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Sustainable development of portfolio investment in India's publicly listed companies

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by
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ISBN 81-7993-119-6

Published by
TERI Press
Darbari Seth Block
IHC Complex, Lodhi Road
New Delhi – 110 003
India

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Printed in India by I G Printers, New Delhi

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Acknowledgements

The authors would like to acknowledge the support of the following organizations and individuals:

— the Project's Advisory Group: Nick Robins (Henderson Global Investors), David Gait (First State), Stephen Hine (Eiris), Nandan Maluste (Kotak Mahindra Bank), Ravi Narain (National Stock Exchange) and Suresh Narayan (India Index Services Limited)

— Rochelle Mortier (TERI-Europe) and Evalueserve for initial research in India and UK

— Rachel Mew (Delsus Limited)

— the staff of the Publications Unit at TERI.

Credit and thanks are also due to many other individuals around the world who have provided information, advice and opinions for this report. Lack of space prohibits naming them all, but their assistance is deeply appreciated.

The project was undertaken with the generous support of the UK Foreign and Commonwealth Office through its Global Opportunities Fund.

The conclusions and judgements contained in this report should not be attributed to, and do not necessarily represent the views of, the UK Foreign and Commonwealth Office or the organizations represented by the members of the project's Advisory Group. The authors do not guarantee the accuracy of the data included in this publication and accept no responsibility whatsoever for any consequences of their use.

Executive Summary

The Indian business community, in common with the rest of world, is increasingly aware of the power of environmental, social and governance (ESG) issues to create or destroy shareholder value in companies across a wide range of industries and markets. This same understanding underpins the move by portfolio investors worldwide to incorporate ESG-related risks and opportunities into their investment decisions and ownership practices. Sustainable investment now accounts for around US$3.7 trillion of global assets under management. ESG investment practices are rapidly becoming mainstream and this figure is therefore likely to continue to grow significantly.

India's remarkable economic success story goes hand-in-hand with serious sustainable development challenges. Inadequate infrastructure is now one of the main obstacles to continued growth. Water scarcity is leading to hardship and conflict. Energy is in short supply. India's reliance on fossil fuels and rapid industrialisation mean that its emissions of greenhouse gases are rising swiftly. Climate change could cause major changes to monsoon conditions and lead to other severe impacts. In rural India, poverty remains a major problem. In the congested cities, skilled human capital is in short supply in key growth industries.

At the same time, India is producing some of the world's leading companies, and portfolio investors are giving greater weight to Indian and other emerging market equities. Many already apply ESG methods to this emerging market investment, and more are planning to do so. For some international investors, ESG risks in emerging market equities are currently a major barrier to investment. Countries such as Brazil and South Africa have already created an investment climate geared to sustainable portfolio investment. China is beginning to focus on the same challenge.

Sustainable investment therefore presents some critical issues and opportunities for India Inc. This report provides a comprehensive review of the trends and issues. It concludes that:

- Sustainable investment is already important to India Inc. and will become more important in the medium- to long-term. Indian companies are not well represented in the portfolios of international sustainability funds. Many Indian companies fail the sustainable investment tests of influential investors such as CalPERS (the California Public Employees Retirement System).

- India lags behind in its preparedness to attract inward sustainable investment and develop domestic sustainable investment. It falls short both in relation to its potential and in comparison with other emerging markets. This poses tangible risks and missed opportunities in terms of India's future competitive edge.

- India possesses the capability to close the gap on sustainable investment, and achieve the benefits, in a relatively short space of time. Key strengths include world-class companies, the forthcoming launch of an Indian sustainability index by CRISIL (Credit Rating Information Services of India Limited), an increasingly competitive and innovative domestic mutual fund market as exemplified by the ABN AMRO Sustainable Development Fund, and the support of several centres of excellence in the fields of sustainable business and sustainable investment.

The report puts forward six main recommendations on actions that, if begun now, can achieve measurable progress over the next 1–2 years:

Recommendation 1 **Create a dedicated national focal point**

A high priority should be given to establishing a forum for advocacy, research, capacity building, networking and similar activities. Such an initiative should coordinate closely with the Association for Sustainable and Responsible Investment in Asia (ASrIA) and network with other emerging markets, especially Brazil. Consideration should also be given to some type of "twinning" or partnership programme with sustainable investment experts or associations in Europe. The UK may be particularly relevant in this regard.

Recommendation 2 **Raise the awareness and readiness of corporate leaders specifically in relation to sustainable investment**

A tightly-focused initiative is needed to further increase understanding in India's listed companies about the concepts, opportunities and requirements of sustainable investment, and to help them to develop the necessary strategies and tools.

Such an initiative should focus on Chief Executive Officers and Chief Financial Officers as its entry point, and should be oriented around strategic management and investor relations rather than corporate social responsibility.

India has excellent programmes and industry forums dealing with corporate social responsibility and sustainable development, including TERI–BCSD and the CII–ITC Centre for Excellence on Sustainable Development, amongst others. This provides a good foundation for new measures at corporate leader level specifically in relation to sustainable investment.

Recommendation 3 **Develop coordinated programmes around the Carbon Disclosure Project and sustainability reporting initiatives**

The fifth annual cycle of the Carbon Disclosure Project (CDP), a global collaboration between 280 institutional investors with total assets of US$41 trillion, has requested 100 of India's largest companies to disclose information

on their greenhouse gas emissions. Coordinated measures to promote this project in India could be targeted at those companies that most commonly appear in sustainable investment portfolios. Alternatively, such awareness raising and/or technical assistance could be directed at companies selected from those that fail (or risk failing) the ESG requirements of sustainable investors such as CalPERS.

Measures are also needed to promote sustainability reporting by Indian companies, along the lines of the Global Reporting Initiative (GRI). As well as raising senior management awareness about the benefits of GRI-based disclosure, technical training may be required at operational levels on how to measure, compile and interpret the types of information specified in GRI's guidelines. Potentially, such actions could focus initially on companies in the S&P CNX Nifty index. The process of CDP5 reporting and awareness-raising around CDP5 could provide valuable synergies with pilot programmes on sustainability reporting, given the partial overlap and similar discipline.

Recommendation 4 **Survey the attitudes of retail investors**

In the near future at least, the potential to develop a domestic sustainable investment market rests with latent demand in the retail investment sector rather than public pension funds. The ABN AMRO Sustainable Development Fund will test this assumption to some extent. If successful, ABN AMRO's lead may potentially encourage other mutual fund managers to develop competing products.

However, information on market demand is likely to be guarded as valuable commercial intelligence. The overall process of understanding retail investor demand and stimulating service provider competition will be accelerated significantly by an independent survey that is made public. Such a survey could be coordinated by the forum proposed in Recommendation 1, perhaps in conjunction with the Association of Mutual Funds in India.

Recommendation 5 **Develop and track the business case evidence specific to India**

The ESG issues that are relevant to the long-term financial performance of companies in India are likely to differ from those that apply to companies in other markets. Such country-specific subtleties are not yet fully understood, and may not be adequately captured by the sustainable investment methods used by international investors.

In addition, sustainable investment in India will understandably be approached with conservative caution in many quarters. Quantitative analysis and back-testing will be required to help demonstrate the case, as well as common sense.

More detailed analysis is also needed on the lessons to be gained from experience to date by sustainability funds investing in India and the Indian companies themselves.

Recommendation 6 **Reach out to international sustainable investors**

There would be value in closer engagement on ESG issues between Indian companies (and investment professionals) and the international sustainable investment community. The emphasis should be on increasing mutual understanding of the opportunities.

Potential measures could include, for example, an event for CEOs from S&P CNX Nifty companies to interact with international sustainable investment analysts. Another possibility might be a London or New York roadshow of Indian companies to coincide with the January 2008 launch of the CRISIL Sustainability Index.

1 Introduction

The Indian business community, in common with the rest of world, is increasingly aware of the power of environmental, social and governance (ESG) issues to create or destroy shareholder value in companies across a wide range of industries and markets.

Many Indian companies have well-developed corporate social responsibility programmes. Infosys, Suzlon and others have demonstrated how environmentally and socially sustainable business models, strong corporate governance and an emphasis on human capital can open new markets, improve productivity, enhance customer and workforce loyalty, reduce business interruption risk, strengthen brand identity and enhance access to capital.

By the same token, ESG issues can lead to serious regulatory, operational and reputational risks. Enron provided a global lesson on the need for robust corporate governance and effective disclosure and transparency. Coca Cola's operations in India have been beset by problems related to access to water and groundwater pollution. Indian companies, too, can offer equally startling local examples of ESG problems and their impact on the bottom line and shareholder confidence.

Internationally, a growing number of pension funds, mutual funds and other portfolio investors in publicly quoted companies now take ESG factors into account in their investment choices and ownership decisions. Their objective in doing so is to improve long-term returns by exploiting market inefficiencies, managing intangible value or diversifying into growth technologies. In some cases, such investors are also guided by strong ethical or social responsibility values.

The broad spectrum of 'sustainable investment' represents total assets under management of approximately US$3.7 trillion worldwide. ESG investment practices are rapidly becoming mainstream and this figure is therefore likely to continue to grow significantly. At the same time, portfolio investors are allocating increasingly larger amounts of capital to Indian and other emerging market equities. Many already apply ESG methods to this emerging market investment, and more are planning to do so. For some international investors such as CalPERS, ESG risks in emerging market equities are currently a major barrier to investment.

Simultaneously, India is experiencing record levels of domestic savings, pension and mutual fund assets. Whether these savers can look forward to a prosperous retirement may depend partly on the ESG-related financial risks and opportunities to which their investments are exposed. Their future quality of life in old age may also rely partly on having the opportunity today to employ their capital

in a way that supports environmental sustainability and social responsibility in their own economy and homeland.

Sustainable investment therefore presents some critical issues for India Inc. over both the short- and long-term horizon.

This report examines, for the first time, what is currently happening on the ground, how it may affect or benefit India, and what further steps may be expected or needed.

Chapter Two reviews India's emergence as the world's second-fastest growing economy, the sustainable development challenges that this involves, and the risks and opportunities that sustainability issues pose for India's publicly listed companies. *Chapter Three* provides an introduction and overview of international trends in sustainable investment, including the rising importance of India and other emerging markets. The sustainable investment practices and initiatives that can be seen in India today are summarised in *Chapter Four*, which deals with both the foreign institutional investment and domestic investment.

Finally, *Chapter Five* focuses on two key questions: Is India lagging behind other rapidly developing economies such as China? And, if so, how can the gap be closed?

2 The emerging giant

Surging economy

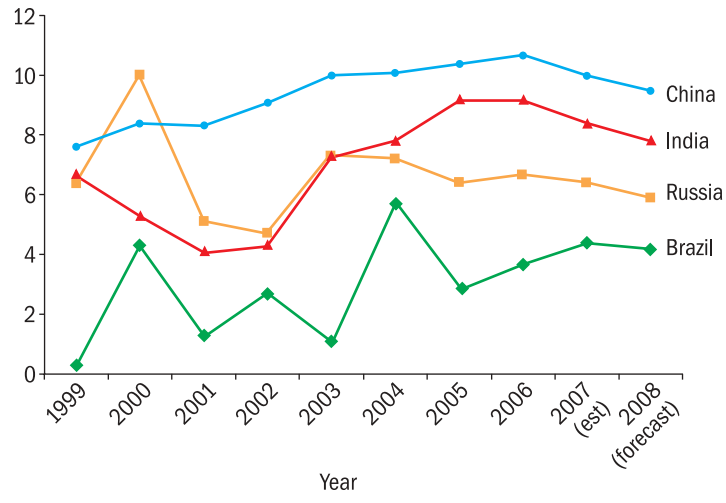
Over the past ten years, India's economy has surged, with an average growth of around 6 percent making it one of the fastest growing in the world. In the last four years alone growth has reached 7-8 percent and the country seeks to attain an average growth rate of 8 percent or higher per year.

Figure 1 compares India's growth with that of the other 'BRIC' countries - Brazil, Russia and China. Growth across different sectors of the Indian economy is shown in Table 1 and is dominated by the service industry, which continues to make up around 60 per cent of India's real GDP.

High levels of foreign portfolio investment

Foreign investment flows in to India, comprising foreign direct investment (FDI) and foreign portfolio investment (FPI), are financing much of this growth. Foreign investment flows have risen sharply from negligible levels during the 1980s to reach US$20 billion in 2005-06. Cumulative foreign investment flows have amounted to US$106 billion since 1990-91, split almost evenly between FDI and FPI.

Figure 1 **Real GDP Growth in BRIC Countries**



Source World Economic Outlook, IMF, 2007

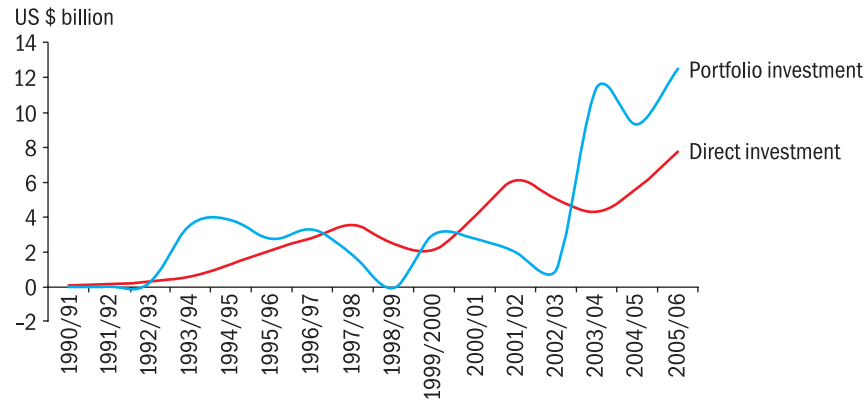
Table 1 Growth rates of Real GDP in India by sector (at 1999–2000 prices)

Sector	2000–01 to 2002–03 (average)	2003–04 (provisional estimates)	2004–05 (quick estimates)	2005–06 (revised estimates)	2005–06 Q1	Q2	Q3	Q4
Agriculture	–0.5	10.7	0.7	n.a.				
Mining and quarrying	4.4	5.3	5.8	0.9	3.1	-2.6	0.0	3.0
Manufacturing	5.7	7.1	8.1	9.0	10.7	8.1	8.3	8.9
Electricity, gas and water supply	2.8	4.8	4.3	5.3	7.4	2.6	5.0	6.1
Trade, hotels, transport, storage & communications	8.5	12.0	10.6	11.5	11.7	11.0	10.2	12.9
Financing, insurance, real estate & business services	6.5	4.5	9.2	9.7	8.8	10.5	8.9	10.5
Community, social & personal services	4.1	5.4	9.2	7.8	7.3	8.0	8.4	7.6
Construction	5.9	10.9	12.5	12.1	12.4	12.3	11.5	12.0
Real GDP at Factor Cost	4.6	8.5	7.5	8.4	8.5	8.4	7.5	9.3

Source Reserve Bank of India Annual Report 2005–06

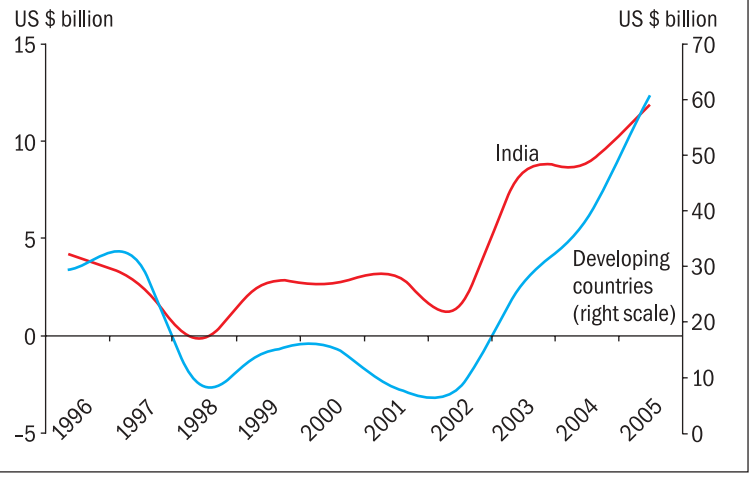
As Figure 2 shows, however, there has been a dramatic rise in FPI flows in to India since 2003–04 and this upwards trends seems set to continue. Net portfolio equity investment is projected to increase to $11.5 billion this year from $10.5 billion in 2006.

Figure 2 Foreign Investment into India



Source Reserve Bank of India, Annual Report, 2005–06

Figure 3 Portfolio Equity Flows to India and Developing Countries



Source Reserve Bank of India, Annual Report, 2005–06

India has been competing successfully with other developing countries for the capital that foreign portfolio investors allocate to emerging markets (Figure 3). The share of net FPI flows to India as a proportion of total flows to emerging markets is higher than its share of FDI flows, and remained in the range of 12-15 per cent during 2004 and 2005. In 2006, India accounted for almost half the inflows into eight key emerging markets tracked by Morgan Stanley, up from 28 per cent in 2005. Its 49 per cent share exceeded by far the country's 5.5 per cent weight in the bank's emerging markets index. According to Morgan Stanley research, overseas investors increased their stakes in the 50 largest Indian companies by 3 percentage points since the start of 2005.

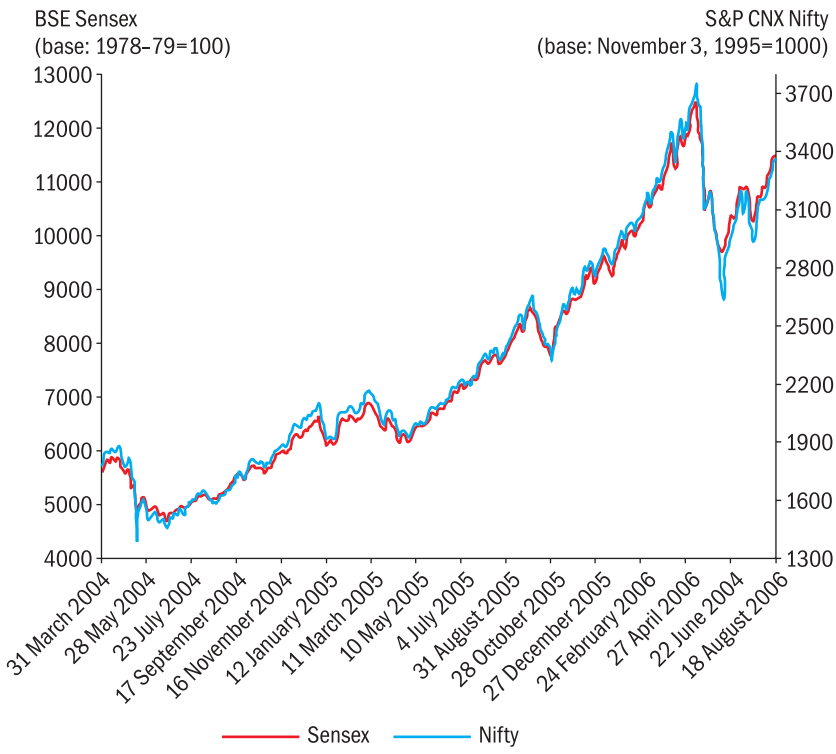
Strong stock market performance and steady flow of IPOs

India's attractiveness as a destination for FPI is reflected in India's stock markets, which witnessed bullish conditions in 2005–06 with the benchmark indices touching all-time high levels. The BSE Sensex rose 73.7 per cent between end-March 2005 and end–March 2006, while the S&P CNX Nifty increased by 67.1 per cent (Figure 4).

India's bull market has coincided with a steady flow of initial public offerings (IPOs) (Figure 5). In 2006, Indian corporates issued a total of US$19.3 billion in shares, up 23 per cent from the previous year, according to Dealogic, the data company. The volume of IPOs increased 186 per cent, led by Cairn India, whose $2 billion listing was India's biggest ever. Indian companies were also among the world's most active issuers of depositary receipts in the first half of 2006, accounting for one in three issues globally, according to the Bank of New York.

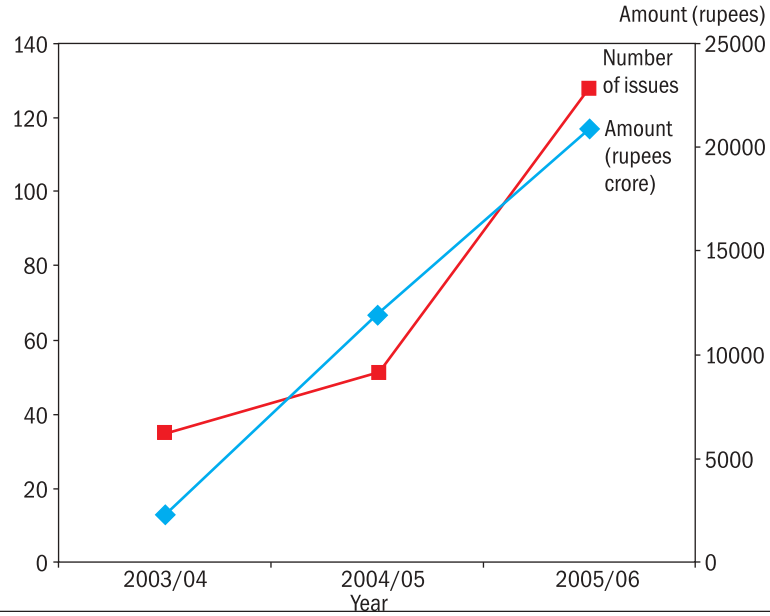
However, the market has remained discriminating even during the 2006 euphoria about rising stock prices. In March 2007 the Financial Times reported that Cairn India's shares failed to take off on their debut trading amid uncertainty over a pipeline that affected the company's main oil find, remaining down by about 21 per cent.

Figure 4 **Indian Stock Markets**



Source Reserve Bank of India, Annual Report, 2005–06

Figure 5 **Flow of IPOs**



Source Reserve Bank of India Annual Report, 2005–06.

Dramatically expanding retail investor market

India's stock market gains have also been driven by the rapid growth of mutual fund assets, matching the rise in India's middle class. Statistics published by the Reserve Bank of India (RBI) reveal a dramatic increase in equity investment by domestic mutual funds, from Rs. 448 crore (US$110 million) in 2004–05 to Rs. 14,302 crore (US$3.5 billion) in 2005–06, while their investment in debt has fallen from 97 per cent of total assets under management to 72 per cent over the same period.

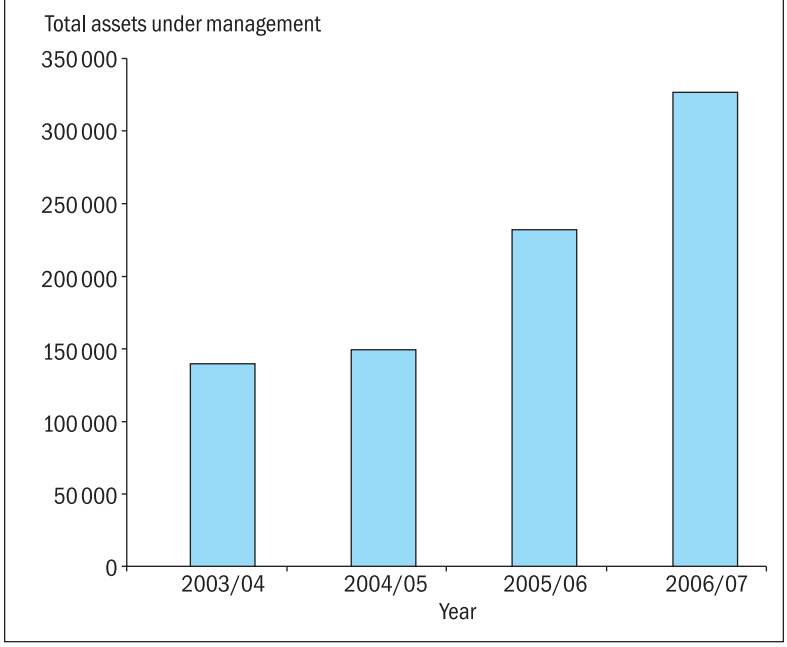
Other data published by the Association of Mutual Funds in India indicate that the total assets of India's mutual funds as of March 2007 amount to Rs. 326,388 crore (US$80 billion) (Figure 6).

The retail investment segment seems likely to continue to grow dramatically and become an even greater force in India's stock markets. A 2006 study by Capgemini and Merrill Lynch counted more than 83,000 millionaires, up 19.3 per cent from a year earlier. More recently, McKinsey forecast that India could become the world's fifth-largest consumer market by 2025 if it undertakes the reforms necessary to sustain average annual economic growth of 7.3 per cent. India's middle class (defined as those earning between $4,400 and $22,000) could rise more than tenfold, from 50m people, or 5 per cent of the population, to 583m people (41 per cent) by 2025. The number of "global Indians" with incomes of over $22,000 will rise tenfold to 24m, their average incomes climbing from $35,000 in 2005 to $50,000 in 2025, according to McKinsey.

Provident and pension funds in flux

India's contractual savings system, comprising life insurance, provident and pension funds, presents a complicated, changing and controversial picture. A detailed and accurate treatment lies beyond the scope of this report.

Figure 6 **Mutual Fund Assets under Management (Rupees crore)**



Source Association of Mutual Funds in India

Pension funds for central and state government employees contain total assets under management of approximately Rs. 141,954 crore (US$34.8 billion), according to information published by RBI. These funds have been restricted to investment in debt and government-run special-deposit plans.

Low returns and shifting demographics have resulted in significant asset-liability mismatches for these defined-benefit pension schemes. The International Herald Tribune, for example, reported in January 2007 that the largest of India's state-run pension funds, the Employees Provident Fund Organization with Rs. 904 billion under management and 44 million members, may have to cut the interest it pays due to a shortfall in the income it earns from its investments.

Against this background, India is poised to implement major pension system reforms in 2007 in the shape of the New Pension Scheme (NPS). The NPS will place the majority of India's civil servants in a defined-contributions system overseen by the Pension Regulatory and Development Authority (PFRDA). The PFRDA is currently inviting bids from private sector pension fund managers to manage funds deposited under the NPS.

The fund managers will be able to offer employees stock-market linked products as well as 'risk-free' products invested in government securities.

However, it currently appears that no more than 5 per cent of the NPS pension fund corpus will be permitted to flow into equities.

Infrastructure hinders growth

India faces major challenges in balancing its surging economy with the needs of sustainable development and ESG-related pressures and constraints. As foreign ownership restrictions progressively disappear and peak import tariffs fall, India's infrastructure (notably ports, airports, railways, roads and electricity) is likely to present the biggest single barrier to maintaining economic growth rates at current levels. The Confederation of Indian Industries (CII) estimates that more $330 billion needs to be spent on infrastructure over the next 5 years to boost the country's competitiveness. The RBI has indicated that, along with higher levels of investment, issues of governance and management – including policies relating to appropriate pricing and user charges – will need to be addressed to achieve satisfactory results.

In the meantime, India Inc. is operating at almost full capacity. RBI estimates that overall capacity utilisation increased from 82.2 per cent during 2004–05 to 82.7 per cent in 2005–06. Capacity utilisation is estimated to be above 90 per cent in the case of industries like cotton textiles, wool, silk and man-made fibres, and textile products.

Running out of energy

The economy is also severely hindered by capacity problems in the power sector, which has grown by only 5.2 per cent over the same period that Indian industry overall has grown by 8.1 per cent. The capacity deficit is already resulting in severe power shortages and peak load shortages reached 12 per cent in 2005, according to Ministry of Power data. Electricity generation is hampered by policy shortcomings, excessive transmission and distribution losses, revenue collection problems and emerging difficulties in the availability of coal and gas. To fill the demand-supply gap, India plans to nearly double its installed capacity (115,500 MW as of January 2005) by 2012 through public and private power generation companies.

This scale of development has significant environmental implications, particularly given India's heavy reliance on coal, which accounts for about 60 per cent of power generation. Coal-based thermal power is the major contributor to India's greenhouse gas emissions. Particulate emissions are a major factor in local air quality. Furthermore, coal-based thermal power requires large amounts of land for ash disposal, and ash ponds in turn pose have implication for groundwater contamination.

Coal production in India is itself potentially constrained by sustainable development pressures. According to the RBI, coal production was affected severely in the first half of 2005–06 owing to disruption in mining activities at various coal fields caused by adverse monsoon conditions, which themselves may be linked to climate change. Sustainable development pressures also constrain other aspects of India's critical infrastructure requirements: around 37 per cent of the central government's investment projects in rail, road and other infrastructure were delayed in 2005–06, according to the RBI. This was attributed to land problems and environmental clearance requirements, amongst other factors.

Agriculture lags too far behind

Although real GDP from agriculture and allied activities registered an increase of 3.9 per cent in 2005–06 from a low of 0.7 per cent in 2004–05, growth in the rural economy remains low and volatile. While the share of agriculture in the overall GDP has declined from around 35 per cent in 1980–81 to around 20 per cent at present, the fall in the proportion of the population dependent on the sector has been small. Thus a majority of the workforce is still dependent on agriculture while GDP growth due to agriculture is marginally above the rate of growth of the population. This creates an increasingly chronic divide with India's urban middle classes and presents risks in terms of productivity and long-term stocks of grain and other essential foods.

Indian agriculture continues to be dependent on the vagaries of the monsoon, which is itself subject to increased climate variability associated with greenhouse gas emissions. In the case of principal crops, the coverage of irrigated area is only about 40 per cent. Furthermore, water use efficiency in Indian agriculture is one of the lowest in the world. Major investments and management improvements are needed in India's rural infrastructure, including irrigation, rural water supply, roads, housing, rural electrification and telephone connectivity. In addition, limited access to credit (especially for small and marginal farmers) is a major obstacle.

Water supplies under severe stress

Water scarcity is an increasingly worrying problem for all sectors of the Indian economy, not just the agricultural sector. Water supplies are already under severe stress and in 2005 the World Bank warned that India's demand for water could exceed all sources of supply by 2020 unless action is taken now.

In the absence of effective water management and reliable piped water supplies, there has been a massive shift to self-provision over the last 20 years, with tubewells and groundwater pumps a common feature in homes and businesses in both urban and rural areas. According to the World Bank, 70 per cent of India's irrigation water and 80 per cent of its domestic water supplies comes from groundwater, which is being rapidly depleted. In many states, water from shallow wells is often badly contaminated by agricultural pesticides and other pollutants. Deeper wells typically have cleaner water, but require electricity or diesel and installation of a water tank. The capital and operating costs are significantly higher and, given the high variability of electricity supply, reliability is poor.

According to the UNDP's Human Development Report 2006, water scarcity in India has started to generate innovative technological solutions, driven mainly by the private sector. The operating costs of technologies such as reverse osmosis water treatment and water recycling have become more competitive with the higher-cost of buying water in water-scarce areas. With an initial investment of just under US$3 million, Madras Fertilisers recycles more than 80 per cent of its daily use of 15.12 million litres of water to the plant's cooling towers. The company also supplies 3 million litres per day of fresh water to Chennai City. J K Papers in Orissa is one the most water-efficient pulp and paper companies in the country, and Maharastra's Natural Sugar & Allied Industry dominates the water-efficiency league in the sugar industry. The first "zero discharge" textile mill in the country, Arvind Mills, is in Santej in Gujarat, where water shortages are a recurring problem.

Climate change poses serious risks

Global climate change is likely to result in severe droughts and floods in India and have major impacts on human health and food supplies, according to the country's 2004 report to the UN Nations Framework Convention on Climate Change (UNFCCC). This has been reinforced by the recent reports of the UN Intergovernmental Panel on Climate Change.

By drying up major river basins and altering rainfall patterns, global warming will significantly affect agriculture and forestry in India, threatening livelihoods and food security. The report predicts that maximum temperatures in India will increase by two to four degrees Celsius over the next 50 years, with northern India expected to experience the greatest increase. Rainfall patterns are also set to change. Western and central areas could have up to 15 more dry days each year, while in contrast, the north and north-east are predicted to have five to ten more days of rain annually: dry areas will get drier and wet areas wetter.

The report predicts that the area of India prone to malaria will increase by at least ten per cent by 2080, as changing weather patterns will result in more potential breeding grounds for malarial mosquitoes at higher altitudes. Most major river basins across the country are likely to become considerably drier, resulting in constant water shortages that will occasionally become acute. This could shift forest boundaries and affect biodiversity in the regions affected.

In coastal areas, the key climate-related risks include more frequent tropical cyclones and rises in sea level that would submerge mangrove forests and increase the salinity of wetlands. According to the report, if sea levels were to rise by one metre, about 7.1 million people in India could be displaced, and more than 5,000 square kilometres of land and 4,000 kilometres of roads could be lost.

Carbon economy presents a big dilemma

India is one of the world's top six largest emitters of carbon dioxide, producing around 5 per cent of global carbon dioxide emissions in 2003. By comparison, China's share is 16 per cent and the United States is the largest emitter at 22 per cent. When population is taken into account, however, India's contribution appears more modest at 1.2 metric tons per capita, compared to China at 3.2 metric tons per capita, Russia at 10.3 tons per capita and the United States at 19.9 metric tons per capita.

Nevertheless, India's size and rapid economic growth makes it a significant actor on the climate change stage. Worldwide emissions increased by 4 billion metric tons between 1990 and 2003. In addition to the emissions coming mainly from industrialised nations, emissions increased substan-

tially from India, which contributed 0.6 million metric tons (or 15 per cent) to the increase, second only to China at 1.7 billion metric tons (around 42 per cent of the 1990–2003 increase). India's carbon dioxide emissions are set to increase further at a dramatic rate.

According to AP Mitra, emeritus scientist at Delhi's National Physical Laboratory and former director-general of the Council of Scientific and Industrial Research, a four-fold increase in India's GDP would require a 2.8-fold increase in carbon dioxide emissions, 1.3 times more methane and 2.6 times more nitrous oxide unless action is taken. The World Resources Institute, a US-based environmental think-tank, estimates that by 2025 India will rank fourth in the world for total GHG emissions.

India signed and ratified the UN Framework Convention on Climate Change as a non-Annex I country, meaning it is not obligated to reduce its emissions of carbon and other greenhouse gases (GHG). While the government has stated that India recognizes the importance of reducing GHG emissions, it also places a high priority on economic development. As such, India is not a signatory to the Kyoto Protocol that mandates specific commitments by countries to reduce their emissions of greenhouse gases by an average of 5.2 per cent below 1990 levels by the agreed 2008–2012 time frame. India's non-participation in the Kyoto Protocol has been cited as one of the reasons behind the opposition to implementing the Protocol by several signatories, including the United States.

The tension between rapid industrial development and climate change therefore poses enormous challenges for India. The Indira Gandhi Institute for Rural Development, for example, estimates that a 30 per cent reduction in carbon dioxide emissions will raise the number of poor by 17.5 per cent.

The climate change agenda in India currently focuses on developing ways to cut emissions incrementally over several years. India has already put some national mitigation strategies in place. It is targeting the coal, transport, petroleum, steel, cement and agricultural sectors by promoting energy conservation, alternative fuels, renewable energy technologies and afforestation. In 2001, Delhi was the first capital city to introduce a public transport system based on an alternative fuel (compressed natural gas) to reduce polluting gases.

Environmental compliance and enforcement are weak

India's rapid industrial growth has been accompanied by serious environmental problems, from air and water pollution to solid waste management. To address these environmental challenges, the central government has identified and targeted 17 highly polluting industries and 24 environmental problem areas. The chemical and engineering industries are at the top of the government's list, since they are the major contributors to air, water, and waste pollution. These industries include integrated iron and steel plants, non ferrous metallurgical units, pharmaceutical and petrochemical complexes, fertilizers and pesticide plants, thermal power plants, textiles, pulp and paper, tanneries and chloralkali units.

According to a recent OECD report, as of June 2006, 73 per cent of the 2,672 units under 17 categories of highly polluting industries were in compliance. This is a decrease from 2004, when the rate was 84 percent. Table 2 provides a summary of the compliance status by industrial sector. The major non-complying sectors are chloralkali (29 per cent), thermal power (27 per cent), copper (25 per cent), iron and steel (24 per cent), and pharmaceuticals (23 per cent).

Table 2 **Compliance Status of 17 Categories of Highly Polluting Industries (June 2006)**

No	Industrial Category	Complying	Defaulting	Closed	Total
1	Aluminium	6	1	0	7
2	Cement	198	16	20	234
3	Chlor-Alkali	24	10	0	34
4	Copper	3	1	0	4
5	Distillery	191	35	36	262
6	Dyes & DI	87	9	25	121
7	Fertilizer	104	10	21	135
8	Iron & Steel	28	9	1	38
9	Oil Refineries	17	3	1	21
10	Pesticides	95	9	11	115
11	Petrochemicals	73	7	1	81
12	Pharmaceuticals	351	124	59	534
13	Pulp & Paper	118	32	37	187
14	Sugar	438	49	91	578
15	Tannery	97	13	17	127
16	Thermal Power	129	51	8	188
17	Zinc	4	1	1	6
18	Total	1963	380	329	2672

Source CPCB

The OECD report warns that the data in Table 2 should be considered with caution, as the table lists under "complying" those industries that have installed pollution controls after having been initially found in violation of the environmental requirements. According to the US Environmental Protection Agency, there were 1,551 initially non-complying facilities within the same 17 categories, of which 1,351 facilities complied with subsequent enforcement orders and 178 were shut down, with 22 units defaulting. This suggests a negative compliance trend in large industry in India in recent years. In addition, the real compliance rates are likely to be lower, since inspections usually do not evaluate compliance with all environmental requirements.

The situation with small and medium-sized enterprises (SMEs) is much worse, according to the OECD: SMEs account for 40 per cent of industrial production in India; employ limited pollution control technologies; and are responsible for an estimated 70 percent of the total industrial pollution load nationwide.

Shortage of skilled human capital

India's service sector, in particular the information and communication technology (ICT) sector, has benefited from the availability of vast skilled labour and is expected to lead the economy, drawing from its linkages with the well-performing industrial sector and expanding international trade.

Unlike other countries at this stage of development, India appears to have skipped directly to specialisation in skill-intensive manufacturing and service industries. However, this advanced skill-intensive part of the Indian economy is already leading to skill shortages and aggressive competition for qualified workers.

The trend is expected to accelerate and will require much greater emphasis on the provision of education, especially at higher levels. It also places a much greater emphasis on Indian companies' human capital management.

Emerging global leaders

Many Indian companies are rapidly establishing themselves as global leaders operating at a multinational level.

A May 2006 report by the Boston Consulting Group (BCG), for example, identified 100 companies from India, China, Brazil and other 'rapidly developing economies' (RDEs) which it believed were at the leading edge of globalizing their businesses. The list includes 22 companies from India (Box 1).

Box 1 Boston Consulting Group's "New Global Challengers" from Rapidly Developing Economies

Country	Company	Industry
Brazil	Braskem	Petrochemicals
Brazil	Companhia Vale do Rio Doce (CVRD)	Mining
Brazil	Coteminas	Textiles
Brazil	Embraco	Engineered products
Brazil	Embraer	Aerospace
Brazil	Gerdau Steel	Steel
Brazil	Natura	Cosmetics
Brazil	Perdigão	Food and beverages
Brazil	Petrobrás	Fossil fuels
Brazil	Sadia	Food and beverages
Brazil	Votorantim Group	Process industries
Brazil	WEG	Engineered products
China	Aluminium Corporation of China (Chalco)	Nonferrous metals
China	BOE Technology Group Company	Computers and IT components
China	BYD Company	Consumer electronics
China	China Aviation Corporation	Aerospace
China	China FAW Group Corporation	Automotive equipment
China	China HuaNeng Group	Fossil fuels
China	China International Marine Containers Group Company (CIMC)	Shipping
China	China Minmetals Corporation	Nonferrous metals
China	China Mobile Communications Corporation	Telecommunications services
China	China National Heavy Duty Truck Group Corporation (CNHTC)	Automotive equipment
China	China Netcom Group Corporation (CNC)	Telecommunications services
China	China Petroleum & Chemical Corporation (Sinopec)	Fossil fuels
China	China Shipping Group	Shipping
China	Chunlan Group Corporation	Home appliances
China	CNOOC	Fossil fuels
China	COSCO Group	Shipping
China	Dongfeng Motor Company	Automotive equipment
China	Erdos Group	Textiles
China	Founder Group	Computers and IT components
China	Galanz Group Company	Home appliances
China	Gree Electric Appliances	Home appliances
China	Haier Company	Home appliances
China	Hisence	Consumer electronics
China	Huawei Technologies Company	Telecommunications equipment
China	Konka Group Company	Consumer electronics
China	Lenovo Group	Computers and IT components
China	Midea Holding Company	Home appliances
China	Nanjing Automobile Group Corporation (NAC)	Automotive equipment
China	Pearl River Piano Group	Musical instruments
China	PetroChina Company	Fossil fuels
China	Shanghai Automotive Industry Corporation Group (SAIC)	Automotive equipment
China	Shanghai Baosteel Group Corporation	Steel
China	Shougang Group	Steel
China	Sinochem Corporation	Chemicals
China	Skyworth Multimedia International Company	Consumer electronics
China	SVA Group Company	Consumer electronics
China	TCL Corporation	Consumer electronics
China	Tsingtao Brewery	Food and beverages
China	UTStarcom	Telecommunications equipment
China	Wanxiang Group Corporation	Automotive equipment
China	ZTE Corporation	Telecommnications Equipment

Contd...

Box 1 Contd...

Country	Company	Industry	Country	Company	Industry
China (Hong Kong)	Johnson Electric	Engineered products	India	Videsh Sanchar Nigam Ltd (VSNL)	Telecommunications Services
China (Hong Kong)	Li & Fung Group	Textiles	India	Wipro	IT services/business Process outsourcing
China (Hong Kong)	Techtronic Industries Company	Engineered products	Indonesia	Indofood Sukses Makmur	Food and beverages
Egypt	Orascom Telecom Holding	Telecommunications services	Malaysia	Malaysia International Shipping Company (MISC)	Shipping
India	Bajaj Auto	Automotive equipment	Malaysia	Petronas	Fossil fuels
India	Bharat Forge	Automotive equipment	Mexico	América Móvil	Telecommunications services
India	Cipla	Pharmaceuticals	Mexico	Cemex	Building materials
India	Crompton Greaves	Engineered products	Mexico	Femsa	Food and beverages
India	Dr. Reddy's Laboratories	Pharmaceuticals	Mexico	Gruma	Food and beverages
India	Hindalco Industries	Nonferrous metals	Mexico	Grupo Modelo	Food and beverages
India	Infosys Technologies	IT services/business process outsourcing	Mexico	Nemak	Automotive equipment
India	Larsen & Toubro	Engineering services	Russia	Gazprom	Fossil fuels
India	Mahindra & Mahindra	Automotive equipment	Russia	Lukoil	Fossil fuels
India	Oil and Natural Gas Corporation (ONGC)	Fossil fuels	Russia	MMC Norilsk Nickel Group	Nonferrous metals
India	Ranbaxy Pharmaceuticals	Pharmaceuticals	Russia	Mobile TeleSystems (MTS)	Telecommunications services
India	Reliance Group	Chemicals	Russia	Rusal	Nonferrous metals
India	Satyam Computer Services	IT services/business process outsourcing	Russia	Severstal	Steel
India	Tata Consultancy Services (TCS)	IT services/business process outsourcing	Russia	Sukhol Company	Aerospace
India	Tata Motors	Automotive equipment	Thailand	Charoen Pokphand Foods	Food and beverages
India	Tata Steel	Steel	Thailand	Thai Union Frozen Products	Food and beverages
India	Tata Tea	Food and beverages	Turkey	Koç Holding	Home appliances
India	TVS Motor Company	Automotive equipment	Turkey	Sabanci Holding	Chemicals
India	Videocon Industries	Consumer electronics	Turkey	Sisecam	Building materials
			Turkey	Vestel Group	Consumer electronics

BCG analysed the factors that marked these 100 companies out as 'new global challengers', and identified that they each followed one of six globalization strategies:

- Model 1: Taking established home-market product lines and brands to global markets.
- Model 2: Global marketing of innovative technology-based solutions that leverage their home-market strengths in engineering and research.
- Model 3: Establishing global leadership in one specific, relatively narrow product category.
- Model 4: Monetizing the natural resource advantages of their home countries.
- Model 5: Globally rolling-out business models pioneered in their home markets.
- Model 6: Acquiring natural resources from other countries to serve their home markets.

Although not specifically analysed in BCG's report, these globalization strategies involve numerous ESG-related opportunities and risks. It is notable that two of the six globalization models followed by emerging market 'global challengers' involve the exploitation of mineral and other natural resources.

What could sustainable investment do for India Inc.?

Against this complex and challenging background, the development of sustainable investment practices in India could potentially offer significant competitive value to India Inc. The benefits of increased attention to ESG factors by foreign and domestic investors in Indian equities may arguably include:

- Better differentiation of Indian stocks compared to issuers from other emerging markets in the global competition for long-term, quality investors.
- More efficient allocation of capital to companies with business models and management qualities that are robust enough to succeed in the face of the ESG challenges in India and which contribute to environmentally sustainable and socially responsible development of the national economy.
- Additional market-based incentives for Indian firms in growth technologies that respond to sustainable development needs such as alternative energy.
- Enhanced corporate awareness of ESG risks and opportunities and more rapid transmission of global ESG know-how and business intelligence.
- Additional market-based incentives for companies to comply with national ESG standards and adopt corporate social responsibility programs which go beyond compliance.
- Increased choice for domestic retail investors through lower-risk stock-linked products that also reflect retail investors' personal values and faith-based principles.
- Greater diversity, competition and innovation in fund products, sell-side research and specialised rating products.
- The creation of professional capacity, asset pools and consumer interest for the further development of high development impact financial products such as micro-insurance, micro-pensions, community investing, weather risk insurance and environmental finance.

3 International sustainable investment trends

Diverse global market worth US$3.7 trillion

The sustainable investment market represents assets under management of approximately US$3.7 trillion (Table 3), and is continually growing and evolving.

In Europe, for example, the sustainable investment market is estimated to be as high as 10–15 per cent of total European funds under management, and to have grown by 106 per cent since 2003. Adjusted to the progression of the MSCI Europe over the same period, the real growth of European sustainable investment over 2003–06 is around 36 per cent.

The term 'sustainable investment' embraces a diverse and innovative range of products, strategies and styles. The main sustainable investment methods in use today are summarized in Table 4.

Table 3 **Estimated value of sustainable investment assets under management, worldwide**

Country	Combined retail & institutional assets (US$ billion)	Number of retail funds	Data as of
USA[1]	2,290	201	December 2005
Canada[2]	453	76	June 2006
UK[3]	781	75	December 2005
Rest of Europe[3]	252	300	December 2005
Australia[4]	10	122	June 2006
Japan[5]	3	34	June 2006
Emerging markets[6]	1	17	October 2003
Totals	3,790	825	

Sources

1. 2005 Report on Socially Responsible Investing Trends in the United States, Social Investment Forum, 2006
2. Canadian Socially Responsible Investment Review 2006, Social Investment Organisation, 2006
3. European SRI Study 2006, Eurosif, 2006
4. Sustainable Responsible Investment in Australia 2006, Ethical Investment Association/Corporate Monitor, 2006
5. Association for Sustainable & Responsible Investment in Asia (ASrIA) Fund Portal (www.asria.org)
6. Towards SRI in Emerging Markets, International Finance Corporation/Enterprising Solutions, 2003

Table 4 Key sustainable investment practices

Strategy	Definition
Ethical exclusions	This refers to exclusions where a large number of negative criteria and/or filters are applied (as opposed to just tobacco or weapons for example).
Positive screening	Seeking to invest in companies with a commitment to responsible business practices, or that produce products and/or services. Include Best-in-class and Pioneer screening.
Best-in-class	Approach where the leading companies with regard to ESG criteria from each individual sector or industry group are identified and included in the portfolio.
Pioneer screening/thematic investment propositions	Thematic funds, based on ESG issues such as the transition to sustainable development and a low carbon economy. May focus on sectors such as Water, Energy, etc.
Norms-based screening	Negative screening of companies according to their compliance with international standards and norms such as issued by OECD, ILO, UN, UNICEF, etc.
Simple screens/Simple Exclusions	An approach that excludes a single given sectors from a fund (such as arms manufacture, publications of pornography, tobacco, animal testing, etc.). Simple screens also includes simple human rights screens (such as excluding Sudan or Myanmar) and Norms-based screening.
Engagement	Engagement is applied by some fund managers to encourage more responsible business practices and/or enhance investment returns. It relies on the influence of investors and the rights of ownership, and mainly takes the form of dialogue between investors and companies on issues of concern. Engagement may extend to voting practices.
Integration	The explicit inclusion by asset managers of ESG risk into traditional financial analysis.

Source European SRI Study 2006. Eurosif.

Fund managers involved in sustainable investment now range from niche 'socially responsible investment' firms such as Calvert and Domini Social Investment in the US to 'mainstream' firms such as ABN AMRO, F&C and Henderson Global Investors.

The wide diversity and innovation in sustainable investment strategies reflects a number of critical variables, including:

- Investors' objectives and risk appetite: some investors may employ sustainability approaches primarily for ethical reasons. For others, the rationale may be financial out-performance by exploiting market inefficiencies or portfolio diversification through exposure to new technologies.

- Criteria: Some strategies may focus on a single issue such as human rights. Others may be based on a multitude of factors and may apply very different weighting to those individual factors.

- Data sources: some sustainable investment strategies rely solely or mainly on the environmental and social information that firms make publicly available. Others may probe deeper by using questionnaires, independent research and ratings, or first-hand discussions with management.

- Investment methodology: some strategies use sustainability information at the beginning of the portfolio construction process to screen companies in or out of the 'investable universe' of stocks

that are then subject to 'traditional' financial analysis. Other strategies integrate sustainability information into the entire process, for example, by analyzing the effect of an issue such as climate change on a company's long-term financial performance.

Competitive returns

One of the outstanding drivers for growth of sustainable investment is the increasing understanding by investors, companies and academics of the business case.

As emphasised earlier in this report, 'sustainable investment' is not a homogenous asset class. It contains a wide range of objectives, methods and styles, and asset managers with different capabilities and strengths. Generalizations on sustainable investment performance would be dangerously over-simplistic. Numerous academic studies and a growing body of long-term performance evidence from leading indices and funds do, however, allow three general statements to be made with confidence:

- Companies with better ESG performance typically have better-than-average returns on assets.
- Investment strategies that incorporate ESG factors do not under-perform compared to 'traditional' styles and benchmarks.
- Many sustainable investment indices and funds show consistent long-term out-performance.

For example, the Domini Social Index, a capitalisation-weighted market index of 400 common US stocks screened according to broad social and environmental criteria, has outperformed the S&P 500 on a total return basis since it was established in 1990.

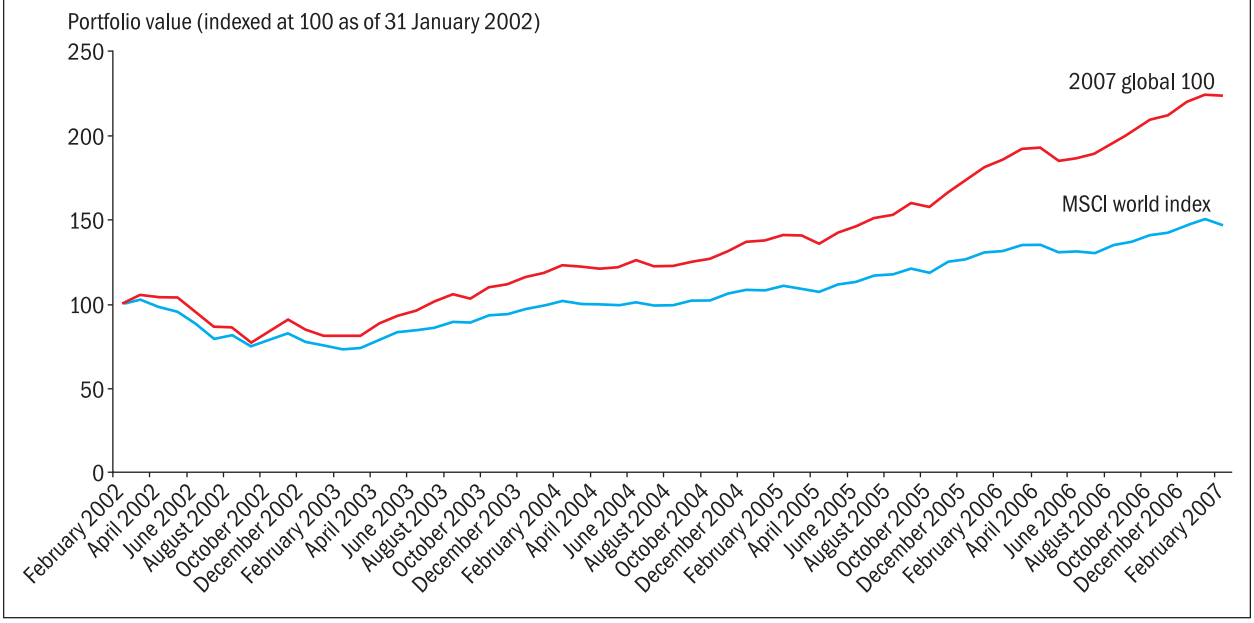
A further example is illustrated by the Global 100, a list of publicly-traded, MSCI World-listed companies that have the best developed abilities, relative to their industry peers, to manage the environmental, social and governance (ESG) risks and opportunities they face. Launched by Corporate Knights Inc in 2005, the Global 100 is compiled annually based on research and analysis by the investment advisory firm Innovest, and is unveiled each year at the World Economic Forum in Davos. Figure 7 shows the superior relative performance of the 2007 Global 100 companies back-tested against the MSCI World Index (2002–2007). Tellingly, perhaps, the 2007 Global 100 does not contain a single company from the emerging markets.

Table 5 **Outperformance results**

	MSCI World	2006 Global 100	Outperformance
1 year	10%	23%	13.46%
3 year	19%	25%	5.47%
5 year	3%	10%	7.11%

Source Innovest

Figure 7 **Performance of the 2007 Global 100 compared to the MSCI World**



Source Innovest

Fiduciary duty and pension regulation is important

A second critical driver in the growth of sustainable investment, especially outside the United States, is the role played by government in setting the policy environment for pensions. The UK Pension Reform led the way when it set up the Statement of Investment Principles for pension funds. This simply required pension funds to state whether and how they take social, environmental and ethical issues into account, but had a major impact on awareness and changes in investment practice. Other countries in Europe and other parts of the world have followed suit with similar policy measures. Some are even considering tax breaks for pension savings in sustainable investment products.

There is also growing discussion among pension funds and other institutional investors about the links between ESG issues and the investor's fiduciary duties to manage their funds for the sole benefit of their members. UNEP–FI and the international law firm Freshfields researched the legal context for this in 2006 in several countries. Their report concluded that "integrating ESG considerations into an investment analysis so as to more reliably predict financial performance is clearly permissible and is arguably required in all jurisdictions". It also suggested that "ESG considerations must be integrated into an investment decision where a consensus…amongst the beneficiaries mandates a particular investment strategy."

Information infrastructure continues to evolve

As the sustainable investment has grown, so too has the infrastructure of indices, rating products and research needed to supply investors with relevant ESG-related information. Table 6 illustrates just some of the specialised index products that are now in operation, including indices in Brazil, South Africa, Malaysia and Singapore.

There are numerous research, investment advisory and consulting firms that specialise exclusively in sustainable investment. The majority of these firms are based in North America and Europe, but many offer global capabilities. Firms such as Innovest, EIRIS, ISS, SAM Sustainable Asset Management, Asset4, KLD, Trucost, Vigeo, SIRI, Jantzi Associates and many others are continually competing and innovating in this space.

In addition, many 'mainstream' sell-side investment houses, including Goldman Sachs, Citigroup, UBS, Deutsche Bank and Société Générale, have created specialist ESG teams or integrated ESG experts into the mainstream analysts. In Europe, several leading pension funds and money managers have joined together behind the Enhanced Analytics Initiative (EAI), which provides commission-based incentives for better sell-side research integrating ESG and other non-traditional financial risk factors. Ground-breaking equity research has also been produced by a number of sell-side firms in response to a challenge from UNEP–FI (United Nations Environment Programme–Financial Initiative) for research on the financial materiality of ESG issues across a range of sectors and themes.

Investment consultants play a very influential role in the institutional investment field, and are also developing ESG-related advisory capabilities for pension funds and other clients. Currently, Mercer Investment Consulting is widely acknowledged to be the sustainable investment leader in this field.

Moving into the mainstream

There has been a profound and increasingly strong trend over the last three to four years towards mainstream recognition and uptake of sustainable investment concepts and practices. A major reason for this is that the materiality of ESG issues to long-term performance has become more obvious.

Table 6 **Selected index products for sustainable investment**

Indices	Market covered	Launch date	Review	Available Currency
European Indices				
Dow Jones STOXX/Euro	Pan			
STOXX Sustainability Index	Eurozone	Oct 01		Euro and US$
Ethibel Sustainability Index Europe	Europe	Jun 02	Quarterly	Euro and US$
FTSE4Good Europe	Europe	Jul 01	Bi-annual	Euro
FTSE4Good UK	UK	Jul 01		GBP
Humanix	Europe	Jan 01	Quarterly	Euro
World / US Indices				
Dow Jones Sustainability World Index	World	Sep 99	Annual and quarterly	US$ and Euro
FTSE4Good Global Index	World	Jul 01	Bi-annual	US$
FTSE4Good USA	USA	Jul 01	Bi-annual	US$
Calvert Social Index	USA	Apr 00	Annual	US$
Domini 400 Social Index	USA	1990	Not fixed	US$
Ethibel Sustainability Index Global	World	Jun 02	Quarterly	Euro and US$
Jantzi Social Index	Canada	Jan 00	Annual	Canadian $
Emerging Market Indices				
JSE SRI Index	South Africa	May 04	Annual	Rand (R)
Bovespa Sustainability Index	Brazil	Dec 05	Annual	Real (R$)
OWW Responsibility Malaysian SRI Index	Malaysia	Dec 06	Bi-annual	Ringgit Malaysia
OWW Responsibility Singapore Index	Singapore	Mar 07	Bi-annual	Singapore $

Furthermore, experience and capabilities developed by 'core' sustainable investment professionals has made it less and less difficult for investors to begin managing these ESG issues. Climate change has been a major driver in this trend, but other factors such as human rights, core labour standards and global biodiversity pressures have also been prominent.

Global advocates such as the UN Global Compact, UNEP–FI and the International Finance Corporation have played an important role in this mainstreaming movement. In particular, the Global Compact's 2004 report, Who Cares Wins – Connecting Financial Markets to a Changing World, and subsequent annual conferences have provided a focal point for the development and sharing of best practice

A key recent development is the launch of the Principles for Responsible Investment (PRI), an initiative of the UNEP Finance Initiative and the UN Global Compact in conjunction with the many of the world's leading pension funds. The Principles are voluntary and aspirational. They are not prescriptive, but instead provide a menu of possible actions for incorporating ESG issues into mainstream investment decision-making and ownership practices. Launched by UN Secretary-General Kofi Annan at the New York Stock Exchange in April 2007, the PRI is now backed by signatories

Box 2 The Principles for Responsible Investment (summary)

"As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and corporate governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these Principles may better align investors with broader objectives of society. Therefore, where consistent with our fiduciary responsibilities, we commit to the following:

1. We will incorporate ESG issues into investment analysis and decision-making processes.
2. We will be active owners and incorporate ESG issues into our ownership policies and practices
3. We will seek appropriate disclosure on ESG issues by the entities in which we invest
4. We will promote acceptance and implementation of the Principles within the investment industry.
5. We will work together to enhance our effectiveness in implementing the Principles.
6. We will each report on our activities and progress towards implementing the Principles.

The Principles for Responsible Investment were developed by an international group of institutional investors reflecting the increasing relevance of environmental, social and corporate governance issues to investment practices. The process was convened by the United Nations Secretary-General.In signing the Principles, we as investors publicly commit to adopt and implement them, where consistent with our fiduciary responsibilities. We also commit to evaluate the effectiveness and improve the content of the Principles over time. We believe this will improve our ability to meet commitments to beneficiaries as well as better align our investment activities with the broader interests of society.We encourage other investors to adopt the Principles."

The Principles have been adopted by signatories from around the world currently representing total assets of about US$8 trillion. The full text of the PRI (including suggested actions for the implementation of each principle) and details of signatories and their progress towards implementation are available at www.unpri.org.

representing total assets of US$8 trillion. Signatories range from CalPERS and the Dutch pension fund ABP (two of the largest and most influential pension funds in the world) to the Government Pension Fund of Thailand and 17 pension funds and other assets owners in Brazil. There are currently no Indian signatories to the PRI.

$41 trillion focusing on climate change

As noted earlier, climate change has been a major driver of sustainable investment in recent years. One of the most high profile initiatives in this respect is the Carbon Disclosure Project (CDP), an alliance of the world's largest investors for collaboration on the business implications of climate change. Each year, institutional investors collectively sign a single global request to companies for disclosure of information on greenhouse gas emissions. The CDP website (www.cdproject.net) is the largest registry of corporate GHG emissions in the world.

CDP was launched in 2000 at No. 10 Downing Street in London. The first cycle of the project (CDP1) requested information from the FT500 largest companies in the world on behalf of 35 institutional investors representing US$4.5 trillion. Subsequent cycles have been backed by an increasing number of investors, and the number of companies in the survey has also grown. Indian companies were included for the first time in CDP4 and the results are discussed in the next chapter.

CDP5 was launched in February 2007. The CDP5 information request was signed by more than 280 institutional investors with assets of more than $41 trillion and sent to 2,400 companies in both developed and emerging markets, including 100 of the largest companies in India.

4 Sustainable investment in India today

Emerging markets: a new frontier for sustainable investment

The emerging markets are now widely recognized as one of the sustainable investment market's most important and promising new priorities.

International sustainable investors are looking to the emerging markets to provide the growth needed to deliver future long-term risk adjusted returns. Mainstream investment houses specialising in emerging markets are beginning to recognise the need to factor ESG variables into their valuations, strategies and ownership decisions. Domestic investors in emerging market countries at both the institutional and retail levels are increasingly diversifying out of government debt and into stocks, and can see first hand the ESG issues that this implies.

Up-to-date data on sustainable investment flows to and within emerging markets are extremely limited. The International Finance Corporation (IFC) has recently commissioned Mercer Investment Consulting to undertake a comprehensive investment data survey on 'sustainable' portfolio investment in emerging market equities. Mercer's report is expected in late 2007.

Emerging markets grab only 0.1 per cent of the global sustainable investment market

In the meantime, the most useful dataset on sustainable portfolio investment in emerging markets is from a 2003 report published by IFC, Towards Sustainable and Responsible Investment in Emerging Markets, prepared by the consulting firm Enterprising Solutions.

The results of this study are summarised in Table 7. Emerging market assets held by social investors in developed economies totalled less than US$1.5 billion, or about 0.06 per cent of all 'socially responsible assets' worldwide. Emerging market assets held by social investors who are themselves based in emerging markets totalled about US$1.2 billion, or nearly 0.04 per cent of all SRI worldwide. Thus, the sum total of SRI assets in emerging markets was estimated to be US$2.7 billion, or 0.1 per cent of the US$2.7 trillion globally.

The IFC study found that the majority of SRI emerging market assets were held by institutional investors, particularly the US pension fund CalPERS. Developed country retail mutual funds accounted for the smallest share of emerging market SRI, with just US$40 million held in 23 funds.

Table 7 **Sustainable investment assets in emerging markets, 2003**

	Number of funds	Emerging markets assets ($US millions)
Developed Country Retail Mutual funds with Emerging–Markets Assets		
United States	2	21.5
United Kingdom	6	3.6
Canada	9	13.6
Europe	0	0.0
Australia	1	0.6
Asia	5	0.41
Subtotal	23	39.7
Institutional SRI	15	1,440.0
Total	38	1,479.7
Emerging Market Retail Mutual Funds		
Brazil	1	4.7
Korea	2	18.8
Malaysia	1	39.0
South Africa	5	228.2
Subtotal	9	290.7
Institutional SRI	8	956.0
Total	17	1,246.7
Total Emerging Market SRI	55	2,726.4

Source Towards SRI in Emerging Markets, IFC, 2003

According to IFC's 2002 study, SRI investors based in emerging markets controlled some US$1.25 billion. However, this figure is dominated by South African mutual and institutional funds, which together accounted for US$1.18 billion. The remaining US$62 million consisted of retail funds in Brazil, Korea and Malaysia.

Asia-Pacific: 170 funds with $25–30 billion in assets

Current data on ASrIA's Funds Portal indicate that there are over 170 funds in the Asia-Pacific region that invest in publicly listed equities through one form of sustainability framework or another (Table 8). The Singapore-based consulting firm Owens, Williams & Wood has recently quoted that this represents around US$25–30 billion of assets under management.

Indian stocks do not seem to be well represented

Currently, there are very few 'global' investment funds specialising in sustainable investment in emerging market equities. However, several sustainability funds in North America and Europe have made small allocations to the emerging markets in their strategic portfolio mix.

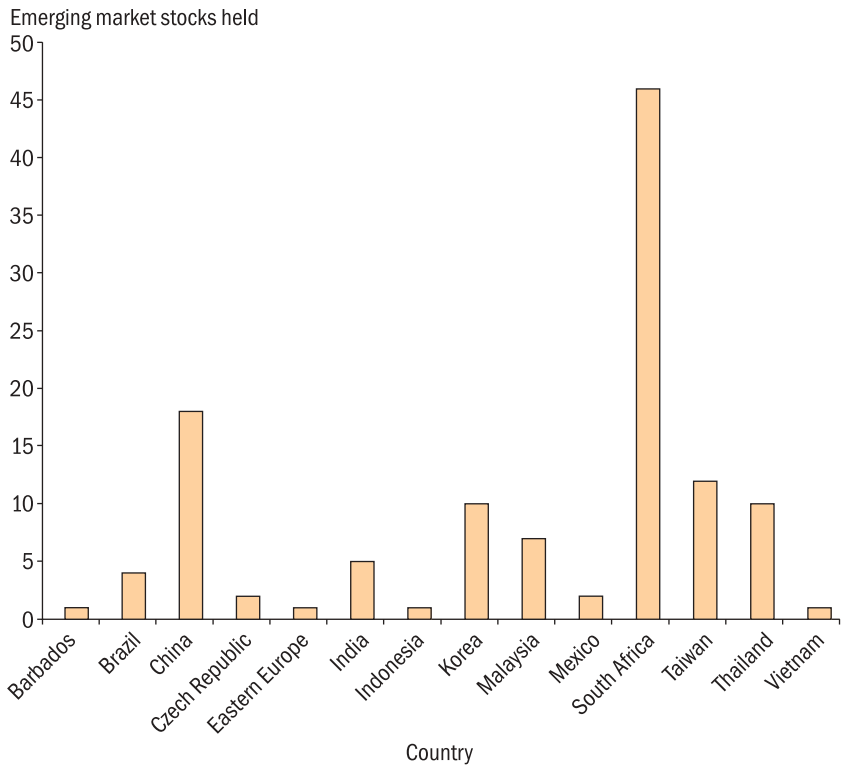
IFC's 2003 report found around 120 or so emerging market stocks were held by a sample of developed market SRI mutual funds (Figure 8). Nearly 40 per cent were South African companies. Only four were Indian companies, compared to China (18 companies) and Thailand (10 companies).

Table 8 **Sustainable investment funds in Asia, 2007**

Country	Number of Funds
China	1
Hong Kong	4
Japan	34
Korea	8
Taiwan	2
Singapore	1
Malaysia	2
Indonesia	0
India	1
Australia	122
New Zealand	1
Segment Total	176

Source Association for Sustainable & Responsible Investment in Asia

Figure 8 **Emerging Market stocks typically held by developed market SRI mutual funds in 2002**



Source Towards Sustainable and Responsible Investment in Emerging Markets, IFC, 2003.

Additional, but necessarily more limited, research undertaken over August 2006–April 2007 on behalf of TERI–Europe revealed several other Indian firms in the portfolios of developed market sustainability funds. Based on this information and IFC's 2003 report, the following Indian companies appear most likely to be significant holdings in the portfolios of FIIs (Foreign Institutional Investors) that employ sustainable investment practices:

- Bajaj
- Cipla
- Dr. Reddy's Laboratories
- HDFC Bank
- ICICI Bank
- Infosys
- Mahanagar Telephone
- Suzlon Energy
- Tata Motors

Of these, Suzlon Energy seems to be a particularly popular stock, appearing in the top 10 holdings of several funds, including the US$3 billion MLIIF New Energy Fund – A managed by BlackRock Merill Lynch Investment Managers.

Although more thorough research is needed, these findings suggest that, compared to other emerging markets and taking into account India's market capitalization and strong stock market performance, Indian companies receive relatively little positive attention from international sustainable investment funds.

Negative attention

Indian firms do, however, appear to attract constructive criticism and even negative attention from those FIIs who place an emphasis on ESG issues. Most actions and decisions of this kind take place behind closed doors and any evidence is mainly anecdotal. Occasionally, however, such shareholder engagement and activism are played out on the public stage, and CalPERS provides an important example in the case of India Inc.

CalPERS (the California Public Employees Retirement System) manages assets of more than US$210 billion, making it the largest pension fund in the United States and one of the largest worldwide. It provides retirement and health benefits to more than 1.4 million state and local public employees and their families. CalPERS has long been a powerful and influential (and sometimes controversial) advocate for high standards of corporate governance, environmental sustainability and social responsibility.

CalPERS emerging market portfolio is currently US$5.2 billion split equally between three managers: AllianceBernstein, DFA and Genesis.

In February 2002, CalPERS developed a new approach for investing in emerging markets. Under the revised system, the fund's adviser began evaluating countries on the basis of political stability, financial transparency and labour standards in addition to traditional measures such as liquidity, volatility, investor protection and transaction costs. Applying the criteria, CalPERS exited from a number of emerging market countries.

India was only re-admitted to the permissible investment list in 2004.

In December 2006, CalPERS authorised its emerging market managers to make selective investments in China.

CalPERS publishes reports from its emerging market managers on the sustainability aspects of companies that fail or border on failing its ESG screening standards. Table 9 shows the May 2007 results of ESG screening undertaken by just one of CalPERS' emerging market managers, Dimensional Fund Advisors (DFA).

The Indian companies on the failure list are:

- ABB Ltd (India)
- Hindustan Lever
- Mangalore Refinery & Petrochemicals Ltd

Of the 22 Indian companies on DFA's "Fail?" list, 17 are BSE-100 companies, and 11 are among the top 50 Indian companies in the S&P CNX Nifty index. DFA's report includes detailed information on the ESG issues of concern at each named company. The report is publicly available on CalPERS website, www.calpers.ca.gov together with similar reports from CalPERS other two emerging market

Table 9 **Sustainability screening of emerging market companies on behalf of CalPERS**

	Number of Companies		
	Pass	Fail?	Fail
Brazil	22	10	
Chile	24	5	–
Czech Republic	5	1	–
Hungary	5	–	–
India	72	22	3
Indonesia	13	2	–
Israel	17	–	–
Korea	24	20	4
Malaysia	40	5	4
Mexico	25	6	3
Philippines	8	1	–
Poland	10	1	1
South Africa	36	1	6
Taiwan	113	7	4
Thailand	17	14	2
Turkey	13	1	–
Total	444	96	27

Source CalPERS Emerging Markets Company Report, Dimensional, May 2007

managers. The ESG issues that arise in relation to the Indian companies in this report are wide-ranging. Examples include concerns about:

- business relationships in Burma and Sudan;
- potential involvement in irregularities in the UN Oil-for-Food program in Iraq;
- deaths at public protests against the construction of new steel plants;
- infringement of indigenous people's rights;
- public health effects of sudden chlorine gas leaks from petrochemical plants;
- habitat loss and disturbance to endangered species arising from port construction;
- use of child labour;
- disputes over water rights;
- discrimination of members of the dalit caste;
- deviations from good manufacturing practice in the pharmaceutical industry.

In May 2006, CalPERS' Board of Administration voted to ban investments in nine companies that do business in Sudan. The ban was part of a nine-point plan designed to push to the government of Sudan to "halt the genocide that has resulted in egregious human rights violations". CalPERS's statement urged the US federal government to publish a definitive list of companies with Sudan ties and asked the nine identified companies to work with such international human rights groups as the United Nations Global Compact to fully declare their business operations in Sudan, and encouraged engagement with companies to effect change.

The nine companies banned by CalPERS included three Indian companies:

- Bharat Heavy Electrical Ltd.
- Oil & Natural Gas Co.
- Videocon Industries Ltd.

CalPERS also joined the Connecticut State Treasurer's Office and the New York State Comptroller's Office to ask 12 other companies to disclose direct or indirect business activities in Sudan. This list included another Indian firm, Reliance Industries.

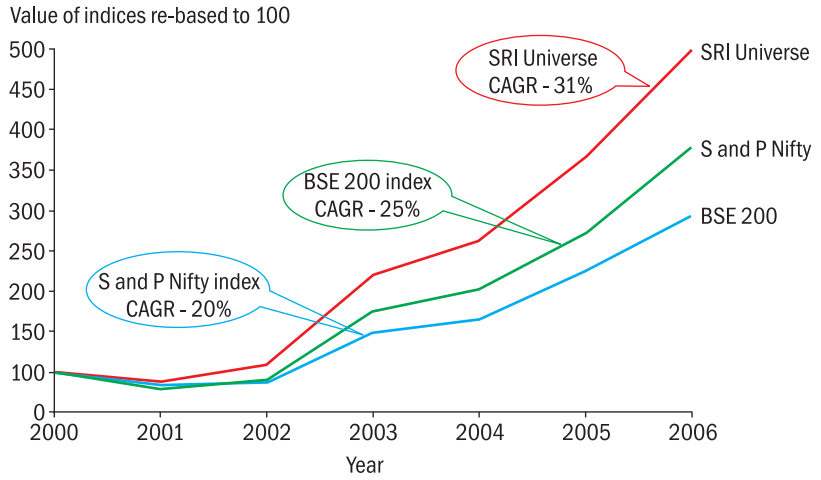
Sustainable retail investment is in its infancy

Only one sustainable investment fund – the ABN AMRO Sustainable Development Fund, launched in March 2007 – is currently available in India.

The ABN AMRO Sustainable Development Fund is a three-year, closed-end equity scheme. The fund will choose from a universe of large, medium and small cap companies filtered by CRISIL, one of India's leading research and rating firms. CRISIL will screen and score S&P CNX 500 companies on an Environmental, Social and Corporate Governance (ESG) template based on public disclosures made by these companies. This positively-screened investment universe will then be subject to 'traditional' financial analysis blending company and sector views with macroeconomic analysis.

Extensive back-testing against past records indicates that the 245 companies in the fund's 'SRI universe' have consistently out-performed traditional indices such as the BSE Sensex and Nifty (Figure 9).

Figure 9 **ABN AMRO Sustainable Development Fund – back-testing results**



SRI Universe (245 companies) has historically delivered 'Alpha' over the various Benchmark Indices for a period of 6 years.

Public environmental awareness and social values may be one reason for the limited penetration of sustainable investment products into the Indian retail investor market. Unfortunately, there appears to be limited information on consumer attitude surveys in this regard.

It may be notable, however, that a 2005 poll of the Indian public by WorldPublicOpinion.org found that two out of three Indians believe India should limit its emissions of GHG gases. More than eight in ten were reported to view climate change or global warming as an important threat, and a majority rejected the idea that developing countries like India should not be expected to limit their emissions. Those with higher income were found to be more likely to accept higher costs and to reject arguments that India or developing countries in general are not responsible for reducing emissions.

India benefits from the carbon trading market

International policy on climate change has created a burgeoning market for carbon emissions trading. Under the Clean Development Mechanism (CDM), developing countries other than in Eastern Europe (which are covered by a separate system) can sell Certified Emission Reductions (CERs) to buyers in developed countries who need to offset their direct emissions of greenhouse gases.

Asia dominates the seller's market. India has a relatively low share of this market at 12 per cent. However, India is second (at 17 per cent) only to China in the CDM pipeline by the number of expected CERs by 2012 and first by volumes of issued CERs to date at about 18 million. This is partially as a consequence of the relatively small size of projects (70 per cent of projects with deliveries below 50 MtCO2e per annum).

According to the World Bank, a concerted effort to increase the participation of banks and appropriate intermediaries or bundling agents to increase the average project size could help attracting private carbon buyers to India. Others have pointed out difficult negotiations, with high price expectations from the seller-side that may have driven buyers to other countries. There is evidence, however, of this issue becoming less of a constraint in recent months.

Increasingly, Indian financial institutions have entered the market by wrapping the credits for guaranteed delivery sale at a premium to un-guaranteed delivery sales.

Useful ESG disclosure by Indian companies is limited

PricewaterhouseCoopers' 10th Annual Global CEO Survey found that 58 per cent of CEOs in the Asia Pacific region expressed concern about the threat to their businesses posed by climate change, significantly higher than the overall figure of 40 per cent. Their report did not provide a breakdown of this data for CEOs of Indian companies. However, the Carbon Disclosure Project is throwing increasing light on India Inc's preparedness for a carbon-constrained global economy.

As discussed in Chapter 3, the current, fifth cycle of CDP includes, for the first time, 100 of India's largest publicly listed firms in its request for disclosure of information on greenhouse gas emissions. CDP5 questionnaires have already been sent to these companies and the results will be published in September 2007. The investment community will almost certainly pay close attention to the number and quality of responses from Indian companies.

Companies in India and other Asian countries were also included in CDP4, albeit with a much smaller survey size. For Asia (excluding Japan) as a whole, 125 companies were contacted. Of these, 70 (56 per cent) did not respond, 19 (15 per cent) declined to participate, 32 (26 per cent) answered the questionnaire, and 4 (3 per cent) provided quantitative data.

Of the 18 Indian companies that were surveyed under CDP4, 6 answered the questionnaire, giving a relatively high return rate of 33% (Table 10). Some of the companies who answered the questionnaire stressed that India's carbon emissions per capita are low, and that emission reductions would be expensive and would compete with the needs of India's economic development. None of the companies reported that they expected government regulation on carbon emissions in the near future.

Calcutta Electric Supply Corporation (CESC) and National Thermal Power both reported energy efficiency improvements that would reduce greenhouse gas emissions on a voluntary basis. CESC reported that it was at an advanced stage in the validation of three CDM projects representing carbon dioxide emissions of 37,000 tons per year, but gave no information in its overall emission figures. National Thermal Power also reported that it was developing CDM projects representing 3 million tons per annum, but was at an early stage; it had also planted 1.7 million trees to date and has begun pilot projects for bio-diesel.

Infosys provided information on the cost of power and fuel, but gave no consumption figures or details of its indirect carbon emissions in this regard. The State Bank of India stated that, as a bank, its only exposure to potential financial risk in this context related to changing monsoon conditions and the effect of this on credit risk in the agricultural sector.

Sustainable investors also require disclosure of ESG information on issues other than climate change and greenhouse gas emissions. The Global Reporting Initiative (GRI) reporting guidelines are the international standard in this respect and aim to improve upon the tendency of companies in the past to publish corporate social responsibility reports that were often little more than brochures. The GRI guidelines have been developed to create a common structure for communicating sustainability

Table 10 **Indian company responses to CDP4**

Company name	Response	Market Capitalisation USD Mn (08/08/06)
National Thermal Power	Answered Questionnaire	21,213
Infosys Technologies Ltd	Answered Questionnaire	20,029
Bharti Tele-Ventures	Answered Questionnaire	16,291
ITC Ltd	Answered Questionnaire	13,584
State Bank of India	Answered questionnaire	9,150
CESC Ltd	Answered questionnaire	498
Hindustan Lever	Declined to participate	10,448
Gail LD	Declined to participate	4,256
Oil & Natural Gas	No Response	36,259
Reliance Industries	No Response	29,004
Tata Consultancy Service	No Response	20,007
Reliance Energy Ltd	No response	2,115
Tata Power Co	No response	2,113
Torrent Power AEC Ltd	No response	245
Gujarat Industries Power Company Limited	No response	174
Wipro	No response, despite indicating a response was forthcoming	15,635
ICICI Bank	No response, despite indicating a response was forthcoming	10,482
Indian Oil Corporation	No response, despite indicating a response was forthcoming	9,534

Source Carbon Disclosure Project Report 2006, Appendix B

performance and are currently the reporting framework used most widely by companies and the analysts reviewing them.

Most companies that produce GRI-based annual sustainability reports lodge copies of those reports on GRI's on-line register. The GRI Register currently lists reports from five Indian companies. Table 11 compares the number of Indian companies who provide GRI reports with the number of GRI reports from other BRIC countries. India compares well to China, but poorly in relation to Brazil and South Africa. Also shown, for comparison, are figures for the UK and USA.

The Indian companies who have registered corporate sustainability reports with the GRI are:

- Dr Reddy's Laboratories
- Ford India Ltd
- ITC Ltd
- Jubilant Organosys Ltd
- Tata Iron & Steel Co. Ltd

Of these, only ITC and Jubilant Organosys have registered reports covering the period after 2004.

Table 11 GRI report numbers for India and selected other countries

Country	Number of companies
India	5
Brazil	25
Russia	4
China	1
South Africa	43
UK	92
USA	111

CRISIL rises to the challenge

Chapter 3 discussed the importance of information providers in the sustainable investment value chain, including the market's need for suitable indices. In the emerging markets, Bovespa (the Sao Paolo Stock Exchange) and the Johannesburg Stock Exchange (JSE) have both created specialist indices serving this need. The consulting firm Owens, Williams & Wood recently launched socially responsible investment (SRI) indices for Malaysia and Singapore. There are indications that China is considering following the Bovepsa and JSE example and, in the meantime, the Australian sustainable investment research and rating firm Reputex has set up operations in Beijing catering to both international investors and Chinese corporates.

Recognising the need to improve the availability of sustainable investment research and information in the emerging markets, in 2006 the International Finance Corporation ran its Capturing Value competition. This offered grant funding of US$0.5 million to projects that would address the information inefficiencies encountered by sustainable investors in emerging markets. The competition was won by two separate consortia, who are now implementing their projects. Both projects are in Asia.

The first, a collaboration between the UK rating firm Trucost and Hong Kong-based CLSA, will generate sell-side sustainability research on around 500 emerging Asia companies.

The second project is led by CRISIL, one of the leading investment research and rating firms in India, in association with Standard & Poor's and the US sustainable investment research firm KLD. The project centres on the creation of a Sustainability Index of listed Indian companies. Industry consultations are currently underway to develop the ESG criteria and index methodology that will be used.

The index will be launched in January 2008. If it follows the Brazilian experience, it is likely to have a major impact.

Excellent but diffuse forums for collaboration

Industry associations such as the US Social Investment Forum, the UK Social Investment Forum and Eurosif (European Social Investment Forum) have played a crucial role in developing and deepening sustainable investment in their respective markets. Latin America founded a similar forum in 2006, centred in Brazil.

Such umbrella organisations provide significant value. They:

- enable sustainable investment professionals to network with their peers at both a national and international level;
- act as advocates for best practice;
- provide a forum for engagement with a wide range of key stakeholders including policy-makers, regulators, stock exchanges and listed companies;
- undertake valuable market analysis, thematic research and annual reports; and
- provide important information clearing-house functions.

The Association for Sustainable & Responsible Investment in Asia (ASrIA) has been providing this service in Asia for several years from headquarters in Hong Kong. It is widely respected and has been a highly influential pioneer, both in the region and internationally. The current Chair of ASrIA's Board of Directors is Rajesh Srivastrava, the Mumbai-based Managing Director and Head of Corporate and Commercial Banking at Rabo India Finance Limited.

In India itself, organizations such as TERI–BCSD, the Centre for Social Markets (CSM), the Confederation of Indian Industry and many others have played important roles in promoting sustainable and socially responsible business. To date, however, there has been no permanent national forum or semi-formal network to progress the specific issue of sustainable investment in the specific context of India, complementing ASrIA's work across the wider geography of the region.

5 Closing the gap

India has an opportunity to catch up

The overall assessment of this report is that:

- Sustainable investment is already important to India Inc. and will become more important in the medium- to long-term.
- India lags behind in relation to sustainable investment and this poses tangible risks and missed opportunities.
- Catching up is worthwhile, even crucial, and should not be particularly difficult.

Sustainable investment in India lags behind where it should be in relation to:

- India's future competitive edge over other emerging markets, principally China, and its share of the ever-increasing global sustainable investment market.
- The size, maturity, portfolio diversification needs and 'do good' aspirations of the sustainable investment sector in the US and other developed markets.
- India's market capitalization, high-tech/high-skill industrialization, ability to deliver out-performing returns and strategic importance to the rest of the global economy.
- The potential under-valuation of the many Indian companies that demonstrate excellence (or have the potential for excellence) in management quality, corporate governance, social responsibility, environmental technology and environmental stewardship.
- The potential over-valuation of some other Indian companies (and some companies in other emerging markets) that have poor track records in relation to ESG issues and offer lower long-term shareholder value as a result.
- The sheer scale and strategic importance of the sustainable development challenges faced by India, and the crucial role that private enterprise and private investment play in making progress (or not) towards solving these challenges.

Some key gaps

In general, industry's compliance with environmental, health and safety, and other relevant national standards and regulations is highly variable, and is often poorly enforced. Some companies also fail (or risk failing) to meet the ESG requirements and expectations of important foreign institutional investors, which are often higher than national standards and deal with issues that are material to investors but not regulated by codes.

With the emergence of a domestic mutual fund investing according to sustainability principles and a high-profile Indian sustainability index, some companies also risk failing (and being seen to fail) the sustainable investment test at home.

Companies are generally not yet providing ESG-related reports and other disclosure information that are useful to sustainable investment analysts. In many cases, ESG issues are typically seen and managed as corporate social responsibility (CSR) issues that often cross over into corporate philanthropy. Such CSR programs are undoubtedly important in terms of value they add to beneficiary communities (and to brands), but typically do not address the ESG-related financial risks to core business that concern the majority of sustainable investors.

Companies' CSR programs and teams may be poorly integrated with their investor relations activities. Companies that do want to provide sustainable investment funds and analysts with relevant information may lack the necessary capacity or tools and may be unfamiliar with engaging with such stakeholders.

India's pension and provident funds are much less engaged (if at all) in sustainable investment issues than pension funds in many other developed and emerging markets. The policy framework and public debate around reform of the Indian public pension system does not appear to address ESG issues or the implications of ESG-related financial risks to fiduciary duties.

With the exception of ABN AMRO, mutual fund managers in India do not appear to innovating or preparing to innovate around sustainable investment opportunities in the growing and competitive retail market. Related to this, there appears to be little public opinion survey information on the environmental awareness and sustainable investment appetites of Indian consumers.

Sustainable investment awareness, concepts and practices have not yet reached deeply into the main body of India's buy-side and sell-side analyst community. It must also be acknowledged, however, that many international investors and analysts also lag behind in this regard and may rarely, if ever, raise ESG issues when looking at Indian companies.

In common with many other jurisdictions in both developed and emerging markets (with the notable exception of a few countries such as South Africa and Malaysia), stock exchange listing requirements and on-going disclosure obligations in India do not expressly address ESG-related financial risks.

Until the CRISIL/S&P/KLD sustainability index is launched in January 2008 and the CLSA/Trucost sell-side research comes on stream, India will continue to lack the home-grown architecture for independent, reliable data and analysis of the kind needed by the sustainable investment market.

Although India possesses many centres of excellence in relation to ESG and sustainable business issues and is well-served by regional organisations such as ASrIA, it lacks a single national focal point dedicated specifically to sustainable investment issues. There is no discernable network of "up and coming" young professionals to provide tomorrow's leadership on sustainable investment.

Some key strengths

Experience from Brazil and other emerging markets suggests that the successful development of sustainable inward and domestic investment practices is associated with 10 key factors. Conducive framework conditions are provided by:

1. A vibrant stock market that is friendly to foreign portfolio investment and contains companies that, in relation to ESG issues at least, represent a spectrum of "the good, the bad and the ugly".

2. A critical mass of 'leadership companies' that are national, regional or global players with senior management team who are attuned and responsive to the ESG agenda.

3. Healthy domestic pension funds with progressive trustees/fiduciaries and the ability to invest in equities, fixed income and other classes with relatively few government-imposed restrictions on the permissible portfolio mix.

4. A fast-growing middle and upper-middle income class that is well educated about long-term investment, is sensitized to social and environmental issues, and is willing to make consumer decisions based partly on such considerations.

5. Increasing competition for market share between different pension fund providers and mutual fund managers, including competition from international firms entering the market for the first time.

6. Active market participation and potential future interest by foreign institutional investors that have a long-term perspective, show discernment and have the capability for constructive shareholder engagement.

7. An effective government policy and regulatory framework that balances robust mandatory requirements with market-based incentives in relation to listing and disclosure requirements, environmental compliance, labour standards, corporate governance, etc.

8. Good local infrastructure for information, including indices, equity research, rating products etc. geared to the needs of sustainable investors, complemented by an attentive media and globally-wired NGOs able to speak the language of investment and business and to act credibly and effectively.

9. An emerging cadre of home-grown sustainable investment professionals who are networked into their peers at regional and international levels.

10. Significant riches and undeniable problems in terms of natural resources, human capital, environmental and social conditions that can either drive or constrain economic growth and sustainable national development.

As this report illustrates, most of these ingredients are already present in abundance in India, or are rapidly emerging. Those that are currently missing are, arguably, unlikely to be absent for long. With the correct catalysts and collaborative action, significant progress and benefits should be achievable within one-three years.

Practical action is achievable

India Inc. should consider the following recommendations on the main short- to medium-term actions for closing the gap. These recommendations are intended to provide the basis for discussion and debate within India. With the exception of Recommendation 1, they have therefore deliberately not been prioritized.

Recommendation 1 Create a dedicated national focal point

A high priority should be given to establishing some type of national social investment forum in the immediate future. Such an entity would undertake the advocacy, research, capacity building and other functions described in Chapter 4. Initially at least, this could be a temporary forum or industry-led working group until sufficient critical mass is achieved to support the case for a permanent organisation.

Such an initiative should collaborate and coordinate closely with ASrIA, and should also network with the sustainable investment professional community in other emerging markets, especially Brazil.

Consideration should also be given to some type of "twinning" or partnership programme with sustainable investment experts or associations in Europe. The UK may be particularly relevant in this regard, given its close cultural and trade links with India and reputation as a centre of excellence in sustainable finance.

Recommendation 2 Raise the awareness and readiness of corporate leaders specifically in relation to sustainable investment

A tightly-focused initiative is needed to further increase understanding in India's listed companies about the concepts, opportunities and requirements of sustainable investment, and to help them to develop the necessary strategies and tools.

Such an initiative should focus on Chief Executive Officers and Chief Financial Officers as its entry point, and should be oriented round strategic management and investor relations rather than corporate social responsibility.

India has excellent programmes and industry forums dealing with corporate social responsibility and sustainable development, including TERI–BCSD and the CII–ITC Centre for Excellence on Sustainable Development, amongst others. This provides a good foundation for new measures at corporate leader level specifically in relation to sustainable investment.

Recommendation 3 **Develop coordinated programmes to promote and enable CDP5 disclosure and sustainability reporting**

Initiatives flowing from Recommendations 1 and 2 should be coordinated with measures already being taken in India in relation to the 100 Indian companies covered by the current cycle of the Carbon Disclosure Project.

For example, specific steps could be taken to support CDP5 responses from those companies that most commonly appear in sustainable investment portfolios. Alternatively, such technical assistance could be directed at companies selected from those that fail or risk failing the sustainable investment test due to climate change-related issues, for example by reference to the ESG screening reports published by CalPERS.

Measures are also needed to promote sustainability reporting by Indian companies, based on GRI guidelines. TERI–Europe with the support of IFC and SustainAbility have recently completed such training for selected companies. These efforts need to be replicated. As well as raising senior management awareness about the benefits of GRI-based disclosure, technical training may be required at operational levels on how to measure, compile and interpret the types of information specified in GRI's guidelines. Potentially, such actions could focus initially on companies in the S&P CNX Nifty index.

The process of CDP5 reporting and awareness-raising around CDP5 could provide valuable synergies with pilot programmes on GRI reporting, given the partial overlap and similar discipline.

Recommendation 4 **Survey the attitudes of retail investors**

In the near future at least, the potential to develop a domestic sustainable investment market rests with retail investors rather than public pension funds. It is rational to assume that there is latent demand in this market, and uptake of ABN AMRO's Sustainable Development Fund will test this to some extent. If successful, it may potentially lead other mutual fund managers to develop competing products.

However, information on market demand is likely to be guarded (rightly) as valuable commercial intelligence. The overall process of understanding retail investor demand and stimulating service provider competition will be accelerated significantly by an independent survey that is made public. Such a survey could be coordinated by the entity referred to in Recommendation 1, perhaps in conjunction with the Association of Mutual Funds in India.

Recommendation 5 Develop and track the business case evidence specific to India

The environmental, social and governance issues that are relevant to the long-term financial performance of companies in India are likely to differ from those that apply to companies in Brazil, China or the UK, for example. Indian companies face different ESG pressure points, such as water scarcity and caste discrimination. Such country-specific subtleties are not yet fully understood, and may not be adequately captured by the sustainable investment methods used by international investors.

In addition, sustainable investment in India will understandably be approached with conservative caution in many quarters. Quantitative analysis and back-testing will be required to help demonstrate the case, as well as common sense.

The ESG screening reports published by CalPERS provides a "goldmine" of information on the types of issues that guide sustainable investment decision-making and on the perceived ESG qualities of Indian companies.

Various avenues of profitable research are therefore open to collaboration between investors, analysts, academics, NGOs and companies in India and abroad. Specific priorities and opportunities should be investigated further.

Recommendation 6 Reach out to international sustainable investors

There would be value in closer engagement on ESG issues between Indian companies (and investment professionals) and the international sustainable investment community. The emphasis should be on increasing mutual understanding of the opportunities. Potential measures could include, for example:

- A one-off forum in Mumbai or (say) London for CEOs from S&P CNX Nifty companies and international sustainable investment analysts.
- A London or New York roadshow of Indian companies coinciding with the January 2008 launch of the CRISIL Sustainability Index.
- A "sustainable technologies" investor day run by one of India's stock exchanges to showcase leading Indian companies in the alternative energy, cleaner production or bio-tech industries.

Additional measures and opportunities are likely to apply over the medium- to long-term. For example, there is scope to consider the role of government and regulators in relation to listing requirements and pension fund investment policies. ESG training for chartered financial analysts is another possibility that may be feasible to explore in due course. Indian endorsement of the UN Principles for Responsible Investment provides yet another option. However, it would be premature to develop such recommendations further given the purpose of this report and the current status of sustainable investment in India. Ultimately, such steps should – and almost certainly will – originate from India Inc. as further progress on sustainable investment takes place.

About TERI–Europe

A charity, approved by the Charity Commission for England and Wales, TERI–Europe endeavours to strengthen the linkages between India and Europe by (1) exploring common grounds for solutions to global problems like climate change, (2) setting up databases to facilitate appropriate technology choices in various sectors of the economies, (3) informing European industry about business opportunities in India's energy and environment fields, and (4) promoting dialogue between organizations on pertinent issues like corporate social responsibility.

Further details at www.terieurope.org

About Delsus Limited

Delsus Limited was founded in September 2006 by Dan Siddy, a leading international expert on sustainable investment in the emerging markets and formerly head of the International Finance Corporation's sustainable financial markets facility. Delsus is a boutique consulting and advisory firm specialising in sustainable investment and private sector enterprise in emerging markets. Delsus was set up to serve the growing need for expert services and idea generation linking business and investment with the environmental and social dimensions of emerging market development, working with clients in the investment, banking, corporate and international development sectors, helping them to protect and create value through far-sighted management of sustainable development opportunities and risks.

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