

Governance and Accountability Policy Innovations: Advancing China's green finance

Mariana H. Silva

January 2014

© 2013 The International Institute for Sustainable Development
Published by the International Institute for Sustainable Development.

International Institute for Sustainable Development

The International Institute for Sustainable Development (IISD) contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change and energy, and management of natural and social capital, as well as the enabling role of communication technologies in these areas. We report on international negotiations and disseminate knowledge gained through collaborative projects, resulting in more rigorous research, capacity building in developing countries, better networks spanning the North and the South, and better global connections among researchers, practitioners, citizens and policy-makers.

IISD's vision is better living for all—sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the International Development Research Centre (IDRC), from the Danish Ministry of Foreign Affairs and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.

Head Office

161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba, Canada R3B 0Y4
Tel: +1 (204) 958-7700 | Fax: +1 (204) 958-7710 | Website: www.iisd.org

Governance and Accountability Policy Innovations: Advancing China's green finance

January 2014

Written by Mariana H. Silva

Table of Contents

1.0 Introduction	1
2.0 Policy Failures in Governance, Accountability and Transparency of Financial Market Actors.....	2
2.1 The Banking Sector and Credit-Rating Agencies	2
3.0 The Estrangement of Financial Market Reform and Sustainable Development Goals Restricts Green Finance Flows	5
3.1 Banking Sector	5
3.2 Credit-Rating Agencies, Pension Funds and Sovereign Wealth Funds	5
4.0 Governance and Accountability Policy Innovations Relevant to Green Finance	6
4.1 Banking Sector	6
4.2 Credit-Rating Agencies	7
4.3 Pension Funds and Sovereign Wealth Funds	7
4.4 Corporations	8
4.5 Stock exchanges	9
5.0 China Can Absorb These Policy Innovations into Their System to Green Their Financial Markets.....	13
5.1 Banking Sector	13
5.2 Credit-Rating Agencies	13
5.3 Pension Funds and Sovereign Wealth Funds.....	14
Conclusion	15
References.....	16

1.0 Introduction

Green finance aims to explore how the financial system and the financial services sector might be re-engineered to deliver on sustainable and equitable development. It asks how the provision of investment capital and financial risk-management services can be reformed in a manner that provides for economic growth, social justice and stewardship of the natural environment. Current development models rely on economic growth created through balanced and optimal investment flows. However, it is important to emphasize that in sustainable growth, we aim to meet present needs without compromising the ability of future generations to meet their needs. Thus, economic growth needs to be sustainable in order to truly improve the economy, society and the environment for both present and future generations.

Our world faces numerous urgent environmental and social challenges hungry for investment. Financial institutions, sovereign wealth funds and pension funds could play a crucial role in green growth, and yet these investors face numerous barriers to adding green projects as an asset class into their investment portfolios.

Adjustments of public policy could help unlock private investment for green projects. Nevertheless, the current framework of the international financial markets is not achieving a capital allocation that is efficient for solving environmental problems at scale. Policy-makers have focused on creating more sound and stable financial markets, leaving the sustainability agenda to other players, without apprehending that sustainability and long-term resilience go hand-in-hand. Without a unification of these two goals, market failures will continue to arise. The present report analyzes where policy has failed for financial market actors in the areas of governance, accountability and transparency, and the impact of these failures on green finance flows. It then presents the best policy innovations for governance and accountability relevant to green finance. Finally, it evaluates how policy-makers in China can use these policy innovations and impose specific guidelines for their financial market actors with the goal of greening their financial markets.

2.0 *Policy Failures in Governance, Accountability and Transparency of Financial Market Actors*

Policy-makers have repeatedly enacted and implemented policies that have destabilized the global financial system. These policies were knowingly maintained during the decade before the global financial crisis, an event that represented the unwillingness of policy-makers to adapt to a dynamic, innovating financial system. The policy failures had different impacts on the role each market participant played. These participants include banks, credit-rating agencies, pension funds and sovereign wealth funds.

2.1 The Banking Sector and Credit-Rating Agencies

Credit ratings have become indispensable in global economic operation because of the overreliance of the financial market on risk evaluation to justify the return of a given investment. After the financial crisis, it became obvious that the current rating system needed reforming and new thinking.

During the financial crisis, policy failures related to credit-rating agencies were exposed. These included the well-known conflicts of interest associated with credit-rating agencies selling their ratings to the issuers of securities. Issuers have an interest in paying rating agencies more for higher ratings, since those ratings influence the demand for and hence the pricing of securities (Levine, 2010). The explosive growth of securitized and structured financial products from the late 1990s onward dramatically intensified the conflict-of-interest problem. Securitization and structuring, which involves the packaging and rating of trillions of dollars worth of new financial instruments, brought in huge fees associated with processing these securities as they flowed into banks and credit-rating agencies. By the early 2000s, it was already known that the boom in securitization was encouraging credit-rating agencies to inflate their ratings for huge profits. Moreover, regulators failed to raise their voice when banks started paying the credit-rating agencies to both structure and then rate securities. Credit-rating agencies gave AAA ratings to structured products that turned into toxic assets, creating the nucleus of the financial turmoil. That these agencies were permitted to operate with such a lack of transparency and accountability demonstrated the need for action (Benmelech & Dlugosz, 2010).

Policy-makers realized the urgent need to regulate banking practices with the fall of Lehman Brothers in 2008, which showed the lack of liquid assets on the banks' balance sheets and the poor risk-assessment methodology in use. Policy-makers in the European Commission realized that conflicts of interest and the banks' overreliance of credit agencies were urgent matters. As of June 2013, credit-rating agencies operating in Europe have been required to follow stricter accountability rules. The new rules also aim to reduce the overreliance on credit ratings while at the same time improving the quality of the rating process. Credit-rating agencies will even have to be more transparent when rating sovereign states (European Commission, 2013).

In line with G20 commitments, the new rules will reduce the financial industry's overreliance on external ratings, requiring banks to strengthen their own credit-risk assessments. European supervisory authorities should also avoid references to external credit ratings and will be required to review their rules and guidelines where appropriate. Furthermore, the new rules will make rating agencies more accountable for their actions. A rating agency can now be held liable if it infringes the regulation intentionally or with gross negligence, thereby causing damage to an investor or an issuer.

Although these new rules achieve a more transparent and accountable rating system, the system continues to fail in its most fundamental mandate by not achieving an accurate credit risk assessment. Credit-risk rating agencies will not present a reliable credit risk valuation if they fail to recognize environmental risks and natural resource scarcity in their long-term risk-assessment methodology.

For example, sovereign bonds are exposed to numerous risks that could affect a country's capacity to pay back its debt, and credit-rating agencies still fail to make an exhaustive risk assessment when they ignore exposure to environmental risk at a national level. The Fukushima Daiichi nuclear disaster gives an example of how environmental risks impact financial accounts at the national level.

On the other hand, policy-makers have contributed to reforming the banking system. The 2010 U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act and the Bank of International Settlement (Basel III) guidelines increase the power of financial regulatory agencies, reduce regulatory gaps, promote development of better crisis-management tools and consolidate the regulation of systemically important institutions. Yet these pieces of regulation continue to fail on sustainability factors, restricting green finance flows.

Pension Funds and Sovereign Wealth Funds

During the financial crisis, pension funds and sovereign wealth funds were restricted from adding green investments into their portfolios. However, they could invest in toxic structured products. These circumstances coexisted with poor regulations.

The current framework regulating the fiduciary duties of pension funds and sovereign wealth funds fails to recognize the benefits of green investments. Pension funds and sovereign wealth funds investing in green projects seek a positive environmental impact as long as the investment has the potential for a certain minimum return on investment or capital appreciation. Usually, investors choose green investments if the intended green impact of the project also entails a financial return. For the investment to be considered viable, additional financial parameters should include consideration of the company, sector, country and particular investment risks. Some investors invest directly into green projects, while others employ intermediaries and external specialized funds.

Pension funds and sovereign wealth funds have a fiduciary duty to represent the best interest of their clients and beneficiaries. This duty is primarily defined as a duty of loyalty and impartiality toward these parties. As a result of this legal mechanism, the administrators of these funds must, as fiduciaries, refrain from making decisions that would benefit themselves or third parties over beneficiaries or clients. Fiduciaries are also required to act with prudence and care when making investment decisions to tailor their portfolio to suit their unique investment objective. For example, the duty of prudence requires an adequate level of diversification, and other considerations at the level of both the portfolio and individual investments. These duties and the standard of care are consistent across institutional investors.

Taking all of these factors into account, investors must approach the administration of their portfolio within the interpretations of portfolio and investment theory (Principles for Responsible Investment, 2011). The most prominent tenet of these responsibilities is modern portfolio theory, which as currently implemented requires the evaluation of investments on a limited number of factors (risk and return) and encourages funds to benchmark their performance using asset class-specific measures (indices). The implications for institutional investors are the following (Wood, Thornley & Grace, 2012):

1. Benchmarking tends to favour standardized opportunities over innovative ones, emphasizing the short-term performance of an investment. As a result, green projects may be disfavoured because of their higher technological risks (even though they have low environmental risks).
2. Modern portfolio theory disregards the long-term health of a business and its broader impact on society. Although these aspects may be implicitly factored into the decisions of fund administrators and investors if they are perceived as linked to the short- to medium-term performance of an investment, the theory does not take into account the greater sustainability implications that may in fact have positive financial or non-financial significance (Huppé and Silva, 2013).

With such failures in the governance policy for sovereign wealth funds and pension funds, green projects will be left on the sidelines.

3.0 *The Estrangement of Financial Market Reform and Sustainable Development Goals Restricts Green Finance Flows*

Current reform proposals do not address core environmental issues, demonstrating the weakness of financial regulation and accountability for risk.

3.1 Banking Sector

The Basel III guidelines have presented stricter banking regulations that will require banks to maintain liquidity buffers in order to remain stable. The requirement for a 30-day liquidity buffer states that the buffer must be large enough to cover part of the difference between a bank's financial inflows and outflows in times of stress. It is to be phased in at 60 per cent of this difference starting in 2015, rising to 100 per cent in 2018. Furthermore, banks will be required to disclose their leverage ratio, defined as a bank's Tier 1 capital divided by its average total consolidated assets, which gives a measure of a bank's ability to meet its long-term financial obligations. The leverage ratio requirement is to be introduced in January 2018.

Banks have begun to adjust their balance sheet in the transition toward meeting Basel III requirements. The banking sector already shows less capital being allocated into projects with high risks or long investment horizons that could affect the banks' liquidity ratios. Green projects are mainly long term and carry higher risk due to the new technologies or innovations they utilize, putting over-capitalized banks in a difficult position with regard to contributing to the greening of financial markets.

3.2 Credit-Rating Agencies, Pension Funds and Sovereign Wealth Funds

With the credit-rating agencies playing a crucial role in the financial system, the lack of policies foreseeing how environmental risk represents future financial losses at the corporate and national level dampens efforts for greening financial markets. Without embedding environmental risk into risk-assessment methodologies, it becomes complicated for pension funds and sovereign wealth funds to add green investments to their portfolios, and conservative investments will continue to be preferred over green investment.

The excessive reliance on credit-rating agencies in the current financial framework should be part of the immediate agenda of policy-makers. A country cannot issue a sovereign bond without having hired a credit-rating agency to rate the issuance. The current framework that credit rating agencies use to account for all the risks related to the bond issuance include political risk, economic growth, institutional and fiscal strength, and vulnerability to shocks such as banking and foreign-exchange crises.

The continuing debt crisis emphasizes the importance of an accurate risk assessment in relation to the length of an issuance. Over the long term, the methodology that credit-rating agencies use in assessing the risk of sovereign bonds should include a better recognition of the value of ecosystem services and account for natural capital in national accounts. Both the availability and use of these resources are likely to influence core economic indicators such as sovereign credit ratings and a nation's ability to meet future debt obligations (positively or negatively). Bringing environmental analysis into risk assessments will be crucial for long-term sustainability for investors, the investments and the overall economy. In our current financial framework, which is overreliant on credit ratings, credit-rating agencies could play a crucial role in accounting for environmental risks.

4.0 Governance and Accountability Policy Innovations Relevant to Green Finance

The lending activities of participants in the financial system are not in line with sustainable development goals. Policy innovations relevant to green finance need to be implemented to leverage private capital into green projects.

4.1 Banking Sector

It is important to establish policies to mitigate the credit drought in specific sectors of the economy caused by stricter financial governance policies. A good example of this is priority-sector lending in India, which could be adapted to foster green development. India's priority-sector lending was implemented by the Reserve Bank of India and requires banks to provide a specified portion of their net bank lending to specific sectors. "Priority sector" refers to those sectors of the economy that may not get timely and adequate credit in the absence of this special dispensation. Typically these are small-value loans to small farmers for agriculture and related activities, to micro and small enterprises, for housing for low-income groups, for students and other low-income groups, and to weaker sections of the economy. The Indian banking system is fully compliant with Basel II. This priority-sector lending fits within the banks' capital requirements and constraints. The prioritization was analyzed through the lens of sustainable development, as opposed to a profit-driven view that would focus only on the sectors where the returns are higher. There are some industries that, although not the most profitable in the short term, are fundamental to sustainable development.

In India, domestic banks have the mandate to lend 18 per cent of their net bank credit to agriculture, and 10 per cent of this must be lent to the weakest section of the sector. Foreign banks operating in India must also comply with the mandate; consequently, they are required to contribute to the economic development of the country in return. Foreign banks are required to lend 32 per cent of their net bank credit into sectors that will have a positive impact on the local economy.

TABLE 4.1 PRIORITY-SECTOR LENDING AS DEFINED BY THE RESERVE BANK OF INDIA

CATEGORIES	DOMESTIC COMMERCIAL BANKS/ FOREIGN BANKS WITH 20 OR MORE BRANCHES	FOREIGN BANKS WITH FEWER THAN 20 BRANCHES
Total priority sector	40	32
Total agriculture	18	No specific target
Advances to weaker sectors	10	

Source: Reserve Bank of India, 2013

Interest rates on certain priority-sector loans are determined by the Reserve Bank of India's directives and linked to the base rate of banks. Priority-sector guidelines do not lay down any preferential rate of interest for priority-sector loans.

The regulation includes alternatives in cases where the bank does not reach the required lending targets. Domestic banks with a shortfall in lending to priority sectors must allocate an amount equal to the shortfall as a contribution to the Rural Infrastructure Development Fund. Foreign banks, on the other hand, are required to deposit an amount equivalent to the shortfall with the Small Industries Development Bank of India for one year. The Rural Infrastructure Development Fund is maintained by the National Bank for Agriculture and Rural Development. Domestic and

commercial banks contribute to the fund only to the extent of their shortfall in stipulated priority-sector lending to agriculture. The amounts collected by the fund are used to provide loans to state governments and state-owned corporations to enable the completion of ongoing rural infrastructure projects (Reserve Bank of India, 2013).

4.2 Credit-Rating Agencies

A project led by the UN Environment Programme Financial Initiative (UNEP FI), which proposes integration of ecological risk into country-level risk in sovereign bonds (UNEP FI, 2012), sets a best-practice example for how policy-makers could leverage the role of credit-rating agencies on the path to greening financial markets.

The availability of natural capital is likely to become increasingly financially relevant for economies. This will be the case not only for individual businesses, but also for nations. By natural capital we refer to the stock of ecosystems that provide a renewable flow of goods and services such as fish, crops, timber, climate regulation and many other services. In the last few years, a variety of studies, including the UNEP's study on the economics of ecosystems and biodiversity, have improved understanding of the value of ecosystem services as well as the considerable cost to society, businesses and nations of natural resource degradation and overuse. For example, a study by Principles of Responsible Investments and the UNEP FI measured the magnitude of global environmental externalities to be US\$6.6 trillion in 2008, about 11 per cent of the value of the global economy. The question is whether such environmental phenomena affect the financial underpinnings of sovereign bonds or other types of securities. A country's use and availability of ecosystem services play a role in the health of its economy and its ability to secure a high quality of life for its citizens (UNEP FI, 2012).

The innovations showcased by this project could help credit-rating agencies achieve a more accurate credit-risk assessment. The introduction of environmental risks into the risk-assessment methodology of these agencies will consequently provide a more fair competition between green and non-green investments.

4.3 Pension Funds and Sovereign Wealth Funds

Even if pension funds and sovereign wealth funds apply policies that restrain their investment strategies to a spectrum of conservative securities, in some cases it may be possible to find an alignment with environmental objectives. Where alignment exists, it may be possible for these funds to make investments that generate environmental and economic benefits along with the necessary financial returns. Therefore, pension and sovereign wealth funds can be harnessed not only to comply with their core objectives of efficiently managing retirement funds and countries' reserves, but also to contribute to the long-term well-being of beneficiaries, workers, retirees and their communities. Public and union-sponsored pension funds, as well as sovereign wealth funds such as state-owned investment funds, may be more inclined toward this type of approach, depending on their governance, mandate and institutional context. Such strategies have historically been used by union-sponsored pension funds in the United States to serve beneficiaries and their communities by targeting assets with the objectives of expanding employment opportunities in a particular geographical region, increasing the availability of affordable housing, strengthening capital infrastructure, revitalizing urban neighborhoods, helping rural economies, developing small and medium enterprises, or supporting green industries (Croft, 2009). Through these investments, pension funds are able to provide more job security and encourage infrastructure projects and other investments that promote the public good.

These types of investments are referred to as "economically targeted investments." They seek to produce competitive rates of return while also providing collateral benefits. In the case of state pension funds, these collateral benefits aid

targeted geographic areas, groups of people or particular sectors of interest of the economy. Collateral benefits may include affordable housing, job creation or retention, sales and tax revenue generation, and payroll growth.

Rather than making traditional investments in national stock and bond markets, a pension fund with an economically targeted investment policy may target projects or companies. The intent of these investments is to make equity financing available to viable companies that may not come to the attention of venture capital partnerships. Proponents of economically targeted investments contend that targeted investments in venture capital, small business loans and affordable housing improve the economy and tax base. Florida's economically targeted investments, such as traditional investments in state pension funds, are subject to the requirements of Florida state law and the U.S. Employee Retirement Income Security Act. These laws require pension fund managers to act as fiduciaries and to follow the "prudent person" rule. These two requirements charge the State Board of Administration, its trustees and its fund managers with acting prudently in evaluating the suitability of investment vehicles for the pension fund, seeking expert opinions on these investments and ensuring that this information is complete and up to date, selecting investments that do not result in lower rates of return than would alternative investments with commensurate degrees of risk, and purchasing these investments with the exclusive goal of benefiting pension participants and beneficiaries.

In sum, these requirements essentially charge public pension fund managers with maximizing investment returns to the retirement system first, and maximizing economic benefits second. Currently, twenty-one state pension plans have economically targeted investment programs. These states include Florida, California, Texas and New York, which typically use the investments to provide resources for urban development, housing, small business loans, company start-up capital, and capital for business expansion to those firms identified as benefiting the state (Office of Program Policy Analysis & Government Accountability, 2008).

4.4 Corporations

Although corporations are not a structural part of the financial services sector, they play a crucial role in advancing green finance; thus, it is worth reviewing the policy innovations aiming to promote this role.

Customers, investors and non-governmental organizations are pushing for disclosure on companies' sustainability performance, and it has become a real challenge for companies to respond efficiently and effectively. Enforcement and environmental accountability require important consideration. Ideally, reporting on sustainability should be provided through a single, integrated report that communicates every aspect of a company's performance. Effective sustainability reporting communicates to stakeholders about the company's performance against its sustainability objectives. Since retail investors are currently more sensitive to corporate responsibility concerns, companies that embrace sustainability reporting are likely to have an advantage over their competitors and boost value for shareholders.

One example of successful environmental accountability is the case of the sportswear and footwear company PUMA. This corporation published an environmental profit-and-loss accounting in November 2011, an important step forward for corporate reporting. As a pioneer, the company analyzes the environmental, social and economic impacts of the whole business operation and supply chain, including fair wages, working conditions, job creation and tax contributions. PUMA has proposed a three-stage process for full environmental, social and economic reporting:

1. Environmental profit and loss: Covering greenhouse gas emissions, water use, the impacts of changes in land use on ecosystems and biodiversity, local air pollution, and waste.

2. Social profit and loss: Including social impacts such as fair wages; freedom of association; health, security and stability; empowerment; community cohesion; human capital; and gender equality. PUMA will collaborate with other corporate and civil society stakeholders to address social issues.
3. Economic profit and loss: To focus on some of the beneficiaries of the economic impacts from PUMA's operations. This could include job creation, wages, total tax contributions, indirect and induced employment, and indirect and induced output.

PUMA has positioned its environmental profit-and-loss exercise in the context of a longer-term imperative for global businesses to introduce more sustainable business models. For example, PUMA's direct operations in 2010 accounted for just €8 million of its €145 million environmental impact costs. The remaining €137 million was incurred by its entire supply chain, ranging from raw material production to processing and manufacturing (McGill, 2011).

PUMA is an example of how corporate transparency and responsibility in the markets begin to play their part in the financial world. However, the optional nature of these activities causes them to be seen by the private sector as a way to "greenwash" the corporate image.

Countries could introduce reform of corporate governance policies in the area of environmental risk disclosure. Such a policy reform could standardize environmental profit-and-loss accounts, which would provide a basis for comparison among companies on a national level. This is the case in Denmark.

Danish companies have published yearly green accounts since the Danish government enacted legislation in 1995 to make such reporting mandatory. Green accounts are mandatory environmental reports accounting for the physical flows of pollutants and resource efficiency through information about use of raw materials and waste generation. The legislation is very flexible, to suit the communication needs of different companies (Danish Environmental Protection Agency, 2012).

4.5 Stock exchanges

The objective of green accounts is to enhance the public's access to information on the environmental performance of polluting companies in order to promote a democratic and progressive dialogue around environmental issues. A second objective is to motivate reporting companies to look at their processes and products and improve their resource efficiency, as well as to motivate them to work systematically with the environment.

Along the same lines, South Africa requires corporations not only to report on green accounts, but to do it in an integrated way. Corporations disclose in one single report, where the environmental reporting is given the same importance as the financial reporting. The process to arrive at the integrated reports started in 1994, when the first King code on corporate governance was published; this was the first corporate governance code for South Africa. It established recommended standards for boards and directors of listed companies, banks and certain state-owned enterprises. It not only included financial and regulatory aspects, but also advocated an integrated approach that involved all stakeholders. It was applicable to a wide variety of organizations: the companies listed on the main board of the Johannesburg Stock Exchange, large public entities as defined by the Public Entities Act of South Africa, banks, financial and insurance companies as defined by the Financial Services Acts of South Africa, and large unlisted companies.

In 2009 the King III code established that organizations would be required to produce integrated reports in place of an annual financial report and a separate sustainability report. Nowadays, this is a reality: the companies listed on

the Johannesburg Stock Exchange are required to create one single report combining all financial and environmental factors, following the Global Reporting Initiative’s Sustainability Reporting Guidelines. An integrated report gives readers an exhaustive view of the company by including social, environmental and economic performance along with the company’s financial performance (South African Institute of Chartered Accountants, 2013).

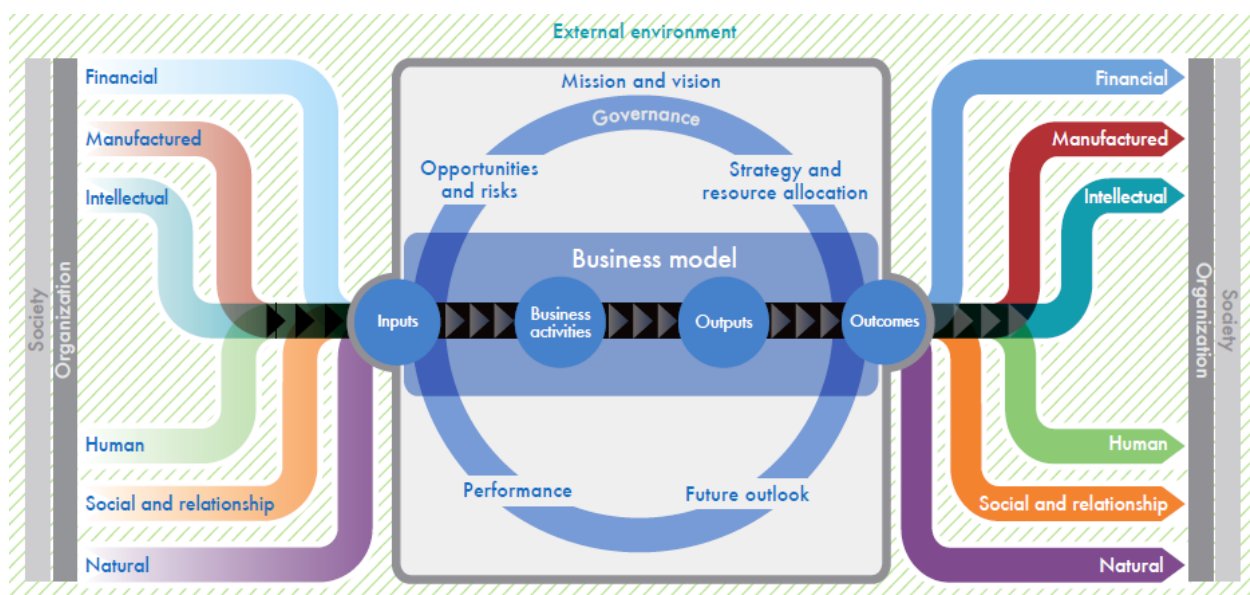


FIGURE 2: FUNDAMENTAL CONCEPT OF INTEGRATED REPORTING

The complete picture of an organization’s value creation process, showing the interaction of the Content Elements and the capitals in the context of the organization’s external environment.

The Global Reporting Initiative’s Sustainability Reporting Guidelines propose the disclosure of companies’ value creation over time. The integrated report in these guidelines is a concise communication about how an organization’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term. The objectives include catalyzing a more cohesive and efficient approach to corporate reporting that communicates the full range of factors that materially affect the ability of an organization to create value over time. Another objective is to inform an allocation of financial capital that supports value creation over the short, medium and long term; to enhance accountability and stewardship with respect to the broad base of capital flows (financial, manufactured, intellectual, human, social and relationship, and natural); and to promote understanding of the interdependencies among them (Global Reporting Initiative, 2013).

Even though the Johannesburg Stock Exchange is currently seen as the best-practice example for driving companies to disclose their environmental footprint with the process of delivering integrated reporting, several stock exchanges around the world have begun to take sustainability reporting as an important factor for long-term profitability. The table below provides a clear overview of the current activities to encourage sustainability reporting in different jurisdictions for stock exchanges.

TABLE 4.2 EXAMPLES OF STOCK EXCHANGE ACTIVITY TO ENCOURAGE SUSTAINABILITY REPORTING

NAME OF ORGANIZATION	PRODUCT	DESCRIPTION	COUNTRY
Australian Stock Exchange Corporate Governance Council	Corporate Governance Principles and Recommendations	The Corporate Governance Principles & Recommendations with 2010 amendments include a requirement (in Principle 7) to include sustainability risks in the description of potential material business risks. Paragraph 4.10.3 of the Listing Rules state that companies must disclose whether they have followed the recommendations. The council refers to environmental, social and governance aspects that position sustainability strategically as a driver of long-term economic performance.	Australia
BM&FBovespa	Listing Rules (from 2012) and Corporate Sustainability Index methodology (from 2005)	BM&FBovespa is recommending that as of 2012, listed companies state in item 7.8 of the Reference Form ("Description of the company's relevant long-term relationships not elsewhere described") whether they publish a regular sustainability report and where it is available, or explain why not. The stock exchange also operates a corporate sustainability index known as ISE. The ISE criteria and methodology are used to survey companies each year: 40 companies are selected based on their scores from answering a questionnaire by the stock exchange. Their responses are scored according to the ISE methodology.	Brazil
Bolsas y Mercados Españoles	FTSE4Good IBEX Index	FTSE Group partnered with Bolsas y Mercados Españoles (BME) to create the FTSE4Good IBEX Index. The index comprises companies in the BME's IBEX 35 Index and the FTSE Spain All Cap Index that meet good standards of practice in corporate social responsibility.	Spain
Bolsa Mexicana de Valores	Sustainability Index	Launched in association with the Ethical Investment Research Service together with a methodology and assessment framework. To meet the listing requirements for the sustainability index, each company is evaluated in comparison with the sustainability practices of its sector globally. Mexican companies have to score in the top 50 per cent of performers to be eligible for inclusion.	Mexico
BSE Ltd. (Bombay Stock Exchange)	Carbon-themed Index	BSE-Greenex includes the top 20 companies based on greenhouse gas emissions, free-float market capitalization and capital turnover.	India
Bourse de Luxembourg	The Ten Principles of Corporate Governance	As well as issuing the Ten Principles of Corporate Governance, LuxSE is an active member of the Socially Responsible Investment Working Group of the Luxembourg Investment Fund Association, which seeks to promote Luxembourg as a preferred venue for socially responsible funds.	Luxembourg
Bursa Malaysia	Corporate Social Responsibility Framework	Since 2007 Bursa Malaysia has required listed companies to disclose their corporate social responsibility activities, and if there are none, to provide a statement to that effect.	Malaysia
Canadian Securities Administrators	CSA Staff Notice 51-333 Environmental Reporting Guidance	The CSA provides guidance to reporting issuers on existing continuous disclosure requirements (in National Instrument 51-102 and 58-101 Continuous Disclosure Obligations) relating to environmental matters under securities legislation.	Canada
Deutsche Börse	DAX global Alternative Energy Index and Sarasin Sustainability Germany	The DAXglobal® Alternative Energy Index enables participation in growing alternative energy markets. Companies selected for the index must generate more than 50 per cent of their revenues in one of the following sub-sectors from the alternative energy segment: natural gas, solar, wind, ethanol or geothermal/hydro/batteries. The DAXglobal® Sarasin Sustainability Germany Index is composed of the 100 biggest and most liquid German companies based on free-float and market capitalization. The selection of constituents takes place according to market capitalization and the average daily trading turnover. Thereafter these companies are verified in compliance with the Sarasin Sustainability Matrix®.	Germany

NAME OF ORGANIZATION	PRODUCT	DESCRIPTION	COUNTRY
Hang Seng Indexes Company Limited	Hang Seng Corporate Sustainability Index	Constituent selection is based on a robust process that includes consideration of the results from a corporate sustainability rating assessment undertaken by RepuTex.	Hong Kong
Borsa Istanbul	Istanbul Stock Exchange Sustainability Index	ISESI will assess how businesses are addressing urgent sustainability issues that are important for Turkey, such as climate change, the depletion of natural resources and ecosystems, diminishing water supplies, health and safety, community relations, and employee relations, and their resulting impacts on Turkey's economic development.	Turkey
KRX Korea Exchange	SRI Index	The KRX SRI Index was launched in 2009 as part of the "Plan for Green Growth."	Korea
London Stock Exchange Group	Corporate Governance for Main Market and Aim Companies (2012) and various FTSE4Good Indices	The corporate governance guidelines encourage companies to consider corporate governance in the widest sense to include reporting requirements and sustainability.	UK
Nasdaq OMX (USA)	Family of Green Economy Indices	These indices are designed to act as a performance indicator for stocks covering areas such as energy efficiency, clean fuels, renewable energy generation, natural resources, water, pollution mitigation and advanced materials.	USA
National Stock Exchange of India	S&P ESG India Index	Each company is assigned a quantitative ranking based on three factors: transparency and disclosure of corporate governance, environmental practices, and social governance. Raw values for each factor are calculated for each company in the index. These values are then standardized. The three standardized values are summed, and the companies are ranked in descending order.	India
New York Stock Exchange Euronext	assetmasterExecutive™ tools	In partnership with ASSET 4, NYSE Euronext makes available the assetmasterExecutive™ tools, which enable companies to manage risk, enhance governance practices and increase accountability.	USA
Shanghai Stock Exchange	Environmental Disclosure Guidelines and Sustainable Development Industry Index 2011	These guidelines require listed companies to fulfil social responsibilities and promote sustainable economic and social development. The Shanghai Exchange has also developed the concept of "social contribution value per share," which is a new method of measuring value creation.	China
Singapore Stock Exchange (SGX)	Guide to Sustainability Reporting for Listed Companies	These guidelines are currently voluntary, but SGX has announced that there will be progress toward mandatory reporting.	Singapore
Hong Kong Exchanges and Clearing Limited	Environmental, Social and Governance Reporting Guide	The guidelines were introduced on a voluntary basis but will become mandatory by 2015. The Hong Kong Exchange also has listing rules that require mineral companies to make certain material sustainability-related disclosures in prospectuses.	Hong Kong
TMX Group (Toronto Stock Exchange)	Refers to CSA Staff Notice 51-333,	TMX publishes standards for companies engaged in mineral exploration and a corporate governance guide.	Canada

Source: Climate Disclosure Standards Board, 2013

5.0 *China Can Absorb These Policy Innovations into Their System to Green Their Financial Markets*

China's use of ecological resources has quadrupled in the last four decades. The country is now demanding more from the planet than any nation except the United States. If China were to follow the consumption patterns of the United States, it would demand the available biological capacity of the entire planet. In contrast, if China can model a new development path that achieves environmental quality and human well-being, it will lead the way not only on economic terms, but as a leader in sustainable development.

Accelerated growth in China can compromise a variety of aspects in the country, from the environment, local and foreign communities to further economic growth, if sustainability is not added to the economic equation. Financial markets and actors can gain monetary benefits and, at the same time, participate in green finance. China can profit from each of these policy innovations.

5.1 Banking Sector

Banks in China have stricter capital requirements than those imposed by the Basel III guidelines. It is impossible for green projects to get access to bank loans. Policy innovation and green credit guidelines prioritize corporations that are environmentally compliant, but the capital requirements for existing banks leave many projects undercapitalized. If we translate the Indian priority-sector lending example into the Chinese context, we can see that an efficient policy implementation will not only foster the renewable energy sector and other green projects, but also will help to achieve sustainable economic growth, if the priority-sector lending policies in a given country are correlated with the competitive advantage of that specific country.

China has a competitive advantage in the photovoltaic manufacturing market due to its vast scale of production, which has resulted in manifold supply-chain benefits. Photovoltaic manufacturing in China now accounts for nearly 60 per cent of global production, including nine of the top ten global solar module manufacturers. The low-cost focus of Chinese firms has reshaped the industry, helping to drive solar module prices down 75 per cent since 2007 and boosting demand growth. China offers an example of a successful election to take part in the renewable-energy supply chain.

A way to foster exports and production of these green products and services is to align the banking industry with the goals of the green developers. A priority-sector lending scheme in the banking industry, like that in India, will require banks to allocate credit into the specific sectors that the government wishes to develop. Since priority-sector guidelines do not lay down any preferential rate of interest for the loans, this scheme does not jeopardize the profitability of banking institutions, nor does it contradict the interest rate determined by the People's Bank of China. Priority-sector lending aligns the goals of the government with those of the banking system.

In the long run, this lending program will attract more private players to these specific sectors, bringing newer technologies and higher efficiency. Exports of green products, green services and green energy will prove that it is possible to simultaneously advance green finance and achieve economic growth.

5.2 Credit-Rating Agencies

China is the largest foreign investor in U.S. treasury bills and other U.S. securities. In autumn 2010, China's Dagong Global Credit Rating Company decided to downgrade the United States to A+, four levels below its previous AAA

rating, when the U.S. Federal Reserve decided to continue its policy of quantitative easing. Any factor influencing the ability of the United States to pay back its debt over the long term is of major interest for the Chinese people. Since Beijing holds a significant amount of U.S. government debt, the failure of the United States to reach its economic growth goals poses a major risk for the Chinese. In the same way, China holds a significant amount of German sovereign bonds. Any critical factor that could affect the long-term capacity for repayment by these two countries should be at the top of Chinese policy-makers' list of concerns.

As mentioned before, no risk assessment is accurate if it does not make an exhaustive analysis of all the factors that could affect national accounts. Environmental risks are financially relevant, and a credit rating that does not consider them represents a flawed exercise with an inaccurate calculation of the capacity of the country to repay its debt.

China, as the biggest investor in sovereign debt, should use its strategic position and negotiate with other countries to add environmental risks into their analysis. These actions will bring two benefits to China:

- 1) They will provide a more accurate credit risk assessment for the sovereign bonds that China is holding and will therefore offer higher transparency and understanding for planning of investment strategies.
- 2) They will position China as a leader in credit risk-assessment methodologies for sovereign bonds. Adding environmental risk into the equation of sovereign bonds will scale up green finance. As China has already taken measures to clean up their cities and markets, the global application of a credit risk-assessment methodology that embeds environmental risk will consequently give China a higher rating compared with other countries that are lacking that vision of lowering environmental risks.

5.3 Pension Funds and Sovereign Wealth Funds

China's property bubble is being further inflated by trust funds and pension funds. Policy-makers should follow the example of setting economically targeted investment. It could align the interest of pension funds with the ones of the government, and it could help capitalize underfinanced green projects and thus scale up the renewable energy sector in China. In this case, pension and sovereign wealth funds can be required not only to provide retirement income or other financial objectives, but also to contribute to the government's goals of shifting to a more sustainable economy.

Conclusion

China can take advantage of policy innovations that have been developed internationally. The disclosure of environmental information, accountability for environmental risks, and economically targeted investments for green projects are first steps toward lowering pollution in China's industrialized cities. With such reporting, the government would know the amount of pollution generated by corporations. If policy-makers establish clear guidelines for disclosure of environmental risks and impacts, corrective actions could be better targeted.

This year China began its first emission-trading scheme, in Shenzhen. Although this is a first step for lowering carbon dioxide emissions, there is still a long way to go. Greater transparency and accountability by corporations regarding their impact on the environment will be an enormous achievement toward controlling carbon dioxide emissions.

Once environmental accounting policies are clear and sound, China could take a step further and be the first country to enact a regulation that links the bonuses of managers of large corporations with their achievements in decreasing their companies' environmental footprint.

If China takes the lead building the ecosystem for green investment flows, this will not just benefit China but will have positive repercussions for the rest of the world.

References

- Benmelech, E., & Dlugosz, J. (2010). The credit rating crisis. In D. Acemoglu, K. Rogoff & M. Woodford (Eds.), *NBER Macroeconomics Annual 2009, Volume 24*. Cambridge, USA: National Bureau of Economic Research. Retrieved from <http://www.nber.org/chapters/c11794.pdf>
- Climate Disclosure Standards Board. (2013). *The reporting landscape*. London, UK. Retrieved from <http://www.cdsb.net/landscape/the-reporting-landscape.html>
- Croft, T. (2009). *Helping workers' capital work harder: A report on global economically targeted investments (ETIs)*. Vancouver, Canada: Global Unions Committee on Workers Capital. Retrieved from <http://www.workerscapital.org/images/uploads/Helping%20Workers%20Cap%20Work%20Harder.pdf>
- Danish Environmental Protection Agency. (2012). *The Danish green accounts: Experiences and internal effects*. Copenhagen. Retrieved from http://www.byelverton.net/sustainable_business/GreenAccounts.pdf
- European Commission. (2013). *Stricter rules for credit rating agencies to enter into force*. Press release. Retrieved from http://europa.eu/rapid/press-release_IP-13-555_en.htm
- Global Reporting Initiative (GRI). (2013). *Sustainability reporting guidelines*. Amsterdam. Retrieved from <https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-Technical-Protocol.pdf>
- Huppé, G. A., & H. Silva, M. (2013). *Overcoming barriers to scale: Institutional impact investments in low-income and developing countries*. Winnipeg, Canada: IISD. Retrieved from <http://www.iisd.org/publications/pub.aspx?pno=2836>
- Levine, R. (2010). An autopsy of the US financial system: Accident, suicide, or negligent homicide. *Journal of Financial Economic Policy*, 2(3), 196–213. Retrieved from http://faculty.haas.berkeley.edu/ross_levine/papers/Autopsy-4-13.pdf
- McGill, A. (2011). *PUMA's reporting highlights global business and challenges*. PriceWaterhouseCoopers. Retrieved from <http://www.pwc.com/gx/en/corporate-reporting/sustainability-reporting/pumas-reporting-highlights-global-business-challenges.jhtml>
- Office of Program Policy Analysis & Government Accountability. (2008). *Department of Management Services Retirement Benefits Administration*. Tallahassee, USA: The Florida Legislature. Retrieved from <http://www.oppaga.state.fl.us/profiles/4133>
- Principles for Responsible Investment. (2011). *PGGM: Responsible investment annual report 2011*. London, UK. Retrieved from http://www.unpri.org/viewer/?file=wp-content/uploads/ESthemedinvestingcasestudy_PGGM.pdf
- Reserve Bank of India. (2013). *Master circular - priority sector lending - credit facilities to minority communities*. Retrieved from <http://www.rbi.org.in/commonman/English/scripts/Notification.aspx?Id=291>
- United Nations Environment Programme Financial Initiative. (2012). *Pushing the frontier in environmental analysis on sovereign bonds: Integrating ecological risk in sovereign credit risk models and investments*. Retrieved from http://www.unepfi.org/work_streams/biodiversity/e_risc
- Wood, D., Thornley, B., & Grace, K. (2012). *Impact at scale*. San Francisco and Harvard, USA: Pacific Community Ventures and Initiative for Responsible Investment. Retrieved from http://www.pacificcommunityventures.org/uploads/research/pdf/ImpactReport_FINAL2.10.12.pdf

Published by the International Institute for Sustainable Development.

International Institute for Sustainable Development

Head Office

161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba, Canada R3B 0Y4

Tel: +1 (204) 958-7700 | Fax: +1 (204) 958-7710 | Website: www.iisd.org