assess the practical impacts induced by banks' transactions, such as how many loans they denied and withheld to control lending to "two high" industries and how much they have financed to promote green projects.²³⁴

The information disclosure system in Chinese banking is still in its early stage of development, and the disclosure of content related to the environment remains very limited. Historically, Chinese banks have a habit of disclosing only the good news and not the bad. So, some key

233. See Part III.D.3.

234. Interview with Yang Shuying, Engineer, The Policy Research Ctr. of Env't and Econ., Ministry of Env'tl. Prot. (Feb. 10, 2012).

information concerning negative aspects might be hidden. The lack of transparency in information disclosure makes it difficult for the public to discern if loans of certain banks are truly “green” and it also affects the overall understanding of banks’ performance in green financing. Banks would benefit not only from being more transparent themselves, but also from asking increased transparency from borrowers. By requiring their clients to be more transparent in disclosure, banks would dissuade clients from hiding their environmental risks. The Guideline on Green Credit is a step forward by asking the banks to publicize their green credit policies and to disclose environmental information. However, it does not require the same transparency from the borrowers.

B. Characteristics and Efforts of the Stakeholder

1. *Government.* The Chinese government plays a decisive role in promoting green finance. In other countries, green finance tends to be implemented on a voluntary basis, although a few developing countries, such as Brazil and India, have also created a quasi-regulatory policy to promote green lending.²³⁵

Having learned the lessons from the first green policy in 1995, being a lacking of enforcement and interdepartmental collaboration, the MEP, PBC, and CBRC have worked closely together to set up an implementation platform, where the three ministries have been assigned to take their own responsibility and enhance official and unofficial collaboration for the “Green Credit Policy”.²³⁶ Under this policy, the MEP’s main task is to build an environmental information system in order to transfer information concerning corporate environmental performance to its local bureaus at different levels, and then to keep the information updated.²³⁷ Local environmental protection bureaus are also responsible to periodically update the PBC with information about enterprises’ environmental non-compliance.²³⁸ The idea is to make these updates accessible to banks for their credit risks assessment system.²³⁹ The PBC is responsible for guiding banks to use companies’ environmental information in credit risk assessment. The CBRC is mainly to guide and supervise the Chinese banks to ensure that they have set companies’ environmental compliance as an

235. Aizawa & Yang, *supra* note 84, at 120.

236. *Id.* at 219.

237. *Id.*

238. Interview with Yang Shuying, *supra* note 234.

239. *Id.*

independent factor for credit review and credit granting.²⁴⁰ Moreover, banks' performance in compliance with the Green Credit policy has been incorporated into the CBRC's regulations and supervisory tasks.²⁴¹

Besides individual responsibilities, the three ministries are also taking measures to enhance their close collaboration. Initially, they conducted consultation and research with state-funded think tanks to complement the notion of green credit.²⁴² In 2007, they released a series of official documents related to green credit individually and collectively whereby the "Opinion", which was discussed in detail above, was the core.²⁴³ In order to share accurate and timely environmental information into the bank credit system, the PBC and CBRC signed a "Notice" in 2008 about collaboration in providing sufficient information services to banks.²⁴⁴ At the same time, provincial and local governments who directly face environmental challenges on the ground are also actively participating in the policy implementation by issuing their local rules.²⁴⁵ It is estimated that there were over twenty provinces and cities that have made local policies to elaborate their implementation rules and procedures in line with the Green Credit Policy.²⁴⁶ Moreover, governmental officials have started approaching the international community including International Finance Corporate, the World Bank, and the WWF to learn from international experience and good practices in promoting green credit.²⁴⁷

Nevertheless, the remaining deficiencies should be tackled by Chinese government agencies. For example, few specifications of industry-based green credit policy have been developed. This makes it difficult for banks to evaluate companies' performance in terms of industrial environmental standards. Training on environmental risk assessment and environmental regulations for bank staff involved in is not adequate. Furthermore, relevant policies to guide and inspect Chinese banks' environmental conduct abroad are still absent. Therefore, the governments responsible for policy implementation have to pay close attention to these challenges.

240. *Id.* at 230.

241. *Id.*

242. Interview with Yang Shuying, *supra* note 234.

243. *See* Part III.B.

244. *See* Part III.A.

245. Interview with Yang Shuying, *supra* note 234.

246. *SEPA Makes Public the Stage-Based Progress in Green Credit Policy*, *supra* note 134.

247. Aizawa & Yang, *supra* note 84; *SEPA Makes Public the Stage-Based Progress in Green Credit Policy*, *supra* note 134.

2. *NGOs, Media.* Besides the government, some other stakeholders can also contribute to the development of green finance in China. This particularly includes NGOs and the media.

On a global scale, international NGOs, such as Friends of the Earth (US), Banktrack, WWF, International Rivers, and Greenpeace have started conducting research and on-the-spot investigations related to bank lending outside of China and monitoring the environmental operations of Chinese banks in overseas project finance. Chinese environmental NGOs are quickly establishing themselves as an important voice in the discussion of China's green finance.²⁴⁸ They are showing that NGOs in China are applying more diversified methods to advocate environmental sustainability and can make significant contributions to Chinese banks as they implement environmental finance policies. For example, in 2007, the Institute of Public and Environmental Affairs launched the China water pollution map. This lists the companies that violated environmental regulations and generally enhances company information disclosure of environmental issues.²⁴⁹ The Institute's work also potentially contributes to the greening of the banking sector, as it supplements the environmental sharing database organised by the governments. Since 2008, Green watershed, a Yunnan province-based NGO, in partnership with eight other organizations, has established the "Green Banking Innovation Award" in terms of ranking criteria, in order to promote banks to consider their crucial roles in sustainable development.²⁵⁰ In 2009, several Chinese NGOs working together voiced concerns about the environmental practices of Asian Pulp and Paper, a world's leading pulp and paper company in Asia, for its evaluation period pre-IPO.²⁵¹

CONCLUSION

China is still in an initial stage of green financing. There has, however, been an interesting development in this "greening" process during the last four years.

The Green Credit Policy of 2007, a policy instrument issued by three governmental agencies, has essentially created a series of effective tools for Chinese banks, such as the environmental information sharing database, which is basically a "blacklist" for environmentally non-complying

248. Interview with Dr. Yu X.G., Director, Green Watershed, in China (Apr. 10, 2011).

249. *Id.*

250. *Id.*

251. *Id.*

enterprises.²⁵² This policy also made some individual banks start developing their own internal policies and procedures for their transactions.²⁵³ However, the best practice would be that the policy could induce banks to develop an internal system that reflects priorities concerning environmental and social sustainability, particularly to enhance environmental risk management.

On the whole, only a few smaller-sized Chinese banks have been proactively adopting international green financing principles such as the EPs, UNEP FI, but it is unclear whether they are taking these stringent principles seriously. Comparing the good practices with other international peers, Chinese banks still fall behind in some areas, such as developing comprehensive systems for environmental risk management, transparency in the disclosure of environmental information, monitoring their environmental conduct abroad, and capacity building of banking employees. These gaps and weaknesses will be addressed not only by banks themselves, but also by collective efforts by governments, NGOs, media, banks' clients, and other stakeholders. In order to step further in green financing, some suggestions can be made to improve the performance of Chinese banks.

First, the Green Credit Policy should probably not be considered as an endpoint but rather as a starting point. The Green Credit Policy has already been recognized by the international financial community as a significant attempt of regulation towards green banking in China.²⁵⁴ However, it is also necessary to take measures to ensure that the policy would not confine banks' understandings and green practices merely in the preventive phase.²⁵⁵ It is rather important to encourage banks to develop all-around environmental risk management systems that go beyond those procedures to inspect clients' environmental non-compliances. For example, banks should enhance their internal expertise by building capacities with international good experience and should develop their corporate environmental governance from the top to the bottom level of the personnel. In order to follow international peers, they need to increase their understanding of environmental trends and regulations in a timely manner. They should also develop specific environmental risk management strategies and standards in terms of different bank portfolio. Furthermore,

252. Kate Swartz & Guan Lin, *Taming the Dragon: How Corporate Giants in China Can Be Employed To Further Environmental Risk Management*, 13 VT. J. ENVTL. L. 97, 113 n.88 (2011).

253. See *supra* Part III.C.1.

254. Swartz & Lin, *supra* note 252, at 114–16.

255. For different phases of sustainable banking, see Marcel Jeucken & Jan Jaap Bouma, *The Changing Environment of Banks*, 27 GREENER MGMT. INT'L 21, 28–30 (1999).

enhancing stakeholder participations and improving transparency in reporting are also necessary beyond the mere compliance with the formal policy.

Secondly, instructing banks by creating a “blacklist” for lending restriction should not be the only approach. The government needs to go a critical step further by designing appropriate and innovative financial incentives, so that banks could price loan products according to risks in various degrees, such as through tax incentives for banks who grant loans to green enterprises and who provide favourable rates to green projects. Through dynamic green finance policies, banks should be encouraged to apply interest rate differentiation or to produce innovative green financial products to stimulate sustainable financing²⁵⁶ The Guideline on Green Credit tried to provide incentives to the banks. It requires the bank regulatory agencies to assess the performance of banks and to use it as a criterion in banks' crediting, access to the market and senior management evaluation. However, because the Guideline is only a document issued by the CBRC, a more comprehensive supporting system needs the involvement of more agencies or legislation at a higher level.

Third, the involvement of Chinese NGOs should be promoted. So far, governmental regulators have started approaching the international community, including IFC, the EPs, and UNEP FI, to learn from international experience and good practices in promoting green credit. Also, some Chinese banks like the ICBC and the Industry Bank have arranged meetings with international environmental NGOs such as the WWF and Banktrack.²⁵⁷

A fourth recommendation is to monitor Chinese banks' environmental conduct abroad more closely. So far the Green Credit Policy is only applied to conduct within China. This geographic limitation has already exposed certain Chinese banks to unpredictable risks. In some developing countries, environmental legislation and governance are relatively inadequate and weak. Simply relying on a local authorization or permit may not be sufficient to ensure that environmental risks are tracked and managed. In fact, the experience obtained from the Green Credit Policy in China creates an opportunity for Chinese banks and governments to address sustainable conduct in overseas investment. The Chinese government also needs to

256. Fan Jingyi, *China Green-Credit Legal System Research* (2011) (Master's thesis in political science and law, Southwest University) (on file with author). The use of tax incentives to promote the development can also be found in some European countries. See Richardson, *supra* note 6, at 320–21. One concrete example is tax reduction for green loans in the Netherlands, see Van Belleghem, *supra* note 36.

257. YU, *supra* note 141.

instruct banks more clearly on how to apply the Green Credit Policy in the context of the global scale. Chinese banks themselves need to practice green international standards and initiatives in China, so as to gain confidence in applying them to their overseas businesses as well.

Finally, an important question that needs to be addressed in future research is whether the adoption of a green credit policy can, as is currently the case, be totally left to the market. In the US and Europe this is largely the case where self-regulation has driven financial institutions to corporate social responsibility and to a green credit policy. In China, however, one should keep in mind that the big 5 state-owned banks represent more than 50% of all lending.²⁵⁸ Considering their favourable market status, they may not have the incentives to adopt a green credit policy in the absence of regulation. Moreover, the law does not oblige the disclosure of information for example on environmental performance of either banks or the clients to which they have been lending.²⁵⁹ This also raises the question whether in China it may not be more appropriate to shift from the current voluntary approach (which has, as we have shown, led to some changes, but may not be totally satisfactory) towards a more regulatory duty towards corporate social responsibility and more particularly green finance. At least one could consider the introduction of an obligation for financial institutions to disclose information on their environmental performance and that of their clients.

According to the four steps in sustainability theory,²⁶⁰ the Chinese banking sector should go a step further in green finance by transiting from being preventive to being offensive. It simply means that banks are expected to hold thinking from “it is bad to emit numerous GHG” to “it is good to reduce the CO₂ emission”; from “cannot be part of environmental accident” to “take steps to be part of the solution”. In this way, the Chinese banking industry would cross the threshold into a new promising period of green financing and make substantial gains towards sustainability.

258. CHINA BANKING REGULATORY COMM'N, *supra* note 63, at 25.

259. *See supra* note 181 and accompanying text.

260. *See supra* Part II.A.2.