# Chemicals Industry's Initiatives for Corporate Social Responsibility: Some Perspectives from Academia

Inisiatif Industri Kimia untuk Tanggungjawab Korporat Sosial: Perspektif dari Ahli Akademik

Khai Ern Lee, Mazlin Mokhtar, Goh Choo Ta, Lubna Alam & Mahathir Amir

#### ABSTRACT

Chemicals industry is likely to become increasingly relevant in Malaysia. The government is playing its active role in regulating and enforcing legislation to monitor the activities throughout the chemical lifecycle. Chemicals industry itself is also ought to manage the risks associated with their activities through a holistic risk management framework. With the implementation of global regulations and policies, it is able to increase the competitiveness of chemicals industry in the global market and enhance protection of human health and the environment. Today's chemicals industry should not merely focus on maximize their profit and meeting the needs of shareholders, focus should also be devoted to their social and environmental performances and meeting the needs of other key stakeholders including the community, customers, suppliers, and employees. Corporate social responsibility (CSR) thus has become a concern for chemicals industry. Various CSR emblematic initiatives, namely Responsible Care (RC), Product Stewardship (PS) and Extended Producer Responsibility (EPR) have been carrying out within chemicals industry. The implementation of such initiatives has become a way for chemical companies to advance social progress while also making a profit, and ultimately becomes a way for many businesses to sustain over the long-term.

Keywords: Chemicals industry; corporate social responsibility; responsible care

### ABSTRAK

Industri kimia dilihat semakin relevan di Malaysia. Kerajaan memainkan peranan yang aktif dalam mengawal selia dan menguatkuasakan undang-undang untuk memantau aktiviti di sepanjang kitaran hayat kimia. Industri kimia sendiri juga patut menguruskan risiko yang berkaitan dengan aktiviti mereka melalui rangka kerja pengurusan risiko yang menyeluruh. Dengan pelaksanaan peraturan-peraturan dan dasar-dasar global, ia mampu meningkatkan daya saing industri bahan kimia di pasaran global dan meningkatkan perlindungan kesihatan manusia dan alam sekitar. Industri kimia hari ini tidak boleh semata-mata memberi tumpuan kepada memaksimumkan keuntungan dan memenuhi keperluan pemegang saham mereka, tumpuan juga perlu ditumpukan kepada prestasi sosial dan alam sekitar dan memenuhi keperluan pihak berkepentingan utama yang lain termasuk masyarakat, pelanggan, pembekal, dan pekerja. Tanggungjawab sosial korporat (CSR) itu telah menjadi satu perhatian bagi industri bahan kimia. Pelbagai inisiatif CSR lambang iaitu Penjagaan Bertanggungjawab (RC), Pengawasan Produk (PS) dan Tanggungjawab Pengeluar Lanjutan (EPR) telah menjalankan dalam industri bahan kimia. Pelaksanaan inisiatif tersebut telah menjadi satu cara bagi syarikat kimia untuk memajukan perkembangan sosial di samping mendapat keuntungan, dan akhirnya menjadi satu cara bagi perniagaan untuk kekal jangka panjang.

Kata kunci: Industri kimia; tanggungjawab sosial korporat; penjagaan bertanggungjawab

### INTRODUCTION

Chemicals industry is one of the leading industries in the global market. In Malaysia, chemicals industry contributes about 6% to the total manufactured exports annually (Abdullah 2008). As the government plans to strengthen further the competitiveness of the manufacturing sector, the chemicals industry is likely to become increasingly relevant. The chemicals industry in Malaysia is regulated and monitored by various government

agencies through respective acts and regulations. The relevant legislations for chemicals industry throughout the chemical lifecycle from import, production, transportation, and use/handling to final disposal are shown in Table 1. Internally, chemicals industry is also ought to manage the risks associated with their activities through a holistic risk management framework as shown in Figure 1. Through the implementation of global regulations and policies as shown in Figure 2, it is able to increase the competitiveness of chemicals industry

in the global market as well as to enhance protection of human health and the environment.

Apart from ensuring profitability and high quality products to meet growing customer's demand, there is also a need to ensure the sustainability of social and the environment of the society. Thus, corporate social responsibility (CSR) has become a concern for chemicals industry. American economist, Professor Howard R. Bowen, who was always regarded as the father of CSR, advocates that CSR refer to the obligations of businesspersons to pursue those policies, to make those decisions, or to follow those lines of actions, which are desirable in terms of the objectives, and values of our society (Bowen 1953). Nobel Laureate, Professor Kenneth J. Arrow, also having the same view whereby he asserted that firms ought to maximize profits; not merely do they like to do but there is practically a social obligation to do so (Arrow 1973). Today, organizations should take into account - over and

above their economic performance – their social and environmental performances (Berland & Loison 2008). Chemicals industry and society are inseparable and interdependent. Chemicals industry thus should not merely focus on maximizing their profit and meeting the needs of shareholders, focus should be devoted to their social and environmental performances as well as meeting the needs of other key stakeholders including community, customers, suppliers and employees. Various initiatives, namely Responsible Care (RC), Product Stewardship (PS) and Extended Producer Responsibility (EPR), have been carrying out for CSR within chemicals industry. The present article attempts to discuss the importance of CSR for chemicals industry as well as to provide an overview of chemicals industry's initiatives for CSR, from the perspectives of academia. A particular emphasis is given on the implementation of Responsible Care program for CSR in chemicals industry.

TABLE 1. List of legislations that relevant to chemicals industry throughout the chemical lifecycle

Stages	Agencies	Relevant legislation
<u>Import</u>		
Pesticides	Pesticides Board	Pesticides Act 1974
Industrial chemicals	Royal Malaysia Customs	Customs Act 1967
Drugs	Ministry of Health	Poison Act 1952
Food	Ministry of Health	Food Act 1983
<b>Production</b>		
Emissions to air and water	Department of Environment	Environmental Quality Act 1974
Workers health and safety	Department of Occupational Safety and Health	Occupational Safety and Health Act 1994
Food Industry	Ministry of Health	Food Act 1983
Transport of hazardous goods		
By air, road, marine and rail	Ministry of Transport	Civil Aviation Act 1969, Road Transport Act 1987
Use / Handling		
Pesticides	Pesticides Board	Pesticides Act 1974
Cosmetics	Ministry of Health	Control of Drugs and Cosmetics Regulations 1984
Workers health and safety	Department of Occupational Safety and Health	Occupational Safety and Health Act 1994
Consumer chemicals	Ministry of Domestic Trade and Consumer Affairs	Consumer Protection Act 1999
<u>Disposal</u>		
Scheduled Wastes	Department of Environment	Environmental Quality Act 1974 Environmental Quality (Scheduled Wastes) Regulations, 2005

### Risk Management Framework

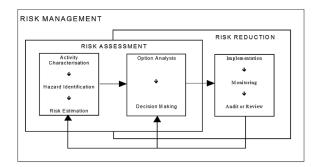


FIGURE 1. Risk management framework

Source: www.hse.gov.uk/quarries/education/powerpoint/topic4.ppt

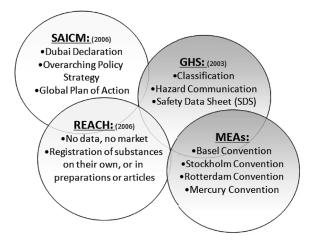


FIGURE 2. Global chemicals relevant regulations and policies.

### CORPORATE SOCIAL RESPONSIBILITY (CSR)

As far as we know, no business is operating alone. It interacts with a variety of society forces, employees, customers, communities, business partners, investors, governments, media, universities and many more. Businesses can sustain their growth only if society is generally satisfied with their overall contribution to social, economic and environment. CSR is a form of corporate self-regulation integrated into a business model. It functions as a built-in, self-regulating mechanism whereby a business monitors and ensures its compliance with laws, regulations, ethical standards, and international norms. CSR is also a process with the aim to embrace responsibility for the company's actions and encourages positive impact through its activities on the environment, consumers, employees, communities and other stakeholders. In some

models, a firm's implementation of CSR goes beyond compliance and engages in actions that appear to further some social good, beyond the interests of the firm and that which is required by law (Craig 2010).

Over the past decades, chemicals industry has suffered for several serious human-caused disasters. In 2005, chemical plant explosion in Jilin province, China, has released around 100 tonnes of pollutants containing benzene into the Songhua River. While authorities in the Chinese central government have made considerable efforts to prevent such disasters, including releasing circulars on safety awareness, making regular spot checks, and increasing funding to improve safety facilities, a key contributor to these preventable incidents remains the lack of effective social responsibility (Worldwatch Institute 2005). Thus, efforts should be initiated to address strong concerns and ongoing adverse public opinion on the chemicals industry.

### **INITIATIVES**

There several initiatives being carried out under the broader umbrella of CSR, namely Responsible Care (RC) (Givel 2007), Product Stewardship (PS) (Lewis 2006), Extended Producer Responsibility (Lewis 2009) and so forth. Being the emblematic initiatives of CSR, Responsible Care (RC) program, was initiated as a response to the adverse publicity and concern of Bhopal disaster, in which an estimated 5800 to more than 20,000 people were killed due to a toxic chemical spill of methyl isocyanate in India in 1984 (Givel 2007). RC program is a voluntary initiative adopted by chemical companies in promoting good chemical management as well as to improve continuously environmental, health and safety performance in terms of their operations and products in a manner responsible to the concern of the public. It achieves these objectives by meeting and going beyond legislative and regulatory compliance, and by adopting cooperative and voluntary initiatives with the government and other stakeholders. RC program also requires member companies to listen and respond to public concerns, publicize their progress and assist each other to achieve optimum performance. The implementation of RC program helps to improve the public's perceptions of the chemicals industry and its products in order to gain a positive business climate, in which it can also improve public policy, ensure facilities growth, secure markets for products, and attract quality employees. RC program is congruent with the primary goals of CSR where it does not only meet the needs of shareholders of the company, but also meet the social and environmental goals of the community, customers, suppliers and employees.

As the environmental, health and safety impacts of chemical products have become increasingly visible, it triggers the chemicals industry that there is corporate responsibility for the life cycle impacts of their products. Product Stewardship (PS) and Extended Producer Responsibility (EPR) are two initiatives established specifically for products. PS is a concept whereby environmental, health and safety protection centres around the product itself. It is one of the many issues being addressed by chemical companies under the broader umbrella of CSR. PS is being driven by a global trend to make chemical companies to be more responsible in reducing the environmental, health and safety impacts of their product (Lewis 2006). Extended Producer Responsibility (EPR) is a strategy designed to promote the integration of environmental costs associated with goods throughout their life cycles into the market price of the products. EPR focuses on waste management whereby it places most of the responsibility for product management on the producer. It emphasizes the need for the responsibility to be regulated and proposing a reallocation of responsibility for product waste management between industry, consumers and governments (Lewis 2009).

## CASE STUDY – RC PROGRAM IMPLEMENTATION IN THE US

In the study done by Finger & Gamper-Rabindran (2011) shows that the likelihood of accidents is reduced by 69.3%, translates in back-of-the-envelope avoided losses of \$0.8 billion to \$3.8 billion per year, with the implementation of RC program in the US chemical manufacturing sector. RC program helps in raising management's attention to safety and their ability to correct errors, in turn reduces potential liability and insurance costs. Such an improvement could improve the public's perceptions towards chemicals industry and ensure chemicals industry grows sustainably.

### RC AND PS PROGRAMS IN MALAYSIA

Chemicals industry is one of the leading industries in Malaysia. Chemical Industries Council of Malaysia (CICM) has launched RC program in Malaysia in year 1994. To date, there are only 122 of chemical companies have pledged their commitment to RC program. However, less than 10% of the signatory companies are SMEs. The signatory companies are mainly Multi-National Corporations (MNCs) and big and medium local companies that have better technology and more resources in implementing this program. The participation of the SMEs in RC program is not encouraging and still lacking commitment to this voluntary initiative. The lack of awareness of the importance of adopting this CSR emblematic initiative has made the implementation of RC program in SMEs a major challenge. It is also noted that PS program has the lowest compliance rate as compared with other Codes of Management Practices under RC program in Malaysia. Thus, an evolution of more sustainable PS program is necessary due to the rapid growth of industrial development and urbanization over the past decades causing an increase to the quantity and types of toxic and hazardous wastes generated in the course of these progresses.

### ROLES OF CHEMICALS INDUSTRY

Initiatives such as RC, PS and EPR are congruent with the primary goals of CSR by not only meeting the needs of shareholders of the company, but also meeting the social and environmental goals of the community, customers, suppliers and employees. In order to ensure the success and sustainability of these initiatives, chemicals industry should possess key qualities as proposed in Figure 3. Most importantly, chemicals industry should integrate social, environmental and economic concerns into their values, culture, decision-making, strategy and operation in a responsible, accountable, and transparent manner to protect the interest of stakeholders and ultimately ensure the success of CSR. It is also noted that coherent CSR strategy and RC, PS and EPR initiatives based on integrity, sound values and a long-term approach offers clear business benefits to companies and contributes to the well-being of society. In addition, continuous communication and outreach programs should also be conducted among the stakeholders to highlight the importance and value of these initiatives and promoting awareness. Thu, it will encourage more active participation of chemical companies.

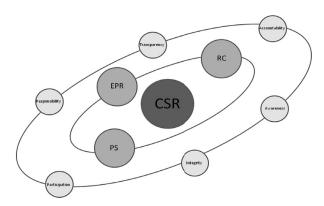


FIGURE 3. Components towards CSR

### **CONCLUSIONS**

Chemicals industry and society are inseparable and interdependent. Thus, chemicals industry should know the truth and act with vision, courage and passion to create sustainable contributions to the society. Chemicals industry's initiatives such as, Responsible Care, Product Stewardship, and Extended Producer Responsibility have become a way for chemical companies to advance social and environmental progress while also making a profit, and ultimately becomes a way for many businesses to effectively sustain over the long-term. These initiatives should become an essential part of any successful chemical company's business strategy towards corporate social responsibility.

### **ACKNOWLEDGEMENT**

The authors would like to acknowledge the financial support from the National University of Malaysia (Universiti Kebangsaan Malaysia) via research grant DIP-2015-008 and TD-2014-015.

### REFERENCES

- Abdullah, S. T. 2008. The chemical industry in Malaysia. In Mokhtar M, Goh CT, Zaharuddin NR (eds.) Round table dialogues No. 16 Managing chemicals for a better quality of life: Improving our performance (MyNICHE-3). Institute for Environment and Development (LESTARI), Universiti Kebangsaan Malaysia, Bangi.
- Arrow, K. J. 1973. Social responsibility and economic efficiency. Public Policy 21: 303-318.
- Berland, N., Loison, M.C. 2008. Fabricating management practices: Responsible Care and corporate social responsibility. Society and Business Review 3: 41-56.
- Bowen, H. R. 1953. Social responsibilities of the businessman. New York: Harper & Brothers.
- Craig, C. F. 2010. Corporate social responsibility and business sustainability (Chapter 1).In Studies in trade and investment, Creating business and social value: The Asian way to integrate CSR into business strategies. New York: United Nations publication.
- Finger, S. R., Gamper-Rabindran, S. G. 2011. Does industry self-regulations reduce accidents? Responsible Care in the chemical sector. University of Pittsburgh, Graduate School of Public and International Affairs.
- Givel, M. 2007. Motivation of chemical industry social responsibility through Responsible Care. Health Policy 81: 85-92.
- Lewis, H. 2006. Product stewardship for CSR. In Jonker, J., De Witte, M. (eds.) Management models for corporate social responsibility. New York: Springer Berlin Heidelberg.
- Lewis, H. T. 2009. Product stewardship: institutionalizing corporate responsibility for packaging in Australia. Ph.D. Thesis, School of Global Studies, Social Science and Planning, College of Design and Social Context, RMIT University, Melbourne, Australia.
- Worldwatch Institute. 2005. Lack of corporate social responsibility behind recent China accidents. URL: http://www.worldwatch.org/lack-corporate-socialresponsibility-behind-recent-china-accidents, (akses pada 13 Julai 2015).

www.hse.gov.uk/quarries/education/powerpoint/topic4.ppt

Khai Ern Lee

Institute for Environment & Development (LESTARI)

Universiti Kebangsaan Malaysia

43600 UKM Bangi, Selangor, Malaysia.

E-mail: khaiernlee@ukm.edu.my

Mazlin Mokhtar

Institute for Environment & Development (LESTARI)

Universiti Kebangsaan Malaysia

43600 UKM Bangi,

Selangor, Malaysia.

E-mail: mazlin@ukm.edu.my

Goh Choo Ta

Institute for Environment & Development (LESTARI)

Universiti Kebangsaan Malaysia

43600 UKM Bangi,

Selangor, Malaysia.

E-mail: gohchoota@ukm.edu.my

Lubna Alam

Institute for Environment & Development (LESTARI)

Universiti Kebangsaan Malaysia

43600 UKM Bangi,

Selangor, Malaysia.

E-mail: lubna@ukm.edu.my

Mahathir Amir

Institute for Environment & Development (LESTARI)

Universiti Kebangsaan Malaysia

43600 UKM Bangi,

Selangor, Malaysia.

E-mail: mahathir@ukm.edu.my

Received: 18 April 2017 Accepted: 12 June 2017