

## **Trends in Asian Corporate Sustainability Management**

Yasuhiro KANDA<sup>1</sup>

### **Contents:**

1. Background: Concept of Corporate Sustainability Management (CSM)
2. Development of CSM in Asia
3. National and Local Responses to CSM
4. Challenges

### **1. Background: Concept of Corporate Sustainability Management (CSM)**

At the 2002 World Summit on Sustainable Development (WSSD), “changing unsustainable patterns of consumption and production” was determined to be the key task for the future. The prospective direction of corporate environmental conservation activities is an important factor in solving global environmental issues—corporations’ roles as producers and consumers are critical in the market economy. It is quite promising that many companies will be shifting to corporate sustainability management (CSM)<sup>2</sup>, which will enable the realisation of a balance between the market economy and environmental conservation.

The private sector plays an important role in building and promoting a sustainable society. Conventional economic development has caused serious industrial pollution and global environmental problems, because the supply of environmental resources is regarded as being infinite. As a consequence, the value of the environment has been neglected and has not been integrated into the market economy. In order to solve this problem, it is essential that we integrate it into the market economy and then establish a system where environmentally sound goods and services are assessed properly. Also, economic structures at the global, national, and local levels need to be transformed from ones that have used natural resources by free to ones that work under environmental restrictions. Under such circumstances, it is extremely critical that the private sector actively employs technological and institutional innovations to enhance the quality of life of all world citizens.

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<sup>1</sup> Research Fellow, Kansai Research Center of the Institute for Global Environmental Strategies [kanda@iges.or.jp](mailto:kanda@iges.or.jp)

<sup>2</sup> In this paper, the term “CSM” means “a management style of which principles are based not only on profits, but also on environmental or social concerns.”

CSM needs to be implemented in every size of enterprise, from global corporations to medium and small companies, with the operations of the smaller ones usually adhering to the local society. In the case of global enterprises, it is critical that they bear in mind the possible effects on the socio-economies of the countries where they invest and that they provide social and financial support there as they do in their home countries. Globalisation of the economy continues to develop in search of economic efficiencies, where they seek conceptual harmony between economic efficiency, environmental conservation, and social equity. In the case of small- and medium-size companies, they used to be overwhelmed by economies-of-scale in the past. But as a new sense of values begins to penetrate into society to appreciate the environment, and the safety and quality of life, they have started to create a new style of community-based business by re-building mutual trust with their communities. Whereas national economies have long played a major role between the global and local economies and will remain the biggest of the three, local economies as well as the global economy will continue to grow and become more important. For companies who operate their business nationwide, they are now compelled to create strategies with both global and local perspectives and to take on more responsibility for the environment and society.

In the past, the pursuit of profit was believed to be the major, or only, premise when operating a business and, as a consequence, to bring wealth to the socio-economy through the market mechanism. Meanwhile, the concept of CSM regards contribution to environmental conservation and social equity as the foremost element besides making profit. It is therefore indispensable that CSM be introduced into more companies, which would eventually transform the present market into one that is environmentally sound. Then, as market transformation continues to proceed, CSM ought to be increasingly promoted and disseminated, thereby creating a self-supporting cycle.

The three major targets of CSM are part of what is called the “triple bottom line.” While sustainability indicates the ideal way to operate the socio-economy, the triple bottom line is a term perceived from the corporation’s point of view and places importance on achieving three targets simultaneously: environmental, social, and economic values. Sustainable development is often explained as development that meets present needs without compromising the ability of future generations to meet their own needs. On the other hand, CSM is interpreted as an indispensable management concept for corporations to make themselves sustainable by contributing to the socio-economy.

In order for companies to achieve successful transformation financially, environmentally, and socially, they need to be fairly evaluated by the market. Regulations perform an important role as policy measures in forming and transforming the market framework. In addition, some other kinds of incentive mechanisms need to be created by economic entities to promote voluntary changes, which are the key to successful economic transformation. To accomplish this objective, it is essential that

companies acquire management tools that employ the CSM point of view. Table 1 shows some management tools which are developing and being incorporated into companies. Recently, voluntary agreements (e.g., between governments and corporations) have been a major topic of discussion regarding the voluntary activities of corporations. In this paper, the author intends to focus on the more positive activities of corporations that perceive environmental conservation as an important part of their corporate strategy.

Table 1. Management tools for developing CSM.

Management tools	Outline
Environmental management system (EMS)	Basis for CSM, e.g., ISO14001 standard, Eco-Management Auditing System (EMAS), etc.
Environmental labelling	Label on eco-friendly good and services to inform consumers about environmental performance
Environmental performance evaluation (EPE)	Internal process and assessment tool to evaluate whether environmental data of corporations meet management criteria
Environmental reporting	Method of communicating environmental performance to stakeholders such as shareholders, consumers, and employees
Environmental accounting	Method of recognising, measuring, and communicating environmental performance

## 2. Development of CSM in Asia

It is not a simple matter to assess the level of CSM development in each country, since it is often measured by various kinds of indicators, and every country has their own business framework. This section, however, is an attempt to overview the status of CSM development in Asia from a global point of view, with taking up the following indicators: dissemination levels of EMS, an integrated indicator of company activities, the number of companies which show in the Dow Jones Sustainability Index, activity levels of eco-labelling and Socially Responsible Investment.

The basis of CSM is the environmental management system (EMS). The most well-known one is ISO 14001, from the International Standards Organization; while in Europe, the Eco-Management Auditing System (EMAS) is quite popular. There are several other environmental management systems developed by national governments or non-governmental organisations (NGOs) for small- and medium-sized companies. Table 2 shows the number of ISO 14001 certifications in each country and their increase from 1998 to 2001. As seen in the chart, Japan is prominent in the world for certifications. In Asia, China and Korea follow Japan. Overall, it shows a significant rate of increase, especially in the case of China and India.

Table 2. The number of ISO14001 certifications, by country.

Year Country	1995	1996	1997	1998	1999	2000	2001	Increase rate 1998–2001 (%)
India	1	2	28	40	111	257	400	1,000.0
China		9	22	94	222	510	1,085	1,154.3
Hong Kong		7	46	56	51	105	165	294.6
Taipei	2	42	183	203	216	421	999	492.1
Indonesia		3	45	55	55	77	199	361.8
Japan	4	198	713	1,542	3,015	5,556	8,123	526.8
Korea	19	57	174	263	309	544	880	334.6
Malaysia		7	36	86	117	174	367	426.7
Philippines		1	11	27	39	46	120	444.4
Singapore		37	65	78	87	100	298	382.1
Thailand		58	61	126	229	310	483	383.3
U.S.A.	1	34	79	291	636	1,042	1,645	565.3
Germany	35	166	352	651	962	1,260	3,380	519.2
U.K.	61	322	644	921	1,492	2,534	2,722	295.5
World Total	257	1,491	4,433	7,887	14,106	22,897	36,765	466.1

Source: ISO (2002).

To measure sustainability, various types of indicators have been proposed. The World Economic Forum has developed the Environmental Sustainability Index (ESI), which discloses the performance ranking and evaluation of 142 countries. This integrated index consists of 68 indicators, five of which come under “private sector responsiveness,”<sup>3</sup> representing voluntary corporate activities. One of them shows the number of ISO 14001-certified companies per gross domestic product (GDP); another expresses the percentage of eligible companies in the Dow Jones Sustainability Group Index (DJSGI), etc.

Figure 1, below, plots the ranking of major Asian countries, with “private sector responsiveness” (P-rank) on the horizontal scale and the ESI on the vertical scale. For both the P-rank and the ESI, the smaller the number, the better the performance. These Asian countries may as well be categorised into three groups: a group of the Philippines, India and Indonesia, a group of Korea and China, and a group of Japan, Malaysia and Thailand. With regard to India, the Philippines, and Indonesia, the slow development of voluntary activities in the private sector is observed since overall environmental restrictions in these nations are quite severe. Whereas in the case of Korea, China,

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<sup>3</sup> In this paper, ranking of the private sector responsiveness is expressed as “P-rank.”

Japan, Malaysia, and Thailand, voluntary activities in the private sector have been considerably promoted; however, overall environmental restrictions remain severe in Korea and China, where future issues to address includes enhancing social institutional capacity.

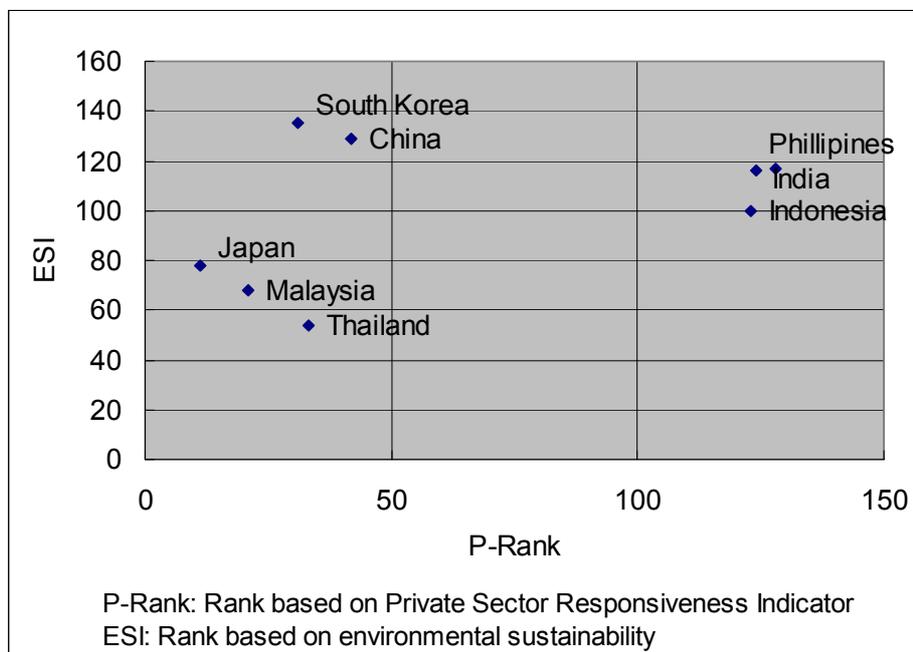


Figure 1. Ranking of major Asian countries.  
 Original data source: World Economic Forum (2002).

Table 3, below, depicts the number of companies listed on the DJSGI for each country. Unlike the regular Dow Jones Global Index (DJGI), the companies appearing on the DJSGI are highly evaluated from sustainability point of view. Recently, there have been many global companies in Japan that have demonstrated their initiatives in view of sustainability, but most of the other Asian countries have not reached this stage yet. The majority of global companies are either from the United Kingdom (U.K.) or the United States (U.S.), which explains why these countries have a strong impact on the global economy. These global companies are expected to undertake initiatives to their full extent in terms of the environment and sustainability. Even global companies have corporate cultures that reflect the socio-economy of their original country, and they all have strong cultural impacts on many other companies and countries. This being considered, it is indeed desirable that more global companies are further nurtured in Asian countries.

Table 3. The number of DJSI-listed companies, by country.

Japan	China	Hong Kong	Taiwan	S. Korea	Singapore	Malaysia	Thailand
35	0	4	1	0	0	2	0
India	Indonesia	U.S.	Canada	U.K.	Germany	DJSI	Total
0	0	66	14	73	23	317	

Source: DJSI World (2004).

At the product level, environmental labelling and its status of dissemination are usable as indicators. Among the three types of environmental labels (Type I, II, and III), Type I is the most common and it allows the labelling of products through third-party verification. Some 25 countries have participated in the Global Ecolabelling Network (GEN), the international organisation that uses Type I. These countries have developed their own programmes for certification—one programme each, in general, except for Sweden, which has three. Six are employed in Asian countries. Details such as the name of the programmes and the number of product standards are given below in Table 4. With regard to mainland China, the China Certification Committee for Environmental Labeling Products (CCEL) was set up in 1994 to further disseminate environmental labelling, but this does not appear in the table because it is presently just a participant of GEN and not yet a member. The table indicates that Asian countries, as a whole, are beginning to make considerable progress regarding voluntary activities at the product level.

Table 4. Eco-label programs in Asian countries (Type I).

Country	Program	Voluntary standards
Thailand	Thai Green Label Program	33
India	Eco-mark Scheme of India	16
Taiwan	Green Mark	77
Hong Kong	Hong Kong Green Label	37
Japan	Eco Mark Program	64
Korea	Environmental Labelling Program	84

Source: Global Ecolabelling Network (2002).

Socially responsible investment (SRI) is closely related to corporate sustainability management (CSM). As of 30 June 2003, there are 313 SRI funds in Europe with total assets of 12.15 billion Euros (15.43 billion US\$)<sup>4</sup>, and the U.K., the leading nation, makes up the significant portion of these assets with nearly 32% of the total European

<sup>4</sup> Calculated with an exchange rate of 1Euro=1.27US\$.

SRI assets. This indicates that there has been considerable effort made in the U.K. to promote corporate social responsibility (CSR) through methods such as changing national policies, including pension law revision. In the case of the United States, the pattern of SRI funds can be classified into three categories: (1) screening funds, which exclude specific industrial sectors such as firearm manufacturers; (2) shareholder advocacy funds, which implement shareholders' rights; and (3) community investment funds, which invest for community development. According to the Social Investment Forum 2003 Report, "Nearly one out of every eight dollars under professional management in the United States today is involved in socially responsible investing," and its total asset value amounts to as much as U.S.\$2,164 billion.

Table 5, below, details the number of SRIs in major Asian countries. In Japan, the first eco-fund<sup>5</sup> was established in 1999. Presently there are 10 SRI/eco-funds<sup>6</sup>, yet the total asset value remains at just 71 billion yen<sup>7</sup> (U.S.\$676 million)<sup>8</sup>. Some leading pension funds, however, have recently started to introduce investment practices that screen companies from the environmental point of view. Although there has been a sign of expansion, SRI/eco-funds in Asia still have a long way to go overall.

Table 5. Number of SRIs/eco-funds in major countries in Asia.

Japan	Hong Kong	Singapore	Korea	Malaysia	Taiwan
10	6	2	1	1	1

Source: ASrIA Web site homepage<sup>9</sup>.

### 3. National and Local Responses to CSM

#### 3.1 Environmental management systems (EMS)

In the next section, environmental management systems at the national and local levels will be discussed, with a focus on the present status in Japan and Korea.

##### 3.1.1 Japan

The widespread use of environmental management systems (EMS) in Japan is notable in that it has been disseminated throughout the nation. One of the major background factors contributing to this situation are the efforts of the Japan Environmental Management Association for Industry (JEMAI), a related organisation

<sup>5</sup> eco-fund is a type of SRI funds.

<sup>6</sup> There 12 funds if we distinguish a fund with hedge from one with no hedge.

<sup>7</sup> It is referred to a report *Foreign Versus Local* of ASrIA 2003.

<sup>8</sup> Calculated with an exchange rate of US\$1=105 Japanese Yen

<sup>9</sup> ASrIA homepage (Provider of SRI-Eco-funds in Asia) <http://www.asria.org/sri/asia/sriasia> (access date: 10 February 2004)

of Japan's Ministry of Economy, Trade and Industry (METI), which disseminates the use of EMS by providing training programmes, environmental diagnosis, and guidance in building a system. Another contributing factor is the development of environmental management businesses created by assessment organisations, training institutes, etc., such as the Japan Accreditation Board of Conformity Assessment. Furthermore, one other factor may be related to Japanese corporate culture, which tacitly forces corporations to obtain certifications by imposing various kinds of pressure on them.

In spite of the above accomplishments, the use of EMS in small- and medium-sized enterprises (SMEs) has not been expanded enough yet—this suggests an important policy issue to address. Japan's Ministry of the Environment launched an environmental activity evaluation programme (Eco Action 21) in 1996 in an effort to encourage more SMEs, schools, and hospitals to introduce an EMS. Compared with the ISO14001 programme, this one is intended to provide EMS measures in more concrete and simpler terms.

Local governments in Japan have actively created environmental policies and SME policies. Many have obtained or are trying to obtain ISO 14001 certifications for themselves, and some leading local governments have developed and are managing original systems for SMEs. For example, they began to provide SMEs with financial support for obtaining ISO certification. Also, regarding local business registration, they give preferential treatment to SMEs that have already established an EMS. The environmental management system designed for SMEs has native features in terms of its objectives, targets, and levels since it was developed based on their original schemes.

### **3.1.2 Korea**

The Ministry of Commerce, Industry and Energy of Korea (MOCIE) holds jurisdiction over the Korea Accreditation Board (KAB), which operates the ISO14000 and ISO9000 programmes, and the Korea National Center for Cleaner Production (KNCCP), which is responsible for promoting cleaner production. Under this organisational structure, MOCIE's missions include disseminating environmental management systems as well as developing cleaner production technology and facilitating its transfer.

The Ministry of Environment launched its Environment-friendly Company Certification System in April 1995 with the aim of certifying prevention-oriented companies. As of the end of December 2001, 126 companies had already received the certification.<sup>10</sup> These companies have formed a network for information exchange and have been providing technological assistance and advice to SMEs. Prospective challenges for the ministry include coordinating the relationship between the Environment-friendly Company Certification System and ISO14001, and reinforcing

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<sup>10</sup> Source: homepage of the Korea's Ministry of the Environment (Policies and Legislation)  
<http://www.me.go.kr:8080/eng/index.html> (access date: 10 February 2004)

incentives for companies to take actions toward CSM.

### **3.1.3 Roles and issues of national and local governments**

Japan is the world's leading nation in the number of companies who have obtained ISO14001 certification; nevertheless, the role of national and local governments regarding environmental management systems is still crucial. Their role in maintaining coordination between Japanese management systems and international standards is worth particular attention. Although the management systems in each country are beginning to have common features with the development of economic globalisation, many still have differing inherent characteristics developed in different historical backgrounds. This applies not only to the ISO14000 series but also to the case of the OECD Principles of Corporate Governance.<sup>11</sup> On the other hand, it is very likely that the predominant management system in each country will be largely influenced by the international standard once it is established. Under this circumstance, the national government of each country plays an important role in balancing and coordinating between the domestic system and the international system.

As stated previously, efforts such as development by local governments in Japan of EMSs for SMEs and the Korean government's creation of a new EMS besides ISO hold great significance. They are also superior examples of using the bottom-up approach and are indispensable in particular for their regular revision process. The next step is to converge these bottom-up approaches, the source of bringing systematic innovation to each country. In doing so, it should be noted that national governments will face a difficult situation if too many similar management systems are formed as a result of these approaches. For this reason, it is essential that national governments converge adequately by displaying their competence in coordinating, while promoting innovations, rather than employing the command-and-control style of approach.

## **3.2 Environmental Reporting and Environmental Accounting**

### **3.2.1 Japan**

Japan's Ministry of the Environment (MOE), along with the Ministry of Economy, Trade and Industry (METI), has long been committed to promoting environmental reporting and environmental accounting by way of issuing guidelines and related reference materials since the first publication of a guideline on environmental reporting in June 1997 under the editorship of the Environment Agency (presently MOE). With regard to environmental reporting, some award programs have been established, which have contributed to creating a competitive atmosphere among companies. In addition, a network-type organisation has been formed by companies and institutions engaged in environmental communication through environmental reporting with the aim of

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<sup>11</sup> Organization for Economic Cooperation and Development (OECD)

disseminating environmental reporting and improving its quality.

Both environmental reporting and environmental accounting have been disseminated throughout Japan to a considerable degree, as illustrated by the following numbers: out of all the listed companies and companies with more than 500 employees, 650 companies (21.9 percent) publish an environmental report and 573 companies (19.3 percent) employ environmental accounting.<sup>12</sup>

The next primary task in the development of environmental reporting is to produce a way to address social elements in the reporting. Social elements need to be included in order to address growing concerns on Corporate Social Responsibility (CSR)<sup>13</sup> in global economy. There are various guidelines on CSR, and one of the most influential is the Sustainability Reporting Guidelines of the Global Reporting Initiatives (GRI)<sup>14</sup>, which addresses report contents from the aspects of economic, environmental and social performances. GRI takes a long-term, multi-stakeholder, international process to develop the guidelines to make it a global one. However, the social items to be reported are still controversial.

In addition, the organisational structure of a company may possibly be influenced when dealing with the idea of the triple bottom line. In the case of conventional environmental reporting, the environmental section of a company alone carries out the whole process. But employing the principle of the CSR requires the involvement of another section of the company that is able to coordinate company-wide.

Another challenge that needs addressing is assuring comparability and credibility in environmental reporting. The main functions of environmental reporting are (1) to act as an environmental communication tool between corporations and society, and (2) to serve as an information disclosure tool based on corporate accountability to the public. To maximise these social functions, comparability and credibility need to be improved.

With an aim to tackle these tasks, various efforts have been undertaken such as revising environmental reporting guidelines, establishing a system for third-party evaluation and verification, and providing incentives for environmentally conscious companies.

With regard to environmental accounting, developing an environmental accounting system for more effective corporate management has become a primary issue.

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<sup>12</sup> Source: Survey of Eco-friendly Action of Corporations 2002, Ministry of the Environment.

<sup>13</sup> CSR is defined as “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with stakeholders on a voluntary basis” in the European Commission’s Green Paper “Promoting a European Framework for Corporate Social Responsibility” (2001)

<sup>14</sup> The GRI was launched in 1997 as a joint initiative of the U.S. non-governmental organisation of Coalition for Environmentally Responsible Economies (CERES) and United Nations Environment Programme (UNEP).

Considering that conventional financial accounting has been formulated based on long-term accumulated practices, it is expected the same will apply to the case of environmental management accounting. Therefore, at present, the practices of environmental management accounting at advanced companies are being gathered to address this task.

### **3.2.2 Korea**

Korea's Ministry of Environment first issued environmental reporting guidelines in May 2002 as a result of the Corporate Environmental Report Pilot Project, which was launched in August 2001 in collaboration with 13 corporations from six industrial sectors. The main objectives of the reporting guidelines are to disclose environmental conservation activities to the community, strengthen environmental competitiveness, and improve environmental management practices by enhancing communication with related parties. In cooperation with stakeholders such as companies and investors, the MOE is to regularly re-examine and make revisions to the guidelines when and where necessary. Regarding environmental accounting, the MOE developed the Environmental Cost Guidelines in June 2002 and is operating pilot projects in 7 companies.<sup>15</sup>

According to a survey conducted by the author and some researchers in the fall of 2002, 11.3 percent of the listed companies regularly publish an environmental report and 5.5 percent have introduced environmental accounting procedures.<sup>16</sup> Many companies are at the planning stage and/or gathering relevant information, which indicates that both environmental reporting and accounting need to be more disseminated throughout the country. The proposed guidelines, undertaken just recently, need to be more actively discussed from practical and logical perspectives in order to be more effectively dispersed. In order to accomplish this, initiatives conducted by the Ministry of Environment are much needed.

### **3.2.3 Other Asian countries**

In the case of China, the Environmental Protection Department of the government of the Hong Kong Special Administrative Region offers a wide range of information on environmental management, particularly regarding environmental reporting guidelines.<sup>17</sup> They have been promoting the disclosure of corporate environmental information, for example, by publishing an environmental performance guidebook with

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<sup>15</sup> Source: Ministry of Environment of Korea 2003. *Korea's Market-based Policies for Environmental Improvements*.

<sup>16</sup> The survey results can be downloaded at  
[http://www.iges.or.jp/jp/be/pdf/report12/apdx\\_e.pdf](http://www.iges.or.jp/jp/be/pdf/report12/apdx_e.pdf)

<sup>17</sup> Hong Kong Environmental Protection Department's URL is <http://www.epd.gov.hk/epd/>

the cooperation of global auditing companies.

In Malaysia, the Association for Chartered Certified Accountants (ACCA)<sup>18</sup>, whose headquarters are located in Britain, introduced its Environmental Reporting Award for domestic corporations in 2002. At the awards ceremony hosted by the minister of science, technology, and the environment, a collaborative effort between the government and the nation's major NGO for promoting environmental management was initiated. Only 11 companies entered the contest for the first award in 2002, but more companies are expected to sign up in the years to come. The ACCA is also devoted to developing human resources to foster conventional accountants and so forth by organising events in Mainland China, Hong Kong, and Singapore.

#### **3.2.4 Roles, future issues, and policies of national and local governments**

The more widely environmental reporting and environmental accounting are disseminated in Asian countries, the greater the responsibility of national and local governments is expected to become. Although the main indicators for environmental reporting and environmental accounting have been formed and will be developed on the basis of the native features of each nation and local society, they are also required to be global and uniform. It is quite likely that the most significant role of national governments will be to coordinate with other global actors in developing global standards in order to improve efficiency while, at the same time, promoting the development of business practices of each country, which reflects the uniqueness of each nation.

As with conventional accounting systems, it is thought that both environmental reporting and environmental accounting will further develop as theories and practices accumulate and are mutually influenced. In some countries in Asia where a conventional accounting system has not been established sufficiently yet, it is likely that they will develop a conventional accounting system that takes into consideration new systems such as environmental reporting and environmental accounting. Even in developed countries like Japan, where environmental reporting and environmental accounting are widely practiced, many tasks still remain to be tackled by the ministries responsible for conventional accounting and financial reporting in an effort to make these systems work under socio-economic schemes. For building theories and promoting practices, it is crucial that national governments take the initiative and set the prospective direction with the cooperation of companies and accountants.

### **3.3 Environmentally sound products, services, and industries**

#### **3.3.1 Japan**

Japan is well known for the cooperative relationship between its national government

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<sup>18</sup> ACCA's URL is <http://www.accaglobal.com/>

and the private sector in developing scientific technology. The nation's present science and technology policy is formulated based on the Science and Technology Basic Law of 1995 and the Science and Technology Basic Plan, which was designed based on the basic law, where the environment was selected as one of the four principle fields of research and development.<sup>19</sup> Also, with an aim to improve its standardisation activities and to catch up with Western standards, the Japanese Industrial Standards Committee, an affiliate organisation of METI, issued its Standardization Strategy in 2001, which also lists the environment as one of its four major areas of focus. In addition, they are continuing their efforts to establish the "Environmental JIS" (Japanese industrial standards). In regard to the Type I environmental label, an ISO standard, the Japan Environment Association (JEA), an affiliate organisation of the MOE, continues to operate its Eco-Mark programme, which is steadily achieving popularity. Although the Type III environmental label is still in the process of being standardised, the Japan Environmental Management Association for Industry (JEMAI), an affiliate organisation of METI, has taken charge of the label and launched the Eco-Leaf programme in 2002. In standardising the Type III environmental label, the development of the life cycle assessment method (LCA) will be indispensable. Japan has already conducted a government LCA project under the leadership of related organisations of METI. On the other hand, unlike the other two labels, Type II requires little involvement of the national government since it is a voluntary effort, as explained by the qualification for labelling based on "self-declared environmental claims." At the same time, major companies, including electronic information equipment manufacturers, as well as NGOs promoting the use of recycled paper, have been conducting their own voluntary practices.

Regulations on recycling contribute to creating new markets—an important step towards the development of a recycling-based society.<sup>20</sup> In this direction, the Japanese government enacted the Basic Law for Establishing a Sound Material-Cycle Society (2000) and created laws on recycling containers and packaging, household electrical products, food waste, construction waste, and is now in the process of making a law for automobile recycling. Despite the costs of dealing with wastes, recycling is attracting increasing expectations of building a range of promising businesses. Regarding green procurement policies and practices, the Japanese government enacted the Law on Promoting Green Purchasing in 2001 with the intent of fostering the green market. The enforcement of this law has lead national and local governments to make efforts to promote green procurement and shift market demands towards environmentally sound products. In addition, environmentally conscious companies and consumers

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<sup>19</sup> The 2nd version of the Science and Technology Basic Plan. 2000.

<sup>20</sup> In Japan, the word "recycling" has a wide meaning and includes reuse or recovery of heat energy: thermal recycling.

collaboratively established the Green Purchasing Network (GPN) in 1996. With these efforts, the greening of the market has been steadily developing.

Increasing efforts have been made to support the environmental industry from the viewpoint of community development over the past few years. For example, the Eco-Town project, a collaboration between METI and MOE, has a scheme that allows local governments to receive subsidies if their eco-town proposal is approved by the national government. The main objectives of this project are represented by two of the project's goal statements: "to bring welfare to the community by way of promoting environmental industry utilising accumulated business practices performed in the community" and "to build a comprehensive system which focuses on environmental harmonisation with the participation of industries, public administrations, and consumers intending to achieve a recycling-based society." As of November 2003, 19 local governments had obtained approval from the national government for their own eco-town project. Another example is the implementation of environmental "special structural reform zones," a program that falls under the economic and structural reform agenda as an experiment with deregulation performance in designated areas. The process of this programme is the same as with the Eco-Town project—the local government submits a proposal to obtain approval from the national government. In an effort to promote the use of recycled materials, the deregulation of waste treatment has been conducted on an experimental basis. If this produces successful results, it may be considered for dissemination throughout the nation. Of the 117 regions that have been approved as special zones (as of March 2003), ten zones are related to the environmental industry. Moreover, an increase in support measures for "community business" has been observed recently. In addition to METI and MOE, local governments are also promoting support measures for environmental businesses in the community.

### **3.3.2 Korea**

The national government of Korea regards the environmental industry as one of its strategic national industries for the twenty-first century, along with information technology and biotechnology, and it has actively supported the environmental industry in recent years. A major example is the recent creation of the Environmental Industry Committee, jointly formed in April 2000 by the Ministry of Finance and Economy (MOFE), the Ministry of Commerce, Industry and Energy (MOCIE), and the Ministry of Environment. In addition, a government-wide environmental industry development strategy was drawn up in collaboration with nine related government ministries. It deals with a wide range of activities including developing environmental technology, creating a domestic environmental market, and providing support to promising environmental businesses.

In the area of developing environmental technology, the government launched its Ecotechnopia<sup>21</sup> project in fiscal year 2001, with support from the G7 countries, to

conduct collaborative research and development between research institutes and corporations utilising approved proposals from the public. In order for an environmental technology to pervade the market, the safety and reliability of the technology must be guaranteed. To this end, the national government introduced the Environmental Technology Verification System, which grants certification to environmental technologies if they meet the given standard through objective assessment. In response to local environmental issues, regional environmental technology development centres have been established with the aim of harnessing the research capabilities of companies and universities in the community to foster the lively exchange of research accomplishments. The centers also offer a consulting service to small- and medium-sized companies.

Various activities have been conducted to nurture new businesses. For example, the Small and Medium Business Administration set up a joint environmental business venture fund with investment companies to provide support to promising environmental business ventures. As a result, the Korea Environmental Industry Association and the Korea Environmental Venture Association were formed. Their efforts include organising ENVEX, an annual international trade fair of eco-technology, with the Korea Environmental Preservation Association (KEPA) playing a leading role. In addition, they have set up a permanent exhibition in China. These developments demonstrate that Korea has committed itself to expanding its share of the international environmental industry and technology market.

### **3.3.3 Roles, issues, and measures of national and local governments**

Environmental technologies and industries are anticipated to play a significant role in future markets in the twenty-first century on the path to realising a win-win relationship between the environment and the economy. To this end, national and local governments have a critical role to play. In many cases, government goals of securing economic growth and job security brought by the environmental industry and gaining a larger share in the international market suggest that the environmental industry is regarded as only one of the conventional industrial sectors. This attitude needs to be discussed from a broader perspective, and a more comprehensive target should be set—transformation of the industrial structure. Companies' voluntary activities are crucial to transforming industrial structures, and national governments have a significant role to play in this regard by indicating the prospective direction and elaborating a concrete vision of an environmental industry embedded in the nation's economic society, while directing innovation towards sustainable development.

In a similar way, the role of the community, including local government, has become increasingly important. Community activities in Japan have steadily developed and been disseminated throughout the country as development of the support system progresses, such as a new law that enables non-profit organisations to have legal status.

Growing numbers of successful cases have been reported in various regions, such as the use of photovoltaic panels, resource/energy-saving through local area management, and formulating an independent economic system by introducing local currencies. In order to further promote activities such as these, it is essential that partnerships be built among the government, non-profit organisations (NPOs), and companies. Local government is expected to perform its role as coordinator between the related bodies. Strategies for CSR can be interpreted as a scheme to enhance corporate competitiveness based on long-term relationships of mutual trust. In order to enhance competitiveness on the national level, activities of individual partnership, in which CSM is the key concept, are crucial and need to be encouraged.

### **3.4 Evaluation of companies**

#### **3.4.1 Japan**

Just as goods and services are evaluated through the use of environmental labels, a growing number of CSM practices are being appraised by a third party through application of indicators and ranking systems, which has drawn considerable attention. Of the two types of evaluation—internal and external—internal evaluation is indispensable for corporations to achieve continuous improvements based on evaluation results. On this account, the Japan Association of Corporate Executives created and issued a list of corporate evaluation criteria (evaluation sheet) in March 2003 with the intent of encouraging further corporate voluntary assessment. The criteria were developed in terms of CSR, and member companies have been conducting evaluations based on these standards.

With regard to external evaluation, there are also two types: (1) evaluation in the capital market for selecting investments, and (2) social evaluation that influences the corporate brand. In terms of evaluating investment products, the sum of the total assets of 10 SRI/eco-funds only amounts to 71 billion yen (U.S.\$676million), accounting for less than 1% of the total public offering stock investment funds. While individual green investors are increasing in number, it has become important that the government supports SRI measures that promote institutional investors such as pension funds to make investment to SRI funds. Another problem is the high cost of gathering data on corporate environmental and social activities. Accordingly, encouraging voluntary efforts of corporate information disclosure are strongly advised. Also, corporate social evaluation, implemented by agencies including a newspaper company, academics, and NPOs, has had a significant influence on corporations since they release the corporate ranking as a result of evaluation, which affects the image of the corporate brand and consequently puts considerable pressure on corporations to improve.

#### **3.4.2 Korea**

Although there is only one SRI fund available in Korea, expectations for the

development of SRI are growing. In June 2003, the first international conference on the issue, titled SRI Action in Korea<sup>21</sup>, was organised by leading companies with support from the Association for Sustainable & Responsible Investment in Asia (ASrIA), an NGO promoting SRI in Asia, along with the National Pension Corporation, the supervising body for pension funds and the financial industry, and the Ministry of Finance and Economy. A highlight of the conference was a speech on the significance of SRI that was delivered by the deputy prime minister, who is also the minister of finance and economy. He discussed the importance of accounting transparency to the foundation of SRI development, and also announced the intention of providing dynamic support for building the market for SRI with this significant statement: “Active support will be given to the market that aspires to vitalize socially responsible investment and endeavours to develop investment indexes such as a social responsibility index.” According to a survey of Korean specialists, the majority of financial experts think that SRI is still unacceptable because of their doubt on financial performance of SRI funds, but people regard it as the socially right way to invest, which indicates the potential of developing SRI. Korea’s potential is supported by the facts that that individual eco-fund investors are mainly women and Korea has significant population of working females, and that there are active environmental groups, diverse religious groups, and large number of charities.

### 3.4.3 Roles, future issues, and policies of national and local governments

The two processes of evaluating a corporation and then its products are fundamentally different in nature. While product evaluation is measured with a set of indicators on environmental efficiency, various ideas exist on implementing corporate evaluation—some attach more importance to past records than future plans or vice versa. There seems to be no one complete method available yet for effectively evaluating corporations. Under these circumstances, an integrated evaluation system needs to be formulated with the participation of companies, evaluators, and users who will then take action based on the result.

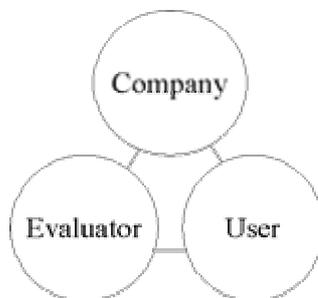


Figure 2: The three players in the corporate evaluation system.

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<sup>21</sup> The materials on the Action in Korea can be obtained at  
<http://www.asria.org/events/korea/june03> (10 February, 2004)

The main role of a national government in building an evaluation system is to develop the infrastructure, and the first concrete task is to establish a baseline for corporate information. Although environmental reporting has played a key role in this regard, it is crucial that government provides corporations with support in creating a more systematic and user-friendly database system. Second, as for evaluators, the number of rating organisations, which include NPOs, and diversification of their values are expected to increase. At present the most influential evaluators tend to be well-versed in employing the mass media. If various types of rating bodies are created, it is quite promising that the overall quality of evaluation will improve and become more balanced. Finally, the actual users of the evaluation results should be extended to green investors and green consumers. These infrastructure improvements will allow an effective, well-balanced evaluation system that further promotes corporate sustainability management.

#### 4. Challenges

As the role of actors in the global and local economies come to hold more significance in the field of CSM, some changes occurring in the role of national actors have emerged. Major actors at each economic level are summarised below in Table 6.

Table 6. Major actors involved in CSM.

Economy	Major Actors related to CSM promotion
Global/Regional	ISO, GRI, UNEP, OECD, (EU), WBCSD <sup>22</sup> , ASrIA, MNEs <sup>23</sup> , NGOs
National	National governments, economic federations, enterprises, NGOs/NPOs
Local	Local governments, SMEs, NPOs

The need for CSM policies on the global level continues to grow as the globalisation of product and capital markets proceeds. Against this background, new types of actors have appeared, including consulting businesses that promote CSM. It should be noted that global actors are greatly influenced by Western nations; in this regard, even more attention needs to be paid to developing countries.

Economic frameworks at the national level were once developed with the target of achieving a high level of economic growth, which resulted in the industrial society of the twentieth century with excessive supplies of goods. With this overflow of goods, however, industrial society is experiencing difficulties continuing in this manner, because it causes air pollution in urban area or unsanitary living condition with increasing amount of wastes. It is clear that national economic structures, which have been

<sup>22</sup> World Business Council for Sustainable Development (WBCSD) <http://www.wbcsd.org/>

<sup>23</sup> Multi-National Enterprises (MNEs)

developed for increasing GDP, must be reorganised to actualise the required transformation by using new indicators such as Integrated Environmental and Economic Accounting (commonly referred to as SEEA)<sup>24</sup> or Genuine Progress Indicator<sup>25</sup>. To this end, it is crucial that national governments act in collaboration with global and local actors, while national-level companies search for new opportunities in global and local economies. When we consider of material recycle or renewable energy, local economies is filled with new business opportunities that contribute to increasing people's well-being and reducing environmental loads at the same time. Reflecting the characteristics of local society and local nature, indigenous and creative activities are expected to activate local economies. On par with ecological systems, the diversity of local economies is important to achieving sustainability and should be exercised in economic activities.

To elevate the potential of CSM, developing the infrastructure of the market economy in areas such as corporate governance as well as product and capital markets is critical. From this point of view, what are the possibilities for Asian enterprises to be actively involved in promoting CSM? At present, they lag behind Western nations in terms of transparency, but in considering the trend of disseminating environmental management systems, the foundation of CSM, Asian enterprises have rapid growth potential if appropriate policy measures are taken, along with infrastructure development of the market economy. Particularly in China, a notable increase has been observed in the number of environmental management system certifications obtained. In addition to conventional market infrastructure development, the greening of the product and capital markets is in the process of being upgraded. China holds large potential for achieving dramatic development with the privatisation of national enterprises.

With regard to policy measures, Western nations have been leading the world. The European CSR strategy in particular has been the focus of international attention. It should be noted that they have implemented a series of systematic policies in recent history, including the Aarhus Convention, the basis of information democracy, and sustainability strategies including the Cardiff Process: a strategy for integrating environment into all European Union policies and activities<sup>26</sup>. Learning from Western experience, Asian countries should look at systematic policies from a broad perspective, while steadily accumulating various practices. The immediate major task is to

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<sup>24</sup> United Nations Statistics Division and other organizations are developing SEEA.

<sup>25</sup> Information of the Genuine Progress Indicator is at <http://www.rprogress.org/projects/gpi/> (10 February 2004)

<sup>26</sup> The Cardiff Process was made by European Commission in 1998 to develop some practical steps towards implementing the integration principle in the daily work of the European Community institutions.

disseminate information on the stream of environmental practices such as creating environmental reporting guidelines and introducing award programs.

CSM is a powerful approach for achieving sustainable development; however, since it is developed on the basis of capitalism and capital seek its own growth, it tends to have a bias for some developed countries. In order for CSM to become a common approach in both developed and developing countries, joint concerted efforts are important and carefully examined. There are various issues to be solved for each actor in the three economic levels (local, national, and global). Below are some important issues and policy measures for them to address.

Global actors have major roles to play in constructing global guidelines and standards such as sustainability reporting guidelines, measurement and reporting guidelines of greenhouse gas management, and environmental labelling. The GRI and ISO are developing guidelines and standards through a multi-stakeholder dialogue process, and Asian countries have opportunities to participate. But in order to gain real value out of participation from countries, opportunity alone is not enough and the accumulation of practices in each country is necessary, because without this experience it is impossible for government officials or practitioners to put forward opinions in the dialogue process that reflect the country's actual situation. For this reason, global actors are expected to support developing countries in building their economies and promoting practices from a wide range of perspectives as well as to develop and revise guidelines and standards. Comparative studies of business practices and circumstances will contribute considerably to advancing this situation. Another issue is that guidelines and standards are becoming more complex and difficult for companies and other organisations to understand. Information on the development process of guidelines and standards needs to be made more widely available.

National governments have a critical role in promoting CSM because of its effects in the national market, which occupies dominantly compared with global and local market. National governments are the main actors in shaping the framework of their own market economies, so they will remain the biggest player. In order to accelerate the greening of the goods and services markets or the capital markets, information measures such as environmental reporting are important, as well as regulations or economic measures such as environmental taxes. Business circumstances of the environment, society, and economy are diverse in nature: the availability of natural resources, human resources and information resources depends on a business location. It would not work for a company to just incorporate global guidelines or standards as they are. Each country needs to build a basis for CSM. National governments are encouraged to create guidelines on which companies in the country build their practices, and then it becomes possible for the country to participate in the process of developing global guidelines and standards. Some countries might say that we need to first work on the basis of the market economy and then later on CSM, but it would be a short-cut to

start building a basis for the next economy now by taking CSM into account and promoting CSM practices.

Finally, CSM is rooted in local individual activities. Companies, factories, local governments, NPOs, and communities are encouraged to form partnerships and begin concrete CSM-related activities, because local activities are the source for national and global activities. Both globalisation and localisation are proceeding simultaneously in the economy, and each present significant business opportunities for local actors. For example, energy conservation or recycling activities are important businesses to be tackled through partnerships, and nature conservation or community welfare would be promoted with the introduction of local currencies. Local-level activities are a source of innovation, where the utilisation of distinctive local knowledge is encouraged.

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