CHAPTER 7
What steers business towards sustainability?
Evidence, lessons and policy implications for Asia

Introduction

Business has been the engine of much of Asia’s recent economic growth, but it also has become a main source of environmental damage. With modernisation and globalisation in Asia, business has become more influential in society. It is important, however, to recognise that business provides technologies and other solutions to environmental problems. From the environmental perspective, business is often portrayed as the cause of the problem, but in fact “Business is at worst only part of the problem, and at best can be only part of the solution. But within a multi-stakeholder framework, facilitated by the public sector, great opportunities exist to make use of the energies of the private sector to a far greater extent than has been contemplated” (World Economic Forum, 2005 (WEF)). Especially for the matters that require complex and collaborative solutions, “it is increasingly in the interests of business to be part of the solution rather than part of the problem.” (UNDP, 2003)

Nevertheless, the market economy cannot become environmentally-sound unless environmental externalities are incorporated. To make it more environmentally-sound, various adjustments and improvements are necessary. Innovation is the most important element for companies to deliver goods and services in a competitive market. To make innovation contribute to sustainable development, however, market conditions require significant modification. Trade-offs between industrial development and environmental conservation will also be essential, as there are major limits to the availability of win-win scenarios. Monopolies, corruption and perverse subsidies exist for reasons and addressing these barriers in the interests of sustainable development will require trade-offs, many of which will be difficult and politically challenging (SustainAbility, 2004).

What might be the future directions for sustainable business in Asia? In an attempt to address this question, this chapter surveys voluntary initiatives taken by business in response to global environmental concerns, examines market-based innovations, including regulations and economic measures, and identifies future directions for business that will lead the society towards sustainability. It suggests choices and actions for governments and business to support voluntary initiatives drawing upon market mechanisms through the reconfiguring of its environmental policies and strategies.

Global sustainability standards and the Asian corporate response by voluntary initiatives

Sustainability indicators and country clusters

Issues concerning sustainable development are complex, differing greatly from country to country. Different aggregated indicators have been suggested to measure a company’s efforts for attaining sustainability. This section summarises the status of private sector responses in Asia through voluntary initiatives.

Various types of indicators have been proposed to measure sustainability. A WEF (2002) study suggested that countries can be classified into different clusters based on environmental systems criteria, including reducing stress, reducing human vulnerability, social and institutional capacity and global stewardship. It also developed the Environmental Sustainability Index (ESI), which provides a performance ranking and evaluation of 142 countries. This integrated index consists of sixty-eight indicators, five of which
come under “private sector responsiveness.” Among the five are the number of ISO 14001-certified companies per gross domestic product (GDP) and the percentage of eligible companies in the Dow Jones Sustainability Group Index (DJSGI).

Fig. 7-1 shows the relationship between “private sector responsiveness” (P-rank) and the Environmental Sustainability Index (ESI) for major Asian countries. The smaller the P-rank and the ESI values, the better the performance of the country’s business sector. In this way major economies of the region were categorised into three groups: the Philippines, India and Indonesia; the Republic of Korea (ROK) and China; and, Japan, Malaysia and Thailand. With regard to the first group, voluntary activities in the private sector appear as limited, whereas they appear as considerably higher in the ROK, China, Japan, Malaysia, and Thailand. However, Fig. 7-1 also suggests that overall environmental situations, such as industrial pollution, energy use and emissions, remain relatively severe in the ROK and China.

**Corporate management systems for sustainability**

In recent years, a large number of ideas and proposals have emerged to bring corporate management systems into better alignment with notions of sustainable development. Although there is considerable overlap and the categories are not mutually exclusive, these may be grouped under four broad headings:

(i) **Environmental management system (EMS)** focusses mainly on natural environment issues.

(ii) **Corporate Governance (CG)** has tended to emphasise economic and accountability factors. The corporate financial scandals (e.g., ENRON, Arthur Andersen and Worldcom) of recent years triggered not only significant media coverage but also focussed public and governmental attention as never before on corporate corruption and corporate governance issues. The Organisation for Economic Co-operation and Development (OECD) developed a set of guidelines (OECD, 2000; OECD, 2004) for corporate governance.

(iii) **Corporate Social Responsibility (CSR)** emerged from the philanthropic sector. It may be seen as expanding the initial emphasis of CG from correcting and avoiding corruption to much broader non-financial issues. The emphasis in CSR differs from country to country. It tends to centre mainly on “human rights” in the United States, “employment” in Europe, and “safe working conditions” in Japan.

(iv) **Corporate Responsibility (CR)** differs slightly from CSR in that its origin was mainly in consumers’ movements and its principal emphasis is on consumer protection. ISO has begun the standardisation process of CR in its Consumer Policy Committee.
An integrated index has been developed based upon the evaluation of companies according to the four management systems elaborated in Table 7-1. Of the four categories, the emphasis in Asia to date has been mainly on EMS, as we will see in the next section.

### Table 7-1: Basic concepts of corporate management systems

<table>
<thead>
<tr>
<th>Concept</th>
<th>Major aspects concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Management Systems (EMS)</td>
<td>Natural Environment</td>
</tr>
<tr>
<td>Corporate Governance (CG)</td>
<td>Economic Corruption</td>
</tr>
<tr>
<td>Corporate Social Responsibility (CSR)</td>
<td>Social Adherence</td>
</tr>
<tr>
<td>Corporate Responsibility (CR)</td>
<td>Consumer Protection</td>
</tr>
</tbody>
</table>

In addition to the integrated index referred to above, two financial market indices have been developed to measure corporate sustainability: the “Dow Jones Sustainability Index” (DJSI) which derives from the New York Dow-Jones market indicator and the “FTSE4Good” which links to London’s financial market. Table 7-2 describes the chronology of the development of those indices, while Table 7-3 shows the number of companies for which these indices are calculated. It reveals that, except for Japan, only a few Asian companies have thus far been included in these evaluations. With over 50 million business enterprises, this indicates that Asia has a long way to go in order to catch up with what has already become a widespread, if not a general practice in North America and in Europe (Heeswijik, 2004).

### Table 7-2: Chronology of TBL integration and corporate management

<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>OECD Multinational Enterprise Guidelines (1st Version) developed (Revised ‘84, ’91, ’00)</td>
</tr>
<tr>
<td>1992</td>
<td>UNCED (Earth Summit) held</td>
</tr>
<tr>
<td>1996</td>
<td>ISO14001 (1st Version) issued and revised</td>
</tr>
<tr>
<td>1997</td>
<td>Global Reporting Initiative (GRI) began</td>
</tr>
<tr>
<td>1999</td>
<td>OECD Corporate Governance Principles (1st Version) issued; Dow Jones Sustainability Indexes (DJSI) started (Revised in 2004)</td>
</tr>
<tr>
<td>2000</td>
<td>GRI Sustainability Reporting Guidelines (1st Version) developed, and United Nations Global Compact started. (Revised in 2002)</td>
</tr>
<tr>
<td>2001</td>
<td>EC green paper on CSR issued</td>
</tr>
<tr>
<td></td>
<td>FTSE4Good Index started.</td>
</tr>
<tr>
<td>2002</td>
<td>World Summit on Sustainable Development - Johannesburg Summit held</td>
</tr>
<tr>
<td>2004</td>
<td>ISO started developing CR guidelines.</td>
</tr>
</tbody>
</table>

### Table 7-3: Number of constituencies of corporate sustainability indexes

<table>
<thead>
<tr>
<th>Index</th>
<th>Hong Kong</th>
<th>Japan</th>
<th>Malaysia</th>
<th>Singapore</th>
<th>Total</th>
<th>World Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DJSI</td>
<td>4</td>
<td>35</td>
<td>2</td>
<td>0</td>
<td>41</td>
<td>317</td>
</tr>
<tr>
<td>FTSE4Good</td>
<td>4</td>
<td>184</td>
<td>0</td>
<td>3</td>
<td>191</td>
<td>932</td>
</tr>
</tbody>
</table>
Environmental management system for industries

The environmental management system (EMS) is predicated on a variety of standards and guidelines and a number of important measurement instruments aimed at the continuous improvement of the environmental performance of companies. Among the main instruments are life-cycle assessment (LCA), environmental reporting, and environmental accounting and the application of ISO 14001 which has become the most commonly used EMS. Fig. 7-2 shows that EMS is growing in Asia. Japan is well ahead of other Asian countries with 13,416 ISO 14001 certificates issued. It is followed by China (5,064) and the ROK (1,495), but all three countries rank in the top ten world-wide in the number of certificates issued. In addition, the Taiwan Province of China, India and Thailand have increasing numbers of ISO-certified companies (ISO, 2003). Although the number of companies with ISO certification is still on the increase, the annual growth rate of the world’s total has slowed recently. The latest data for the period 2002-2003 (Fig. 7-3) shows an increase of 34 per cent which is lower than those for the two previous years. Still growth rates of Asian countries tend to be higher than the world total. Japan and China have had a dramatic growth period, and other countries appear to be following that trend.

Fig. 7-2: Number of ISO certified companies in Asia

Fig. 7-3: Growth rate of ISO 14001 certificates
Fig. 7-4 indicates a marked divergence in the adaptation ratio between the number of ISO 14001 certificates, an environmental management system (EMS) and of ISO 9001 - a quality management system (QMS), in major Asian countries and in some western countries. Although the number of ISO 14001 certified companies drastically increased in recent years, there is still a huge gap between the two. This suggests that Asian countries could narrow the gap by adopting both the EMS and the QMS. Even Japan, the top EMS country, has the potential to triple its number of companies with ISO 14001.

Fig. 7-4: Ratio of ISO 14001 to ISO 9000: 2001 certified companies

Fig. 7-5 suggests a strong relationship between the level of economic development and the adoption level of the environmental management system. This trend could also be interpreted as indicating a relationship between the extent to which a country has integrated into global markets through globalisation and ISO certificates per capita. Of course, caution should be taken in interpreting Fig. 7-2 through 7-5 in view of the fact that there are various types of EMS besides ISO 14001, and there are companies that have “multiple certifications.”

Fig. 7-5: Relationship between GDP and ISO certification

Although developed countries have a higher rate of EMS certified companies, this does not necessarily mean that companies in developed countries of the region have responded more to global issues. Table 7-4 illustrates this point. The number of companies in Japan and the ROK participating in the Global Compact Initiative (GCI) is relatively low compared to the Philippines, India and Sri Lanka. This may be due to the nature of the initiative itself, which is voluntary and less rigorous, or it may be that many companies in Japan and the ROK are thinking that it is less useful.
Environmental Performance of Small and Medium Enterprises

The evidence above indicates that many Asian corporations already recognise the benefits of EMS. But there exist millions of small and medium enterprises (SMEs) in the Asia-Pacific region. How to encourage SMEs to adopt EMS will be a challenge. Even in Japan the number of ISO 14001 certified companies has increased at an accelerated pace, but participation by SMEs is limited. In order to cope with this, several initiatives are being undertaken by national and local governments. In Japan, the Ministry of Environment has developed a set of guidelines for SMEs and formulated a registration and certification programme called “Eco-action 21.” The Institute for Global Environmental Strategies (IGES) – Centre for Sustainability (http://ea21.jp) is the nodal body to operationalise the programme.

As a region-wide effort to assist and encourage Asian small and medium-size enterprises (SME) to move toward sustainability, the Asia Development Bank, 2005 (ADB) has suggested a “greening” of the supply chain strategy. This is at least in part a response to pressures on Asian suppliers from corporations in the USA and Europe to improve environmental performance. ADB strategy is based on the establishment of environmental objectives and a programme of regular monitoring. While costs for meeting goals and conducting monitoring could represent a substantial burden on Asian SMEs, their client corporations in the advanced economies can assist SMEs by providing hardware, such as pollution abatement technologies, specific guidance on moving up the value chain and other professional services.

There is evidence that at least some SMEs in developing Asia may be applying aspects of CSR without being familiar with the concept itself. In local economies, businesses get to know each other and, in addition to capital gain, seek collectively a longer and stable relationship within the local community. A report by the United Nations Industrial Development Organization calls this “silent responsibility” (UNIDO, 2002) and points to the importance of turning CSR debates from a northern preoccupation into a global agenda that includes developing Asia.

Information Disclosure and Sustainability Reporting

Environmental or sustainability reporting is the foundation for information disclosure on the environmental performance of a company. They evaluate companies based upon information collected by various means, which include questionnaire surveys or interviews. They are important for the public and local authorities, for example, to know the progress made by a company in meeting its voluntary environmental goals. These reports are vital for promoting market-based eco-initiatives such as green products and green investment funds.

At the international level, the Global Reporting Initiative (GRI) has emerged as a widely-accepted best practice. The GRI is a multi-stakeholder process and independent institution whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines. These guidelines are for voluntary use by organisations for reporting on the economic, environmental, and social dimensions of their activities, products, and services. The GRI incorporates the active participation of representatives from

<table>
<thead>
<tr>
<th>Country</th>
<th>China</th>
<th>India</th>
<th>Indonesia</th>
<th>Japan</th>
<th>ROK</th>
<th>Malaysia</th>
<th>Nepal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>45</td>
<td>93</td>
<td>2</td>
<td>29</td>
<td>0</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>116</td>
<td>1</td>
<td>36</td>
<td>14</td>
<td>353</td>
<td>1,983</td>
</tr>
</tbody>
</table>

Source: www.unglobalcompact.org
business, accountancy, investment, environmental, human rights, research and labour organisations from around the world. Started in 1997, GRI became independent in 2002, and is an official collaborating centre of the United Nations Environment Programme (UNEP) and works in cooperation with UN Secretary-General Kofi Annan’s Global Compact.

The GRI is being used throughout Asia, although still on a very modest scale (see Table 7-5). Asian companies have thus far not been very responsive to these initiatives, compared to their European and American counterparts. This may be due to a general lack of awareness. Nevertheless, Asian companies are likely to become increasingly aware of the initiative because of the pressure from transnational enterprises.

Table 7-5: Number of sustainability reports registered at the GRI reports database

<table>
<thead>
<tr>
<th>Time, as of</th>
<th>China</th>
<th>India</th>
<th>Japan</th>
<th>ROK</th>
<th>Malaysia</th>
<th>Thailand</th>
<th>Total</th>
<th>World Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Aug. 2004</td>
<td>4</td>
<td>3</td>
<td>88</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>104</td>
<td>507</td>
</tr>
<tr>
<td>28 Mar. 2005</td>
<td>5</td>
<td>6</td>
<td>122</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>144</td>
<td>645</td>
</tr>
</tbody>
</table>

Source: www.globalreporting.org

Some Asian companies, especially in Japan, have introduced their own systems of “environmental accounting” as a management tool to identify costs and effects of environmental conservation and to measure them quantitatively as much as possible. There is no single methodology and certain diversities are clearly required to take account of the circumstances of individual companies. The absence of a single methodology or universally agreed normative framework, however, raises questions of objectivity and trustworthiness. In response to this, the use of third party verification (Box 7-1) is increasing in countries like Japan.

Indeed, Japan is well ahead of other Asian countries in the field of information disclosure and sustainability reporting. The Ministry of the Environment developed environmental reporting guidelines in 1997, and revised them in 2001 and 2004. The Ministry for Economy, Trade and Industry also issued similar guidelines in 2001, which include specific guidelines for small and medium-sized enterprises (SMEs). Fig. 7-6 indicates a steady increase in the number of environmental reports prepared in Japan.
Box 7-1: Third-party verification on corporate environmental/sustainability reports

Third-party verification is a globally accepted system as far as corporate financial reports are concerned. Auditing companies check financial details of the report and issue a certificate. A similar verification system may be developed for environmental/sustainability reports, however there are a few issues to be addressed. Firstly, unlike financial reports, readers of environmental/sustainability reports are not limited to shareholders. Target readers include government officials, media, NGOs, general public, and company employees. This fact has resulted in having multilateral functions of environmental/sustainability reports, i.e., to meet company’s accountability; to raise the company’s brand image; to promote communication with stakeholders; and, to educate employees. Secondly, indicators to measure environmental/sustainability performance of a company are not well-established. Global and national guidelines on environmental/sustainability reporting have been developed, but there is still a need to improve ways to calculate scores. Despite these problems, third-party verification is on the increase in Japan. There seem to be two directions in which third-party verification is heading. One is to assure the accuracy of the report, and the other is to make comments on the performance of the company. This indicates a need to standardise the basic rules regarding the third-party verification.

The above discussions suggest that voluntary initiatives are likely to become an important and internationally-accepted tool for integrating the economy and the environment. Asia, however, has barely begun to integrate into this trend. One reason is that voluntary initiatives are not yet accepted by the millions of small and medium enterprises in the region. In Asia only a small number of big businesses have committed themselves to voluntary initiatives. The second reason is a lack of strong incentives. Hence there is a need for developing national systems so that companies that have provided information on their environmental and social performance are rewarded with incentives. Moreover, information plays a critical role in the market. Financial institutions require an objective evaluation of companies in order to make investment decisions. Balance sheets are a basic information source but additional information is clearly necessary to evaluate environmental performance. In view of this, some companies have introduced “environmental accounting” as a management tool to identify costs and effects of environmental conservation, and to measure them quantitatively as much as possible. Evaluating a company is like evaluating a person. There is no one methodology to conduct company evaluation, and certain diversities should be always allowed. In this regard, third-party verification (Box 7-1) is also getting popular in countries like Japan.

Market-based innovations and national public policy frameworks

Development of green product markets in Asia

Originally introduced in Germany in 1978, the environmental labelling scheme has played an important role for the expansion of this market. Now many countries are promoting environmental labelling in accordance with the basic standards set out by ISO 14020s, developed in late 1990s. There are three types of environmental labelling, but the most familiar scheme for consumers is the Type I, because Type I schemes are designed articulately by individual countries with a symbol that is easily recognisable by consumers. As shown in Table 7-6, the environmental label programme is being widely promoted in many Asian countries, but has yet to gather momentum and certification has thus far been very limited. Advances in this area will require both increased consumer awareness and a strengthened policy instruments that encourage and/or require eco-labelling.

Environmentally-sound products usually cost more than conventional ones because additional costs are
incurred making the products. The additional cost of these products reflects the “external cost.” The barrier is that consumers often demonstrate a strong reluctance to purchase environmentally-sound goods because of their higher cost. Studies in Europe and in North America indicate that cost considerations often cause even very environmentally-conscious consumers to choose environmentally-unfriendly products. One possible theoretical response to this would be to consider the incremental cost incurred in producing an environmentally-friendly product as a “social cost” and to provide a publicly financed subsidy to cover the difference. This, however, would be entirely unworkable and unsustainable. Instead of subsidising environmentally-sound products, some of the preferred policy options would include the elimination of perverse subsidies, especially those applying to raw materials and energy supplies and the use of government purchasing powers to create markets for environmentally-friendly products.

A few countries in Asia have introduced government policies to encourage the purchase of environmentally-friendly products. Japan enacted the Law on Promoting Green Purchasing in 2000. This law targets the consumption power of public entities and requires the national government, its affiliated organisations and local governments to purchase more environmentally-sound products by establishing annual procurement plans. Companies and people are also encouraged to choose environmentally-sound products as much as possible. The list of environmentally-sound products is prepared by the national government, consolidating information from manufacturers and environmental labelling organisations. The list ranges from typical goods and services, such as recycled paper and renewable energy, to certain types of public works. The Korean government is in the process of legislating the “Green Purchase Act” (Sook, 2003). Prior to that, the Seoul Metropolitan Government enacted its own initiative starting from 2004 (KELA, 2003).

At the same time, consumers’ awareness does seem to be growing, especially in Japan. The Green Purchasing Network (GPN) was established in 1996. GPN consists of corporations, local governments and consumer organisations, and provides information on environmentally-friendly products through printed

<table>
<thead>
<tr>
<th>Location of managing organisation</th>
<th>Programme(s) delivered</th>
<th>Voluntary standards/criteria sets</th>
<th>Licenses issued to companies</th>
<th>Certified products/services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Eco Mark Programme</td>
<td>64*</td>
<td>1,867*</td>
<td>5,391*</td>
</tr>
<tr>
<td>India</td>
<td>Ecomark Scheme of India</td>
<td>16*</td>
<td>2*</td>
<td>3*</td>
</tr>
<tr>
<td>ROK</td>
<td>Environmental Labelling Programme</td>
<td>84*</td>
<td>221*</td>
<td>441*</td>
</tr>
<tr>
<td>Singapore</td>
<td>Singapore Green Label Scheme</td>
<td>35**</td>
<td>–</td>
<td>130**</td>
</tr>
<tr>
<td>Taiwan Province of China</td>
<td>Green Mark</td>
<td>77*</td>
<td>381*</td>
<td>1,557*</td>
</tr>
<tr>
<td>Thailand</td>
<td>Thai Green Label Programme</td>
<td>33*</td>
<td>34*</td>
<td>200*</td>
</tr>
<tr>
<td>China</td>
<td>Environmental Labelling</td>
<td>–</td>
<td>700**</td>
<td>8,000**</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Hong Kong Green Label</td>
<td>37*</td>
<td>3*</td>
<td>7*</td>
</tr>
<tr>
<td>Philippines</td>
<td>Green Choice Philippines</td>
<td>5**</td>
<td>–</td>
<td>200*</td>
</tr>
</tbody>
</table>

* As of end of 2002, ** As of April 2004
Source: GEN (2002)
materials, a web-based database and by holding seminars. The membership has now grown to 2,889 organisations, and local GPNs are emerging in some parts of Japan. The ROK formed a GPN in 1999, and Malaysia established one in 2003. The Taiwan Province of China and Thailand are making preliminary arrangements for setting up a Green Purchasing Networks (GPN). Networking of national GPNs, such as the recently established international GPN, is underway, which is expected to further accelerate the GPN movement in Asia.

The above evidence indicates a range of policy measures that are emerging in Asia to promote environmentally-sound products, although it also underscores the limited nature of efforts to date.

**Potential for green investment in Asian countries**

The structuring of investment funds against criteria and standards of Socially Responsible Investment (SRI) is an important policy instrument that could hold considerable potential for Asia. In general, SRI funds aim to exclude investments in companies and countries with poor environmental and/or social performance and to reward “good performance” in these areas. In the USA and Europe SRI has been practiced mostly by mutual funds, institutional funds, such as pension funds, and insurance funds (SIF, 2003).

In Japan, there were twelve SRI mutual funds as of November 2003: seven funds targeting domestic corporations and five funds that target international corporations. The first Japanese SRI fund started its operation in 1999, and the number of SRI funds gradually increased between 1999 and 2001, but little progress has been made since then. Total asset of SRI is 71 billion yen (ASrIA, 2004), which accounts for less than 0.01 per cent of the Japanese market. This figure is small compared to 15 per cent in the USA and 12 per cent in the UK (SiRi, 2004).

Across Asia as a whole, the number of SRI funds remains small, although six have been established in Hong Kong. However, awareness seems to be growing in Asian countries. Table 7-7 indicates the extent to which financial institutions in Asia have specifically committed financial investment regimes to sustainable development under the UNEP-finance initiative. The UNEP started its financial institutions initiative by adopting the “UNEP Statement by Banks on the Environment and Sustainable Development” in 1992, and its insurance industry initiative in 1995 by adopting “UNEP Statement of Environmental Commitment by the Insurance Industry.” These statements expect the signatories to conduct internal reviews and measure their activities against their environmental goals and share information with customers and other stakeholders.

<table>
<thead>
<tr>
<th>Initiative</th>
<th>China</th>
<th>India</th>
<th>Japan</th>
<th>Philippines</th>
<th>ROK</th>
<th>Thailand</th>
<th>World Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Institutions Initiative</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>163</td>
</tr>
<tr>
<td>Insurance Industry Initiative</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>68</td>
</tr>
</tbody>
</table>


Pension funds in Asia have a great potential because of the rapidly ageing population in Asia. In the US, the California Public Employees’ Retirement System (CalPERS) takes into account social and environmental performance of a company in its fund management. In the UK, SRI became active after the government revised the Pension Act so that trustees of pension funds disclose information on the extent to which
social and environmental considerations are taken into account in the selection of investments. In Japan some pension funds have also started the same practice for its fund management by setting up a shareholder voting right policy and an investment policy. Other Asian countries, Japan excluded, have not experienced this kind of development. Caution should be taken, however, to compare the behaviour of pension funds between countries, as the pension systems vary greatly from one country to another.

**Policy instruments for enhanced environmental performance**

Conventional wisdom holds that environmental regulation acts as an impediment to business by imposing additional costs. There is, however, a range of studies (Lopez, 2004) that has provided evidence where environmental regulations have strengthened competitiveness by stimulating technological innovation. Although all regulations do not contribute to innovation, there are innovation-friendly policies (Porter, 1995). Governments are encouraged to take a leadership role in providing an effective policy environment in which innovation for sustainability is promoted.

When regulation impacts on international trade, the results can bring about innovations internationally and exert multiplier effects. In recent years, for example, the EU tightened its regulation on chemical substances. The directive on waste electrical and electronic equipment (WEEE), and the directive on the restricted use of certain hazardous substances in electrical and electronic equipment (RoHS) were adopted in 2003. Those directives required all new electric and electronic products consumed in Europe to be free of toxic substances, such as lead, mercury, cadmium, starting from 1 July 2006. This led directly to a major technological innovation in Japan which is fast becoming the new industry standard (Box 7-2).

**Box 7-2: An example of innovation through WEEE regulation**

Soldering is a technique that has been in use for over 5,000 years. Solder contains lead and is used in the production of over 12,000 electrical and electronic items used today. In June 2000, the Matsushita Corporation of Japan launched a project to eliminate the lead in the soldering process. Less than three years later, on 31 March 2003, Matsushita was successful in eliminating solder from all Panasonic and National brand products manufactured around the world. For Matsushita this meant that its entire manufacturing process had to be totally adjusted in order to accommodate WEEE regulations – a revolutionary achievement.


In Asia, countries like China have also started introducing similar directives. The EU introduced another regulation in the same year, i.e., REACH (Registration, Evaluation and Authorisation of Chemicals) in order to produce sufficient information about the effects of chemicals on human health and the environment and at the same time, to promote research and innovation of EU chemical industries. Although these are non-Asian-based regional regulations, their impacts are felt by many manufactures in Asian countries.

Although regulation can bring about the prescribed results, it requires substantial funding for effective implementation. Partly because of this and because of changes in the nature of environmental issues, new policy instruments were gradually introduced globally. They include “economic measures” and “voluntary approaches.” These new instruments have been shown to be effective in dealing with certain environmental problems, but to have limitations. Therefore, an appropriate mix of various policy instruments becomes important.
Voluntary approaches include “voluntary agreement,” usually a contract between a company and the government, either local or central. The voluntary agreement commits a company to taking voluntary actions to reduce emissions, in many cases, beyond compliance. Both voluntary agreement and regulation are based on the relationship between the government and the private sector, therefore, they are considered close: a voluntary agreement can be easily changed to a regulation. The debate on the effectiveness of voluntary agreement is active (Box 7-3).

**Box 7-3: Voluntary approaches in environmental policy-making**

Voluntary actions by firms and households for the environment should be welcomed and there is a considerable literature indicating that business can profit from taking such voluntary action. There are four distinguished types of approaches: (i) unilateral commitment made by polluters, (ii) private agreements between polluters and pollutees, (iii) environmental agreements negotiated between industry and public authorities, and (iv) voluntary programmes developed by public authorities to which individual firms are invited to participate.

However, opinions differ concerning the usefulness of policy-makers to rely on voluntary approaches to achieve environmental targets. Some see such approaches as offering a chance to address environmental problems in a flexible manner at a low cost based on consensus building between the different stakeholders. Others believe such approaches provide few environmental improvements beyond what would have occurred anyway. Based on an analysis of several case studies, the OECD concluded that voluntary approaches were seldom used as ‘stand alone’ instruments. Instead they tended to form a part of policy packages involving one or several other instruments, such as regulations, taxes, and tradable permits.

The performance of many voluntary approaches would be improved if there were a real threat of other instruments being used if appropriately set targets were not met. Based upon initial pollution control in Japan, voluntary agreement would be effective if it were backed by strong social pressure. This type of voluntary agreement is similar to one used in Denmark to reduce CO₂ emission and may be applied to the Asia-Pacific in promoting biomass energy supply.

Source: RISPO (2005)

There are many impediments in Asia to the effectiveness of both voluntary and regulatory measures. The Asian Development Bank recently examined these and concluded that governments of developing countries in Asia have often found it difficult to make firms comply with existing regulations, due mainly to a range of factors such as: (i) the lack of regulatory resources to enforce standards, (ii) uncertain laws with few penalties for non-compliance, (iii) corruption, and (iv) inadequate infrastructure and human resources to collect evidences for non-compliance by industries (ADB, 2005). These impediments notwithstanding the ADB also reaffirmed the centrality of industry-led “new regulations” as one of the policy focusses on improving environmental sustainability in Asia. Clearly, however, if success is to be achieved, the capacity and policy constraints identified by the bank will need to be addressed systematically, both on an individual country basis and through shared regional efforts.

In addition to voluntary and regulatory instruments, there are also the market mechanisms which entail the removal of subsidies and the adoption of policies that internalise environmental costs—so-called “full cost accounting.”
Globalisation and environmental regulations

One of the most contentious issues debated today is whether the pollution-intensive industries from rich countries are relocating their factories to poor countries with weaker environmental standards thereby turning the poor nations into “pollution havens.” An empirical study (Dean et al., 2005) done with 2,866 manufacturing joint venture projects in China showed that environmental stringency does affect location choice. Low environmental levies are a significant attraction for foreign direct investment (FDI) in highly polluting industries.

The findings of the study have important policy implications. If foreign business investment from industrial countries provides cleaner technology and seeks rather than avoids high regulatory standards, investment by the high income countries in developing Asia has the potential to improve the environmental outcomes in the host countries.

The export of environmentally-damaging products and practices is not new. Concerns about “pollution haven” were raised in the early 1970s (World Bank, 2000). Companies that operated in developed countries where strong environmental policies were introduced tended to relocate to developing countries where environmental standards were lax in order to save investment for the environment. “Pollution haven” concerns were especially high among the heavy-industries, such as iron and steel, non-ferrous metals, industrial chemicals, pulp and paper, and non-metallic minerals.

In the 1980s, “exporting harm” became a big issue (BAN, 2002). Waste produced in developed countries sometimes caused environmental problems in developing countries. Against this backdrop was the 1989 Basel Convention - the international agreement on the trans-boundary movements of hazardous wastes and their disposal. As of 2005, 162 countries and the EC have ratified the treaty, which includes most Asian countries. The Basel Convention functions as a barrier to the international trade of recyclable material. This has become more conspicuous as globalisation proceeds and demand for recyclable items sharply expands in countries such as China. The Basel Convention distinguishes hazardous materials from non-hazardous, and regulates only hazardous materials. Recyclable products such as used computers, for example, often contain hazardous materials. An innovative mechanism is called for to prevent the pollution that results from the trans-boundary movement of hazardous wastes while the trade in recyclable products will be promoted. (Box 7-4)

Box 7-4: Networking international recycling zones for improvement of resource efficiency in developing Asia

Since Asia began its rapid economic growth period, it started consuming more materials and had an increase in the cross-border movement of recyclable material. Illegal dumping has become a serious environmental concern. In order to establish a sound region for recycling, IGES proposed an innovative policy of the networking of international recycling zones. The proposed policy has three components: (i) the introduction of a governmental system to certify national companies and traders conducting international trade, (ii) the establishment of international zones composed of designated ports and industrial areas, and (iii) the formulation of a network of international recycling zones through international agreement. Six expected outcomes of this innovative policy proposal include: the reduction in illegal dumping activities; the transformation of the informal sector; technological innovation by participating companies; the mitigation of negative environmental impacts; and, the reduction of barriers to the international flow of recyclable material; and simplification of the Basel Convention approval process. Possibilities exist for this to be implemented on a pilot study basis for later adaptation by regional free trade regimes.

Source: Hashi and Mori (2005)
Conclusions and recommendations

The overview and evidence presented in this chapter demonstrate the central role that business must play if Asia is to achieve the twin goals of a sustainable environment and the economic growth required to meet the needs of its citizens. A range of policy instruments are presented in the chapter as guidelines to further action. The main conclusion is that a vastly enhanced effort is required and that in all areas, whether involving voluntary, regulatory or market instruments, Asia is lagging far behind in establishing best practices and in achieving sustainability. Increased and concerted efforts are called for on the part of business, government and the local community to respond to the positive market forces, promote voluntary initiatives and reconfigure traditional environmental policies. In broad terms, the strategic actions required can take place only with partnerships among national and local governments, civil society groups and business. Based on the above discussions the following recommendations are suggested as inputs to developing appropriate policy measures:

(i) Concerted efforts are needed to implement more win-win solutions so that economic development can take place with environmental security. There will be more trade-off situations in the short run because voluntary initiatives are not pervasive in most parts of developing Asia. In order to further promote sustainable corporate practices, governments should provide tangible inducements through such measures as tax incentives, public-private partnership arrangements that are consistent with the public interest and do not distort markets and the targeted application of public bidding and public procurement. Even stronger motivation could be given to companies if these incentives are linked to quantitative targets in attaining energy and resource efficiency. In addition, being the largest consumers, governments of Asia must find new ways to respond to the positive market forces, such as green purchasing and green investment regimes. Traditional environmental policies should be reconfigured to expand the green procurement of business to government, business to business, and business to consumer relationships.

(ii) While it is important to seek out win-win options where they exist, the complexities of difficult choices, trade-offs and opportunity costs must be directly confronted in the policy arena. The evidence shows conclusively that double and triple bottom line claims must be treated with circumspection as they can create expectations that cannot be fulfilled and can divert energies away from the essential challenge of coming to terms with and building partnerships around the complex and often contradictory relationships between the environment and economic gain and from understanding and deciding policies based on the difficult trade-offs that are required. Effective and adequate policy and strategy responses in Asia must take into account the following:

a. Although there are potentials for cost-effective environmental improvements, economic development does not ‘automatically’ promote clean production.

b. There are positive relationships between environmental regulation and technological innovation. Regulation is essential as a stimulus to those making slow progress.

c. Regulation is increasingly seen as an enabling framework which needs to encourage change, rather than act as a rigid system of rules and procedures.

d. Early signals by governments about new regulation, flexible instruments and credible long-term objectives can promote the development and adoption of new technologies.

e. Businesses and policy-makers must be made more aware that corporate environmental management offers opportunities as well as difficulties.

f. Political intervention needs not only to provide economic incentives, but also to promote informa-
tion exchange and learning amongst businesses. Such intervention needs to address explicitly the costs and benefits of environmental gains and to seek appropriate policy instruments to address the needs of ‘losers.’

g. The often cited adage by industry that we should leave the choices to consumers as the ultimate arbiters of consumer preference is flawed. The evidence indicates the need for incentives to support green consumerism.

h. Environmental policy has to look at the opportunities and barriers for greening production and consumption and identify points for strategic intervention.

(iii) As a region-wide effort to make business move toward sustainability, the ‘greening’ of the supply chain, should take place to improve the environmental performance of small and medium enterprises in Asia. While costs for meeting such goals could be a substantial burden on SMEs, their counterpart corporations in the advanced economies can help by providing hardware, such as pollution abatement technologies, or specific guidance to help identify win-win situations.

(iv) It is essential for Asian business to participate actively in the development of global guidelines and standards for environmental management, corporate governance, corporate responsibility, and sustainability reporting. If more companies had participated, their concerns could have been more properly reflected. This would make industries in the region more committed to developing standards and guidelines. Incidentally, active participation needs capacity-building and awareness-raising on the part of Asian business. Likewise, companies in Asia need to respond substantially to global voluntary initiatives such as the Global Compact or the UNEP-FI, as they provide opportunities for Asia to demonstrate to the world its proactive stance on the environment and sustainable development.

(v) Asian governments must develop national guidelines on corporate environmental/sustainability reporting so that companies that have provided information on their environmental and social performance are appreciated by society and rewarded accordingly by the market. A few global guidelines developed so far have not appropriately reflected the business environment unique to each country. Therefore, country-specific guidelines that are more relevant to companies operating in their jurisdiction become essential.

(vi) Government interventions are requested to promote more holistic corporate evaluation. For example, the possibility exists that a company producing eco-labelled products might be selling environmentally-destructive products as its core business. This may indicate the need to move from product-based approaches to company-based ones and from environmentally-based approaches to sustainability-based ones. Government interventions of this kind will be more effective if they are linked to partnerships with other non-governmental actors.