INSTITUTIONAL ANALYSIS OF MULTINATIONAL CORPORATIONS' CORPORATE SOCIAL RESPONSIBILITY POLICY AND PRACTICE IN THAILAND: A CASE STUDY OF TOYOTA MOTOR THAILAND

Miss Norkaew Senapan

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หน่อแก้ว เสนพันธุ์ : การวิเคราะห์เชิงสถาบันในนโยบายและทางปฏิบัติเกี่ยวกับความรับผิดชอบต่อสังคมของบรรษัทข้ามชาติในประเทศไทย: กรณีศึกษาบริษัท โตโยต้า มอเตอร์ ประเทศไทย (INSTITUTIONAL ANALYSIS OF MULTINATIONAL CORPORATIONS' CORPORATE SOCIAL RESPONSIBILITY POLICY AND PRACTICE IN THAILAND: A CASE STUDY OF TOYOTA MOTOR THAILAND) อ. ที่ปรึกษาวิทยานิพนธ์หลัก : รศ.ดร.เอก ตั้งทรัพย์วัฒนา, 170 หน้า.

ในปัจจุบัน บรรษัทข้ามชาติมีอิทธิพลต่อสภาพทางเศรษฐกิจและสังคมของประเทศที่ตั้งของบริษัทสาขาเป็นอย่างมาก วิทยานิพนธ์ฉบับนี้นำเสนอกรณีศึกษาของบริษัท โตโยต้า มอเตอร์ ประเทศไทย เพื่อตอบคำถามเรื่องความรับผิดชอบต่อสังคม (Corporate Social Responsibility – CSR) ของบรรษัทข้ามชาติในบริบทของประเทศกำลังพัฒนา เช่นว่า (1.) CSR สามารถเป็นเครื่องมือยกระดับมาตรฐานความรับผิดชอบในสถานที่ซึ่งสถาบันรัฐอ่อนแอได้หรือไม่ (2.) จริงหรือไม่ที่โลกาภิวัตน์นำไปสู่พฤติกรรมขาดความรับผิดชอบของบรรษัท และ (3.) การบริหารจัดการ CSR ในบรรษัทระดับโลกนั้น เน้นการผสานรวมแนวปฏิบัติในท้องถิ่นให้เข้ากับนโยบายระดับโลก หรือพยายามสร้างนโยบาย CSR ที่แตกต่างเพื่อตอบสนองต่อปัจจัยเชิงสถาบันในท้องถิ่นแต่ละพื้นที่

งานวิจัยเชิงคุณภาพครั้งนี้ศึกษานโยบาย CSR ด้านสิ่งแวดล้อมของ บริษัท โตโยต้า มอเตอร์ ประเทศไทย อันประกอบไปด้วยการควบคุมของเสียจากการผลิต การจัดการผู้มีส่วนได้ส่วนเสีย และโครงการสนับสนุนช่วยเหลือสังคม โดยใช้การวิเคราะห์เปรียบเทียบข้อมูล และกรอบการวิเคราะห์ CSR เชิงสถาบันของ เดิร์ค แมทเท็น และ เจเรมี มูน มาปรับใช้ เพื่อพิจารณาลักษณะของกระบวนการโลกาภิวัตน์ ในการพัฒนานโยบายและดำเนินงาน CSR ของบรรษัทข้ามชาติ

ผลการศึกษาแสดงให้เห็นว่าการวางนโยบายและกิจกรรม CSR ของ บริษัท โตโยต้า มอเตอร์ ประเทศไทยนั้น เป็นกระบวนการรูปแบบผสม ที่มีแนวโน้มรวมการปฏิบัติการในท้องถิ่นให้เข้ากับแนวนโยบายระดับโลก ถึงแม้ว่าปัจจัยเชิงสถาบันในประเทศนั้นจะส่งผลต่อการวางนโยบายและกิจกรรม CSR แต่ถือว่าอยู่ในวงจำกัดหากเทียบกับอิทธิพลจากปัจจัยต่างๆ ในระดับโลก และแนวนโยบายของบริษัทแม่ นอกจากนี้ยังพบว่าการหลอมรวมนโยบาย CSR ในท้องถิ่นให้เข้ากับแนวปฏิบัติระดับสากลซึ่งโน้มนำโดยบริษัทแม่นั้น ทำให้เกิดการยกระดับความรับผิดชอบต่อสังคมของบรรษัทในประเทศไทย

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NORKAEW SENAPAN: INSTITUTIONAL ANALYSIS OF MULTINATIONAL CORPORATIONS' CORPORATE SOCIAL RESPONSIBILITY POLICY AND PRACTICE IN THAILAND: A CASE STUDY OF TOYOTA MOTOR THAILAND. THESIS ADVISOR: ASSOCIATE PROFESSOR AKE TANGSUPVATTANA, Ph.D., 170 pp.

In recent times, Multinational Corporations (MNCs) have become very powerful and have great influence to affect the socio-economic condition of the countries hosting their subsidiary companies. This paper introduces Toyota Motor Thailand (TMT) as a case study to answer the questions which have been debated on the topics of MNCs and Corporate Social Responsibility (CSR) in developing countries. These questions include: (1.) Whether CSR can help as a tool to elevate the standards and regulate MNCs in places where the government institutions are weak. (2.) Whether the globalization necessarily leads to irresponsibility. (3.) Whether the management of CSR in global firms is conducted in a way that aligns and converges with local practices into global forces, or the CSR policy is diverged to be more responsive to local institutional factors.

Using a qualitative research methodology, the study focuses on the TMT's environmental CSR policy that includes production externalities control, stakeholder management, and the firm's contributions to Thai society. The cross comparison technique has been adopted along with the institutional framework of CSR by Dirk Matten and Jeremy Moon. This institutional framework has been used to analyze the globalization process of convergence & divergence in TMT's CSR policy formation and implementation.

The result shows that CSR policy formulation and implementation at TMT is considered a hybrid process with inclination towards global integration. Though the influence of institutional factors in Thailand remains significant, it appears limited when compared to the power of global influences and Toyota Motor Corporation (TMC)'s policy. The study also shows that convergence force induced by TMC led to improvements in corporate responsible practices.

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LIST OF ABBREVIATIONS

5YEAP	-	5 Years Environmental Action Plan
BOI	-	Board of Investment of Thailand
BOT	-	The Bank of Thailand
CCI	-	Corporate Community Investment
CSR	-	Corporate Social Responsibility
DIW	-	Department of Industrial Works
EU	-	European Union
EMS	-	Environmental Management System
ELV	-	End-of-Life Vehicle
FDI	-	Foreign Direct Investment
ISO	-	International Standard Organization
JAMNC	-	Japanese Automotive Multinational Corporation
MNC	-	Multinational Corporation
NBS	-	National Business System
NGO	-	Non-governmental Organization
SEO	-	Safety and Environment Promotion Office
SET	-	Stock Exchange of Thailand
TEI	-	Thailand Environment Institute Foundation
TMC	-	Toyota Motor Corporation
TME	-	Toyota Motor Europe
TMT	-	Toyota Motor Thailand Co., Ltd.
TMAP-EM	-	Toyota Motor Asia Pacific Engineering and Manufacturing Co., Ltd.
UN	-	United Nations
USA	-	United States of America
WBCSD	-	World Business Council for Sustainable Development
WTO	-	World Trade Organization

CHAPTER I
INTRODUCTION

1.1 Background and Significance of the Problem

1.1.1 Multinational Corporations and Corporate Social Responsibility

We are now living in a time of rapid globalization, the time when the rise of Multinational Corporations (MNCs) is becoming the engine of a broad and borderless market economy. Today, large MNCs have become very powerful economic and social agents. The biggest corporations have the revenue that surpasses the gross domestic product of some developing states (Scherer & Palazzo, 2008).

It is true that the role of business and its responsibility in a transnational context have been discussed for decades, long before the notion of globalization became the much talked about topic and Corporate Social Responsibility (CSR) became the buzz word in the global arena. According to Carroll (2008) who historically examined the roots of what would later become CSR since the mid-1800s as part of traditional social initiatives, studied the role of business in society alongside the industrial revolution. He marked the 1950s as the period when CSR took shape and cited the work of Bowen (1953) “Social responsibilities of the businessman” as the benchmark point of modern literature on the topic. Carroll (2008) gives the rationale for his proposition that the business during that time was very large, becoming the vital center of power and decision making which affected the lives of the public in multiple areas.

The world’s political economy which was geared towards neo-liberalization gave rise to the scope of social power that corporations have today. Thus, corporate social responsibility also arose in relation to the growth of power among corporations. (Tangsupvattana, 2012)The notion of responsibilities of business later came to prominence around the turn of 20th century when the corporations during that time appeared to the public as too powerful, anti-social and anticompetitive (Post et al., 2003).

1.1.2 The Changing Role of Business, Government & CSR

The rise of MNCs brought about the transnational risks and gaps in regulations as international communities and countries realized that their socio-economic and environmental well-beings are greatly affected by these transnational economic agents. For example, Royal Dutch Shell Plc.'s Nigerian scandal in 1993 is the much cited case to exemplify how the transnational investor could encourage the violation of human rights and the environment in the recipient country where government institutions are weak (Frynas, 2005; Livesey & Graham, 2007).

The World Trade Organizations' (WTO) trade liberalization policy and the Structural Adjustments Programs (SAPs) were implemented by developing countries as debt conditions from IMF and the World Bank. This forced the governments to liberate there protective mechanisms, down-sizing their states, and put forth the privatization of public goods. These policies have reduced the power of the developing state in managing social matters and gave greater opportunity and role for MNCs. (Scherer & Palazzo, 2008). The 1980s-90s therefore increased mobility in capital flow, enabling MNCs to exploit the regulatory differences between states and put pressure on developing countries. This pressure resulted in decreasing the labor and environmental laws by threat of relocating production sites. As a result, labor and environmental conditions deteriorated as poverty still persisted, inequality arose while food security got worse (Chandler & Mazlish, 2005; Jenkins, 2005; Utting, 2003).

Barber (2000) in his publication 'Can Democracy Survive Globalization?' proposed that the new transnational context of globalization removed capitalism from its institutional framework. He proposed that this has "domesticated" it and given the economic agents structural command and control, arguing the institutional imbalance in globalization as follows;

> *"At present, the encompassing practices of globalization have created an ironic and radical asymmetry: we have managed to globalize markets in goods, labor, currencies and information without*

globalizing the civic and democratic institutions that have historically comprised the free market's indispensable context."

(Barber, 2000: 275)

A group of academics see the rise of unregulated MNCs as a destruction of the global environment and human rights conditions. They argue that at a supra-national level, there hasn't been a sufficient global institution that can govern the MNCs. This includes the international laws that are binding at bi-lateral interactions, rather than meaning to regulate or mitigate their undesirable behaviors (Scherer & Palazzo, 2008). Globalization pressure doesn't only create regulatory vacuum but also cause the gap in governance or what Levy and Kaplan (2008) called "governance deficit". Some academics see the phenomena of the shrinking role of the state and the rise in power of unregulated MNCs during 1980s-90s. They also see it as an intended condition of a global economic system, pushed by neo-liberalist policy makers who believe in the efficiency and virtue of the self-regulated market (Frieden, 2007; Hoekman, 1995; Steger, 2009).

1.1.3 Emergence of CSR as a Self-Regulating Mechanism

While the process of globalization weakens the national regulating mechanisms and gives rise to the growth in size and power of MNCs, the public also call for a greater role of responsibility from these corporations. The contemporary discourse of CSR then emerged as a voluntary mechanism to address the corporations' activities and has been attributed to a counterbalance to the crude market liberalization of 1980s-90s (Jenkins, 2005; Parker, 1998; Utting, 2003).

The issue of 'responsibility' towards the business sector has increasingly become one of the defining features of the current neo-liberal globalization period. Movements in the public and civil society ask for MNCs to demonstrate more responsibility, accountability and transparency. These movements are increasingly influencing MNCs behavior. Optimistically, Haufler (2001: 2) described CSR as "a potential new source of global governance, that is, mechanisms to reach collective

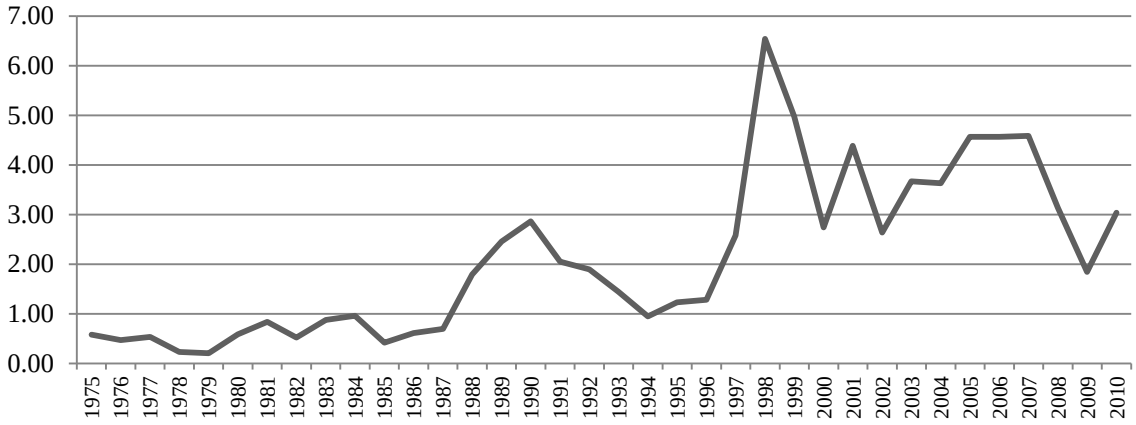
decisions about transnational problems with or without government participation" . While Levy and Kaplan (2008: 445) points out that it also represents the contested terrain in global governance. They argue that CSR is the privatization of governance which displaces the regulatory authority of the state. This is often steered toward public relations in an attempt to create corporate's license to operate or has been instrumentally utilized to increase firm's competitive advantages rather than democratic form of governance.

Chapple and Moon (2007: 184) discuss the debating issues around MNCs and CSR that have been presented around the world and conclude the two sides of the argument on this topic: The first camp proposes that globalization induces irresponsibility of business and encourages the exploitation of the weak environmental and social regulatory standards where the governance institutions are debilitated, while another perspective argues that MNCs improves the responsibility standard through the transfer of best practice onto the local subsidiary. It is the multinational firm that has the power and resources to promote CSR or invest in environmental management systems. Alternatively, another group also proposed that the reality is not so polarized. Some MNCs can be responsible in some part for their operations and irresponsible in other parts, and their performances are contingent on the strategy of their interactions with local conditions.

1.1.4 Thailand and Japanese Automotive MNCs

Thailand has always relied on Foreign Direct Investment (FDI) as one of the tools for economic development, particularly after the financial crisis in 1997. As seen in Figure 1, the net inflows of FDI accounts for 6.54 % of GDP in 1998. According to the FDI record from the Board of Investment of Thailand (BOI), the country with the highest investment in Thailand and the most during 2003-2011 is Japan. The 'Metal Products and Machinery' which includes the investment for the automotive industry is the sector with highest value of investment. (Board of Investment of Thailand, 2012b)

Figure 1 Foreign Direct Investment in Thailand, Net Inflows Unit: % of GDP



Source: The World Bank (2012)

Table 1 Foreign direct investment, net (BoP) Unit: Current US$ million)

	1970-79	**1980-89**	**1990-99**	**2000-09**	**2010-11**
Japan	-6,650	-142,537	-224,457	-443,764	-176,021
China		11,134	259,852	765,864	124,930
Korea	225	-183	-2,415	-48,982	-35,073
Malaysia	2,781	9,647	39,891	-9,137	-8,334
Thailand	371	4,825	27,404	51,067	4,156
Philippines	318	2,141	10,196	10,976	1,935
Indonesia		3,083	19,229	6,268	21,543
Singapore	2,278	16,914	38,349	54,004	18,898
India	-18,032		14,144	79,773	11,008

Source: The World Bank (2012)

Table 2 The Total Value of FDI into Thailand - By Country Unit: Billion Bath

	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Japan	97.5	125.9	171.8	115.3	164.3	106.1	58.9	100.3	158.9	1,099.1
USA	24.5	30.3	8,.6	71.4	101.1	8.7	25.5	6.2	9.2	285.9
EU	24.9	30.4	32.3	13.3	51.2	48.5	13.4	63.9	16.7	294.8
Singapore	6.7	18.2	14.4	18.7	34.4	25.3	14.7	19.1	25.1	176.9

Source: Board of Investment of Thailand (2012b)

Table 3 The Total Value of FDI from Japan into Thailand - By Sector Unit: Billion Bath

Sector	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Agricultural Products	3.4	4.5	3.7	1.5	5.4	4.8	10.1	4.3	8.1	46.2
Minerals and Ceramics	1.9	1.0	2.6	1.5	17.3	8.4	2.8	1.2	14.9	51.9
Light Industries/Textiles	2.8	4.4	2.2	1.6	2.1	3.4	1.2	0.6	4.0	22.6
Metal Products and Machinery	50.9	51.2	127.1	45.3	77.7	64.1	19.7	29.9	66.8	532.4
Electric and Electronic Products	18.5	32.2	20.1	33.5	32.1	14.2	15.8	46.3	36.8	249.9
Chemicals and Paper	14.7	27.7	11.8	26.1	18.6	7.2	5.1	8.6	25.7	146.0
Services	5.1	4.6	4.0	5.4	11.4	3.7	3.8	9.1	2.3	49.8

Source: Board of Investment of Thailand (2012b)

Over the three decades from 1970-2000, the Thai government formed a policy to develop Thailand as a regional hub for world class automotive production. Kohpaiboon (2008) and Wad (2009) regard the excessive growth of Thai-based automotive MNCs to export-oriented policies and the favorable economic environment. These policies include the 'policy-induced incentives' and the abolition of foreign ownership restrictions after the financial crisis in 1997. This allowed the full ownership over subsidiaries of foreign automotive MNCs, together with the removal of the local content requirements in 2000. These factors attracted the Japanese leading automotive MNCs into Thailand and led to the milestone of over one million units of production volume in 2005, transforming Thailand into a regional hub of global one-ton pickup truck production.

Table 4 Thailand Vehicle Production Unit: Car

YEAR	TOTAL	PASSENGER CAR	TRUCK			VAN / BUS / OPV
			PICKUP 1 TON	DOUBLE CAB	OTHER TYPES	
1993	419,831	144,449	230,752		42,044	2586
1994	434,001	109,830	267,055		54,232	2884
1995	525,680	125,916	327,437		67,252	3351
1996	555,821	136,727	350,857		64,681	1704
1997	358,686	111,937	218,336		27,395	914
1998	143,250	19,078	119,986		3,549	637
1999	321,411	72,716	240,369		8,245	81
2000	405,761	97,129	294,834		13,798	
2001	454,797	156,066	289,349		9,111	271
2002	564,392	169,321	229,000	145,407	20,276	388
2003	750,512	251,684	304,839	160,221	24,548	9220
2004	960,371	299,439	399,006	220,127	36,676	5123
2005	1,125,316	277,603	443,680	317,185	86,436	412
2006	1,193,885	298,819	451,753	367,801	75,240	272
2007	1,301,149	329,223	437,626	468,112	65,610	578
2008	1,391,728	399,435	423,433	504,905	63,579	376
2009	999,378	313,442	258,194	352,859	74,425	458
2010	1,645,304	554,267	392,996	558,424	139,025	592

Source: The Thai Automotive Industry Association (2012b)

Table 5 Thailand Vehicle Production / Domestic Sale / Export Unit: Car

Year	**Production**	**Domestic Sale**	**Export**
2000	411,721	262,189	152,835
2001	459,418	104,502	175,299
2002	584,951	409,362	181,471
2003	750,512	533,176	235,122
2004	928,081	626,026	332,053
2005	1,125,316	703,405	440,705
2006	1,188,044	682,161	538,966
2007	1,287,346	631,251	690,100
2008	1,394,029	615,270	776,241
2009	999,378	548,871	535,563
2010	1,645,304	800,357	895,855

Source: The Thai Automotive Industry Association (2012a)

According to the above information, the aim of this research is to study the influence of Japanese Automotive MNCs as the global agent in CSR policy formulation and implementation. In the context of Thailand, **Toyota Motor Thailand Co., Ltd. (TMT)** is a significant agent of Japanese Automotive MNCs in Thailand due to its size and socio-economic influence in the country.

TMT is the subsidiary of **Toyota Motor Corporation (TMC),** the world's largest automobile manufacturer in 2010 by production (OICA, 2011). It is also the market leader in the automotive industry in Thailand with the highest domestic market share and production. The sales quantity of the company in 2011 is more than 670,000 vehicles and the sales revenue amounts to 389,380 million Baht with a market share of 41.39% in Thailand (Toyota Motor Thailand, 2012c).

In 2010 the Toyota manufacturing base in Thailand produced 629,944 vehicle units which represent 7.3% of Toyota's 2010 worldwide production (Total 8,557,351 units).

Table 6 Toyota Motor Thailand's Income and Profit (Unit: Million Baht)

Period	Apr'03 – Mar'04	Apr'04 – Mar'05	Apr'05 – Mar'06	Apr'06 – Mar'07	Apr'07 – Mar'08	Apr'08 – Mar'09	Apr'09 – Mar'10	Apr'10 – Mar'11
Income	152,333	200,812	306,148	304,073	320,265	298,273	313,316	389,380
Net Profit	4,695	11,345	16,956	9,638	10,718	11,005	9,175	24,341

Source: Toyota Motor Thailand (2012c)

Considering the size and the production volume, we conclude that TMT provides a good representation of Japanese Automotive MNCs in Thailand.

1.2 Problem Statement

At present globalization that lacks an effective mechanism to govern the transnational economic agents, therefore it is crucial to explore the potential of CSR as tool to govern these insufficiently regulated MNCs. Particularly in developing countries who are usually the recipients of FDIs and the hosting countries of MNCs

subsidiaries. Further study needs to be conducted to examine the process and potential of CSR.

As shown through the studies and statistics, the Japanese automotive MNCs, especially Toyota Motor Thailand (TMT), hold great importance in Thailand's economic development. However, there is still not enough research that adequately examines the information of the CSR practice of MNCs in Thailand. A study on this topic will contribute to the ongoing debate over the CSR of MNCs and may shed light on how they layout the strategic CSR policy as the global agents, while interacting with the local institutional environments.

1.3 Research Questions

- What are the CSR policies and practices of Toyota Motor Thailand?
- Do the CSR policies and practices of Toyota Motor Corporation improve the responsibility standards in its Thai subsidiary?
- How does Toyota Motor Corporation interact with Toyota Motor Thailand and the Thai national institutional factors relating to CSR policy and practice?

1.4 Research Objectives

- To study the policy and implementation of CSR by Toyota Motor Thailand.
- To assess whether the Toyota Motor Corporation's CSR can be used as a tool to improve the responsibility standards in Thailand.
- To analyze the process of globalization in the CSR management of Toyota Motor Thailand.

1.5 Concept & Theories

1.5.1 CSR Definition & Practice

Due to the contested terrain of CSR and its voluntary nature, trying to review the literature of how CSR has been defined can be problematic. What effects that these definitions have on the scope of CSR, one would find that there is still no common ground in the academic world about how the term should be coined. The definition of the Corporate Social Responsibility is still subjected to interpretations. (Dahlsrud, 2008; Levy & Kaplan, 2008)

Despite the lack of a clear definition of CSR, it is somewhat agreed that the following distinguished characteristics help to describe CSR; Initiated by the corporation; voluntary (beyond legal mandates and regulatory requirements); discretionary (the company sets the budget and chooses the activities); and managed by the firm as a form of stakeholder engagement and risk management tool. (Sagebien & Whellams, 2010)

Over the past several decades, CSR has evolved from a narrow perspective into a wider and more complex set of ideas. To summarize the various concepts, there are three distinguished perspectives on business responsibilities: The classical view, the managerial view and the public view (S. L. Holmes, 1976).

The *Classical View* takes notion form of Milton Friedman's classic market fundamentalist stance, stating that "there is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game"(Friedman, 1970). He regarded business as isolated from other kinds of activities in the society and public matters should be managed through other social institutions.

The *Managerial View* sees the managers of business as people who hold responsibility not only to shareholders but also the customers, suppliers and local community. This view could be regarded as the 'stakeholder approach', and Freeman (1984) was accredited as the creator of the 'stakeholder theory of the firm' which

describes the corporate responsibilities by looking at various groups that have legitimate interests in the corporation. Freeman's main point is that the companies are not simply operating at the interest of the 'shareholders' but also 'stakeholders', which are defined as "any group or individual who can affect, or is affected by, the achievement of the organization's objectives" (Freeman, 1984: 46)

Lastly, the *Public View*, which considers the interests and well-being of society as a whole and that business should operate in harmony with public interests.

One of the most commonly applied definitions of CSR is by the World Business Council for Sustainable Development (WBCSD): "Corporate Social Responsibility is the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large." (WBCSD., 1998) The WBCSD expands the scope of responsibility to cover society as a whole. The main principle is on voluntary commitment to the greater good of the public and stakeholders while maintaining economic development.

In the context of the European Union (EU), the Commission of the European Communities defines CSR as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." It means that by being responsible, enterprises decide to "not only fulfilling legal expectations, but also go beyond compliance and investing 'more' into human capital, the environment and the relations with stakeholders" (Commission of the European Communities, 2001: 6)

1.5.2 Types of CSR Activities

Carroll (1991) classifies CSR practice into four categories. These four categories are economic, legal, ethical and philanthropic responsibilities and he describes them in the form of a pyramid, placing the economic and legal responsibilities at the bottom (fundamentals) and the ethical and philanthropic

activities at the top (voluntary). Another view is from Wood (1991), he proposes three types of CSR behaviors as environmental assessment, stakeholder management and issues management.

In this study, the proposition on categorization of CSR activities from Olsen and Gitsham (2005) will be adopted. This framework divides CSR activities into seven groups to explore the coverage of CSR policies and activities.

Table 7 Main Groups of CSR Activities by Olsen and Gitsham (2005)

	Category	Content / Classes of Activities / Items
1	Leadership, vision and values	Setting a clear direction and leading by putting CSR at the center of the enterprise. It is related to all the other main groups of CSR activities o Defining and setting purpose, values and vision - Incorporating CSR into the enterprise's purpose (or mission) - Incorporating CSR into the enterprise's values. - Incorporating CSR into the enterprise's vision. - Aligning purpose, values and vision - Involving relevant stakeholders - Gaining commitment from key constituents o Translating it into policies and procedures - Developing business principles / Code of conduct - Developing policies - Integrating CSR into strategy - Integrating CSR into corporate governance - Integrating CSR into management systems o Putting it into practice including empowering and embedding - Empowering people - Providing necessary training and development - Instilling a culture of responsible business practice - Aligning remuneration - Using values-based leadership o Ethical leadership and championing - Defining a clear position on political contributions - Lobbying transparently. - Combating corruption and bribery - Refraining from aggressive tax-avoidance - Being a leader and advocate for business engagement into CSR
2	Marketplace activities	Issues of relevance to the markets in which the enterprise operates. o Responsible customer relations including marketing and advertising - Avoiding misleading marketing and advertising - Providing good and clear product information - Avoiding offensive advertising - Promoting diversity and inclusivity through marketing activities - Screening customers for acceptable behavior

Category	Content / Classes of Activities / Items
	- Engaging in cause-related marketing - Listening and responding to customer feedback and complaints - Involving customers in improvements o Product responsibility - Ensuring product safety - Addressing potential misuse of products - Protecting vulnerable customers - Considering product life cycle - Incorporating CSR impacts in product innovation o Using CSR product labeling - Marketing environmentally friendly products - Marketing products respecting human and labor rights - Marketing fair trade products o Ethical competition - Avoiding anti-competitive behavior - Ensuring fair prices - Ensuring affordable prices - Avoiding aggressive selling practices o Making markets work for all - Ensuring accessibility - Engaging in “Base of the Pyramid” activities
3 Workforce activities	Fair treatment of employees by the enterprise and is often related to attraction and retention of employees. o Employee communication and representation - Respecting rights to free assembly and collective bargaining - Listening to and involving employees - Ensuring grievance resolution - Enabling whistle blowing - Combating harassment and bullying - Respecting privacy o Ensuring employability and skills development - Provision of training and development opportunities - Planning career development - Promoting knowledge management and organizational learning - Conducting job appraisals o Diversity and equality - Promoting a diverse workforce - Promoting non-discrimination - Providing equal access to employment opportunities - Ensuring career development for the disadvantaged o Responsible / fair remuneration - Paying employees fairly - Ensuring equal benefits - Paying a living/minimum wage o Work/life balance - Addressing work/life balance - Offering flexible working - Providing stress management

	Category	Content / Classes of Activities / Items
		o Health, safety and wellbeing - Promoting health and safety - Promoting health and wellbeing - Enabling child care, elder care and caring for employees - Providing support programmes - Dealing with HIV/AIDS in the workplace o Responsible restructuring - Consulting on restructuring - Promoting job-sharing - Promoting voluntary redundancies - Applying planned restructuring - Providing support
4	Supply chain activities	Enterprise's suppliers, whose social and environmental performance can be reflected in the enterprise's end products or services by virtue of the supply chain. o Being a fair customer - Listening to and working with suppliers - Agreeing honest and fair terms with suppliers - Ensuring fair pricing o Driving standards through the supply chain - Screening suppliers for compliance with social and environmental standards - Monitoring social and environmental performance of suppliers - Applying CSR standards throughout the supply chain - Promoting fair trade - Setting targets for suppliers - Embedding policies to exclude child and forced labor o Promoting social and economic inclusion via the supply chain - Providing access for suppliers run by minority groups - Providing access for small and local suppliers - Stimulating a sustainable local economy
5	Stakeholder engagement	Stakeholders include people and organizations that can be affected by or can influence the activities of the enterprise. They are typically owners, employees, customers, suppliers, local communities, authorities etc. o Mapping key stakeholders and their main concerns - Mapping stakeholders - Gathering available knowledge on stakeholder's concern - Prioritizing stakeholders - Planning consultation o Stakeholder consultation - Engaging in employee consultation - Ensuring customer feedback - Establishing complaints procedures - Conducting stakeholder surveys - Engaging in local community liaison - Conducting focus groups - Communicating and liaising with business partners - Participating in public policy debate

	Category	Content / Classes of Activities / Items
		- Partnering with public authorities o Responding and managing to stakeholder issues - Setting commitments, targets and goals for CSR activities with stakeholders - Deploying and enabling resources - Overseeing stakeholder CSR activities - Identifying and managing risks - Measuring outcome - Using management guidelines with a CSR element o Transparent reporting and communication - Establishing appropriate communication and reporting channels - Demonstrating openness and transparency - Using leading guidelines on CSR reporting - Getting external validation - Using quality assurance methods
6	Community activities	Community activities (Corporate Community Investment - CCI) are related to promoting the health and wellbeing of the communities in which an enterprise operates in the broadest sense. o Giving cash - Donating, charity - Sponsoring projects & events - Engaging in partnerships for social investment. o Giving employee time - Allowing employee volunteering. - Encouraging employee to engage in part-time project - Using full-time secondment - Co-coordinating project in giving of employee time o Giving gifts - Providing facilities - Loaning facilities and assets - Giving assets or products o Being a good neighbor - Liaising with local communities. - Promoting social cohesion in the community. - Minimizing adverse effects of local operations to local communities
7	Environmental activities	Environmental management requires an understanding of the impacts arising from all areas of an enterprise's activity. This is about policies, operational management and reporting in relation to environmental impacts from all the enterprise's activities o Resource and energy use - Running awareness initiatives - Using 'green' technologies - Improving energy efficiency - Purchasing 'green' materials - Using locally generated renewable energy - Considering broader scope of ecology and biodiversity o Pollution and waste management - Treating emissions

Category	Content / Classes of Activities / Items
	- Re-engineering processes - Reusing and recycling - Managing localized environmental pollution o Environmental product responsibility - Managing the supply chain in environmental aspect - Assessing impacts in product life-cycle - Certifying and labeling products - Reducing packaging - Using product take-back schemes - Addressing GMO issues on environment o Transport planning - Reducing goods transport - Reducing employee travel, using teleconferencing

Source: Olsen and Gitsham (2005)

These main groups are constructed from extensive field experience and research conducted by the Ashridge Business School in order to gather categories of CSR from international organizations, associations and EU-based companies. The authors also noted that there is still considerable overlapping between these groups. Nevertheless, the categorization was proven to be very relevant with practical CSR activities and has been used as a scope of study by many researches (eg. Kramer et al., 2005; Sweeney, 2009; TNS Gallup, 2005)

1.5.3 The Globalization Process: Convergence, Divergence, and Hybridization

One of the most common fields of globalization is the study of process and interaction between transnational forces and local resistance. On one side, there is a notion which proposes the world will converge upon common models of organization, consumption, culture, and politics (eg. Levitt, 1983), however, another group suggests that cultural values, path dependencies, and the advantages of differentiation will mitigate this effect, causing greater divergence (eg. Whitley, 1994)

Matten and Moon (2008) propose the process of globalization has various effects on CSR in both converging and diverging manners. The convergence force in CSR is mainly driven by global institutional pressure, while the divergence force is performed in a dividing manner by the different National Business Systems (NBS). Although this proposition is constructed from observations made among western developed countries, they predict that is a process that could happen globally.

They also note that in developing country context where there are weak institutions and poor governance mechanisms, the convergence force driven by transnational economic agencies such as MNCs may become stronger when compared to local resistance. The degree of how strong this force is may depend on the strength of traditional institutions of those nations (e.g., family, religious, and tribal institutions) (Matten & Moon, 2008: 418).

Like other political debates, the empirical evidence is less polarizing and more mixed. The process which combines elements of both convergence and divergence forces is sometime referred to as ‘hybridization’ (or crossvergence) of CSR in developing countries context, whereby transnational convergence and local divergence forces are interacting together. (Jamali & Neville, 2011)

1.5.4 Institutional Framework of "National Business System"

Matten and Moon (2008) propose that divergence that creates differences in CSR that can be explained by the 'National Business System' (NBS). This notion was originated by Richard Whitley (Whitley, 1999 cited in Matten and Moon, 2008). Therefore this research will partly adopt the analytical approach of NBS due to the framework's objective which is to explain how business is embedded in its institutional surroundings.

Whitley (1999) explains that there are varieties of capitalism, which remain divergent despite the alleged converging tendencies associated with globalization. He seeks to grasp this diversity through the concept of a 'business system', which focuses on the ways that different institutional factors create diverse conditions for doing business. The framework concerns the identification and differentiation of units of decision-making and the associated action. The framework that he proposes contains a multi-level analytical approach which Matten and Moon (2008) simplified and compared with other similar institutional frameworks in the 'varieties of capitalism' approach (Hall & Soskice, 2001; Hollingsworth & Boyer, 1999; Maurice & Sorge, 2000). They then formed an adapted model for institutional analyses of CSR. The four key institutional structures of NBS by Matten and Moon (2008) consist of 1) **Political System**, 2) the **Financial System**, 3) the **Education and Labor System**, and 4) the **Cultural System**.

These institutional structures are considered central characteristics that form business environments and influence the nature of firms, their strategic choices, their actions and the ways in which firms and other actors engage in economic activities. This model from Matten & Moon becomes the basis of theoretical framework in this research.

According to Matten and Moon (2008), three main business organizational characteristics of a firm are formed and interact with the NBS institutional environments.

Organizational Characteristics of Firms

The "**Nature of the Firm"** is the institutional framework of a country determines key structural features of the firm including:

- The degree to which private hierarchies control economic processes.
- The degree of discretion owners allow managers in running the company.
- Organizational capabilities to respond to changing and differentiated demands.

The **"Organization of Market Processes"** is how the economic relations between actors are organized and coordinated. The two extremes here being markets and alliances. The characteristic features include:

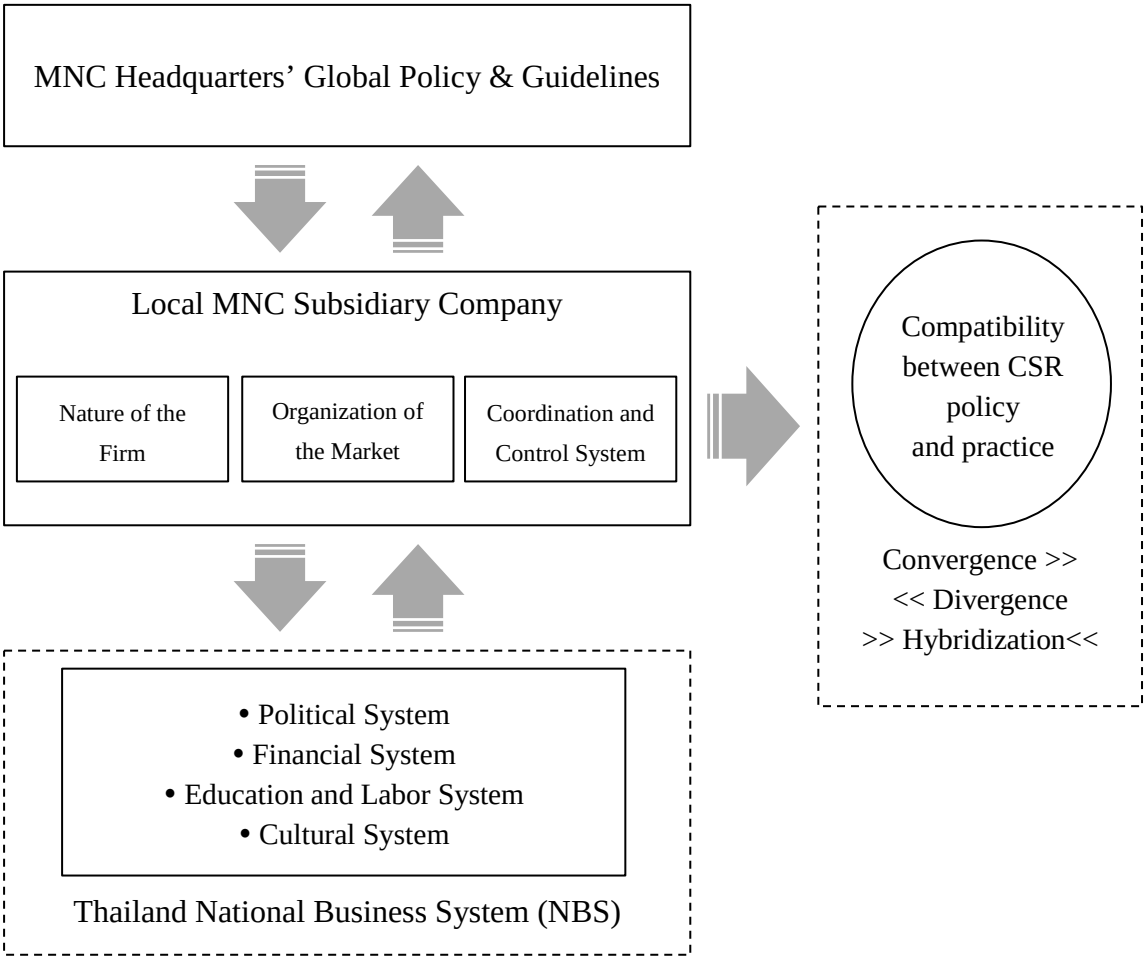
- The extent of long term cooperation between firms within sectors.
- The role of intermediaries in establishing market transactions.
- The role and influence of business associations.
- The role of personal relations.
- Trust in establishing market transactions.

"Coordination and Control systems" Finally, NBSs differ considerably in the way companies are governed. Key characteristics of coordination and control systems in NBSs would include:

- Degree of integration and interdependency of economic processes.
- Anonymity of employer-employee relations.
- The degree to which delegation takes place and trust governs relationships.
- The level of discretion in the task environment of employees.
- The degree of responsibility of managers towards employees.

1.6 Conceptual Framework

Figure 2 The Integrated Model of Conceptual Framework for this Study



An integrated model for this study has been built, combining the concepts of the globalization process, the NBS institutional analysis, and classification of CSR activities. The "MNC Headquarters' Global Policy & Guideline" were placed as a global agency influencing the force of convergence in management of CSR. On the other opposite side of this model, the "Thailand National Business Systems" were placed as the local environment creating the force of divergence. Between these two forces, the "Local MNC Subsidiary Company" acts as an intermediary organization which combines both forces and produces the local policy and practice for its CSR activities in Thailand.

1.7 Hypothesis

- The CSR policy and practice of Toyota Motor Thailand will cover all seven groups of CSR activity as the corporation has power and resources to promote CSR and invest in responsibility management systems.

- The CSR policy and practice of Toyota Motor Corporation will improve the responsibility standards due to the global convergence forces which will induce the local standards to be more compatible with international norms.

- The interaction between Toyota Motor Corporation, Toyota Motor Thailand and the Thai NBSs, will be in the form of the hybridization, with inclination towards convergence.

1.8 Research Methodology

Since the NBSs, by definition are context specific and varying, the process of globalization needs a content analysis approach and CSR activities are also highly contextual. The questions over CSR activities therefore require a detailed and broader perspective in the analysis method.

The qualitative research methodology offers the detailed descriptions of activities, situations and interactions on the subject of study. It is a suitable tool to study the social process and allow researchers to explore ‘why’ and ‘how’ these particular activities are encouraged. Qualitative methods provide a more in-depth and holistic approach to pursue the answer due to its open-ended nature and subjectivity (Barbour, 2007).

In this study, the qualitative research methodology is adopted. The research is aimed at assessing why certain CSR activities are undertaken by the selected MNC in Thailand through the globalization process. Also, what role the global forces and local institutional determinants play in CSR policy formulation.

The Chapter III in this thesis will further elaborate on the details of methodology, research design, scope of study, data collecting tools and analytical techniques.

1.9 Significance of Research

In the case of Toyota Motor Thailand, this study will allow for a better understanding of the MNCs CSR practice in a developing country in relation to globalization topics. For example, the potential of utilizing MNCs as a mechanism to elevate the CSR standards, how the global actor interacts with local institutional factors, and how these forces shape and form the CSR practice. Moreover, the study will contribute to the discussion on CSR as the new governance tool in the self-regulating market economy.

At the instrumental level, companies who are practicing or interested in performing CSR could benefit from the result from this study, especially firms which operate in a cross-national context and have to deal with the different local institutional issues. It will describe how different national backgrounds influence the CSR agenda. This thesis will then serve as a case study which will allow CSR practitioners and policy makers to improve their CSR profiles. Also for governments or other institutions to build the policy that could further encourage better corporate responsibility performance.

The study aims to encourage the movement in the academic arena to analyze CSR not only in philosophical or managerial terms but also concerning the political perspective of this field. This work points out CSR as a tool in managing social issues in the absence of weaknesses in local government institutions.

CHAPTER II
LITERATURE REVIEW

CSR is often seen as a response to pressure from outside stakeholders that may be adversely affected by company practices, or as a proactive attempt by firms to pre-empt or at least mitigate these pressures and enhance the reputation and value of the corporation.

For CSR research, the lack of clarity in definition is compounded by the problem that the meanings and practices of CSR are varying across contexts. This appears as an obstruction for constructing a body of knowledge or theorization. (Kang & Moon, 2012).

In spite of extensive research on CSR and its link with economic and social performance very few studies have investigated the institutional determinants of corporate social responsibility (Jones, 1999; Stanwick & Stanwick, 1998). Corporate social responsibility (CSR) discourse has, in the mainstream, been dominated by managerialist thinking (Amaeshi & Amao, 2009). This managerialist approach to CSR tends to place managerial choice and management efficacy at the heart of the organizational study of CSR.

While the managerialist approach could be a way of discussing and understanding the contemporary CSR movement, it tends to place excessive emphasis on managers, as actors who appear to display unlimited powers in enacting their practices. On the other hand, can appear to downplay the constraining and enabling characteristics of the institutional contexts in which these managerial practices are embedded and enacted. In other words, the managerialist approach to CSR tends to dominate and hinder other useful perspectives in the existing literature. One of these views that have been marginalized for a long time now is the institutionalist perspective. This emphasizes the role of contexts in shaping and influencing managerial practices (Lounsbury, 2008).

2.1 Institutional Analysis of National Business System in CSR Literature

Since the last decade, interests in the institutional dimension of CSR practices have begun to emerge (e.g. Aguilera et al., 2007; Campbell, 2006; Jackson & Apostolakou, 2010; Matten & Moon, 2008). A common strand that runs through most of these studies, suggests that meaning and practice of CSR is institutionally bounded and the dissimilarity in national institutional arrangements affect the scope and practice of CSR.

Institutional theory sees corporations as being embedded in a nexus of formal and informal rules (North, 1990) ranging from coercive political regulation to less formal constraints, such as normative pressures to establish legitimacy. It has been said that the social responsibilities of corporations which differ among countries are likely to do so because they "remain contextualized by national institutional frameworks"(Matten & Moon, 2008), which form the "National Business Systems"(Whitley, 1999).

Whitley (1999) is accredited as the scholar who originated the National Business System (NBS) as the framework to understand the institutional context which businesses interact upon. It has the power to form the organization's behavior in a certain way. The concept centers on the belief that firms do not act in a social vacuum, but are the economic actors embedded in society and affected by numerous influences from the environment. The majority of these influences are linked to the nation which the firm is operating in. Whitley's model provides researchers with a unified set of criteria to compare NBS and point out that certain technologies, management practices etc., are the product of a particular business system and explain how their implementation in other business systems can lead to problems (Matten & Moon, 2008).

Institutional literature on CSR that studies the policy and implementation of how CSR is conducted across contexts has highlighted significant differences in their scope and practices. The most important is "why" and "how" these cross-national differences occur. Matten and Moon (2008) attempt to bridge this gap by adopting the

NBS framework of Richard Whitley (1999), simplified and adapted it to be used as conceptual framework of their comparison between European and American CSR and propose the method as a way to explain the differences in CSR across countries. The core content of their publication is to explain why CSR in US corporations has largely been explicit, whereas CSR in Europe has until recently, been mostly implicitly expressed and implemented. They propose that as it is the "longstanding, historically entrenched institutions" (Matten & Moon, 2008: 406) that shape differences in NBS, these institutions influence the ways in which corporations express and pursue their social responsibilities among different societies.

Chapple and Moon (2005), in their analysis of website reporting of CSR in seven Asian countries (including Thailand), confirm that there is no single pattern of CSR in Asia and that the differences cannot be explained by cross-national differences in the level of development. They suggest that CSR is instead dependent on national factors and also find that international companies adapt their CSR to the specific national contexts of their host Business Systems (Chapple & Moon, 2005). Since this, Chapple and Moon's work was conducted quantitatively and intended to reveal the picture of current phenomena rather than trying to look at the process of adaptation in qualitative manner. It will be important to analyze this statement in the context of present research, in order to ascertain whether international companies adapt their CSR to the NBS in their host, how it is adapted and to what extent the CSR is influenced by the NBS of their origin countries.

Maignan (2001) who has also studied CSR's relation with institutions, finds that even consumer perceptions of CSR are influenced by national institutions. She compares consumers' understanding of and reaction to Corporate Social Responsibility in France, Germany and the U.S. By using George C Lodge's description of 'national ideologies' (Lodge, 1990 cited in Maignan, 2001), she proposes that the US was classified as having an individualistic ideology, where short-term betterment of individuals is valued. France and Germany were described as being orientated towards communitarian. Maignan (2001) finds that consumer perceptions of CSR are indeed influenced by these national ideologies, as French and German consumers are more likely to support socially responsible corporations, and

place less importance on the economic responsibilities of corporations, while the converse is found to be true among US consumers (Maignan, 2001).

Campbell (2006) in his analysis of what influences CSR, also highlights institutions as being a key driver. He proposes that state regulation is the important institution influencing CSR, where corporations will be more likely to act in socially responsible way if there are strong and well-enforced state regulations in place to ensure such behavior. This is a factor that, as shall be found, holds great relevance in the context of the present study. He also proposes that more normative institutions also influence CSR, for instance, the normative understanding of employees as being key stakeholders in Japan. He therefore proposes that corporations will be more likely to act in socially responsible way if they operate in an environment where normative calls for such behavior are institutionalized (Campbell, 2006).

Aguilera et al. (2007) further reiterate this point by illustrating that because business organizations are embedded in different national systems, they will experience divergent degrees of internal and external pressures to engage in social responsibility initiatives. For instance, the Anglo-American national model is characterized by dispersed ownership, expecting short term returns, strong shareholder rights and arm's length creditor financing through equity. On the other hand, the EU Continental model is characterized by long-term debt finance and ownership by large holders. These distinguished features encourage different perspectives on CSR. The authors propose that shareholders in the Anglo-American model will support CSR when it will give rise to short term benefits, perhaps by protecting or improving corporate reputations, while maintaining social legitimacy. Corporate owners in the EU Continental model on the other hand are inclined to promote more long term strategies that will benefit a wider range of stakeholders, as they are not concerned with reaping short term profits comparing to the US model of financial arrangements (Aguilera et al., 2007).

Marens (2012) extends the work of Matten and Moon (2008) by taking a deep analysis on which institutional differences in the NBS model generated divergence forces. Marens concludes that the key institutional determinant in US context is the

Education and Labor System, claiming the collapse of American labor power by the large corporations during the late 20th century. He also attributed this defeat to the political institutions which are the structural defects in the democracy and regulatory systems. This circumstances also brought about the call for responsibility from the public and increasing need for creating acceptance, resulting in the proliferation of explicit CSR concepts and practice by the turn of 1920s.

2.2 CSR Convergence, Divergence, Hybridization

In regards to the discussion over convergence and divergence of CSR in globalization, there is an ongoing debate of how MNCs should develop their CSR strategy in each local context. Whether the centralized strategy of CSR practices, which are managed towards standardization (convergence), are better than the CSR practices that are tailored and localized to be more responsive to the local institutions (divergence).

Muller (2006) discusses the pros and cons of these different approaches and suggests that convergence induces the transfer of proactive CSR practices through MNC's worldwide subsidiaries but could create conflict at local level due to it unresponsiveness and incompatibility. While localized CSR could create fragmentation and if the local countries bear lower CSR standards, it will enable the situation that lead to irresponsibility.

Surprisingly, the study from Muller (2006) found that in the context of Mexico where there are lower standards and regulations, the divergent mode of decision-making is associated with higher local CSR performance. However, the author also points out that results are very firm-specific and the issue needs further studies to include other factors which haven't been taken in account in his research.

Table 8 Global Convergence vs. local Divergence of CSR in MNCs

	Advantages	Disadvantages
Global Convergent CSR	• Upward harmonization of CSR standards internationally • Globally integrated and standardized strategy • Policies, processes, and structures consistent across cultures	• Insensitivity to local needs • Reduced ownership and legitimacy • Compliance based strategies that are tailored to end of pipe controls • Approaches that live up to minimum host requirements
Local Divergent CSR	• Nationally responsive and adapted to local context • Tailored to local cultural differences and preferences	• Fragmented inconsistent and reactive strategies • Lack of clear responsibility and internal tensions • Approaches that live up to minimum global requirements • High coordination and control necessary

Source: Jamali (2010: 184) summarized from Husted and Allen (2006); Muller (2006)

Husted and Allen (2006) quantitative result from Mexico suggests that the level of convergence/divergence relates to the typology of MNCs. This includes the level of integration from multinational firms into the operation, production, ownership and marketing structure in a domestic context. Local divergent CSR is more adopted by firms which have more domestically-integrated structure.

Many studies regard the differences of CSR in developing countries as attributed to the less organized civil society, lack of local consumer interest and controlled media, combined with the lower/inefficient regulatory and enforced legislation in social and environmental issues (Jamali & Mirshak, 2007; Visser, 2008; Wanderley et al., 2008). In addition, low education and awareness, as well as cultural influences on management and relevant stakeholders are also identified as significant to the adoption and implementation of standardized CSR. They also recognize that

religion can also entail a strong influence on the individual's perspectives around CSR and sustainability (Brammer et al., 2007).

Although it may seem that CSR literatures on NBS have failed to take into account the effects of the global converging process, they tend to direct more attention to the forces and interactions in the local institutional environment. In Matten and Moon (2008), the authors also note that there is increasing adoption and standardization of explicit CSR in Europe through coercive isomorphism, mimetic processes, and normative pressures. However, Europe's "new explicit CSR" still reflects respective divergent national institutional framework that represents a mixture of both forms. As for Aguilera et al. (2007), the study suggests that global spread of CSR practices is not isomorphism, but rather is "a modification process, referred to as translation whereby CSR principles and practices imported from elsewhere are adjusted to the local conditions in the process's implementation".

Misani (2009) study explains why corporations in the steel industry attempt at encouraging converged standards of voluntary schemes rather than differentiate its policy to create distinct competitiveness. He concludes that CSR in an carbon emission intensive industry is driven by the pressure to conform instead of the pressure to perform. Most firms focus on social practices that are both efficient and legitimate, and are open to collaboration with rivals in order to avert shared risks or to defend the reputation of their industry. Even firms that want to be innovative may be forced by stakeholder demands to conform to low risk practices.

Jamali and Neville (2011) examine the convergence versus divergence of CSR in developing countries using case studies in Lebanon. They analyze it through the multi-level model of institutional flows, combing elements from analytical frameworks of Matten and Moon (2008) and Scott (2008). The renewed framework classified the field of study into three levels; actors, organizational field, and global environment. The empirical findings reveal a mixed result representing both convergence and divergence. The authors then describe the widespread global convergence form of CSR as 'cosmetic' because underneath the surface, there are underlying dependencies on national institutional environments. These are resistant to

substantive change driven by the traditional patterns and religious beliefs. In the recommendation chapter the authors urge policy makers to strengthen the institutional environment that encourages convergence as it could pave ways to a considerable improvement in CSR standards.

2.3 CSR in Thailand

Studies of CSR in Thailand reflect the majority and trend of CSR researches in the global arena as they mainly focus on the managerial issues and strategic use of CSR to create competitive advantages. The research has shown that the proactive CSR practice in Thailand tends to be limited to large organizations with a strong impact to the economy, society and environment. This is especially the case with those ranked among the top five in major industries, including construction materials, energy, and food. (Kraisornsuthasinee & Swierczek, 2009) These big companies have won local and international awards for CSR (Virakul et al., 2009).

Traditionally, it is found that the emergence of CSR in Thailand shows various interpretations and a greater emphasis on community involvement than on the production process. The study of Kraisornsuthasinee and Swierczek (2009) later shows that the corporate leaders are learning to integrate CSR into their core business practices more deeply than previously found in their earlier study in 2006. (Kraisornsuthasinee & Swierczek, 2006) the result also indicates that the competitive advantage from strategic CSR encourages Thai companies to achieve an advanced level of CSR from the developed economies (Bhattacharya & Sen, 2004). At the same time, there are still the CSR companies who concentrate on philanthropic peripheral activities (Baughn et al., 2007), but Kraisornsuthasinee and Swierczek (2009) point out that the companies selected to be the case studies in their research have passed the compliant, altruistic, and holistic stage to the strategic level. Their CSR practices have covered both core and peripheral areas. The attempt to integrate CSR as a competency is apparent in the environmental dimension. Distinctive achievements include reduction of production impact in the cement industry, alternative product

development in the oil sector, and resource efficiency in beverage and sugar businesses.

For the social aspect, all six companies in the research nurture their relationship with stakeholders and reduce the social impact on the surrounding communities. Kraisornsuthasinee and Swierczek (2009) also found that philanthropic initiatives on a national scale are related to the leading companies' businesses, such as reforestation for oil and water conservation for beverage bottling. (Kraisornsuthasinee & Swierczek, 2009)

Wottrich and Sastararuji (2008) explore CSR in Sweden, Thailand and Brazil to gain insights from the construction industry and the result indicates a predominant CSR value-driven approach. This might suggest that CSR has come a long way from its early roots of charity to become a strategic business practice inserted in corporate values among these countries. Although the cross-national differences were apparently mainly shaped by regional factors, the industry institutions have emerged as an important factor for shaping the areas of cross-national agreements. Swedish companies are strongly focused on environmental issues and stress the idea of sustainability, whereas Thai companies use Corporate Governance to group CSR activities, denoting a focus on legal compliance. Brazilian companies show high concern for social issues, and act as social agents, fulfilling the gap left by the national government.

Virakul et al. (2009) studies the CSR activities in Thai companies that won the Stock Exchange of Thailand (SET)'s CSR award, and examines what is perceived by SET as the best CSR practices in four Thai companies. They conclude that CSR activities in the top Thai companies were based on moral or altruistic motivations with a focus on both production process and philanthropic outcomes. The philanthropic or 'after process' CSR is much more established and given attention as the scope of CSR in these companies. The driving forces behind CSR activities were CEO leadership, company performance and stakeholders' expectations. Their CSR framework followed the stakeholders' model and issues management which arranged

CSR activities into five main categories: education, arts and culture, sports, environment, and public welfare. (Virakul et al., 2009)

As for the link between Thailand' CSR practice and MNCs in relation to the structural influences, according to the Responsible Competitiveness Index (MacGillivray et al., 2007), Thailand is classified in the Asserter Cluster. Members in this category adopt international standards as a competitive advantage to enhance national brands through responsible business practices. Some companies carry these practices to attract foreign direct investment and others use it to promote their brands to the global market.

Foran (2001) conducted a qualitative study on CSR practices at nine multinational electronics firms in Thailand; two of the nine firms are Japanese owned and the remaining seven firms do significant business in California. The study focuses on the environmental health and safety management aspects of CSR. It concludes that the CSR practices of these nine firms are the product of ongoing interactions between the state, firms, consumers and other civil society actors which have improved CSR in Thailand's electronics sector during the 1990s. The study shows that U.S. firms appear to be among the leaders, although their practices have been uneven over time, and vary between firms. The author suggests that the civil society actors, both issue-based and locality-based are two of many potential third parties that have an incentive to participate in improving CSR. The companies and state agencies are likely to respond to calls from civil society actors for more information.

Foran (2001) concludes that the Thai government's ability to design, implement and monitor environmental health and safety practices is still weak. Voluntary measures remain important in this aspect as it helps to fulfill the regulatory gaps, but the voluntary and informal modes of regulation tend to create customized discourses and procedures at the firm level.

Ferguson (2011) conducted research on the CSR operation in Deutsche Post DHL company in Thailand to provide insights from a subsidiary of the leading global logistics company. The study reveals evidence that the subsidiary's internalization of

CSR by selectively highlighted the local initiatives that help address and contribute towards the global CSR strategic objectives. The author regards Buddhist and Thai culture of charity giving and merit-seeking in the operationalization of CSR management which made employee volunteerism well accepted among stakeholders. This describes the issue of collaboration between different influences as one of the obstructions affecting management process.

2.4 CSR in Automotive Industry

In the 2007 publication "*Global Shift, Fifth Edition: Mapping the Changing Contours of the World Economy*" the Emeritus Professor at the University of Manchester, Peter Dicken, referred to the automobile industry as "the industry of industries" in the 20th century and considered it as one of the most globalized industries of the contemporary age (Dicken, 2007). The automotive industry is known to be dominated by large transnational and vertically integrated global firms and considered as a 'producer-driven' business. The industry has been through three generations of transformations including: 1) Ford's assembly-line and standard mass production, 2) Slone/GM's broadening of the scope of models, and 3) Toyota's concept of lean manufacturing, targeting relentless cost reduction and manufacturing perfection. The industry is also very R&D-intensive and requires a huge volume of investment, concerning economies of scale, scope and speed (Wad, 2009: 173).

In a sector profile analysis based on a literature review, Martinuzzi et al. (2011) explores the CSR activities and impacts of the automotive sector in the EU. They suggest that the crucial elements of CSR practice in the automotive industry concerns the product design, since about 80% of the environmental damage stems from the usage phase of the car. The design could decrease the harm to environment by using lightweight materials, improving fuel efficiency, and inventing new types of energy use to decrease carbon emission and other externalities. The products' life cycle which has been reduced due to marketing and sales purposes is also now under the regulation system by the EU, but at the same time it is treated as CSR initiatives elsewhere.

The authors point out the significance of CSR in supply chain management especially in the environmental management schemes and labor codes of conducts. This is due to the nature of car manufacturing that has diverse subsidiary manufacturing bases and suppliers across the world in their production chain.

In the field of human resource management and employee responsibility, the authors illustrate the different models in automotive industries due to the differences in the native country of producers. For example, the Scandinavian firms offer higher autonomy and job satisfaction, but also entail higher work load and stress. The German producers distinctly classify employees into specialized and general workers and contain higher differences in payment, job security, and skill development training. The gender issues could also become the debating topic as only one fifth of the workforce is comprised of women, and there is still, as stated, no research on gender issues in the automotive industry, or on work-life balance (Martinuzzi et al., 2011).

Williander (2007) also studied the environmental management of the three major automotive MNCs developing and launching cars with improved eco-environmental performance. This includes Ford, Volvo, and Toyota. He sought to identify the differences in their aspiration and ability to create technological innovation. The result reveals variant approaches in their environmental perspectives, while Ford and Volvo were looking for alternatives to petrol and cleaner energy sources, Toyota were designing cars for less energy demand. According to his framework, Williander states that Toyota is considered more successful in their environmental approach, driven by their ability to discover new technology with a more open-minded approach to environmental issues.

Frigant (2009) tries to identify which factors might induce first-tier suppliers to commit to socially responsible practices. Adopting a stakeholder approach, he analyzes how customers, civil society, employees, Socially Responsible Investors (SRIs) and state authorities affect first-tier suppliers. Interestingly, he concludes that the traditional stakeholder approach has little influence on first-tier suppliers and

suggests the meso-economic level analytical framework as a way to better reveal the determinants of CSR among these companies.

A survey of an automotive supply chain in Hungary and Austria conducted as part of the EU's *'Rhetoric and Realities: Analyzing Corporate Social Responsibility in Europe (RARE)'* project revealed that among automotive supply chain SMEs, the environmental impact reduction is considered most salient and entails strategic importance. This is followed by the issues around national corruption and bribery. The main factors that drive CSR in these firms are linked to cost saving, followed by being responsive to customer's demands and to enhance the basic values of the company, as well as contributing to sustainable development.(Szlávik et al., 2006)

In South African automotive firms (both the large MNCs and local SMEs) it was found that their CSR initiative on adopting the voluntary ISO 14001 certification had a high rate of adoption, licensing and inspection of their corporate environmental management system (EMS). The firms that got a certified report increased in their competitiveness but sometimes faced low employee awareness and high investment cost as the obstructions of the practice. (Kehbila et al., 2009)

Muller (2006) studies the CSR strategies in Mexican-based automotive MNCs subsidiaries over the choice of global convergence versus local divergence in CSR practice. The research explored whether these subsidiaries adopted global western CSR practices, and examined levels of the headquarters engagement in the management of their CSR policy. The basis of his study lays on the proposition that if global convergence of CSR is effectively transferred to local subsidiaries, then MNCs could become a potential mechanism to improve responsibility standards internationally.

The exploratory research was conducted among seven of Europe's largest MNCs in the automotive industry and analyses were based on their CSR practices in categories extracted and summarized from several of the European Commission's papers on voluntary practice.

In conclusion, the study shows that the local subsidiaries which perceived themselves as be able to have autonomy over local management of CSR provide better performance for their social responsibility. Proactive CSR practices from these autonomous subsidiaries appear to be effectively compatible with globalized CSR standards. Paradoxically, the divergent mode of management entails the convergent performance of voluntary responsibility practice (Muller, 2006).

CHAPTER III
METHODOLOGY

In this chapter, the research approach and design is selected and explained with theoretical and analytical justification for the way the research has been conducted and analyzed. The topics will describe how and why specific choices were made and how it influences the outcome of this thesis study. The limitations of the thesis are also discussed in the last section.

3.1 Research Design

The objective of this research is to study the influence of a Japanese Automotive MNC as the transnational actor that practices CSR in the context of Thailand. Also, to investigate whether CSR practice has been managed in a global convergent or local divergent manner. For the rationale given in Chapter I, the qualitative research method has been selected as our approach.

Analytical Method

In this research, two different analytical techniques have been employed to suite the questions and objectives of the research. We use the coding and cross comparison process to answer the first and second research questions in the form of factual question (What is) and dichotomous question (Does). Whereas the ‘thematic analysis’ technique’ is applied to examine the third question (How), in order to reveal a more complex process of CSR formulation and implementation.

Thematic Analysis

Thematic analysis is one of the most commonly used methods of analyzing data in a qualitative study in order to systematically formulate the answers for the

research questions. Thematic analysis focuses on identifiable themes and patterns of behavior. After collecting the data from the documents or transcribed interviews , the patterns of experiences, attitudes, or traits can be identified and listed for a synthesis of themes and answers (Aronson, 1994; Thomas & Harden, 2007).

The steps of the thematic analysis process can be summarized as follows;

1) Collect the data.
2) Identify all data that relates to the already classified patterns (coding).
3) Combine and catalogue related patterns into sub-themes.
4) Summarize the relations and generate analytical themes.
5) Build a valid proposition for choosing the themes. (Through the relating literature)

To ensure compatibility, the data gathering and analysis techniques have been designed in accordance with the questions of the study.

The design is as shown in Table 9.

Table 9 Matrix of Research Questions and Methodology

Question	Hypothesis	Indicators/ Variables	Source of Data	Data Collection Tools	Analytical techniques
1) What are the CSR policies and practices of Toyota Motor Thailand?	The CSR policy and practice of Toyota Motor Thailand will cover all seven groups of CSR activities because the corporation has power and resources to promote CSR or invest in a responsibility management system.	• CSR Policy, Activities • Compatibility with Olsen and Gitsham (2005)'s CSR activities categorization	• Toyota Motor Thailand • Toyota Motor Corporation • Participants and stakeholders of CSR initiatives	• Document Review • Semi-structured interviews	Coding
2) Do the CSR policies and practices of Toyota Motor Corporation improve the responsibility standards in its Thai subsidiary?	The CSR policy and practice of Toyota Motor Corporation will improve the responsibility standards due to the global convergence forces which will induce the local standards to be more compatible with international norms.	• Similarities and differences between Toyota Motor Thailand, state regulation and Thai standards • Compatibility of CSR practice with international standards	• Thai State's Registration office • Thailand CSR institutions • International CSR standard organization : EU / UN • Toyota Motor Corporation, Toyota Motor Thailand and other subsidiaries	• Document Review • Semi-structured Interviews	Cross Comparison
3) How does Toyota Motor Corporation interact with Toyota Motor Thailand and the Thai national institutional factors relating to CSR policy and practice?	The interaction between Toyota Motor Corporation and Toyota Motor Thailand in the process of CSR formulating and implementation will be in the form of the Hybridization, with inclination to Convergence.	• Concurrency between global policy and local initiatives • Formulation and implementation Process • level of autonomy over formulation of CSR policy • Determinants of divergent initiatives	• Toyota Motor Thailand • Toyota Motor Corporation • Existing literatures	• Document Review • Semi-structured Interviews	Thematic Analysis

3.2 Single-Case Study: Toyota Motor Thailand

Single-Case Study Approach

The case study approach has been adopted, a methodology consisting of an empirical inquiry that explores the phenomenon in depth and within the context where the boundaries between phenomenon and context are not clearly evident. The practice allows researchers to understand the complexity and emphasizes the detailed contextual analysis of persons, events, decisions, periods, projects, policies, institutions, systems or conditions and their relationships. The case study approach suits the research which proposes the question of “How” or “Why” and be conducted in a situation where researchers would not be able to control the behavior of the events (Yin, 2002)

Since the main focus of our study is directed at the last question: *“How does Toyota Motor Corporation interact with Toyota Motor Thailand and the Thai national institutional factors relating to CSR policy and practice?”*. As earlier stated in theory section and literature review, the subject of CSR is highly contextual and the scope of practices has been mixed with a fragmented conclusion on its definition and scope. Additionally, the process of global convergence/divergence has been complex and contested. Therefore, the conditions of our topic fit the case study approach methodology.

Due to the limited time in conducting this research, we employ a single-case study design, which means that only one case has been investigated. However, the single-case design turned out to be the most applicable, taking into account the topic of our research, which concerns CSR with its multi-layers of institutional influences. The study involves such complex phenomenon that it is more sensible to choose a research design that takes a thorough and more holistic view of the case. The single-case setting enables us to concentrate more thoroughly on the various aspects of the case.

3.2.1 Toyota Motor Thailand Overview

Founded	5 October, 1962
Registered Capital	7,520 Million Baht
Production Capacity (3 Plant sites)	650,000 Unit/Year (Aug 2012)
Employees	13,500 (Aug 2012)

Back in 1956, Toyota Motor Thailand Co., Ltd. (TMT) original business was established under the title, "Toyota Motor Sales Co., Ltd.". It was the first Toyota Company in Thailand, as well as the first Toyota Company established overseas. The main business was importing passenger cars and commercial vehicles, i.e. TOYO-ACE, MS 40, DA, and LAND CRUISER. (Toyota Motor Thailand, 2012a)

However, in 1962 having been awarded a BOI investment promotion privilege certification as an automobile assembler, Toyota Motor Thailand CO., LTD. was established on Surawong Road, with a registered capital of 11.8 Million Baht and, initially, 13 dealers. Later in 1964, the first automobile assembly plant was established at Samrong Nua, importing Completely Knocked Down (CKD) vehicles for reassembly, such as TOYOTA DYNA JK 170, TIARA, DYNA PUBLICA (UP 10), DA, and STOUT. A second plant followed in 1975, at Samrong Tai, equipped with a modern 10 Million Baht wastewater facility.

Both the industry-leading CATION E.D.P. (Electro Deposit Painting) system and the Swing Arm Auto Loading system were installed in 1982. Both technologies were remarkable firsts for Thailand's fledgling automobile industry. Toyota Motor Thailand CO.,LTD. moved its headquarters from Surawong Road to its Samrong Complex in 1988 and a third automobile assembly plant was built. This new plant incorporated a highly efficient and advanced technological production process with a production output of 100,000 vehicles per year. In 1997, the Toyota Gateway Plant was open, recognized as one of the highest technologically advanced auto assembly plants in Southeast Asia. It was built on 625 rai at Gateway City in Plangyao District, Chachoengsao.

The establishment of 7 subsidiary companies reflects Toyota's capability of being able to grow steadily and compete effectively in all aspects of the automobile industry. In addition, it has continuously created a wide range of products with aggressive sales promotion activities.

3.2.2 Toyota Motor Thailand CSR Initiatives

TMT has long been recognized for its contribution to Thai society and their commitment towards CSR initiatives. As far back as 1973, Toyota initiated a scholarship programs offering scholarships to students at Chulalongkorn and Thammasart Universities. Throughout its five decades in Thailand, Toyota Motor Thailand Co., Ltd. has been actively involved in numerous social development projects, including programs for technological training, environmental protection, promotion of good driving skills, as well as various sporting and entertainment projects. In 1992, to commemorate its 30th anniversary, the Toyota Thailand Foundation was founded for the purpose of promoting social development in areas of education, culture and the environment in Thailand. (Toyota Motor Thailand, 2012a) The foundation operated with the interest funds generated from the initial registered capital of 30 million baht donated by TMT. In 2002, the 40th anniversary of TMT, the company raised the fund to 400 million baht. (Petison & Johri, 2006). At present, TMT's CSR initiatives consists of four major areas including environmental awareness, road safety, education and technological sharing, and improvement of undeveloped areas.

3.3 Scope of the Study

Since the CSR initiatives of Toyota includes numerous activities and spans across sectors and topics, in this study we will put emphasis on the CSR Strategy in the Field of ***Environmental Performance*** that is presented in Toyota Motor Thailand's Sustainability Reports (Toyota Motor Thailand, 2012b). The scope of activities is still very broad and ambiguous in the way that the environmental, social

and financial performances sometimes cross-intersect. Also, the divisional lines that draw upon CSR activities to separate section of performances are varied cross time and publication. Therefore, here we will limit the scope of study down to the policy formulation and practices of the **"5 Years Environmental Action Plan"** (5YEAP) of Toyota Motor Thailand by looking at the formulation of the overall local policy, goals and guidelines. We will focus on the detailed implementation and interactions between institutions and organizations of the plan.

Time Frame: The scope of our study will be the "2006-2010 Environmental Action Plan" which ran from April 2006 - March 2010.

Principle of the 5 Years Environmental Action Plan

The Toyota Earth Charter (adopted in 1992, revised in 2000) is based on the Guiding Principles at Toyota Motor Corporation, adopted in 1992 (revised in 1997), and embodies the comprehensive approach to global environmental issues. Based on this charter, Toyota said to have made environmental responses a top management priority, and the 5YEAP is a medium-to-long term plan that summarizes specific activities and goals in order to promote companywide environmental preservation activities in accordance with the guidelines called the "Toyota Earth Charter".

In May 2005, the Fourth Toyota Environmental Action Plan of 2005-2010 was adopted and announced, focusing on the four main topics of energy/global warming, recycling of resources, substances of concern, and atmospheric quality. The plan was promoted on a global scale, with companies subject to consolidated environmental management both in the Japanese headquarters and overseas including Thailand.

3.4 Data Collection

The research data collection tools include;

3.4.1 Semi-structured Interview with Key Informants

The questions were constructed to probe on practices and process of applying TMC policy onto the local context. How the convergence and divergence forces affect CSR practice. The questions will be semi-structured, in a way that the planned topics will cover the queries of the main topics while still leave rooms for informants and interviewer to discuss the way of how these factors affect one another.

A. Interview with TMT officers and executives

Total of seven formal interviews were conducted with the TMT officers and executives who participated in the formulation and implementation of 5YEAP.

- Interview Code: A1

  Ekachai Ratanachaiwong - Senior Vice President , Manufacturing & Technical Environmental Committee Secretariat

- Interview Code: A2

  Watsachai Sittibutsaya - General Manager,
  Safety and Environment Promotion Office

- Interview Code: A3

  Suvisar Thitiniran - Deputy General Manager,
  Safety and Environment Promotion Office and environment committee

- Interview Code: A4

  Laksanapan Wongsopar - Assistant Manager,
  Safety and Environment Promotion Office

- Interview Code: A5

  Thanasak, Kulchamorin - Senior Supervisor

  Social Contribution Department

- Interview Code: A6

  Eknarin Jiracheewewong - Assistant Manager,

  Public Relations Department

- Interview Code: A7

  Sunit Prasertsook– Assistant Manager at Gateway Plant,

  Safety and Environment Promotion Office

The semi-structured interviews were employed and aimed towards the discussion of the 5YEAP. The interviews, although open-ended, are structured around the research questions. We purposefully posed questions to steer conversations towards these topics:

1. The processes of forming the five years environmental action plan (2006-2010).
    a. Motives and drivers.
    b. Influences and guidelines from TMC and initiatives generated from local staffs.
    c. The process of formulation, discussion and negotiation.
    d. Roles of managers, employees and/or stakeholders involved.
2. The structure and details of the five years environmental action plan (2006-2010).
    a. More detailed elaboration on the published information of the plan.
3. The implementation process, steps and procedures.
4. Outcome and evaluation of the plan.
    a. The environmental performance.
    b. Benefits and shortcomings.
    c. Stakeholders' perspectives of the plan.

B. Interview with Stakeholders and Specialists

Seven interviews were conducted with the Stakeholders and specialists who relate to the topic of the 5YEAP. The details of interviewees are listed below.[1]

- Interview Code: B1

  Academic expert who worked as external consultant in government relations for TMT for over 10 years and specialized in automobile industry.

- Interview Code: B2

  Onanong Songkitti - Scientist Level : 8 (technical)
  Water technology and industrial pollution management bureau,
  Department of Industrial Works, Thailand

- Interview Code: B3

  Saisalawin Chouibumroong - Legal Officer
  Legal Affairs Division, Pollution Control Department, Thailand

- Interview Code: B4

  Apichat Chaichana - Mechanics Training Supervisor
  Toyota Kanchanathep (Dealer & Service Center)

- Interview Code: B5

  Nongpal Chancharoen - Project Manager
  Stop Global Warming Project, Thailand Environment Institute

- Interview Code: B6

  Asst.Prof. Dr. Pisut Painmanakul - Lecturer
  Department of Environmental Engineering, Faculty of Engineering,
  Chulalongkorn University

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[1] Since the plant of TMT is situated in industrial estates or the places not close by to local community (such as Ban Pho plant), we sought the stakeholders which joined the 5YEAP and interview the TEI manager which has direct contact to TMT personal.

- Interview Code: B7

  Matchima Kunchorn Na Ayuthaya - Member of Advisory Board

  Corporate Social Responsibility Institute, the Stock Exchange of Thailand

3.4.2 Documentary Research

Including published sustainability reports, internal documents, and annual reports from TMT and TMC , research papers, journals, documents, newspapers, and online database.

3.5 Application of Analytical Framework

In terms of concepts and theories, there are several frameworks which have been employed in the case study as described in topic 1.5 (page 10-20). We applied the *'Categorization of CSR Activities complied by Olsen and Gitsham (2005)'*, together with the concept of *'National Business System institutional framework by Matten & Moon (2008)'* to investigate on the *'Convergence and Divergence'* forces in the globalization process. The composition of frameworks is shown in Figure 2 (page 20).

However, since the scope of this research focuses on TMT's '5 Years Environmental Action Plan', policy formulation and implementation which concerns only issues related to environmental performances, part of our conceptual framework needs modification to suit the domain of the study.

We adjusted 'Olsen and Gitsham (2005)'s Categorization of CSR Activities' by removing items unrelated to environmental issues to reveal a more accurate picture of TMT performances. The resulting outcome of modification to Olsen and Gitsham (2005)'s categorization is as shown in Table 10.

Table 10 Categorization of Environmental CSR - Adjusted from Olsen and Gitsham (2005)

	Category	Content / Classes of Activities / Items
1	Leadership, vision and values	o Defining and setting the purpose, values and vision.
		- Incorporating CSR into the enterprise's purpose (or mission).
		- Incorporating CSR into the enterprise's values.
		- Incorporating CSR into the enterprise's vision.
		- Aligning purpose, values and vision.
		- Involving relevant stakeholders.
		- Gaining commitment from key constituents.
		o Translating it into policies and procedures
		- Developing business principles / Code of conduct.
		- Developing policies.
		- Integrating CSR into strategy.
		- Integrating CSR into corporate governance.
		- Integrating CSR into management systems.
		o Putting it into practice including empowering and embedding
		- Empowering people.
		- Providing necessary training and development.
		- Instilling a culture of responsible business practice.
		- Aligning remuneration.
		- Using values-based leadership.
		o Ethical leadership and championing
		- Defining a clear position on political contributions.
		- Lobbying transparently.
		- Being a leader and advocate for business engagement into CSR.
2	Marketplace activities	o Responsible customer relations including marketing and advertising
		- Providing good and clear product information.
		- Screening customers for acceptable behavior.
		- Engaging in cause-related marketing
		o Product responsibility
		- Ensuring product safety.
		- Considering product life cycle.
		- Incorporating CSR impacts in product innovation.
		o Using CSR product labeling
		- Marketing environmentally friendly products.
3	Workforce activities	o Employee communication and representation
		- Listening to and involving employees.
		o Ensuring employability and skills development
		- Provision of training and development opportunities.
		- Promoting knowledge management and organizational learning.
		- Conducting job appraisals.

	Category	Content / Classes of Activities / Items
		o Health, safety and wellbeing
		- Promoting health and safety.
4	Supply chain activities	o Being a fair customer
		- Listening to and working with suppliers.
		o Driving standards through the supply chain
		- Screening suppliers for compliance with social and environmental standards.
		- Monitoring social and environmental performance of suppliers.
		- Applying CSR standards throughout the supply chain.
		- Setting targets for suppliers.
5	Stakeholder engagement	o Mapping key stakeholders and their main concerns
		- Mapping stakeholders.
		- Gathering available knowledge on stakeholder's concern.
		- Prioritizing stakeholders.
		- Planning consultation.
		o Stakeholder consultation
		- Engaging in employee consultation.
		- Establishing complaints procedures.
		- Conducting stakeholder surveys.
		- Engaging in local community liaison.
		- Conducting focus groups.
		- Communicating and liaising with business partners.
		- Participating in public policy debate.
		- Partnering with public authorities.
		o Responding and managing to stakeholder issues
		- Setting commitments, targets and goals for CSR activities with stakeholders.
		- Deploying and enabling resources.
		- Overseeing stakeholder CSR activities.
		- Identifying and managing risks.
		- Measuring outcome.
		- Using management guidelines with a CSR element.
		o Transparent reporting and communication
		- Establishing appropriate communication and reporting channels.
		- Demonstrating openness and transparency.
		- Using leading guidelines on CSR reporting.
		- Getting external validation.
		- Using quality assurance methods.
6	Community activities	o Giving cash
		- Donating & charity.
		- Sponsoring projects & events.

Category	Content / Classes of Activities / Items
	- Engaging in partnerships for social investment.
	o Giving employee time
	- Allowing employee volunteering.
	- Encouraging employee to engage in part-time project.
	- Using full-time secondment.
	- Co-coordinating projects in giving of employee time.
	o Giving other kind of contributions
	- Providing facilities.
	- Loaning facilities and assets.
	- Giving assets or products.
	o Being a good neighbor
	- Liaising with local communities.
	- Promoting social cohesion in the community.
	- Minimizing adverse effects of local operations to local communities.
7 Environmental activities	o Resource and energy use
	- Running awareness initiatives.
	- Using 'green' technologies.
	- Improving energy efficiency.
	- Purchasing 'green' materials.
	- Using locally generated renewable energy.
	- Considering broader scope of ecology and biodiversity.
	o Pollution and waste management
	- Treating emissions.
	- Re-engineering processes.
	- Reusing and recycling.
	- Managing localized environmental pollution.
	o Environmental product responsibility
	- Managing the supply chain in environmental aspect.
	- Assessing impacts in product life-cycle.
	- Certifying and labeling products.
	- Reducing packaging.
	- Using product take-back schemes.
	- Addressing politically sensitive environment issues.
	o Transport planning
	- Reducing transportation of goods.
	- Reducing employee travel by use of teleconferencing

3.6 Limitations

• The methodology employed in this research is a qualitative method with a single-case study. The critics of such method might consider it as offering fewer grounds for establishing generalization. Due to the limitation of time and resources of the study the approach which will allow the best understanding of the in-depth analysis has been employed. This will reveal the answers for the research questions while accounting for the complexity of CSR.

• The scope of study is only limited to the TMT's five years Environmental action plan from 2006-2010. This was selected as the case study in order to explore the potential of Japanese Automotive MNCs as tools for elevating CSR. It is noted here that there are also other various CRS activities of TMT which haven't been taken into account in this study. These include social contributions of other departments which didn't concern the environmental issues and the employee or customers CSR initiatives.

• The TMT is very large in size and advanced in its managerial system comparing to other MNCs in Thailand. The study therefore produces the outlook of CSR which could differ from other size or sectors of MNCs, especially in the different context of a developing country. We therefore suggest the further study of MNCs CSR practice in different sectors and countries to better illustrate the situation of CSR in globalization.

CHAPTER IV
RESEARCH FINDINGS

4.1 Toyota Motor Thailand's Organizational Characteristics

Here we describe the three main business organizational characteristics of Toyota Motor Thailand. This will form the basis of features interacting with the institutional environment contingent to its NBS environment.

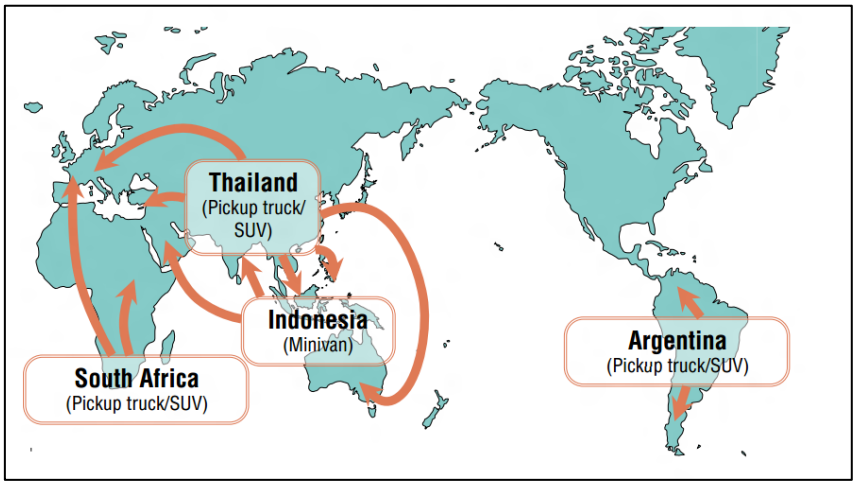
4.1.1 Nature of the Firm

TMT is the first car production company of TMC in Thailand, established in 1962 and started operation in 1964. Due to the high yen value and the expectation of growing demand, TMC increasingly invested in its production base in Thailand as part of their regional production strategy to increase competitiveness. It serves TMC as the center of production and marketing office for the Thai market.

The part makers and supplier firms also established their operations in Thailand to accompany the Japanese auto assembly firms. Among the four global supply bases, Thailand serves as the base for Asia outside Japan, with other global sites handling exports throughout the rest of the world. This includes Oceania, Europe, the Middle East, and Central/South America. (Toyota Motor Corporation, 2012b).

In terms of ownership TMC has 86.43% of ownership in TMT (Toyota Motor Corporation, 2009: 36). From 2003-2010 Toyota Motor Thailand has invested about 770 billion baht in Thailand.(Toyota Motor Thailand, 2011) In 2011 at the end of 5YEAP, TMT produces eight models of Toyota vehicles, including Prius, Corolla, Camry, Camry Hybrid, Vios, Yaris, Hilux Vigo and Fortuner (It also sells more seven models in Thailand made overseas, including the Innova, Avanza, Alphard, Hiace, Commuter, Majesty, and Lexus, Toyota's luxury car line.)

Figure 3 The Four Global Production Bases of TMC's Vehicle Supplies



Source: Toyota Motor Corporation (2006b)

The TMT has three production sites;

1) Toyota Samrong Plant (230,000 unit/year production capacity)
2) Toyota Ban Pho Plant (220,000 unit/year production capacity)
3) Toyota Gateway Plant* (200,000 unit/year production capacity)

Note: * The gateway plant is located inside the Gateway City industrial estate hence complies with the different pollution control laws from the other two plants.

Aside from TMT, the TMC also has other affiliated companies in Thailand including;

1) Toyota Auto Body Thailand Co., Ltd. (1978)
2) Siam Toyota Manufacturing Co., Ltd.(1987)
3) Thai Auto Works Co., Ltd. (1988)
4) Toyota Body Service Co., Ltd. (1992)
5) Toyota Leasing (Thailand) Co., Ltd. (1993)
6) Toyota Automotive Technical School (1998)
7) Hino Motor Manufacturing (Thailand) Co., Ltd. (1964)
8) Rachamongkol Rice Co., Ltd.: RRC (1999)
9) Toyota Motor Asia Pacific Engineering and Manufacturing Co., Ltd. (2007)

Toyota Auto Body Thailand was created to form parts for the assembly process for TMT. Siam Toyota Motor is Toyota's engine factory, assembling gasoline and diesel engines both for the domestic market and for export. Toyota Auto Works was created as a body factory mainly in charge of the body shell part of the one ton pick-up truck.

Due to the launch of TMC's IMV (Innovative international Multi-purpose Vehicle) project in 2004, TMC is accelerating the process of globalizing production and supply in Thailand through TMT and its affiliated companies. The IMV project involves developing products best suited to the emerging market and converting TMC operation into a global supply structure. This is based on concentrating output for exports at four plants, including those in Thailand and Indonesia, so as to achieve growth in a tough business environment marked by a strong yen and fierce competition. In end result is aiming for 100% local procurement, rather than procurement from Japan. (Toyota Motor Corporation, 2012b)

Toyota plans to increase capacity in Thailand, where the auto parts supply industry is concentrated. To facilitate this, the "Toyota Motor Asia Pacific Engineering and Manufacturing Co., Ltd." or TMAP-EM was established in 2007 (re-established from Toyota Technical Center Asia Pacific Thailand Co. Ltd. TTCAP-TH which formed in 2003) with 100% ownership of TMC. It serves TMC as the R&D and evaluation unit for locally produced vehicles, as well as operational support for Toyota production affiliates in Asia, Oceania and the Middle East. This serves as the regional headquarters for the Asia Pacific region, together with Toyota Technical Center Asia Pacific Australia Pty., Ltd. and Toyota Motor Engineering and Manufacturing (China) Co., Ltd. (Toyota Motor Corporation, 2009, 2012b) .

Thailand holds a very important position for their supply chain management, and is vital for the quality and environmental control in the Asia Pacific production of Toyota.

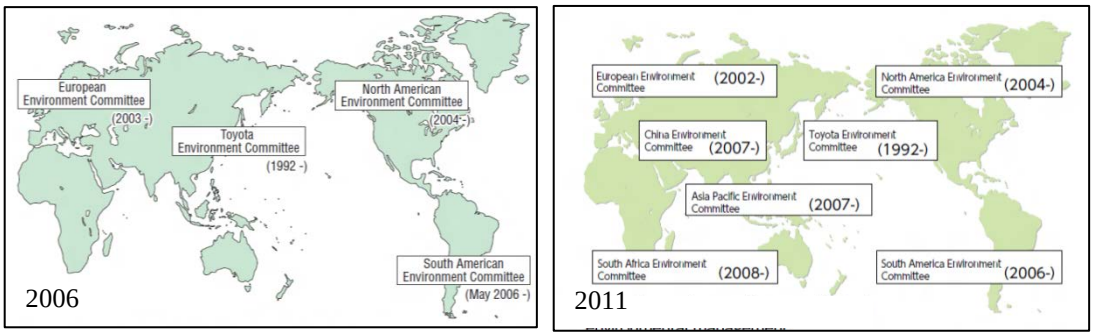
The Discretional Structure of TMT's Environmental Management

First of all, the organizational structure of environmental management of TMT, although quite structured, is not completely static. It has been through a transformative change over the years. The information shown here is mainly based on the situation in 2006 which is the year that the 2006-2010 5YEAP started implementation. The organizational structure has been through a formal change in 2011. Also, the situation in 2011 is complimentary to the base year of 2006.

Initially, the Environmental Committee is formed at the headquarters of TMC since 1992 and consists of top management and chaired by the president of TMC. There are three committees established under the main Toyota Environment Committee, including 1) the Environmental Product Design Assessment Committee, 2) Production Environment Committee and 3) Environmental Management Committee. They meet twice a year to address issues and respond to policies. The main mechanism of this environmental management body is the 5 year environmental action plan implemented at each subsidiary worldwide.

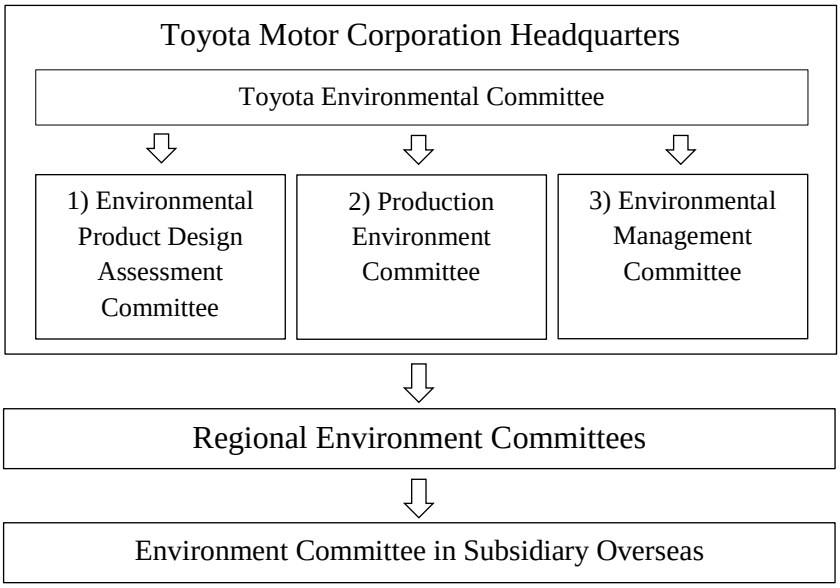
In FY2000, TMC introduced a consolidated environmental management system and the overseas environmental committees were gradually formed in response to this policy. For example, the European Environment Committee was formed in FY2003, North America in FY2004 and South America in FY2006 to reinforce local environmental activities. Towards 2011, more regional centers have been established.

Figure 4 Global Structure of TMC's Regional Environmental Management in 2006 and 2011



Source : Toyota Motor Corporation (2006a, 2011b)

Figure 5 Organizational Framework of TMCs Environmental Management in 2006



In Thailand, TMAP-EM acts as the regional headquarters and regional environmental committee, established in 2007. Even though the 2006-2010 environmental action plan was prepared in 2005 and started implementation in 2006, the TMAP-EM played an important role. This role included cooperation, monitoring, and a consultation process ever since its establishment and it remains a significant step in the implementation of this plan.

4.1.2 Organization of Market Processes

The organization of purchasing in TMT has changed over time and given the appreciation of the yen and the necessity for reducing production costs, Japanese automakers have steadily increased local procurement. This has resulted in decreasing imports from Japan. The supporting industry of parts production is extremely crucial in auto production overseas. Finished vehicles are composed of some 20-30,000 parts, and quality and competitiveness of vehicles are heavily dependent on parts (Yoshimatsu, 1999). The quality and networks of local part suppliers thus define the level of localization in automotive manufacturing.

Toyota's production increasingly relates to the local content procurement, with 81% of its production using domestic content and 13% regional content in 2011 (Toyota Motor Corporation, 2012b). However, most of the local suppliers are Japanese parts-makers (e.g. Denso, Nippatsu and Yazaki Sogyo), especially the first-tier suppliers and many local Thai suppliers are joint ventures or have a technical agreement with Japanese firms. Additionally, if we consider the procurement value of TMT, 40% was given to Japanese-related suppliers (Japanese parts-makers plus local suppliers with technical agreements) and 47% is given to the parts and components manufactured within the four TMT affiliated companies.

The procurements from local firms are the less value-added ones, especially the purely local suppliers which are 15% of supplying firms, they accounted for only 1% of the total purchasing value. Moreover these suppliers are not all exclusive, some of them are also producing parts for other automotive MNCs, especially in production of one-ton pick-up vehicle (Lecler, 2002).

Chiasakul (2004) illustrates the network of cooperation by explaining that during the crisis in 1997, many of part and component suppliers were at risk of going out of business. Japanese auto companies then joined together and supplied loans, advance payments and other forms of assistance to financially troubled suppliers.

In terms of its market, in 2010 TMT production reached 629,944 units and approximately 47% were sold inside Thailand while export sales accounted for 53% with shipment to 110 countries. In 2004, the export share accounted for only about 20%. This is led by the increase global popularity of Hilux Vigo one-ton pickup due to the establishment of TMC's IMV project in Thailand (Thailand Board of Investment North America, 2012).

In Thailand, Toyota gained a market share of 41.39% in 2011 (Toyota Motor Thailand, 2012c). It has long established a strong dealership network with the local companies since 1956. TMT used their strong service system which includes not only products and parts supply, but also initiates marketing tools to help the dealers, such as, forming dealer clubs, supporting education and training programs for sales

persons, building training center for service mechanics, establishing a communication and operation procedure to facilitate the cooperation, linking financial support from Thai financial institution and formed the Toyota Leasing company to provide financial services (Amano, 2009).

TMT has a strong relationship with Japanese Chamber of Commerce (JCC) in Thailand. Since 1997, the presidents of TMT acted as the president of JCC four times (by 4 different presidents). The most recent holder of the president position TMT was during May 2011 to April 2012. (Japanese Chamber of Commerce Bangkok, 2012). TMT is also an active member of The Thai Automotive Industry Association (TAIA). The other very important association related to TMT is the Japan Automobile Manufacturers Association, Inc. (JAMA) which TMC has a membership as well as other 13 Japanese Automotive MNCs operating worldwide.

In March 1995, the JAMA established a special committee on the future development of the automobile industry in Southeast Asia. The committee, comprising general managers of auto makers, discussed various issues regarding the parts complementation system, the tariff systems, and the standards and certification systems. It paid particular attention to the supporting industry of parts production which leads to the increase in percentage of local parts procurement.

4.1.3 Coordination and Control Systems

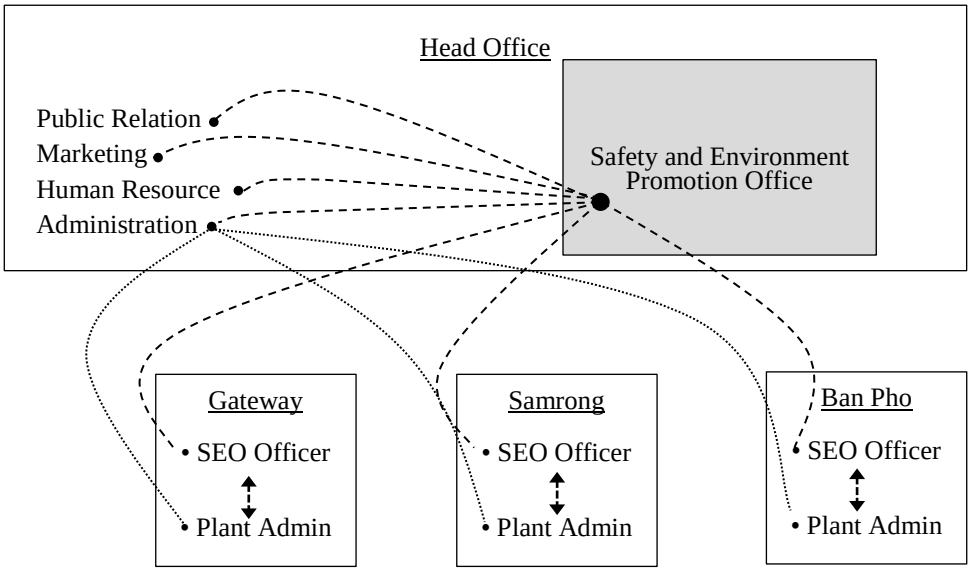
TMT adheres to the mother corporation’s core principles of continuous improvement through challenges and change, complete customer satisfaction, dedication to the highest standards of quality and safety, and respect for people and the environment. (Toyota Motor Thailand, 2011).

TMT has long been known for its high coordination level with local staff. In order to ensure integration and localization of TMC staff, the process which is called ‘Thainization’ has been implemented. The TMC have a unique method to prepare Japanese expatriate managers to work in Thailand by providing formal study of Thai culture and language. All Japanese expatriates are required to undergo a 200-hour

course on Thai language, and are expected to conduct basic conversations in Thai on a daily basis. These managers will be able to communicate with Thai employees at all levels in English as well as Thai. When they arrive to work in Thailand, another unique technique is offering Japanese expatriates a manual written by Japanese expatriates who used to work in Thailand before. These procedures have helped gaining acceptance of the Japanese way and TMC practices from Thai subordinates and also promote strong team spirit. (Petison & Johri, 2006)

TMT has eight special units under the direct command of the president which are responsible for activities and communications among different clusters. These units are internal audit offices, project offices, customer satisfaction promotion offices, public affair offices, safety and environment promotion offices, export administration offices, corporate planning offices and government relation offices (Toyota Motor Thailand, 2007).

Figure 6: TMT's Implementation Structure of 5YEAP

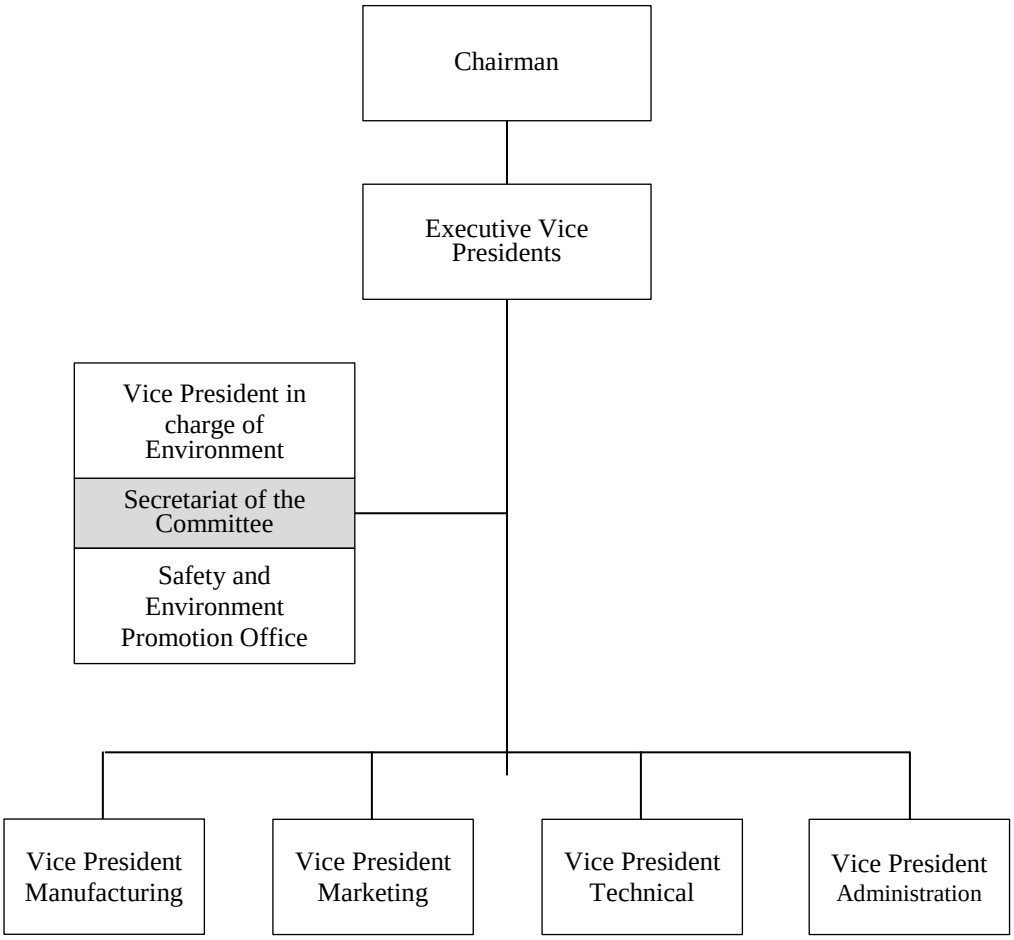


Source: Interview A4

In Thailand, the environmental committee has been established through integration from every department. The TMT's president (Japanese Expatriate from TMC) chairs the environmental committee, whiles directors from every division take

part as members of this governing body. The ‘Safety and Environment Promotion Office’ (SEO) operates as the liaison and secretariat office for this environmental committee. The SEO staffs then coordinate with staffs from other departments to ensure achievement of the 5YEAP.

Figure 7 TMT’s Environment Committee (2006)



There is a high level of integration among the departments of manufacturing, sales, R&D, and human resource in TMT with highly localized organization of the firm. The 5YEAP is one of the policies that shows the TMC integration through the environmental committee and SEO which integrates into all other parts of TMT.

4.2 CSR Policy and Practice of TMT's Environmental Action Plan

The coding technique with categorization of CSR by Olsen and Gitsham (2005) has been applied to answer the first question of "What are the CSR policies and practices of Toyota Motor Thailand?" which is a primary step to identify the content for further analysis. We gathered information on the "2006-2010 five year environmental action plan" from the sustainability reports in 2005-2011 and corporate websites from both TMT and TMC the results of identification, gathering and coding information are as shown in the following section. Noting here that the categories are not mutually exclusive, one activity from the 5YEAP could be classified in two or more items or categories depending on its content.

Table 11 Summary of TMT 2006-2010 5YEAP's CSR Activities

Program / Activities	Goal*	Performance in March 2011 (the end of plan)
Global Warming & Energy		
1) Management of CO_2 emission from TMT and affiliated companies by following the 3 concepts of TMC policy, namely production***, logistics and after-sales service		
1) TMT	CO_2 = 0.284 tonnes/unit	CO_2 = 0.272 tonnes/unit
2) Samrong	CO_2 = 0.237 tonnes/unit	CO_2 = 0.218 tonnes/unit
3) Gateway	CO_2 = 0.306 tonnes/unit	CO_2 = 0.309 tonnes/unit
4) Ban Pho	CO_2 = 0.366 tonnes/unit	CO_2 = 0.333 tonnes/unit
5) Thai Auto Work	N/A	CO_2 = 0.191 tonnes/unit**
6) Logistics	Reduced CO_2 = 10% of the estimations compared to 2007 (= 2.5% from 2009)	Reduced CO_2 = 5.31% of the estimation comparing with 2009
7) After-sales service	10% energy consumption reduction from 2006 among all dealer's service shops	119 from 121 dealers participated in the project
2) Promote development and introduction of alternative fuel vehicles and environmentally-friendly products	Continuously study and Promote Green energy development to public – Gasohol, E10/E20, Hybrid, NGV, Bio-Fuel	1. Launched Camry Hybrid and Toyota Prius in Thailand 2. Launched NGV car, Corolla Altis model 3. Research and develop bio-diesel from Jatropha

Program / Activities	Goal*	Performance in March 2011 (the end of plan)
		4. Received the Green Label Certificate
3) Promote the improvement of traffic condition by using diverse technological network	Support collaboration between the public and private sectors and continuously extend the results	
3.1) Study new technology or methodology to improve traffic flow in metropolitan area and propose to Government sectors		1. Organized the seminar on the Intelligent Traffic System 2. Expand the intelligent traffic information center (iTIC)
3.2) Support know-how, manpower, and other resources to Government Sector		2. Arranged meeting with the Government to follow up the progress
Recycle of Resources		
1) Reduce wastes, promote effective reuse of resources, establish a recycling-based society		
- Continuously develop and improve waste management systems such as separation of waste from used oil, separation and classification of contaminated wastes, production of biogas using food wastes from the cafeterias		
- TMT	6.62 Kg/Unit	6.93 Kg/Unit
- Samrong	5.75 Kg/Unit	5.46 Kg/Unit
- Gateway	7.19 Kg/Unit	7.74 Kg/Unit
- Ban Pho	7.86 Kg/Unit	8.79 Kg/Unit
- Thai Auto Work	N/A	3.50 Kg/Unit**
- Logistics	Reduce the use of packaging materials by 8% compared to 2011 estimation	Reduce waste 27.37% from estimated yearly disposal
- After-sales services	Use all reusable materials for producing dealers' press releases	On process
2) Reduce water consumption - Reuse water from treated water as much as possible, Recycle treated water for manufacturing process		
- TMT	2.12 m3/unit	2.28 m3/unit
- Samrong	1.349 m3/unit	1.65 m3/unit
- Gateway	2.70 m3/unit	2.84 m3/unit
- Ban Pho	3.09 m3/unit	2.76 m3/unit
- Thai Auto Work	N/A	1.14 m3/unit**
Eliminate Use of 4 Substances of Concern (SoC)		
All products comply with SoC regulations and voluntarily eliminate 4 SoCs in production ;	- 4SoC Ban from TMT and affiliated companies	Accomplished – all Toyota products are hazard free.

Program / Activities	Goal*	Performance in March 2011 (the end of plan)
1) Lead (Pb) 2) Cadmium (Cd) 3) Mercury (Hg) 4) Hexavalent Chromium (Cr6+)	- Volunteer 4SoC Ban from all suppliers in 2007	
Atmospheric Quality		
1) Reduce pollution emission to improve air quality in the atmosphere - Product: Promote the development of ultra-low emission technology and introduce the best-performing low-emission vehicles according to Thai Govt. policy and Global trend	All Toyota car models have EURO 4 emission quality standard.	The stage of data collection and analysis (Currently, all car models are EURO 3 certified. But has EURO 4 quality)
2) Reduce emission of Volatile Organic Compounds (VOC) in production		
- TMT	33.83 g/m2	39.58 g/m2
- Samrong	47.90 g/m2	56.25 g/m2
- Gateway	24.90 g/m2	26.17 g/m2
- Ban Pho	24.90 g/m2	25.68 g/m2
- Thai Auto Work	N/A	42.59 g/m2**
Environmental Management System (EMS)		
1) Strengthen the 'Consolidated Environmental Management' plan		
- ISO 14001 certification	Certified at all TMT sites and production sites of all affiliated companies	Target Achieved
- Zero Complaints / Zero Non-Compliance	- Zero Non-Compliance - Zero Complain	- Achieve Zero Non-Compliance - Complaints handled properly and effectively prevent conflict
- Achieving leading levels of environmental performance in each country and region	- Have No.1 status of Environmental management among Automotive Manufacturers in Thailand - Renowned as number 1 in energy conservation of the Global Toyota	- Acquired No.1 status of Environmental management among Automotive Manufacturers in Thailand - Number 1 in reduction of energy and water consumption among Toyota groups in Asia Pacific
2) Further promotion of environmental management of business partners		

Program / Activities	Goal*	Performance in March 2011 (the end of plan)
- Suppliers : Strengthen the supplier environmental management according to the Green Purchasing Guidelines 2007 (by TMC) 1) Acquisition of ISO 14001 certification. 2) Management of Products and Material Delivered to Toyota – SoC free 3) Environment Initiative of Toyota's Supplier 4) Reduction of CO_2 Emission and Usage of Packaging and Wrapping Materials in Logistics	- All suppliers comply with the new 'Purchasing Guidelines 2007'	- All suppliers comply with the Toyota Green Purchasing Guidelines 2007 requirements - All 251 suppliers were certified to ISO14001 standard. - Reduce CO_2 = 10,222 Tons
- After-sales	- All dealers are certified to ISO 14001	94% of all dealers' service centers are certified to ISO 14001 (286 out of 307 centers)
Promotion of Education on the Environment		
Enhance environmental education to all affiliated companies	All employees are trained and updated on environmental, safety and health program	Training and education programs on environmental, safety, and occupational health have been conducted consistently for all employees
Cooperation with the Society		
4.1) Stop Global Warming Project	- Extended the network of the Stop Global Warming Project.	135 municipalities, 170 schools in 76 Provinces participated
4.2) Natural and environmental learning center	- To encourage youths to pay attention to the environment through development of natural learning centers	- Established 2 learning centers at Bangpu & Petchaburi with 75,000 participants - Biotope center established with more than 5,000 visitors
4.3) Eco forest project	- 1 million trees will have been planted by 2013.	755,599 trees in the Eco Forest (2008- March 2011)
4.4) Mangrove Reforestation Project		Planted approx. 200,000 trees for mangrove reforestation project since 2005

Program / Activities	Goal*	Performance in March 2011 (the end of plan)
4.5) Community Projects at each plant	To be admired as the leading company in Thailand in theme of Environment	- Samrong : Participating with local nearby schools to encourage environmental awareness and 5Sor practices in students - Gateway : Cooperate with TEI to organize the 'Eco School' Project with 3 schools and several trainings in Chachoengsao Province - Gateway : Cooperate with the Young Environmental Warrior and Stream Detective Network of Chachoengsao Province to organize activities and trainings
5) Improve disclosures of Environmental information and two-way communication with communities and stakeholders	To be admired as the leading company in Thailand in theme of Environment	- Continuously published annual sustainability reports according to GRI and disclose its environmental accountability - Organized environmental seminars on global warming awareness - No complaint from community in environmental regard for 5 consecutive years
6) Support Environmental Consciousness of Thai Society via Marketing and PR	To be admired as the leading company in Thailand in theme of Environment	- Successfully introduced Hybrid and NGV products to Thai society - 5 Environmental Seminars organized

Remarks:

* The Goal has been revised every two year in 2005, 2007 and 2009. Here we refer to the goal in 2009 which published in 2010 Sustainability Report.

** We put the record available from 2010 sustainability report since the data is not specified in 2011 report.

***The scope of 'Production' also includes operation from the office and other departments.

Coding & Scoring of Activities in the Action Plan

The activities of TMT's 2006-2001 5YEAP can be summarized as follows;

Table 12 2006-2010 5YEAP's Environmental CSR Activities

	Category	Content / Classes of Activities / Items	5YEAP
1	Leadership, vision and values	o Defining and setting purpose, values and vision	
		- Incorporating CSR into the enterprise's purpose (or mission)	•
		- Incorporating CSR into the enterprise's values.	•
		- Incorporating CSR into the enterprise's vision.	•
		- Aligning purpose, values and vision.	•
		- Involving relevant stakeholders.	•
		- Gaining commitment from key constituents.	•
		o Translating it into policies and procedures	
		- Developing business principles / Code of conduct.	•
		- Developing policies.	•
		- Integrating CSR into strategy.	•
		- Integrating CSR into corporate governance.	•
		- Integrating CSR into management systems.	•
		o Putting it into practice including empowering and embedding	
		- Empowering people.	•
		- Providing necessary training and development.	•
		- Instilling a culture of responsible business practice.	•
		- Aligning remuneration.	•
		- Using values-based leadership.	•
		o Ethical leadership and championing	
		- Defining a clear position on political contributions.	
		- Lobbying transparently.	
		- Being a leader and advocate for business engagement into CSR.	•
2	Marketplace activities	o Responsible customer relations including marketing and advertising	
		- Providing accurate and clear product information.	
		- Screening customers for acceptable behavior.	•
		- Engaging in cause-related marketing.	•
		o Product responsibility	
		- Ensuring product safety.	•
		- Considering product life cycle.	
		- Incorporating CSR impacts in product innovation.	•
		o Using CSR product labeling	
		- Marketing environmentally friendly products.	•
3	Workforce activities	o Employee communication and representation	
		- Listening to and involving employees.	•
		o Ensuring employability and skills development	
		- Provision of training and development opportunities.	•
		- Promoting knowledge management and organizational learning.	•
		- Conducting job appraisals.	•
		o Responsible / fair remuneration	
		- Paying employees fairly.	•

	Category	Content / Classes of Activities / Items	5YEAP
		o Health, safety and wellbeing	
		- Promoting health and safety.	•
4	Supply chain activities	o Being a fair customer	
		- Listening to and working with suppliers.	•
		o Driving standards through the supply chain	
		- Screening suppliers for compliance with social and environmental standards.	•
		- Monitoring social and environmental performance of suppliers.	•
		- Applying CSR standards throughout the supply chain.	•
		- Setting targets for suppliers.	•
5	Stakeholder engagement	o Mapping key stakeholders and their main concerns	
		- Mapping stakeholders.	•
		- Gathering available knowledge on stakeholder's concern.	•
		- Prioritizing stakeholders.	•
		- Planning consultation.	•
		o Stakeholder consultation	
		- Engaging in employee consultation.	•
		- Establishing complaints procedures.	•
		- Conducting stakeholder surveys.	
		- Engaging in local community liaison.	•
		- Conducting focus groups.	•
		- Communicating and liaising with business partners.	•
		- Participating in public policy debate.	
		- Partnering with public authorities.	•
		o Responding and managing to stakeholder issues	
		- Setting commitments, targets and goals for CSR activities with stakeholders.	•
		- Deploying and enabling resources.	•
		- Overseeing stakeholder CSR activities.	•
		- Identifying and managing risks.	•
		- Measuring outcome.	•
		- Using management guidelines with a CSR element.	•
		o Transparent reporting and communication	
		- Establishing appropriate communication and reporting channels.	•
		- Demonstrating openness and transparency.	•
		- Using leading guidelines on CSR reporting.	•
		- Getting external validation.	
		- Using quality assurance methods.	
6	Community activities	o Giving cash	
		- Donating, charity.	•
		- Sponsoring projects & events.	•
		- Engaging in partnerships for social investment.	•
		o Giving employee time	
		- Allowing employee volunteering.	•

Category	Content / Classes of Activities / Items	5YEAP
	- Encouraging employee to engage in part-time projects.	•
	- Using full-time secondment.	
	- Co-coordinating project in giving of employee time.	•
	o Giving other kind of contributions	
	- Providing facilities.	•
	- Loaning facilities and assets.	
	- Giving assets or products.	
	o Being a good neighbor	
	- Liaising with local communities.	•
	- Promoting social cohesion in the community.	
	- Minimizing adverse effects of local operations to local communities.	•
7 Environmental activities	o Resource and energy use	
	- Running awareness initiatives.	•
	- Using 'green' technologies.	•
	- Improving energy efficiency.	•
	- Purchasing 'green' materials.	•
	- Using locally generated renewable energy.	•
	- Considering broader scope of ecology and biodiversity.	•
	o Pollution and waste management	
	- Treating emissions.	•
	- Re-engineering processes.	•
	- Reusing and recycling.	•
	- Managing localized environmental pollution.	•
	o Environmental product responsibility	
	- Managing the supply chain in environmental aspect.	•
	- Assessing impacts in product life-cycle.	
	- Certifying and labeling products.	•
	- Reducing packaging.	•
	- Using product take-back schemes.	
	- Addressing politically sensitive environment issues.	
	o Transport planning	
	- Reducing goods transport.	•
	- Reducing employee travel, using teleconferencing.	•

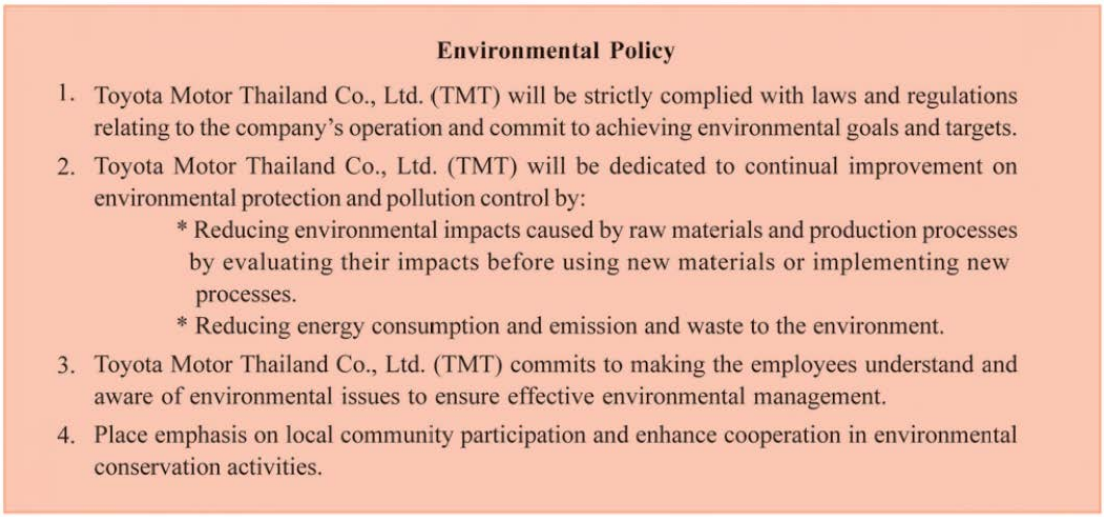
Description

Group 1) Leadership, vision and values

The TMT's 2006-2010 5YEAP activities in this group are;

• Defining and setting purpose, values and vision
  - Showing the incorporation of CSR into the mission, values and visions through adoption of environmental concerns according to TMC's structure.
    - TMC's Global Vision 2010's 4th element "Kind to the Earth" which translated into the Earth Charter and later the 5YEAP in subsidiaries.
    - TMC Guiding Principles.
  - TMT's Corporate Vision to "be the most admired and respected company in Thailand" which includes all parts of operation and environmental aspects.
  - TMT Corporate Principles, the 5th element : "Adopt spirit of social responsibilities to our communities and environment"(Toyota Motor Thailand, 2008)
  - Establishment of Environment Company-wide Committee.
• Translating it into policies and procedures
  - TMT formed its own Thailand Environmental Policy and codes of conduct which are resonant with the global policy.

Figure 8 TMT's Environmental Policy



Environmental Policy

1. Toyota Motor Thailand Co., Ltd. (TMT) will be strictly complied with laws and regulations relating to the company's operation and commit to achieving environmental goals and targets.
2. Toyota Motor Thailand Co., Ltd. (TMT) will be dedicated to continual improvement on environmental protection and pollution control by:
   * Reducing environmental impacts caused by raw materials and production processes by evaluating their impacts before using new materials or implementing new processes.
   * Reducing energy consumption and emission and waste to the environment.
3. Toyota Motor Thailand Co., Ltd. (TMT) commits to making the employees understand and aware of environmental issues to ensure effective environmental management.
4. Place emphasis on local community participation and enhance cooperation in environmental conservation activities.

Source: Toyota Motor Thailand (2008)

- Establishment of the company-wide design of 5YEAP which includes all departments, affiliated companies, supply chain and stakeholders in the action plan.

• Putting it into practice including empowering and embedding

- The 5YEAP entails strategy, benchmarking, action details, management practice and Kaizen guidelines text books, training program, constant re-evaluation of plan at the end of fiscal year.
- The extensive training programs are continuingly carried out to ensure the plan had been implemented accordingly. The corporate codes of conduct and culture are incorporated into the training programs.
- The management practices are employed to encourage the achievement of the goals and empower employee to help creating initiatives. For example, Kaizen (Japanese term for the concept and practice of continuous improvement), and Genchi Genbutsu (Going to the source to find the facts).
- The targets of this plan were aligned with KPI system which related to the evaluation, rewards, and remuneration programs.
- The environmental concerns became the values guiding the corporation and embedded into day-to-day actions.

• Ethical leadership and championing

- Exhibited the aim for leadership by setting goals to be the best automobile manufacturing plant in the region in terms of safety, quality, cost and environment (Eco Plant) and striving for achievement of “Zero Emission” target.
- Transparency of environmental account through publishing of environmental performances and cost.

Conclusion:

• The activities span all 4 classes and achieving 17 of 19 items from the categorization of environmental CSR activities in this group.

• The CSR items which haven't been mentioned in the publicly published materials and interviews include; Defining a clear position on political contributions and lobbying transparently in environmental issues.

Group 2) Marketplace Activities

The TMT's 2006-2010 5YEAP activities in this group are;

• Responsible customer relations including marketing and advertising
  - Study the possibilities and Negotiate with TMC & TMAP-EM to introduce the Hybrid product into Thai Market.
  - Reinforce environmental brand image by cooperating with environmental creditability alliances holding the activities.
  - Green service shop.
• Product Responsibility
  - Reduce emission to improve air pollution emission from products by making all product comply to the Euro 4 level.
  - Promote the development of ultra-low emissions technology and try to introduce the best-performing low- emission vehicle according to government policy and global trend.
• Using CSR product labeling
  - Present "Green Technology" logo, trademark to the public in PoP materials and marketing events such as local motor shows.
  - Try to introduce Euro 4 level vehicles to the Thai Market
  - Using TEI's "green label" standard

Conclusion:

• The activities include 3 classes and achieving 5 of 7 items from the categorization of environmental CSR activities in this group.

• The CSR items which haven't been mentioned in the publicly published materials or interviews are; providing good and clear product information and considering product life cycle

Group 3) Workforce activities

The TMT's 2006-2010 5YEAP activities in this group are;

• Employee communication and representation
  - TMT and TMC involve staff from many levels of management, operations and departments to grasp an accurate picture of the situation before planning the policy to ensure effectiveness and achievement of goals.

• Ensuring employability and skills development
  - Conduct & promote environmental, safety and health awareness training to all operational areas and to all employees.
  - Sending employees to learn about Toyota Environmental Management System at TMC (Japan)
  - Emphasizing staff's education on environmental knowledge through external and internal educational programs.
  - Employee's performance on environmental action plans was incorporated into the job appraisal process.

• Responsible / fair remuneration
  - Aligning Remuneration and rewards through application of KPI system associated with the 5YEAP.

• Health, safety and wellbeing
  - Awarded the Best Safety Award for Occupational Health and Working Environment from Thai government.
  - Achievement and retaining of Occupational Health and Safety Management System (OHSAS) 18001 Certification.

Conclusion: The activities include 3 classes and cover all 6 items from the categorization of environmental CSR activities in this group.

Group 4) Supply chain activities

The TMT's 2006-2010 5YEAP activities in this group are;

• Being a fair customer
  - TMT (and TMAP-EM) constantly consulted and communicated with suppliers to work with them efficiently while keeping a long-term sustainable relationship.

• Driving standards through the supply chain
  - Driving the "Consolidated Environmental Management program to the first-tier supply chain
  - Initiate the "Green Supply Chain" program and applying the "Toyota Green Purchasing Guideline 2007" (first version established in 2001) which has 4 subjects to strengthen in environment issue.
  - Changing the Wrapping Materials in Logistics to be more recycle-friendly
  - Establish Yokoten activities of Best Practice which is the TMC's management practice in EMS to all suppliers.

Conclusion: The activities include 2 classes and cover all 5 items from the categorization of environmental CSR activities in this group.

Table 13 Overview of Environmental specification in the "Toyota Green Purchasing Guideline 2007"

Environmental Activities	Request Level 1:Voluntary improvement efforts 2: Requests for reports 3: Carrying out audits	Industry (primary suppliers) R: Required N: Not required D: To be discussed separately (by Toyota)			
		Parts	Raw materials; Supplement-ary materials	Design, Construction, Cleaning, Landscaping	Logistics
1. Acquisition or renewal of ISO14001 certification	2	R	R	D	R
2. Management of products and material supplied to Toyota					
2.1 Vehicle parts (including parts for customized vehicles), accessories, and raw materials					
2.1.1 Management and recycling of substances of concern • Elimination of 4 SoCs (Pb, Hg, Cd, Cr6+)	3	R	R		
2.1.1 Management and recycling of substances of concern • Reduction of Substances other than 4 SoCs	2 (As TMAP-EM request)	D	D		
2.1.1 Management and recycling of substances of concern • Management system of 4 SoCs (Evidence that no SoCs exist, IMDS)	2 (As TMAP-EM request)	D	D		
2.1.1 Management and recycling of substances of concern • Management of recycling/ recovery rate	2	R	R		
2.1.2 Response to ECO-VAS (LCA)	Report as TMC request	N	N		
2.2 Management of substances of concern in raw materials and supplementary	2		R	R	
3. Environmental initiatives relating to suppliers' activities					
3.1 Compliance with Environmental laws & Toyota's regulations	3 (Check as needed)	R	R	R	R
3.2 Enhancement of Environmental Performance Reduction of energy, water, waste and VOC	3 (Check as needed)	R Action plan of energy, water, waste and VOC Reduction			
3.3 Social and Environmental Contribution	1	D	D	D	D
4. Reduction of CO2 emissions and packaging and wrapping materials in logistics					
4.1 Report of energy consumption to Toyota					
4.1.1 Logistics performed at the request of Toyota	2				R
4.1.2 Delivery of goods to Toyota	2	R	R		
4.2 Reduction measure in CO2 emission and usage of packaging and wrapping material	3 (Check as needed)	R	R		R

Source: Toyota Motor Asia Pacific Engineering & Manufacturing (2007)

Group 5) Stakeholder Engagement

The TMT's 2006-2010 5YEAP activities in this category are;

• Mapping key stakeholders and their main concerns
  - System of mapping stakeholders and concrete action plan towards the identified stakeholders.
  - Prioritizing the key stakeholders: Suppliers and Dealers.
• Stakeholder consultation
  - Engaging employees and dealers in the consultation process, getting insights from the stakeholders and initiate the program to help partners overcome the obstruction of getting ISO 14001.
  - All employees brainstorm together to create activities that will help achieving targets of 5YEAP.
  - Supporting research studies on the public issues on environmental topics especially fuel efficiency and energy conservation.
  - Establish Environmental communication between TMT, NGOs, Government and communities at least once a year.
  - Partnership with NGOs and Government departments in environmental programs to stop global warming.
  - Enhance research and development in partnership with energy companies & Thai Government. Propose invention of new technologies to Government sectors and Support know-how, manpower, and other resources.
• Responding and managing to stakeholder issues
  - Setting Clear commitments, targets and plan towards stakeholders in environmental aspects.
  - Toyota established the complaint procedures in environmental aspects called the 'external communication' procedure where the complaints are reported to the local plant's environmental officer. The environmentalist at each plant will try to solve the problem or report to the head office SEO department for further consultation.
  - Allocating financial, technological, and human resources into the management of stakeholder plan.

- Constant measuring of success through TMT's assessment body.
- Organize workshop training program and/or facilitate the certification program to help the stake holder achieve the targets.
- Conduct environmental training for the public at least 3 times per year.
- Promote Energy Saving projects to dealers by setting the training course for service center owners nationwide, entitled "Energy saving for cost reduction in the service center"

• Transparent reporting and communication

- Publishing annual sustainability report according to GRI reference (TMT reports divide the topics in to 3 aspects: environment, social, economic and started referencing its content to GRI guideline since 2008)
- Website communication to ensure the accessibility of the environmental data.

Conclusion:

• The activities include 4 classes and cover 19 from 23 items from the categorization of environmental CSR activities in this group.

• The CSR items which haven't been mentioned in the publicly published materials and interviews are; conducting stakeholder surveys, participating in public policy debate, getting external validation and using quality assurance methods on reporting.

Group 6) Community Activities

The TMT's 2006-2010 5YEAP activities which relate to the Corporate Community Investment (CCI) are;

• Donating Funds.

- Financially support to the "Stop Global Warming Project" with Thailand Environment Institute as the implementing organization. This project has formed cooperation with many government and local organizations such as

  - National Municipal League of Thailand
  - Department of Environmental Quality Promotion (DEQP), Ministry of Natural Resources and Environment, Thailand.
  - Energy Policy and Planning Office (EPPO), Ministry of Energy, Thailand
  - Appropriate Technology Association
  - Development of Environment and Energy Foundation
  - Office of the Basic Education Commission, Ministry of Education, Thailand

- Provided financial support for the project cooperation between Toyota Motor Thailand Co., Ltd., Toyota Technical Center Asia Pacific (Thailand) Co., Ltd. (TTC-AP), PTT Public Co., Ltd. and Kasetsart University to conduct a research and development project on bio-diesel production from Jatropha.
- Provided funds for reforestation in Khao Ang Reu Nai animal and wildlife reservation protection area.
- Provided funds for Mangrove forest plantation and educational program incorporation with the Army Quartermaster Department and the World Wildlife Fund for Nature (WWF)

Figure 9 Tree Planting Activity for 'eco plant' concept at Ban-Pho Plant

Source: Toyota Motor Thailand Internal Document

• Giving employee time

- Organize the in Mangrove Education Camping and reforestation activities which encourage executives, employees and their families to participate.
- The Planting of Permanent forest in the Ban Pho Plant Area engaging executives, employees, their families, suppliers and dealers.

• Other types of resource contribution

- Provide information and equipment to the research team in Jatropha project.
- Support establishment of environmental Learning Center and develop environmental curriculum at Bangpoo Nature Education Center.
- Organizing seminars and trainings on environmental topics to the public.
- Providing guided tours to visit plants for public groups.

Conclusion:

• The activities include all 4 classes and cover 9 of 13 items from the categorization of environmental CSR activities in this group.

• The CSR items which haven't been mentioned in the publicly published materials and interviews are; using full-time secondment, Loaning Facilities and products, giving assets and products, and promoting social cohesion in the community.

Group 7) Environmental Activities

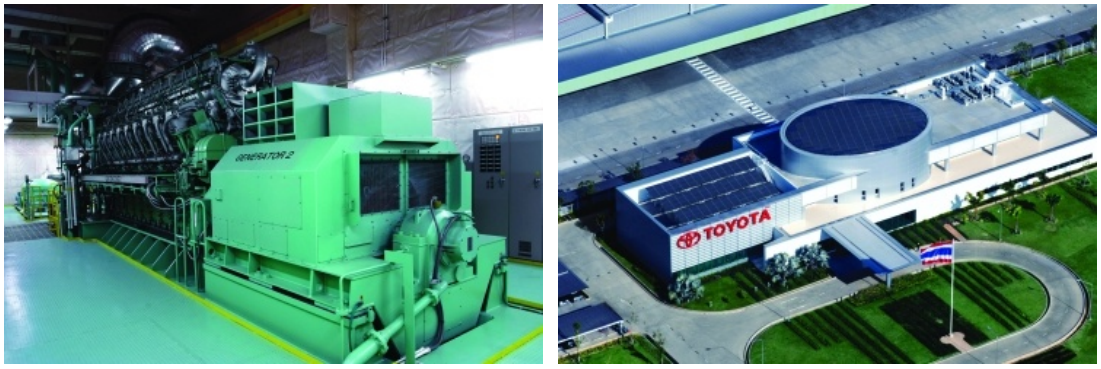
The TMT's 2006-2010 5YEAP activities in this group are;

• Improve the resource efficiency and waste reduction at their plants by doing two types of activities to achieve the vision to have "Zero Emission" production.

1) Technological change and investment in energy efficiency technologies such as installing energy retrieval system from generated heat, changing lighting and electric equipment, investing in new types of alternative energy eg. Solar, LPG, break down or combine the steps of manufacturing

operations, change the machine or chemicals used in manufacturing process, establishing water recycle plant etc.

Figure 10 Ban Pho Plant's Electricity Co-Generator Machine and Solar Power Panels



Source: Toyota Motor Thailand Internal Document

Note: Note: The Ban Pho Plant is the first automotive factory in Thailand which installed a Co-Generator for electricity generation. This Co-generator uses natural gas as its fuel. Generating 11.5 megawatts of electricity and costs approximately 350 Million Baht. A Solar system was also installed at the office building of Ban Pho plant to generate electricity that is used in the building. Both systems can reduce Carbon dioxide emissions by more than 8,500 tons per year. For the production section, stamping and welding processes are installed with Servo-Motors and Servo-Robots, which save energy, increases quality, and reduces spatter and fumes from the welding process.

Figure 11 The VOC emission reduction machine which could reduce 95% of VOC emission

Source: Toyota Motor Thailand Internal Document

Figure 12 Water-based paint used in painting process to reduce VOC emission

Source: Toyota Motor Thailand Internal Document

2) Initiating and applying operational management practices that could reduce the energy use, waste and emissions. For example systematic maintenance to ensure the efficient use of equipment and machines, organizing a waste reduction competition among employees, TMC's own EMS system, incorporating the practice of "reduce reuse recycle" into every part of operations and every employee, applying Toyota's signature "Kaizen" which is one of the core cultures of the company to generate initiatives that promote resource efficiency and waste reduction.

Figure 13 Operational management practice to increase environmental performance

Source: Toyota Motor Thailand Internal Document

• Environmental product responsibility

- TMC provides EMS training to both suppliers and dealer which is the system that was reported to be more advanced than ISO 14000
- Have systematically supported evaluating and monitoring for all dealers and suppliers in their ISO 14000 certification
- Certifying all their products to EURO 4 standards
- Reduce the use of cart box packaging and replace with specially designed plastic that is more recycle-friendly.
- Applying Milk Run expansion & Routing and Kaizen to increase products transport efficiency for TMT and suppliers

Conclusion:

• The activities include all 4 classes of activities and cover 15 of 18 items from the categorization of environmental CSR activities in this group.

• The CSR items which haven't been mentioned in the publicly published materials and interviews are; assessing impacts in product life-cycle (happened in product design which occurred at TMC & TMAP-EM), product take-back schemes, addressing politically sensitive environment issues.

Summary of Key Findings

The first question of our study, "What are the CSR policies and practices of Toyota Motor Thailand?", is an exploratory question which allows us to look at the emphasis, coverage and inclusivity of TMT's 5YEAP. The analysis of categorization of CSR activities in the Table 12 (page 66) could be summarized as in following table.

Table 14 Summary of 2006-2010 5YEAP's CSR Activities

	Category	Achievement / No. of Items	Percentage (Ca.)
1	Leadership, vision and values	17 / 19	89.47 %
2	Marketplace Activities	5 / 7	71.43 %
3	Workforce Activities	6 / 6	100.00 %
4	Supply Chain Activities	5 / 5	100.00 %
5	Stakeholder Engagement	19 / 23	82.61 %
6	Community activities	9 / 13	69.23 %
7	Environmental activities	15 / 18	83.33 %

• We found that even though TMT's 2006-2010 5YEAP is an environmental CSR policy, it contains activities that are not only limited to the environmental category but spans across all groups, especially in the "Leadership, vision and values" category which the plan scores 89.47 percent. The environmental concern has been integrated into the vision, value, and corporate culture. The design process of this action plan is very systematic. The plan entails methodology which concerns several aspects of environmental topics and incorporates the stakeholders in their targets and objectives with clear strategy to achieve those goals.

• In the "Marketplace Activities" category, TMT shows their records and stance on trying to market environmental friendly products and engage in a social marketing activity in environmental issues. This contributed to the high score of 71.43 %. However, it was found that the environmental performances of products and its

environmental effect are not adequately addressed in the product information materials.

Though TMT incorporates the CSR impacts in product innovation, the practices in this category appeared limited. This does not derive from the lack of concern or policy in environmental effects of the products, but rather reflects the strategy of Automotive MNCs production chains. The product design process is mainly conducted at the global or regional headquarters such as TMAP-EM, while TMT serves as a manufacturing base for the global manufacturing chain.

From the interviews, it was also found that TMAP-EM only conducts R&D and innovation in the localization of products and minor adjustments to suit the local market. TMAP-EM is not a design unit that could completely design new products. Therefore the initiatives about product design responsibility in this environmental action plan is limited to the action of trying to develop an NGV system and promote Hybrid Technology in Thailand (Toyota Motor Thailand, 2007, p. 18) but doesn't appear to have a more thorough policy on product design. This result points out one very unique characteristic about MNCs which have a broken-down production chain into many countries and regions. It needs specific design of CSR policy and activities for each operation base that depends on the types of business activities carried out in each place. CSR could become an effective tool for MNCs only if the policy makers take this point into account when designing policy and action plan.

• The 5YEAP has full score in "Workforce Activities" category on items that relate to environmental issues. The area mainly focuses on "Ensuring employability and skills development" group, which reveals one of the most important elements of Toyota's environmental policy. The corporation gives a lot of resources into the training and development to ensure the policy, vision, culture and management practice (such as Kaizen) are well-understood and implemented throughout the whole organization. This practice was crucial to the achievement of 5YEAP.

• The 5YEAP has full score in the "Supply Chain Activities" which mainly comes from TMT's strong initiatives in "Green Purchasing Guidelines" of TMC

(adapted for Thailand by TMAP-EM) and shows the Toyota's emphasis on its supply chain management.

• The stakeholder engagement category has 82.61% which is considered very high and reflects the quality of the planning process of this action plan. Since this is the 4th plan and considered the second generation of the 5YEAP, the TMC and TMT have acquired great experiences and skills in consultation process, mapping their stakeholder concern, and publishing their information through reports. The consistency and continuous improvement (which is the central part of the "Toyota way") enables them to cover a high level of stakeholder management in environmental issues. Though they listen to their partners and engage the stakeholders though communication procedures and focused interviews, the 5YEAP doesn't show a clear establishment of complaints procedures for environmental issues or conducting a formal survey on environmental topic with their stakeholders.

• In terms of the Community activities, TMT scores at 69.23 % reflecting the wide variety of social contributions from the corporation. Although they might not be much different from the main-stream community investment initiatives (mangrove reforestation, planting trees, environmental learning center, alternative energy research, environmental education in provinces that have TMT factories etc.), it provides variety and addresses the environmental issues of various stakeholders while being not too fragmented. The projects also have long-term continuity in resource contribution from TMT, reportedly at approx. 205 Million Baht for this 5 year plan (Toyota Motor Thailand, 2008, 2009, 2010, 2011, 2012c).

• Lastly in the area of "environmental activities", surprisingly the 5YEAP score is at 83.33 %. Although the number is very high, considering the performance in prior categories and the fact that this is the core part of the action plan, a higher achievement in this group was expected. When analyzing the details of each class, it was found that the TMT obtained a perfect score in the "resource and energy use" and "Pollution and waste management" activities as expected. However, it has lower performance in the "environmental product responsibility" due to two reasons; 1) the production design process is at the headquarters TMC and is not emphasized much in

this plan. 2) This framework gathered information from EU firms and international organizations which are very advanced in their initiatives. For example, the research also suggests corporations to have “product take-back schemes” which require producers to take back and recycle its old products and is the best way to ensure that they design their products to be less toxic, to last longer and to be repaired and recycled.

• The summary of areas which are missing from the plan that have potential for improvement in TMT environmental accounts are;

As seen from the summary, some of the areas include environmental political roles and advanced level of transparency. These activities require responsibility above the management field and question the corporate responsibility directly at its role as citizenship in a society. It is suggested that Toyota address these concerns in order to become a true leader in environmental responsibility and contribute to the sustainable development of Thai Society.

4.3 TMT's Environmental Performance After 5YEAP and International Standards

The second question of our study asks "Do the CSR policies and practices of Toyota Motor Corporation improve the responsibility standards in its Thai subsidiary?". The information has been combined from the Thai State's Registration offices, Thailand CSR institutions, EU, UN, etc., and compared with the environmental performance of TMT to examine the compatibility of CSR practice with internationalized standards. The results are as follow;

Table 15 Results from 5YEAP compared with local & international standards

Area of responsibility	TMT's Performance End of FY2010	Thai Regulation	EU Regulation	Thai Voluntary standard	Examples of International Voluntary standard	Examples of Toyota International Performance End of FY 2010	
						level	Source
1) CO_2 Emissions from Vehicle Production	Average 0.272 CO_2 tonnes/Unit		ETS Trading Scheme [EU Directive 93/116/EC] Controlling Carbon Emissions		GHG Protocol	0.501 CO_2 tonnes/Unit	TME [1]
						1.28 CO_2 tonnes/Unit	TMCA[4]
2) Product Emissions Standard	- All models meet Euro 4 standard although not all are formally certified - Green Label (TEI) [6] * The carbon emission standards differ depend on types of engine. Example : 161 CO_2 g/km for one-ton pickup car	TIS 2160-2546(2003) & TIS 2155-2546 (2003) (Equivalent to Euro 3) (no regulation for carbon emissions)	Euro 5 (Effective 2009/10) [EU Directive 1999/94/EC] & Limit of average emission from all car models to 130 CO_2 g/km by 2015 EU regulation 443/2009	Green Label (TEI) TGL-33-R1-11 (used standards according to Euro 4)	Refer to Euro 4-6 Standard	Euro 3-6 Standards depends on countries, plants and products	TMC global[7]
3) Water consumption in vehicle production	2.28 m³/Unit					2.07 m³/Unit	TME [1]
						5.0 m³/Unit	TMC in Japan[3]
						3.7 m³/Unit	TMC global average [7]

Area of responsibility	TMT's Performance End of FY2010	Thai Regulation	EU Regulation	Thai Voluntary standard	Examples of International Voluntary standard	Examples of Toyota International Performance End of FY 2010	
						level	Source
4) Amount of Waste to landfill (Non-toxic waste)	0 tonnes (4.47% incinerated, 95.74% recycled) [Zero Waste Principle by TMC]	N/A (Control at landfill site not at discharger)	EU Landfill Directive 1999/31/EC	N/A (Issued guideline like 3R but no standard to control amount of waste)	Various regulations and schemes in different countries	Zero Waste Management Implemented worldwide	TMC global[7]
						0.0002 kg/unit	TME FY2010[1]
5) Packaging and Packaging Waste	- Reduction of packaging waste at TMT - Application of 4th principle in green purchasing guideline : Reduction of CO2 Emissions and Usage of Packaging and Wrapping Materials in Logistics > Reduced 27.37% of packaging and wrapping materials from base year 2007	N/A Encourage 3R Activities : Reduce, Reuse, Recycle but has no regulation	Packaging and Packaging Waste Directive [Directive 94/62/EC] (Issued targets to reduce weight and increase recyclability + elimination of 4 SoCs)	N/A Encourage 3R activities, but has no standard	CEN Standards on Packaging and the Environment (EU scheme for 'Harmonized' standardization : certified products will not be denied access to any country in the European Economic Area)	Reduced 13.50% (7.8 tons a year) of packaging and wrapping materials from base year 2007	TMC in Japan [7]
6) Elimination & handling of Hazardous Substance	- Eliminate all 4 Substances of Concern (SoC) in production including Lead,	N/A (End of pipe control)	1) The use of lead, mercury, cadmium and hexavalent chromium is prohibited in EU	Green Label (TEI) [6] : Prohibits Lead, Mercury,	Japanese PRTR (Pollutant Release and Transfer Register) system :	- Eliminate all 4 Substances of Concern (SoC) in all Key Oversea Plants	TMC global[7]

Area of responsibility	TMT's Performance End of FY2010	Thai Regulation	EU Regulation	Thai Voluntary standard	Examples of International Voluntary standard	Examples of Toyota International Performance End of FY 2010	
						level	Source
	Mercury, Cadmium, Hexavalent Chromium (TMC policy) (complete elimination, with some exemptions for parts contamination) - Green Label (TEI) [6] - Eco-VAS (LCA) (TMC Practice)		(complete elimination, with some exemptions) 2) Management of other hazardous substances : - Directive on End-of Life Vehicle (ELV) 2000/53/EC Article 4(2)(a) - REACH (EC 1907/2006) - CLP (EC 1272/2008)	Cadmium, Hexavalent Chromium, Arsenic, Antimony, Triphenyl tins and Tributyl tins in Painting Materials	voluntary improvement of the management of chemical substances United Nations' GHS system Environmental Hazards	- Reduce the discharge of substances subject to the PRTR law, focusing on vehicle painting processes	
7) Volatile organic compounds (VOCs) in car painting	39.68 g/m2 (Emission per unit of paint volume Area)	Different Methodology for Measurement : - Control on air quality and limit pollutants in the atmosphere - No control specifically for car painting procedure	Categorized by activities : For surface coating is [45] g/m2 for cars [VOC Solvents Emissions Directive1999/13/EC] Germany's regulation at 35 g/m2		Corporations issue their own guidelines or refer to EU regulations	18.5 g/m2 20 g/m2	TME FY2010[1] TMC in Japan[3]

Area of responsibility	TMT's Performance End of FY2010	Thai Regulation	EU Regulation	Thai Voluntary standard	Examples of International Voluntary standard	Examples of Toyota International Performance End of FY 2010	
						level	Source
8) Treated Water Quality							
- pH Value	SR - 7.4 BP - 7.2 GW - 8.2	5.5 - 9.0 [2]	6.0-9.0 Urban Wastewater Treatment Directive (91/271/EEC) *		N/A (ISO's ICS 13.060 : Guidelines for management and accounting But doesn't control the level of pollutants)	Not Specified (Comply to regulation in hosting countries)	
- Total Dissolved Solids (TDS)	SR - 1111.75 mg/l BP - 866.48 mg/l GW - 1009.61 mg/l	≤ 3,000 mg/l [2, 5]	Different Method of Measurement				
- Suspension solids	SR - 3.69 mg/l BP - 2.02 mg/l	≤ 50 mg/l [2]	≤ 35 mg/l Urban Wastewater Treatment Directive (91/271/EEC) *				
	GW - 46.12 mg/l	≤ 200 mg/l [5]					
- COD	SR - 46.83 mg/l BP - 31.44 mg/l	≤ 120 mg/l [2]	≤ 125 mg/l Urban Wastewater Treatment Directive (91/271/EEC) *				
	GW - 524.36 mg/l	≤ 750 mg/l [5]					
- BOD	SR - 2.03 mg/l BP - 1.42 mg/l	≤ 20 mg/l [2]	≤ 25 mg/l Urban Wastewater Treatment Directive (91/271/EEC) *				
	GW - 192.91 mg/l	≤ 500 mg/l [5]					
- Oil and grease	SR - 1.0 mg/l BP - 0.4 mg/l	≤ 5.0 mg/l [2]	< 10 mg/l Urban Wastewater Treatment Directive (91/271/EEC) *				
	GW - 6.0 mg/l	≤ 10.0 mg/l [5]					
9) Wastewater Discharged Quality							
- Zinc	0.180 - 0.473 mg/l	≤ 5.0 mg/l [2]	Differ between countries & Industries			Not Specified	Not Specified
- Lead	0.1 mg/l	≤ 0.2 mg/l [2]					
- Nickel	0.156 - 0.236 mg/l	≤ 1.0 mg/l [2]					

Area of responsibility	TMT's Performance End of FY2010	Thai Regulation	EU Regulation	Thai Voluntary standard	Examples of International Voluntary standard	Examples of Toyota International Performance End of FY 2010	
						level	Source
- Mercury	0.001 mg/l	≤ 0.005 mg/l [2]	≤ 0.05 mg/l 84/156/EEC Mercury Daughter Directive *			(Comply to regulation in hosting countries)	(Comply to regulation in hosting countries)
- Copper	0.0360 mg/l	≤ 2.0 mg/l [2]	Differ between countries & Industries				
- Cyanide	0 mg/l	≤ 0.2 mg/l [2]					
- Chromium III	0.02 mg/l	≤ 0.75 mg/l [2]					
- Chromium VI	0.01 - 0.02 mg/l	≤ 0.25 mg/l [2]	Differ between countries & Industries				
10) End-of-life vehicles (ELV Management)	N/A	N/A	Requirement of systems for all end-of-life vehicles and parts > Car producers should reach 95% recovery/re-use rate and 85% recycling rate by 2015 [EU Directive 2000/53/EC on end-of life vehicles (ELV) :effective 2007]	N/A	Refer to EU's ELV directive and regulations	Comply with Japanese Automotive Recycling law: (Effective January 2005) The Automotive Shredder Residue (ASR) rate was at 85% in 2010, surpassed the mandated rate at 70% the	TMC in Japan[3]
						Comply with ELV law in EU, EFTA, Taiwan and Korea	TMC[3]

Area of responsibility	TMT's Performance End of FY2010	Thai Regulation	EU Regulation	Thai Voluntary standard	Examples of International Voluntary standard	Examples of Toyota International Performance End of FY 2010	
						level	Source
11) Environmental Management System (EMS)	ISO 14001 standard Certification - Production Plant: 100% - First-Tier Supplier: 100% - Sales Dealers: 94%	ISO 14001 standard Certification as BOI project requirement	Environmental Liability Directive [ELD] 2004/35/EC (came into force in 2009) Within the EU, legislation was introduced to encourage businesses to voluntarily adopt ISO 14000.	ISO 14001 standard Certification	ISO 14001 standard Certification (Japan and UK are the countries with highest registration numbers)	ISO 14001 standard Certification - Production Plant: 100% - First-Tier Supplier: 100% - Sales Dealers: 93.3%	TME FY2010[1]
					EU Voluntary Registration : Eco-Management and Audit Scheme (EMAS) EC No 761/2001	Remark : In FY2000 environmental report, Toyota also accepted EMAS as equivalent to ISO 14001 for suppliers in EU	

Area of responsibility	TMT's Performance End of FY2010	Thai Regulation	EU Regulation	Thai Voluntary standard	Examples of International Voluntary standard	Examples of Toyota International Performance End of FY 2010	
						level	Source
12) Green Supply Chain Management (GSCM)	- TMC Supply Chain Management system : Green Purchasing Guideline 2007 & Kaizen	N/A	N/A	N/A	Supply Chain Sustainability A Practical Guide for Continuous Improvement [UN Global Compact & BSR] Corporations create their own guidelines based on integrated standards in[8] : 1. Green Procurement 2. Green Manufacture 3. Green Distribution 4. Green Logistics	- TMC Supply Chain Management system : Green Purchasing Guideline 2007 & Kaizen	TMC & global major subsidiaries[7]
13) Financial resource to social contribution activities in environmental aspects	54.45 ฿ Million (0.224% of Profit / 0.014 % of revenues)	Not abided by law (Philanthropy or social contribution expenditures could be used to reduce tax maximum 2% of annual profit)	Differs between countries	No apparent standard but encouraged by norms and practices in CSR		(1.75 € Million (1.506% of Profit / 0.01% of revenues)	TME FY2010[1]
						2.363 ¥ Billion (0.579% of Profit / 0.012% of revenues)	TMC & global major subsidiaries[7]

Area of responsibility	TMT's Performance End of FY2010	Thai Regulation	EU Regulation	Thai Voluntary standard	Examples of International Voluntary standard	Examples of Toyota International Performance End of FY 2010	
						level	Source
14) Environmental Accounting and Reporting to public	Published annual sustainability report according to GRI > No level application	N/A (Only discloses environmental accounts to regulators)	Depends on directives and regulations : Encourage the use of	Encourage compliance to GRI Guideline	Global Reporting Initiative (GRI) - Application Level Check: A, B & C - External Assurance : acquire the status of Plus ("+") Carbon Disclosure Project (CDP) for carbon and water disclosure	Global Reporting Initiative (GRI) > A level	Toyota European Sustainability Report 2011 TME FY2010[1]

Remarks:

SR= Samrong Plant, GW = Gateway Plant , BP = Ban Pho Plant

* Directive is an EU regulatory framework that lays down certain end results which must be achieved in every Member State. National authorities have to adapt their laws to meet these goals, but are free to decide how to do so. Often times the Directives restrict only the baseline standard.

[1] Record from Toyota Motor European Sustainability Report 2011 (Toyota Motor Europe, 2012)

[2] Pollution Control Department, Office of Natural Resources and Environmental Policy and Planning, Thailand (Thailand Pollution Control Department, 2006)

[3] Toyota Motor Corporation Environmental Report 2011 (Toyota Motor Corporation, 2011a)

[4] Toyota Motor Corporation Australia (Toyota Motor Corporation Australia, 2012)

[5] Industrial Estate Authority of Thailand, Ministry of Industry (Industrial Estate Authority of Thailand, 2011)

[6] Green Label Thailand by Thai Environment Institute (TEI) Guideline on Vehicle (Thailand Environmental Institute Foundation, 2011)

[7] Toyota Motor Corporation Global Sustainability Report (Toyota Motor Corporation, 2011b)

[8] The Implementation of Green Supply Chain Management Practices (Ninlawan et al., 2010)

Summary of Key Findings

• TMT has full compliance to Thai law from FY2006-2010 and has zero cases of fines which show the basic achievement of responsibility standards. According to the information shown in Table 15, the relationship between TMT's environmental account and international standards is summarized as in the table below.

Table 16 Summary of TMT environmental account in relation to international standards

TMT's Environmental Account from 5YEAP		**Category**			
		Abided by Thai law, but above regulatory standard	In line with EU regulations	In line with CSR/Industrial practice	Above law or CSR standard.- Emphasized by TMC
1	CO2 Emission from Vehicle Production		✓	✓	✓
2	Product Emission Standard	✓	✓	✓	
3	Water consumption in vehicle production				✓
4	Amount of Waste to landfill (Non-toxic waste)		✓	✓	✓
5	Packaging and Packaging Waste		✓	✓	
6	Elimination & handling of Hazardous Substance	(Has regulation with different approach)	✓	✓	
7	Volatile organic compounds (VOCs) in car painting	(Has regulation with different approach)	✓		
8	Treated Water Quality	✓	✓		
9	Wastewater Discharged Quality	✓	✓		
10	End-of-life vehicles	(Not abided by Thai law, lower than EU regulatory standard, no apparent CSR scheme)			
11	Environmental Management System	✓	✓	✓	✓
12	Green Supply Chain Management			✓	✓
13	Financial resource to social contribution			✓	
14	Environmental Accounting and Reporting to public			✓	
	Total	4	9	9	5

• According to the summary, out of 14 environmental responsibility topics emphasized by TMC in the 5YEAP, 4 areas are carried out according to the Thai law but remain in levels above regulatory standards. 9 areas are conducted in line with the EU regulations, 9 areas are associated with CSR standards, and 5 areas were implemented at the level above international laws or voluntarily schemes.

• The results show that the 5YEAP was conducted at a level above domestic regulations. Moreover, it is highly associated with EU regulations and CSR schemes. There are 5 areas which are in line with EU regulations but are not in the scope of environmental responsibility of Thai law or not conducted in the same approaches.

For example, the Volatile Organic Compounds (VOCs) in car painting control is one of the main policies in 5YEAP worldwide. Thai regulation limits the level of VOCs contamination in the atmosphere but does not control the amount of substances used per area of car painting. TMT complied with Thai law but didn't emphasize the practice in terms of the Thai regulatory approach. Instead, TMT accounted the use of VOC compounds in methodology according to the *EU's VOC Solvents Emissions Directive [1999/13/EC]* which measure the substances in units of 'grams per square meter of car painting'.

• It is important to note that the environmental standards of Toyota are not at the same level in every subsidiary. TMT's VOCs level is at 39.68 g/m^2, lower than standard in *VOC Solvents Emissions Directive [1999/13/EC]* (45 g/m^2). But the amount was doubled the TME's level (18.5 g/m^2) and TMC subsidiaries in Japan (20 g/m^2).

Especially in the recyclability and management of end-of-life vehicles, this area was mandatory in the EU and Japan. It was carried out in several countries of Toyota's operation, but has not been implemented in Thailand.

• Moreover, we also found that 6 areas of environmental responsibility obliged by the EU's regulations are related with international and domestic CSR schemes. Including 1) the account of CO2 emission from vehicle production, 2) product

emission standard, 3) amount of waste to landfill (non-toxic waste), 4) management of packaging and packaging waste, 5) elimination & handling of hazardous substances 6) Environmental Management System (EMS) standard.

• There are 5 areas which are emphasized by the TMT above regulatory or voluntary standards, 3 of them are related to the reduction of resource use management (Including 1) CO2 Emission from Vehicle Production, 2) Water consumption in vehicle production and 3) Amount of Waste to landfill (Non-toxic Waste). These are some of the areas that show the effectiveness of TMCs headquarters in global policy in voluntary environmental management. As part of TMC's "Zero Waste Management" policy implemented worldwide, Toyota Motor Thailand eliminated all of its waste to landfill and only 4.47% of its waste was incinerated, the other 95.74% has been sent to the recycle system.

• The assumption could be made that the decision to elevate the CSR standards in its key affiliated companies all over the world above national and regional requirements is partly because of the strong regulations in the EU market. As stated in the 'Green Purchasing Guideline 2007', TMC has promoted the elimination of using the 4SoCs to be "*in line with EU regulation*" and this policy is applied to both domestic and export models. (Toyota Motor Asia Pacific Engineering & Manufacturing, 2007: 7)

4.4 Concurrency between Global Policy and Local Practice

Here the global policy of 5YEAP which is published in the TMC's 2005 sustainability report has been compared to the information from TMT's 2006-2011 sustainability reports. The result of the document review and comparison is shown in the Table 17. From the comparison made in the table, the observations could be summarized as follows:

Table 17 Concurrency Between Global Policy and Local Initiatives

Field		TMC Global Policy	TMT Subsidiary Policy	Level of Concurrency
		Action Items & Description	Specific Activities	
Energy/ Global Warming	**Management**	1) Reduce CO_2 emissions in Toyota's global operations: Create medium- to long-term scenarios for reduction of CO2 emissions and ensure implementation.	• Created 5 Year environmental action plan with specific targets for annual review and 5 year review. Apply systematic benchmarking and implementation process.	High
	Production and Logistics	2) Reduce CO_2 emissions in the production and logistics activities of each country and region	• Management of CO_2 Emission Reduction from TMT, affiliated companies and related operations : Production, Office, Logistic, After Sales	
		Production : Worldwide Average - 20% reduction of CO_2 emissions volume/sales unit from FY2001	In FY2006, the target to reduce 20% of emissions volume/sales unit from TMT's FY2001 (= 0.38 Tons/unit) was already achieved in 2005. Therefore TMT set the new benchmarking goal to further reduce 10% of 2005 emission by FY2010	High (Exceeded TMC target)
		Logistics : Grasp overseas CO_2 emissions volumes and expand reduction activities Determine actual CO2 emissions volumes by FY2007 and make a shift to goal management	- In FY2006, TMT carried out the study to grasp situation on logistics' CO_2 emissions - In FY2007, TMT set target to reduce 10% emission from 2006 by 2010	High
		After Sales : N/A	- In FY2007, TMT set target to reduce 10% of 2006 energy consumption from all dealers by 2010	(Exceeded TMC scope)
	Development and Design	3) Promote the development of technologies to achieve the best fuel efficiency performance in each country and region : Other regions: Actively introduce technologies that improve fuel efficiency 4) Promote the development of clean-energy vehicles, encourage their effective introduction and ensure wider market acceptance 5) Develop technologies to respond to the diversification of energy and fuel sources : develop corresponding technologies for various types of bio fuels and synthetic fuels that will contribute to reductions in CO_2 emissions and energy security	• Promote development and introduction of alternative fuel vehicle and green technology product: Gasohol, E10/20, CNG, NGV, Bio-Fuel • Study & Negotiate with TMC & TMAP to introduce Hybrid technology products. • Present "Green Technology" to the public in events. • Support environmental consciousness of Thai society via Marketing and PR activities • Jointly initiated the 3 years project with Kasetsart Uni. & PTT in research on developing fuel from Jatropha	High

Field		TMC Global Policy Action Items & Description	TMT Subsidiary Policy Specific Activities	Level of Concurrency
		6) Promote initiatives to improve traffic flows using a variety of networking technologies : in cooperation with relevant organizations, aiming to introduce to society traffic systems that use ITS from the three-fold perspective of "cars," "traffic infrastructure" and "people"	• Initiate system to improve traffic using the **intelligent traffic information center (iTIC)** with cooperation from the government sector	High
Recycling of Resources	**Production and Logistics**	7) Promote the effective use of resources to further contribute to the realization of a recycling-based society	• Plan and manage waste reduction and increase recycling in production, logistics, and marketing	
		Production : Reduce the volume of materials discarded - Overseas : Focus on waste, 20% reduction of materials discarded/sales unit from FY2000	• Achieved Zero Waste to Landfill at Gateway Plant , expand the practice to other production sites • Plan to reduce incinerated waste by 5% from 2005 by 2010 • Reduce Waste water sludge by changing coagulant	High
		Logistics : Reduce packaging and wrapping material usage - Overseas : Grasp usage volumes of packaging material and expand reduction activities	- In FY2006, TMT carried out the study to grasp situation on logistics' packaging and wrapping material usage (Part Supply, Service part) - In FY2007, TMT set target of reduction in each year according to estimated usage and production. (example : in 2009 set target to reduce 2.5% from estimated yearly emission)	High
		After Sales : N/A	- 100% utilization of recyclable material in promotion media	(Exceeded TMC scope)
		8) Reduce water consumption - Set separate goals for each country and region and continue implementing measures to reduce water consumption	• Reduce water consumption (to 2.90 m^3/unit at Samrong // 3.24 m^3/unit at Gateway // 2.14 m^3/unit at Samrong) • Maintain no.1 among automobile makers in Thailand.	High
	Vehicle Recycling	9) Steadily implement recycling systems in Japan and Europe - Increase vehicle recovery rates in Japan and Europe to reach 95% by 2015 (No overseas policy)	N/A – Not policy requirement for Thailand	Low
		10) Further promote and expand the use of designs based on the designs for recycling (DfR) concept - Promote and expand the development of vehicles that are easy to	N/A – No design Unit at TMT	Low

Field		TMC Global Policy Action Items & Description	TMT Subsidiary Policy Specific Activities	Level of Concurrency
		dismantle and recycle		
Substances of Concern	**Development and Design**	11) Promote management and further reductions in the use of substances of concern (SOC) - Eliminate use of four SOCs (lead, mercury, cadmium and hexavalent chromium) globally	• All products comply with SoC regulation & TMC guidelines • Volunteer to eliminate all use of 4SoCs (Lead, Mercury, Cadmium, and Hexavalent Chromium) by the end of 2007 in Production, Logistics and After-Sales Services	High
	Production and Logistics	12) Reduce the discharge of substances subject to the Japanese PRTR law (Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management) > Overseas Production: Set goals that are stricter than each country's regulations and implement reduction activities		
Atmospheric Quality	**Development and Design**	13) Reduce emissions to improve air quality in urban areas in all countries and regions - Overseas : Introduce Euro 3 and 4 level vehicles in short term - Further promote the development and market penetration of high-efficiency, clean diesel vehicles	• All Cars produced comply with EURO 4 Level	High
	Production and Logistics	14) Implement initiatives to reduce VOC emissions - reduce the volume of cleaning solvents used in vehicle painting processes and expand the use of water-borne paints - Overseas : Conduct activities to reduce VOC emissions at the highest levels in each country (Emissions/unit of painted area)	• Reduce VOC emission to achieve VOC level of - 50 g/m^2 in plant Samrong - 55 g/m^2 in plant Gateway - 35 g/m^2 in plant Ban Pho (To be no.1 among automobile companies) • Replacement of Technology : Change to water-borne paints robots & other technologies	High
Environmental	**Management**	15) Strengthen consolidated environmental management	• Strengthen consolidated environmental management	

Field		TMC Global Policy Action Items & Description	TMT Subsidiary Policy Specific Activities	Level of Concurrency
Management		Production affiliates : - Global Eco-Factory activities that ensure the incorporation of environmental measures from the planning stages - Toyota EMS (Global audit) > zero instances of non-compliance and complaints, minimizing environmental risks, and achieving leading levels of environmental performance in each country and region	• Develop Eco-factory Activities at all plants and cooperate with TMC to establish guidelines • Improve Toyota EMS performance & Apply for ISO14001 / TIS / OHSAS18001 Certification • Maintain no.1 environmental target among automobile makers • Implement Toyota EMS (Global audit) System	High
		16) Further promote environmental management to business Partners		
		Suppliers : - Further enhancement of environmental activities in cooperation with suppliers - Management of SOCs contained in parts, raw materials, production facilities and other items supplied to Toyota - Request voluntary initiatives by suppliers to improve environmental performance	• Encourage for 100% Achievement of ISO 14001 Certification and Toyota Audit program for Suppliers • Suppliers comply to all measures in Green Purchasing Guidelines by 2010 : SOC & Co2 Reduction, Recycle and Social Contributions	High
		Overseas distributors : - Support initiatives to assess, manage and reduce emissions of CO2 and other substances generated by overseas distributor operations - Support initiatives to ensure appropriate disposal of waste, wastewater and air conditioner coolants at overseas dealers	• Conduct ISO14001 trainings to concerned dealers. Coordinated with certifiers to reduce fee & other supporting activities. • Aimed at 100% of Dealers achieve ISO14001 Certification and complete TMT's complete Dealer Environmental Risk Audit Program • Encourage the 5 fundamental Environmental programs to all dealers	High (Exceeded TMC target)
		17) Enhance environmental education - Raising employee environmental awareness, continue conducting environmental training that contributes to improvement in actual work activities	• Conduct & Promote environmental, safety and health training in all areas and to all employees.	High
		18) Promote new businesses that contribute to environmental	N/A	Low

Field		TMC Global Policy Action Items & Description	TMT Subsidiary Policy Specific Activities	Level of Concurrency
		Improvement - Expand existing and establish new biotechnology and reforestation businesses - Promote development and launch of stationary fuel cells - Expand businesses that reduce environmental risk, such as management of SOCs, etc.		
		19) Steadily reduce environmental impact over the entire lifecycle of the product through full-scale implementation and establishment of Eco-Vehicle Assessment System (Eco-VAS) - Implement on models that undergo redesigns and new models in Japan and expand to all vehicles, including those produced in Europe and America	N/A	Low
	Cooperation with Society	20) Contribute to the development of a recycling-based Society		
		- Promote basic environmental research, such as development of technology to reduce CO^2 emissions, and make proposals	• Jatropha Project (See area No.5)	High
		- Implement philanthropic programs that contribute to development of environmental technologies, environmental education, and the preservation of biodiversity - Continue implementing and further enhance the content of activities such as the Toyota Environmental Activities Grant Program (in commemoration of winning the Global 500 ward) and the establishment of the TOYOTA Shirakawa-Go Eco-Institute	• Develop various environment social contributions through projects with government, communities, NGOs and business partners. Such as ; - Establish Environmental Learning Centers & Education - Expand “Stop Global Warming project” to 76 provinces - Reforestation Projects	
		21) Improve disclosures of environmental information and two-way communications		
		- Enhance disclosures of information concerning environmental product technologies in each country and region - Provide information on environmentally considerate driving (eco-drive) to consumers	• Establish environmental communication between TMT, NGOs, Government and communities on annual basis • Conduct environmental seminar & training for the public	High

Field		TMC Global Policy	TMT Subsidiary Policy	Level of Concurrency
		Action Items & Description	Specific Activities	
		- Further enhance the content of environmental reports in each country and region - Further enhance communications with local communities at Toyota operations worldwide - Improve dialogues with and engage in communication with a broader range of stakeholders, increase mutual understanding	• Distribute sustainability report (according to GRI), publish environmental performance data, and establish environmental website • Provide 'eco-drive' materials and knowledge	
		22) Actively contribute to and propose environmental policies based on sustainable development		
		- Participate in debates concerning the creation of governmental environmental policies and frameworks both in Japan and overseas	N/A	Low
		- Promote environmental measures proposed by the World Business Council for Sustainable Development (WBCSD), Nippon Keidanren, Japan Automobile Manufacturers Association and industry organizations	- Promote and participate in Thai CSR initiative such as Green Label (certified and membership in the board of technical advisors of the scheme) & CSR DIW	High

Summary of Key Findings

• The consistency between the global policy and local practice is very high. From 22 fields of policy items in the 2006-2010 5YEAP, 16 areas contain very high concurrency between the global policy and the local TMT action plan.

• In some areas, such as the management of CO_2 Emission Reduction, Recycle and Environmental Management System (EMS) among TMT dealers *(Area No. 3, 7 and 16)*, TMT has an action plan which exceeds the requirements or targets designed by TMC. However, these diverge policies are inconsistent with the TMC's global policy which encourages the environmental cooperation in all parts of the operation.

• It was that found that areas which were designed in global policy but are missing from the local practice are;

1) Vehicle Recycling, Management of End of Life Vehicles (ELV) and products' entire lifecycle environmental impact *(Area No. 9,10 and 19)* :

TMC only assigned this recycling take-back scheme in Japan and Europe where the practice is legally required. In the interviews, the TMT officers only replied that vehicle recycling activities is not emphasized by TMC in Thailand and that the recycle systems of its products rely on the operation of "Seang-Kong" (Used motor spare parts commercial districts in Bangkok).

In terms of design & R&D in recyclability of products, TMC practices this through the concept of 'Designs for Recycling (DfR)'. This is simply not carried out at TMT because the company doesn't have a design and development unit.

This is also common in MNCs' global management strategy which breaks up their operations and holds their R&D units at global or regional headquarters. TMT's nature of business does not include R&D activities and its role remains only in application of design in manufacturing activities. Therefore the DfR program and policy is not implemented by TMT.

2) Environmental Management: Promote new businesses that contribute to environmental Improvement *(Area No. 18)*

We could not find the activities which support establishment of business that reduce environmental risks or create new green technology from TMT. Instead, TMT emphasizes on the social contributions project and encourages the environmental awareness programs throughout the country.

3) Participate in debates concerning the creation of governmental environmental policies and frameworks both in Japan and overseas *(Area No. 22)*

From the interview A2 and A4, the TMT officers stated that the environmental politics conditions of each region and countries are different. In the context of Thailand, Toyota has intention to remain politically neutral and would like to be involved in political issues as little as possible, whether in terms of environmental issues or other topics related to debates or politics.

"Politics in each country are different. I understand that in some developed countries it is great for companies to make a stance in political debates on social and environmental issues. But in Thailand we (TMT) try to avoid controversies and choose to participate or create partnerships with organizations that stay neutral which doesn't create conflict or disturb others.

For example, we chose TEI and WWF which are respectable credited organizations that aim to work on scientific or positive development approach. We avoid organizations which use aggressive methods."

Interview A4

4.5 Formulation & Implementation Process of 5YEAP Policy

4.5.1 Formulation Process

• Global Policy

In 1992, TMC adopted the "Guiding Principles at Toyota Motor Corporation" and established the official Toyota environment committee as well as the first Toyota action plan for global environment management known as the “Toyota Earth Charter”. Later in 1997, the Guiding Principles went through its first revision, the Environmental Affairs Division was established in 1998 and the Earth Charter got revised. The mid-term environmental action plan was initiated and transformed into a more well-structured management plan in 2000 called “the Third Toyota Environmental Action Plan FY2001-FY2005” and for the first time, Toyota introduced consolidated environmental management, which unites Japanese and overseas consolidated companies in mutual environmental action.

Table 18 Toyota Motor Corporation’s Guiding Principles

Guiding Principles at Toyota (Revised Version , April 1997)
1. Honor the language and spirit of the law of every nation and undertake open and fair corporate activities to be a good corporate citizen of the world.
2. Respect the culture and customs of every nation and contribute to economic and social development through corporate activities in the communities.
3. Dedicate ourselves to providing clean and safe products and to enhancing the quality of life everywhere through all our activities.
4. Create and develop advanced technologies and provide outstanding products and services that fulfill the needs of customers worldwide.
5. Foster a corporate culture that enhances individual creativity and teamwork value, while honoring mutual trust and respect between labor and management.
6. Pursue growth in harmony with the global community through innovative management.
7. Work with business partners in research and creation to achieve stable, long-term growth and mutual benefits, while keeping ourselves open to new partnerships.

Table 19 Toyota Motor Corporation's Earth Charter

<table>
<tr><td colspan="2">Toyota Earth Charter</td></tr>
<tr><td>I. Basic Policy</td><td>I. Action Guidelines</td></tr>
<tr><td rowspan="4">1. Contribution toward a prosperous 21st century society
Contribute toward a prosperous 21st century society. Aim for growth that is in harmony with the environment, and set as a challenge the achievement of zero emissions throughout all areas of business activities.

2. Pursuit of environmental technologies
Pursue all possible environmental technologies, developing and establishing new technologies to enable the environment and economy to coexist harmoniously.

3. Voluntary actions
Develop a voluntary improvement plan, based on thorough preventive measures and compliance to laws, that addresses environmental issues on the global, national, and regional scales, and promotes continuous implementation.

4. Working in cooperation with society
Build close and cooperative relationships with a wide spectrum of individuals and organizations involved in environmental preservation including governments, local municipalities, related companies and industries.</td><td>1. Always be concerned about the environment
Challenge achieving zero emissions at all stages, i.e., production, utilization, and disposal
(1) Develop and provide products with top-level environmental performance
(2) Pursue production activities that do not generate waste
(3) Implement thorough preventive measures
(4) Promote businesses that contribute toward environmental improvement</td></tr>
<tr><td>2. Business partners are partners in creating a better Environment
Cooperate with associated companies</td></tr>
<tr><td>3. As a member of society Actively participate in social actions
(1) Participate in the creation of a recycle-oriented society
(2) Support government environmental policies
(3) Contribute also to non-profit activities</td></tr>
<tr><td>4. Toward better understanding
Actively disclose information and promote environmental awareness</td></tr>
<tr><td>III. Organization in Charge</td><td rowspan="2">Promotion by the Toyota Environment Committee which consists of top management (chaired by the President)</td></tr>
</table>

Table 20 TMC's Consolidated Environmental Management Established in 2001

Basic Policy for Consolidated Environmental Management	
Toyota and consolidated subsidiaries	Jointly adopt the Toyota Earth Charter to promote environmental activities based on a shared awareness
Consolidated subsidiaries	(1) Appoint Environmental Officer (2) Draft an environmental action plan, reflect it in annual policies, and take definite action every year (3) Develop environmental management systems
Toyota	(1) Provide guidelines for drafting action plans by each company as necessary (2) Determine and evaluate the status of progress at each consolidated subsidiary (3) Implement global audits

Source : Toyota Motor Corporation (2001)

Through the system of ‘Consolidated Environmental Management’ all subsidiaries, including TMT are required to jointly adopt the Toyota Earth Charter and draft individual environmental policies of their own. In production, they are required to set quantitative goals and follow up on those goals and have to create an environmental management system in sales and after-sales. Moreover, they are encouraged to reduce environmental impacts such as CO2 emissions during all activities including logistics activities, making social contributions, carrying out environmental communication in line with the nature of business and implementing top level environmental responses based on actual conditions in each country and region.

At the same time, the Toyota environmental textbook was created; environmental leaders were appointed in each division and training of leaders was started. The 2006-2010 Forth 5YEAP is therefore an extension of its continuous mid-term management plan.

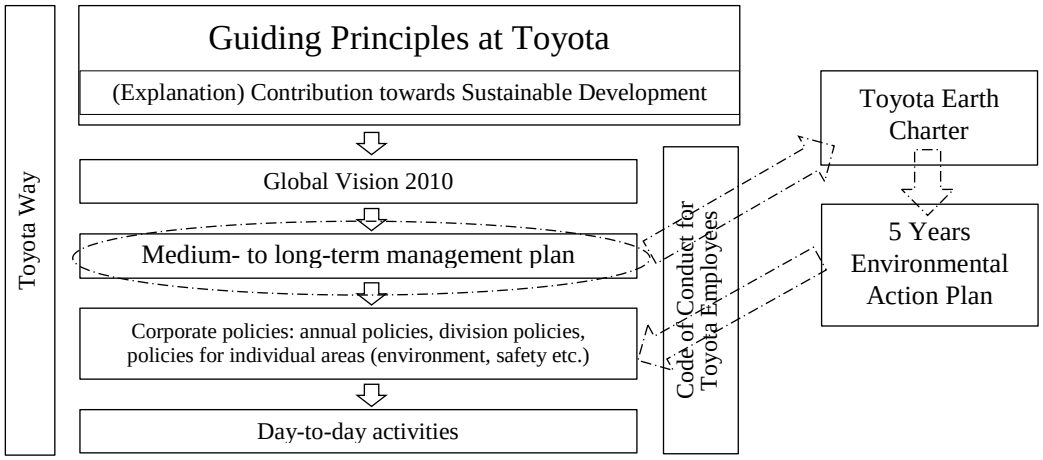
• Local Process

The local involvement began when higher-middle management of TMT received the framework of the plan at the “Global EMS Liaison” conference of TMC environmental committee. For the 2006-2010 environmental action plan, the conference was organized over a three-day period from May 17 - 19, 2005. This conference was held with the participation of 112 representatives from 72 affiliates, primarily overseas consolidated subsidiaries. This meeting was held every other year and later increased into every year for executives and other staff of overseas affiliates who are in charge of environment-related issues.

After receiving the framework of the plan, the officer brought this topic into the TMTs environmental committee chaired by the president of TMT itself and has every top and higher-middle management from every division and department as part of its membership. The plan was discussed and each division worked on their own terms to fulfill the targets and objectives given from TMC. Each detailed proposition

of the plan will be approved by the head of each division, then the president of TMT, and finally approved by TMC.

Figure 14 The Structural Design Toyota Global Environmental Policy



"We always look at the long run, respect the people, the environment and continue to improve our performance. That is the Toyota way"

Interview A2

"The mother company (TMT) gave the overall principle to us for our company which combines craftsmanship with concerns for the environment called "Monozukuri". We also have the Toyota way of continuous improvement and the respect for the people and the environment.

From these principles, the mother company designed the structure of the plan which includes everything because we are aware that to be sustainable we have to account for every part of our operation, not only the production but also the whole value chain. Starting from the design of the cars, our suppliers, our logistics,

everything has to work together and work harmoniously to respond to the task of how to operate sustainably while our business can run smoothly too."

Interview A3

"From this structure (Toyota Global Vision) we have a goal and plan for 5 years which operates under constant revision and improvement and the policy framework was given to every region all over the world. The first thing we did was to look at the plan and tried to see which part concerned us and which didn't. Like for the design of the product, TMT doesn't have R&D department so we don't have to fulfill that part of the policy.

From the big framework, there was a smaller framework and we subdivided it into each part of our operation. This plan was a company-wide policy which means the president was the head of the operation and every part every division came together in the meetings and plan for the long term action of company-wide environmental practice. Then we set the goals, the specific targets and work together continuously to achieve them"

Interview A2

"SEO acted as the host. We told everybody that 'this is the plan, this is what the mother company wants us to do and this is where you are right now. If you want to improve the performance here what you could do?' We offer the consultation of how to do it. Then for each part we go back to write the details. Then we come back again and talk about the outcome, contiguously adjust it until its looks good and then we consult the senior.

… If they agree then it goes on to the president who signed it and send it to TMC to assure consistency to what they assigned. … There has never been a case where TMC asked us to adjust the plan because we always cover the requirement and even exceed the given expectations"

Interview A4

"People from the head office will talk to us and ask whether we have any kind of problems in the past, how performance was and how to improve it"

Interview A7

"For some parts like production there will be numbers given specifically for the baseline and benchmark. We can put our creativity and adjustment into it too, like we could say we want to go for the reduction of 10% not just only 8%. … Yes, it could not be less than the given number that was designed from the mother company as the minimum requirements have to be achieved but we normally set the targets above them.

But for some parts like cooperation with society, there were only one or two sentences given. The mother company just wanted us to contribute to the society in environmental issues but didn't tell us what to do and how to do…. In the supplier part there is a purchasing guideline, but in dealer part, the plan said they want environmental management, the reduction of CO_2 and energy use in dealers but didn't say how. TMT put a lot of work and resource into the social contribution because we think that our market share is at 40% we can not only take, but have to give back and look at the long run.

… In each item, it seems like we can use our own consideration but it is implicitly mandatory because we will have to answer why we don't chose to implement each task, unless it is completely irrelevant to our operation.

Sometimes we don't have to include the items in our plan but it is very unlikely. As far as I see, we follow the structure in the plan. The differences are in the details. For example, we set the target on our own terms that 100% of our dealers have to acquire ISO 14001 certification. TMC only said that there should be cooperation between TMT and dealers"

Interview A2

"In the part of cooperation with the society activities, first of all we think of what we can do. The mother company showed us some examples from many difference countries. We looked at them and don't think that those examples could be adjusted to suit us. Then we tried to find NGOs which have potentials to work with Thai community and picked the Thai Environmental Institutive and WWF which is the biggest NGO in Thailand and international level that works on environmental issues"

Interview A3

We have both top-down and bottom-up in our environmental management process. Let's say if the head doesn't shake then the tail doesn't wiggle. We have a top-down policy in the design of framework, direction, and management. The president signed the policy and he has always been concerned about environmental performance. Every top manager accepts and understands it. The bottom-up method is how the officers try to gather all information presented to our boss. It is all in our 'Ho Shin' (policy deployment) of each department."

Interview A2

"We tried our best to exceed the given minimal requirements, but if we thought we could not reach the baseline then we consult the management. How our boss is going to help us to reach it. But anyhow, we have to reach the goal."

Interview A7

• Determinants of the Policy Planning

Consistent with the conclusion from topic 4.3 of this research, the external determinants of the policy planning is the regulations in export market; mainly the EU since the environmental standards in the EU is considered the strictest. The financial cost of the program is also considered very crucial because environmental performance improvement tools rely on the change in technology which requires large investment. The initiatives which do not apply to those two criteria but were accepted as part of the plan are the ones that were consistent with TMC policy or agreed by the top executives of TMT.

The Thai government sets the baseline of TMT environmental performance for regulation compliance and provided support by giving an award for TMT's performances. The government also had substantial influence in the financial calculation of TMC policy since the government policy could affect the cost of its operation or investment.

Interestingly, for the 'social contribution' part which is considered voluntary, many executives expressed that they felt it is 'necessary', to give back as part of their sustainability outlook.

"The (Thai) government policies on environmental issues are not very strong. We comply with all the regulations and do it even better. For example, we eliminated all four dangerous substances in our production which is part of the regulations of the EU. We do this for all our products which are exported to the EU. Moreover, we also do this for all products sold in the country.

Whatever standards we have for the export market we also have them for our domestic products"

Interview A3

"Another important thing is we always consider the break-even point of the investment for environmental performance. Especially in the production aspect, if it's not more than we can do in terms of the break-even point, then we will try.

But sometimes it isn't worth the money but we feel that it's important and there is a policy. Like the solar cell installation in our Ban Pho Plant, that takes 20 years to meet the break-even point. But our boss agreed and he thought it is important. Or in the vehicle painting process, we changed from thinner-based to the water-based paint. It is very expensive but it is the policy of TMC."

Interview A3

"We have always been concerned for the issues of CO_2 reduction because it is closely related to cost reduction and efficiency, long before the global policy deployment. It's a win-win choice for everybody and the environment. Mainly in operations we consider two things; does it help reduce the cost in the long run? Or does it help reducing the CO_2 Emission? We just installed an electricity Co-Generator machine that use natural gas as fuel, because it emits less CO_2 and was considered more cost-efficient at that time. But later the government said they are going to change the policy on gas. The cost will be higher than buying electricity directly from the government. So now we have a headache.

… We have full compliance to Thai law. So TMT will always ensure that every aspect of our environmental standards are at least at the level of compliance. For the area which is not emphasized or doesn't have policy to continuously improve environmental performance, we have a minimum standard rate of 20% better than what is said in the law to prevent risk. Because the rate of contamination can be fluctuated, if we set the standard rate exactly the same as determined by the law, then we would be on the verge of breaching the law when fluctuations happen.

… For energy and resource reduction, at first you can try to help turn off the lights, try to save the water, have discipline, turn down the air conditioner and you

could reduce the number by 2-3%. After that it depends on investment and technology. Sometimes the government helps us financially like in the ESCO project which was partly funded by a Singaporean company and we can pay by 10 year installments. We have enough money to do that by ourselves, but the projects make the decision easier and the government also promoted us through PR activities so it's extra value."

Interview A1

"We have three principles in our environmental management which are the TMC's policy. The first is the "Zero Non-Compliance" and "Zero Compliant" principle. The first one is to reduce risks in every environmental aspect. The second one is improvement in environmental performance in which we have four KPI indices: CO_2 emissions, waste management, VoCs, and water usage. These are our 3 main concerns in production operation which were included in the plan."

Interview A2

"The strength of Toyota in Thailand reflects Toyota at a global level which is the TMC. What made them so strong is their corporate culture. For over two decades of my involvement with Toyota, at its core is the culture of "efficiency" they consider the best productivity at the best cost according to the circumstances and always operate on this culture systematically. This is very important because it doesn't mean the lowest cost or highest productivity but the lowest cost that produce highest productivity at the optimum point.

… Before this, Toyota invested very little in their social contributions projects and CSR, but over the years I have seen the changes and I think this is because Toyota has calculated and think it is necessary for their long term sustainability. Their market share grows continuously and reached over 40%. They are at the point where they have to give more back to the Thai society"

Interview B1

Social contribution doesn't generate return the same way other activities do. We are always at a loss, such as the reforestation projects. The 'Stop Global Warming' project with TEI and the knowledge workshop for the public. They do not clearly generate return but we feel we have to do because we feel we have to give something back to Thai society. Toyota is the first Japanese big company that established a foundation fund in Thailand. In 1972, there was a campaign against Japanese goods from university students. At that time Toyota thought of why such protest happened, and we saw that we have to give something back to the society. It is not like we have somehow suddenly become kind ,but we look at why the problem arose and have to fixed it accordingly. We cannot ignore it"

Interview A1

"We have to accept that our operations generate environmental damage. We use resources in production and the products emit CO_2. It might not be as much as in some industries, but it still does. At first the top executives were not certain and doubted whether we should promote something (the Stop Global Warming Project) that is directly against ourselves. The policy from TMC only said we have to promote environmental awareness and preservation of biodiversity or technology, but didn't specifically say we have to emphasize on CO_2 reduction. It seemed like an anti-product scheme.

I tried to do research on the UN website or global news sites and saw that it is going to be unavoidable. Transportation sector is the major part of CO_2 release and it is one of the most significant problems from our operations. Being responsible means you take care of the consequences. It is impossible that the project will account for what we generated, but at least, I think it is really cool for us to stand for what we have done.

It took quite some time to convince top executives but our boss was really great and supported us, especially SVP Ekachai and GM Watsachai. He backed up our proposal. Later the president approved it, and the mother company accepted our plan as well. Today this project is considered an example for TMC and many of our documents and practices are requested to be distributed worldwide"

Interview A4

4.5.2 Implementation Process

• The role of TMC

The TMC with its global EMS liaison conference also works as a platform to collect and distribute the best practices from all its affiliates. The TMC also offers the consultation especially in technical parts for environmental management and initiates motivation and incentives schemes to encourage best practices from each subsidiary.

"In the global liaison conference which happens every year, we get a lot of great ideas from Europe. They have some very advanced ideas which we can learn and adapt onto our operations. Our projects were also selected to be presented at the conference and were implemented in Indonesia and Malaysia. For example, our idea to negotiate with the ISO certification company to reduce the cost of certification fee if our dealers apply as a big group, this practice works very well and received appraisal from TMC. Another initiative is we designed the software to automatically shut down all the equipment and don't have to use people to turn it on or off to reduce electricity cost. It saves us a lot of money and increase resource efficiency. These initiatives got promoted in the global operation of TMC"

Interview A3

"Before this we also tried to plant the trees and do reforestation with many organizations in Thailand but it was not very effective. TMC then recommended that... Ok... work with Dr. Miyawaki, his theory is very effective and we invited him to our Ban Pho plant. There were so many steps in Dr. Miyawaki practices. We had to go to nearby forests to see what kind of trees existed there and we used more than ten million baht in the preparation of the soil but it worked out very well "

Interview A4

"The mother company always has motivation initiatives for us. For example, the competition between subsidiaries companies, the environmental month which happens every year in June, we show movies on environment issues and organize the essay competition among our employees. The competition is the main drive, when we set a benchmark or report our performance they (TMC) will send the other affiliated companies' performances for us see too. There's never a lack of motivational scheme from the mother company."

Interview A3

"TMC help us with the technical knowhow on the reduction of energy use in the plant and other types of technology. We also create our own initiatives as well. We are in close consultation and work together with TMC and TMAP-EM advisor in technical part and sometimes use the consultation services from Energy Services Companies in Thailand and in the region"

Interview A2

• **Local Process**

From the interviews, it is said that TMT is very successful among Asia-Pacific automotive manufacturing units and considered an example in this region. The element of success is the high level of coordination between all parts of its operation and the stakeholders. TMT also has a very strong training program for both its employees and stakeholders to ensure the achievement of the plan.

"As you can see we have no walls between each other. We sit together, work together and always consult with each other. The people from SEO always ask me if the plan would work PR-wise and we emphasize the cooperation with every part in our plan not just internally but externally with our network too"

Interview A6

"Toyota is concerned with overall optimum efficiency and that is not the same as sub-optimum. Sometimes what is best for the individual is not the best for the whole group and it requires cooperation from every subdivision at the highest level to reach that goal. Their team spirit is very strong and is one of the main things that drive Toyota forward"

Interview B1

"The hardest part is the work with our dealers because they are our clients and ISO certification needs investment and manpower. It is possible because the executives try to connect and talk to them. We started our ISO certification scheme in dealers at a Buriram showroom as a prototype because the owner graduated from engineering at Chula and he was young and open for a new change. After the first success we acquired the management practice which could be copied by other dealers and formed a training program for them. After we figured the best way to reduce the certification cost the process is a lot easier. Another way is we tell how environmental management can save energy and other costs."

Interview A2

"The main obstacles were the people since this plan required cooperation from every part. The executives always give us 100% there is no problem about that. But for the employee we have to incorporate the environmental concern and update their knowledge continuously otherwise they might not be interested or understand the new policy. The training is one of the crucial elements"

Interview A3

4.5.3 Level of TMT's Autonomy Over the 5YEAP

The level of TMT's autonomy in each part of the framework is different and remains mixed between TMT and TMC influences. In some areas of the production process, the targets were set with specific numbers and criteria. It is more mixed in the stakeholders' part where TMT has to follow TMC guidelines and procedures but are free to set specific targets.

In terms of cooperation with societal area, this part was not very specific and left more room for creativity and initiatives from the local officer. However, the operation of TMT was strongly influenced by the corporate principle and corporate culture which indirectly govern the outcome of the plan to be consistent with TMC's direction.

In terms of penalties or fines, reportedly there is no penalty for performing less than expectated or failure to meet the specific goal. The implementation process could be summarized as **"Communication & Cooperation, Presentation and Positive Reinforcement"**

1) Communication & Cooperation

The headquarters (in this case TMAP-EM) is always in close communication with the TMC affiliated companies. Reportedly each part of TMT operation has monthly reviews. TMT has meetings (either via conference or teleconference) with the headquarters approximately every quarter, so the headquarters could keep up with the progress and problems in operations. This way there will be no 'surprise' and the decisions over each action and goals are a mutual consensus between headquarters and subsidiaries. The headquarters would also be able to provide timely support in terms of technology, know-how, or human resource to help overcome conflicts in implementations.

"The whole plan is considered mandatory to us (TMT). We are part of Toyota affiliated company thus we have to comply with the policy. All of us have to, whether it's the Toyota in Indonesia, Philippines etc.

If those Policy areas concern parts of our operations, if there are requirements then we have to do them. But it is not in the form of order. It is not forced. It is us fulfilling the policy and we do our best, or even better than required

… Especially in Thailand , our executives share positions in TMAP-EM. So we are always in close communication and cooperation"

Interview A4

"We were given the policy guideline for the 5YEAP and after that we remain the full power in setting up the plan according to the given description. In some areas there are specific targets, for example the Carbon Emission Reduction target. But we already surpassed the global goal. Therefore we could set the numbers we want according to or circumstance.

… It is hard to say which part we have more autonomy and which we have less. It is more like, this is what the 'Poo Yai' want us to do, and we do our best to fulfill, or even exceed expectations if we can."

Interview A3

2) Presentation

The presentation process is reportedly very important for officers in TMT

"One of the most important parts is the reporting process. When we have to present our plan to our boss, our boss presents it to superior and finally the president will have to present results at global headquarters TMC.

It sounds like a normal procedure but this is very important and put a lot of pressure on us. Every year the president will have to present which targets have been achieved and which have not and the reasons why."

Interview A4

"We have a committee meeting to report to the president every year and we are very serious about this. Every time each manager receives the feedback from the president which tells us whether what we did was good enough, how to improve it, and we take this back for our improvement.

We always try to visualize the situation to the executives and present everything as how it is, the truth, good parts and bad parts. We have a constant milestone in our operation that tomorrow is the deadline and we still far behind. We always report the situation periodically and resolve the problems together"

Interview A3

3) Positive Reinforcement

According to the interviews, there is no penalty for failure to achieve the targets. Rather TMC emphasizes on the positive reinforcements and awards which strengthen the good practices among its subsidiaries.

"TMT is considered the best in Asia-Pacific, but sometimes we can't meet the targets. There is no penalty or punishment. TMC will ask 'What has happened? You set up your own targets and why can't you achieve them?' so there is a lot of pressure in that process already.

… But more, they emphasize on compliments and rewards if we have good performances our practices will be presented around the world. There are also many other activities to reward the good practices as well.

Interview A4

Summary of Key Findings

To conclude on the formulation and implementation process of this 5YEAP, the data has been compiled from section 4.1.3 'Coordination and Control Systems' (page 58-72) and section 4.5 (page 107) and summarized in the following table.

Table 21 Summary of 5YEAP Planning Specifications

Environmental Activities	Specific Action from TMC in Each Area		
	Set Targets and Require Bench Marking from Affiliates	Provided Guidelines and/or Instructions	Provided Only Policy Description & Objective
1. Global Warming and Energy			
1.1 Management of CO_2 emission from TMT and affiliated companies		✓	
• Production	✓		
• Logistics			✓
• After sale services			✓
1.2 Promote development and introduction of alternative fuel vehicle and green technology products		✓	✓
1.3 Promote the improvement of traffic conditions by using diverse technological networks			✓
2. Recycle of Resources			
2.1 Reduce wastes, promote effective reuse of resources, establish a recycling-based society			
• Reduce waste to landfill (Zero Waste Management)	✓		
• Reduce use of packaging materials in logistics		✓	✓
• After sale service			✓
2.2 Reduction of water consumption in vehicle production	✓		
3. Substances of Concern (SoCs)			
All products comply with SoC regulation and voluntarily eliminate 4 SoCs in production, namely ; Lead, Cadmium, Mercury and Hexavalent Chromium			
• TMT production	✓	✓	
• Suppliers	✓	✓	

Environmental Activities	Specific Action from TMC in Each Area		
	Set Targets and Require Bench Marking from Affiliates	Provided Guidelines and/or Instructions	Provided Only Policy Description & Objective
4. Atmospheric Quality			
Reduce pollution emission to improve air quality in the atmosphere			
• Products Emission Quality	✓	✓	
• Emission of Volatile Organic Compounds (VOCs) in production	✓	✓	
5. Environmental Management System (EMS)			
5.1 Strengthen the 'Consolidated Environmental Management' plan			
• Application of standards such as ISO 14001		✓	
• Eco-Factory Activities			✓
• Toyota EMS (Global audit) : Zero complaint / Zero non-compliance minimizing risks, and achieving leading levels of performance	✓	✓	
5.2 Further promotion of environmental management at business partners			✓
• Suppliers: Implement the 'Toyota Green Purchasing Guidelines 2007'		✓	
• After Sales : EMS system & Join Environmental Activities			✓
5.3 Enhance Environmental Education to Employee		✓	✓
5.4 Cooperation with Society			✓
5.5 Improve disclosures of Environmental information and two-way communication with communities and stakeholders			✓
5.6 Support Environmental Consciousness of Thai Society via Marketing and PR			✓

4.6 Analysis of Local Institutional Factors

In this part of the study, analysis from the process of reviewing TMC and TMT documents has been extended from interviews to the analysis of existing literatures. This part of study examined the institutional enablement of convergence forces and its constraints which created divergence in the global management of CSR, by adapting Matten & Moon (2008)'s framework.

4.6.1 Political System

The discussions in the introductory part of this study have shown how Thai state regulations induced investments from Japanese Automotive MNCs into Thailand. (See: 1.1.4 Thailand and Japanese Automotive MNC, pp. 4-8) For example, the 1962 Industrial Promotion Act in Thailand granted a 50% reduction in tariffs and business taxes on complete knock-down (CKD) kits. Later after the 1980s, the Thai government removed many barriers in trade and focused towards export and investment. This included lifting of export quota, reducing export duties on several commodities, providing business tax exemptions, promoting investment in manufacturing industries with strong export potential, including automobiles production and parts.

Especially after the 1997 financial crisis, the Thai state further adopted trade and investment liberalization policies and allowed full ownership in the automotive sector. The BOI also provided incentives such as an exemption from corporate income tax for exports for eight years, and an exemption from local content requirements for all assemblers in June 1998. (Yoshimatsu, 1999)

As a result of these policies and the decreasing competitiveness of Japan due to strong yen and depression, the Japanese automotive manufacturers started to move their production sites and located their regional bases for global export products in Thailand. The first company to move their regional hub to Thailand was Mitsubishi in

1995, followed by Ford/Mazda in 1997, Isuzu in 2003, and Toyota in 2004 (Thansettakij Newspaper, 2006).

Moreover, as it is broadly recognized, the Japanese government and business sector forged close and intricate relationships through public corporations, industrial associations, informal meetings, etc. This close relationship is a major factor promoting the relocation of Japanese MNCs to East and South East Asia. The Japanese government also has been involved and played a crucial role in developing institutional settings for them. Such as channeling funds through Japan External Trade Organization (JETRO) and Overseas Economic Cooperation Fund (OECF) and established necessary infrastructure in the recipient countries of Japanese FDI. (Yoshimatsu, 1999)

Apparently the major role of the Thai state's involvement with the JAMNC is the provision of trade and liberalization policy in the automotive industry sector, the macroeconomic stability, and the supporting policy for the establishment of parts industry (Wad, 2009). In terms of the state's policy on environmental management, a study from Mukhopadhyay (2006) stated that Thailand became a 'Pollution Haven' in 2000, due to impact of trade liberalization and investment from OECD countries.

Mukhopadhyay referred to the pollution haven hypothesis or pollution haven effect, which predicts that polluting industries in developed countries will relocate their operations to the developing countries. This is due to the differences of environmental regulations in each jurisdiction that creates distortion in comparative advantage. The tougher environmental policies imposed on the developed world would raise the cost of key inputs to goods with pollution-intensive production. (see Eskeland & Harrison, 2003; Javorcik & Wei, 2004)

The results from Mukhopadyay's (2006) study imply that Thailand imported clean goods and exported dirty goods, supporting a North-South debate which proposes that developed counties are relocating their polluting manufacturing bases to the developing south.

Table 22 Pollution terms of trade of Thailand with OECD countries

Emission	Thousands of tons Of Carbon dioxide			Thousands of tons Of Carbon dioxide			Thousands of tons Of Carbon dioxide		
	1980	1990	2000	1980	1990	2000	1980	1990	2000
Pollution embodied in exports	4120.11	2711.49	8579.35	41.55	26.14	83.11	9.13	11.76	35.47
Pollution embodied in imports	8433.57	3014.48	5573.90	82.79	27.29	50.72	19.58	19.87	35.34
Pollution terms of trade	0.4885	0.8994	1.5392	0.5018	0.95786	1.6384	0.4664	0.5917	1.003
Pollution terms of trade*100	48.85	89.94	153.92	50.18	95.78	163.84	46.64	59.17	100.39

Source: Mukhopadhyay (2006: 28)

Thailand has introduced many regulations to combat the environmental degradation. For example, the 1992 Enhancement and Conservation of National Environmental Quality Act, which provides a strong command-and-control regulatory framework to set standards, monitor and enforce them. That Act strengthens existing laws within a policy framework outlined in the Seventh National Economic and Social Development Plan (1991-1996), which emphasized environmental standards. Another important legal instrument is the 1992 Factories Act, which regulates waste discharge from industrial plants. Similarly, the 1992 Hazardous Substances Act provides control over the production, import and export or possession of hazardous substances that could become hazardous waste in the future. The Government also introduced the Energy Conservation and Promotion Act in 1992 in order to promote energy conservation in Thailand. Due to the announcement of this law, the Energy Policy and Planning Office (EPPO), Ministry of Energy, has been established as the implementing body of the act.

In addition, several policies were introduced for improving environmental quality. Two main government agencies have direct responsibility for monitoring pollution. The Pollution Control Department has established networks for monitoring air quality in five regions of Thailand and a total of 52 air quality monitoring stations are in operation (Mukhopadhyay, 2006).

In terms of automotive production, Thai government also issues laws to regulate new vehicles, for example they must be equipped with specific pollution-control devices, such as catalytic converters.

Despite the several legal frameworks that have been set up, Mukhopadhyay (2006) emphasized that the implementation of the regulations has been far below expectations and that lack of enforcement is a fundamental problem in Thailand. The deterioration of the environment could be termed as the result of institutional failures, among other reasons. She suggested that Thailand's trade history reflects how the Thai government always followed the strategy of "grow first, clean up later" (p.32). After a decade of 1990s rapid development, the policies, rules and organizations created to protect the environment were not effective (Thailand Development Research Institute, 2000).

However, from the interviews A2, A3 and B3, the interviewees suggested that the TMT has the full compliance to the law and normally surpassed the standards since the regulations in their export markets and policy imposed by TMC are stronger than Thailand.

Another type of relationship between Thai governments aside from the role of regulator is the role of supporting agencies for environmental improvement through Energy Policy and Planning Office (EPPO). This includes awarding schemes and pushing the voluntary certifications, ISO 14001, CSR-DIW (a certification scheme for CSR standards by Department of Industrial Works), which TMT had acquired the certification since 2008 (Toyota Motor Thailand, 2011).

Interestingly, in the "Stop global warming project" social contribution initiative, TMT has formed cooperation with the Department of Environmental Quality Promotion (DEQP) and the EPPO, showing an indirect cooperation with the state's bodies in environmental management and TMT.

One of the interviewees from TMT even explained that they sometimes picked the organizations that have close ties with the royal patronage development programs because it is consider mandatory for being a large company in Thai Society. Even

though sometimes it doesn't respond to the original policy or doesn't create the most efficient outcome of the project management.

Conclusion:

• The political system in Thailand and cooperation between the Thai and Japanese government have allowed TMC to establish the regional manufacturing site in Thailand and utilize the country, not only as a production site for the domestic market, but as regional production base for export markets all over the world. The political systems in this case appeared as the enabler, further integrated TMT to the global markets and facilitate the convergence in their global environmental CSR management.

• In terms of government's regulations and enforcement on environmental issues, the systems are reportedly weak. These institutions and their features therefore could not create divergence due to its relatively low power and standards. TMT designed their environmental management on the "above compliance baseline" basis and directed their resources to be responsive to TMC's policy and the requirements from export markets.

• The Thai state also encouraged the adoption of international voluntary standards such as ISO 14001, but at the same time they also have roles in setting their own CSR standards such as CSR-DIW. But it is important to note here that CSR-DIW is a certification scheme of the Department of Industrial work that was designed based on ISO26000 framework. The objective of this scheme is to introduce and prepare Thai industries to the new international CSR standard. The second objective is to create the certification program to compliment the ISO26000 (Giatfeuangfoo, 2010) which is designed to be a guideline and cannot apply for certification.

• The last topic on social contributions appeared to create divergence in their CSR Management. Even though the initiatives are originally designed from staff of TMT, in implementation and selection of partner organizations, the political networks

certainly play roles in their management. TMT utilizes its social contribution projects to further strengthen their cooperation with the government and political networks related to environmental management issues.

4.6.2 Financial System

In the work of Matten & Moon (2008), the analysis on the financial system part concerns the networks and systems connected to the source of capital in each nation. These elements provide the sustainability outlooks of the firms and affect the policy choice on CSR strategy and management.

The financial source of TMT mainly comes from the FDI of TMC[2] through direct loan, and rarely seeks funding through loans from domestic financial system of Thailand. Therefore the TMT has limited direct contact to the Thai Financial institutions.

The overall environment of the financial system in Thailand, however, has effected the investment of TMC, since the relocation of production base from Japanese Automotive sector was also made on the basis of a relatively weak currency of Thailand when compare to the yen. The relationship with source funding from TMC and the global market integration through IMV project, however, provides TMT with the more-long term sustainability and resilience against occasional financial instability in Thailand. For example, in December 2006 when the Bank of Thailand tried to curb the rise in Thai baht value by required all foreign loans to be subject to the 30-per-cent withholding requirement, Toyota loudly complained such enforcement since it raised the cost of their loan from TMC. However, the president

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[2] • It is listed in Japan: Tokyo, Nagoya, Osaka, Fukuoka, Sapporo / Overseas: New York, London

• As of March 31, 2012, the 3 biggest shareholders are 1) Japan Trustee Services Bank, Ltd. 2) Toyota Industries Corporation 3) The Master Trust Bank of Japan, Ltd. (Toyota Motor Corporation, 2012a)

still stated that it would not affect investment plans including the construction of the eco-friendly "Ban Pho" flagship plant.[3] (Thansettakij Newspaper, 2007)

The unprecedented success from IMV project in 2004, combined with support from BOI and Thai government has led to the decision of the establishment of the "Ban Pho plant". The project was initiated in 2005 and finished construction in 2007. It is considered to be the flagship of TMT and the most modern plant in the region in terms of safety, quality, cost and environment. TMC cited it as one of their 5 most eco-friendly plants around the world during that time. The plant was claimed by TMT to be the first ecological factory in ASEAN and a model of the environmental technology application for sustainable development (Toyota Motor Corporation, 2006a). The plant was equipped with natural gas electricity Co-generator (which the interviewee A2 said it was partially funded by Thai Government's ESCO project.) , the water-based paint robots that release less air pollution, a waste water treatment plant that complied to TMCs international standard, facilities to carry out zero landfill waste management, solar energy panels, etc.

It is also important to note that the channeling of funds from TMC into Thailand is very much connected to the Board of Investment or BOI. It is an agency which operates under the Ministry of Industry and is the principal government agency for encouraging investment. It offers an attractive and competitive package of tax incentives, waives restrictions on foreign equity in manufacturing activities or in some circumstances, provides assistance for work permits and waives restrictions on land ownership by foreign entities, among other activities. (Board of Investment of Thailand, 2012c)

For foreign firms to be granted tax and duty incentives they must comply with the criteria of BOI. One of the requirements of BOI imposed on Zone 1 (Bangkok, Nakorn Pathom, Nonthaburi, Pathoum Thani, Samut Prakan, and Samut Sakhon) and

[3] The Bank of Thailand later relaxed the requirement for fund that could be identified as beneficial investment for industries in Thailand.

Zone 2 (Kanchanaburi, Chachoengsao, Chon Buri, Nakhon Nayok, Ayutthaya, Phuket, Rayong, Ratchaburi, Samut Songkhram, Saraburi, Supanburi, and Ang Thong) projects, which are the sites of TMT and its suppliers, is for applicants to obtain ISO 9000, ISO 14000 or similar international standard certification within two years of their start-up date (Board of Investment of Thailand, 2012a). Such criterion compliments with the environmental plan of Toyota and achievements of its 5YEAP goal.

Conclusion:

• The financial systems in Thailand have influence on TMT in terms of providing long-term favorable conditions of the Thai baht value. This induced investment and led to the construction of the Ban Pho plant, which is part of TMC plan to establish Thailand as the regional hub. Also to mark TMT to be the most eco-friendly automotive production company in ASEAN.

• The source of funding from TMC provides resilience to TMT from contemporary instabilities in Thailand and integrated it more into the global condition of the financial system.

• The requirements of BOI appears to complement the global standard of TMC and help strengthening the achievement of 5YEAP goal. In the overall picture, the information suggests that the local condition of the Thai financial system has limited power to diverge the policy and appear to help strengthened the convergence of TMTs environmental CSR management.

4.6.3 Education & Labor System

Thailand has an increasingly high rate of education, entails high opportunity for education and has also been through decades of education reform. The net enrolment rate for primary school age children (6 to 11 years) increased from 81.4 per cent in 2000 to 90.05 per cent in 2009. Similarly, the net enrolment rate for secondary school age children (12 to 17 years) increased from 55.4 per cent in 2000 to 72.22

percent in 2009. However, out of 30,010 schools nationwide, 65 per cent fall below a 'satisfactory' level in terms of student educational achievement, the quality of teachers and overall school administration. (UNICEF, 2008)

A research by Thathong (2010) conducted in the 4 provinces of northeastern Thailand concludes that the environmental education still needs a lot of improvement. The environmental issues were not directly addressed in the school-based curriculum but were indicated in some subjects and mostly initiated through teacher's interests. The schools still lack environmental knowledge, awareness, and collaboration which appear to be major problems, apart from lacking of money allocation and necessary equipment.

To conclude, the wide reach of education and strong network of schools provides the basic infrastructure and enabler of educational development programs. Moreover, the poor quality of education especially in the area of environmental knowledge allows other third party institutions the roles to help building capacity in environmental education. Such conditions made it feasible for TMT to establish the programs in schools and integrated their 'stop global warming project'[4] with the network of over 170 schools in 76 provinces.

Through cooperation with TEI as the implementation organization of the project, TMT could carry out the environmental education program which is supported by TMC. Moreover, TMT also cooperates with TEI to organize the 'Eco School' project with 3 schools in Chachoengsao, and organized the "Young Environmental Warrior and Stream Detective Network" with schools of Chachoengsao Province.

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[4] The 'Stop Global Warming' Campaign started in 2005 and further strengthen during the 2006-2010 5YEAP. Concurrently, the Toyota Motor Europe (TME) also started similar program called 'Eco-Schools' in 2005. It is an environmental education program which TME supports the Foundation for Environmental Education (FEE) to helps schools become more sustainable. Approximately 11 million students from 37,900 schools in 50 countries are part of the Eco-Schools network.

"The mother company always emphasizes on the importance of education. At the start of this project, we and TEI considered that the schools and municipal networks are a practical choices. Do you know why? They do not come and go. The project can be more sustainable. … We have continued on this path for over 8 years now. We are also very concerned about the kids because they are the future and we think we can really make Thailand more concerned about environmental issues by starting when they are young"

Interview A1

"It's not that environmental programs in Thai schools are bad. We cannot say it like that. We picked the schools because it is crucial to create sustainable change in Thailand. … Our main targets could be divided into three groups; first is the teachers, second is the student and the third is the curriculum. … It is very hard to carry out, not that picking the school network would make everything easy. School is a closed system and depends on individuals. We hope that the environmental concern will be integrated into the curriculum.

… When we started the program eight years ago, the participants didn't really understand the concept of 'global warming' before…. In my opinion, the success of our program is to make the people understand the concepts and make it measureable, into something concrete so people can understand it substantially, more than just using clothed bags"

Interview B5

From the researcher's observation in the interview with TEI manager (B5), the information is very similar to Thathong (2010)'s conclusion. Even though the interviewee didn't think that Thai environmental education lacks quality, the teacher didn't understand the concept of global warming and the environmental management practice hasn't been integrated into the curriculum. The interviewee also suggests that success in each location is based on individual basis which is quite consistent to

Thathong (2010)'s findings that the environmental program in schools is based on teachers' initiatives.

Conclusion:

• The condition of the education system in Thailand in environmental aspects allows for divergence in the area of 'social contribution' practice. TMT carried out several projects that partner with networks of public schools to enhance environmental education, which are activities we haven't found in TMC[5]. It is also reportedly initiated by local actors such as the TEI and TMT staffs.

• The divergence is, however, not contradicted by TMC policy. According to out interviewee from TMT, the headquarters only has policies to encourage social contribution and cooperation with society in terms of environmental issues, but didn't control on the form or guideline in this area.

4.6.4 Cultural System

Local cultures have been identified as a key aspect for MNCs consideration for the implementation of a global CSR strategy in Thailand (Shimoni, 2011). According to Ketudat (1990) who presented the images of middle-range sociocultural features of Thailand in his book. He described Thai culture as relating deeply to the Buddhist religion, although there are non-Buddhist as well as ethnically non-Thai

[5] Toyota Motor Europe (TME) also have similar program called 'Eco-Schools' in 2005. It is an environmental education program which TME supports the Foundation for Environmental Education (FEE) to helps schools become more sustainable. It is the project that started since 1994 and currently has approximately 11 million students from 37,900 schools in 50 countries as part of the Eco-Schools network.

minorities. Carroll (2008) proposes that CSR practice in a predominantly Buddhist country is likely to be associated with a strong culture of corporate philanthropy and charity and such practice will also continuingly be sustained due to these religious beliefs.

The research from United Nations Volunteers (UNV) on the CSR Development in Thailand (The NETWORK Thailand et al., 2009) also propose that the religious context in Thailand has a basis in performing good deeds, because of the Buddhist merit making culture, therefore a lot of Thai companies are involved in philanthropic actions and employee volunteering. This is reflected in TMTs main activities in social contribution which several programs emphasize on the employee volunteering activity in planting trees. However, from the interviews and document reviews we found, TMT has very few social contributions in the form of donations or philanthropy. Mostly these are conducted in the social contribution department, excluded from SEO and the 5YEAP.

In terms of culture characteristics, Ketudat (1990) asserted that the character of 'Thai Buddhist culture' could be best illustrated by its adaptiveness, openness, freedom, tolerance, and selective borrowing. Thai people have a long history of adaptiveness towards other cultures and high tolerance of cultural differences. Buddhism plays part in its non-exclusivity which induces adaptability and openness. Ketudat (1990) stated that Thai culture also reflects the borrowing process due to its elements from the Indians, Chinese, Khmers, Mons, Burmans, Indonesians, Malays and later the western world. On the other hand, William J. Klausner who conducted research on Thai culture in 1955 later describes in a 1997 book that Thailand has been undergoing a tremendous transformation due to the forces of industrialization and globalization which have transformed the culture beyond his recognition four decades ago. (Klausner, 1997)

Traditionally, Thais try to avoid open conflicts at all costs and expressions of anger were best kept private. Thais were rarely seen venting their anger publicly. They preferred to settle conflicts through the mediation of senior, respected figures in the community such as monks. According to Klausner, this is because in rural

communities where the members know each other intimately and have to depend on one another for labor in each other's fields, such public display of anger would cause disharmony in the village and thus would be detrimental to everyone.

However, through urbanization and industrialization, his later visit to Thailand found that Thais are much more often seen being angry in public, especially when they perceive to have been wronged unfairly. This confrontational stance stems from the industrial culture that is fast supplanting the traditional agrarian way of life. The belief in social hierarchy is still ingrained in the Thai psyche, but the recent advances have made it the case that Thais are treating one another more and more as equals. He proposes that Thai culture is changing toward the more open, confrontational, individualistic and egalitarian way of living commonly found in the west. However, comparatively the prevailing traditional culture stills presents as part of its preexisting identity. (Klausner, 1997)

Hofstede (1991) describes the national culture as the "collective mental programming" which distinguishes one nation from another. He is most well-known for his work on dimensions of cultural variability. The five basic dimensions: Power distance (PDI) and uncertainty avoidance (UAI); individualism versus collectivism (IDV); masculinity versus femininity (MAS); and short-term orientation versus long-term orientation (LTO). These five dimensions represent universal categories for characterizing national cultures.

Thai society is characterized as collectivism. This includes collectively emphasize fitting in with other people, social harmony, interpersonal sensitivity, conforming and readiness to be influenced by other people. Personal and family connections play an integral part in the operations of Thai business. Views and opinions have a greater impact on business management when expressed by respectable members (Jirachiefpattana, 2006).

Thai society is characterized by uncertainty avoidance which means there is great fear in ambiguous situations and unfamiliar risks. Also the society is very hierarchical, Thai society has high power distance and accepts wide differences in

power in their organizations, in other words, subordinates will not influence their superior's ideas or decisions. In Thai society, a person's power normally comes with his/her title, rank and status. Face saving or the criticism avoidance value also plays a very important role in Thai culture as part of the way power is practiced. Thais try to avoid conflict and criticism at all times because of the face saving value. “Face” is equals “ego” and Thais give extraordinary emphasize on preserving one another’s “ego” especially towards ‘Pu Yai’ (superior, elder, authority-power figure). This leads to criticism avoidance. (Komin, 1990)

Table 23 Thai & Japanese Culture Characteristics according to Hofstede (1991)

Cultural dimensions	Japanese	Thai
Power distance (higher = more hierarchy)	54	64
Individualism (higher = more individualistic)	46	20
Masculinity (higher = more masculine)	95	34
Uncertainty avoidance (higher = more uncertainty avoidance)	92	64
Long-term orientation (higher = a more long term orientation)	80	56

Source : Hofstede (1991)

Thai culture also does not encourage subordinates to dare to make mistakes, nor to take initiatives. Thais avoid taking on more responsibility and avoid taking risks, because risk means bringing in more uncertainty and increasing their responsibilities, thus avoiding mistakes. Hence the culture encourages only a few people at the top of Thai organizations to make decisions and take risks. (H. Holmes & Tangtongtav, 1995)

These characteristics of Thai culture complement our earlier finding, which suggests that the divergent policy only be put forward after seeking consensus from top Thai executives. In high power distance societies, the less powerful people will be more dependent on the more powerful.

The combination of high power distance, high uncertainty avoidance, and high collectivism also contributed to the convergence force of global policy and top management's direction which is consistent to our findings in the topic 4.3.

Conclusion:

• The cultural system in Thailand encourages both convergence and divergence in CSR management. In terms of TMT's social contribution activities, the traditional embedded culture of merit making in Thailand encourages divergence through employee volunteering programs.

• According to Hofstede (1991) and extended studies from his work, the Thai & Japanese culture characteristics are compatible and encourage convergence in CSR management. The divergence in policy could also be made through the conformity from higher management in areas that is not directly contradicting the TMC policy's direction.

CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

• 1st Question

For the first question of our study, the results are consistent with our hypothesis. The environmental CSR policy and practice of TMT cover all the seven groups of Environmental CSR activities according to classification adapted from *Olsen and Gitsham (2005) categorization of CSR Activities.* Even though the TMT's 5YEAP concerns only on environmental issues, the activities in this plan integrate deeply into every category of CSR and reflect a high level of coordination with every part of its operation.

The TMT's 5YEAP contains very high integration in the 'Leadership, vision and values', 'Workforce Activities' and 'Supply Chain Activities' category. The environmental concerns are engraved into its vision and culture and have been reemphasized consistently through its training and educational programs for all employees, stakeholders. This is especially the case for business partners (Suppliers and Dealers) in the supply chain.

However, we found that TMT scores lower in the 'Market Place Activities' and 'Community Activities' categories. This is due to product responsibility aspects that related to design and development, resulting from the nature of TMT. This is because TMT only contributes to manufacturing and marketing activities of TMC and does not consist of an operational R&D unit. This reflects the strategy of global MNCs which extensively rely on its value chain and utilize the competitive advantage of the global division of labor.

Another remarkable performance of TMT is in the 'Stakeholder engagement' category. TMT employ a very thorough and considerate process of forming and integrating their partners and stakeholders into their environmental management.

They offer a wide variety of programs and initiatives to its stakeholders to ensure the effectiveness of its environmental program.

In terms of social contribution projects, there has been a gradual increase in financial and other resource contributions to society. However, the activities were conducted mainly in a development program rather than a philanthropic manner. We found that TMT social contribution programs also have long-term continuity in cooperation with its partners. TMT appear to concentrate on planned topics, while remaining high coverage on various environmental issues.

The area in which TMT lacks, is the recyclability of its products and the issues concerned with end-of-life vehicles. TMC has no policy or future plan to develop such initiatives in Thailand. We also found that TMT still lacks the environmental activities in ethical levels such as the issues in politics of the environment, advanced level of transparency and contribution to the public debate or policy development.

In conclusion, the areas which TMC could initiate more activities to improve its environmental performances could be summarized as in the table below.

Table 24 Areas for Improvement in TMT's Environmental CSR Activities

	Category	Content / Classes of Activities / Items
1	Leadership, vision and values	o Ethical leadership and championing
		- Defining a clear position on political contributions
		- Lobbying transparently.
2	Marketplace activities	o Responsible customer relations including marketing and advertising
		- Providing good and clear product information
		o Product responsibility
		- Considering product life cycle
5	Stakeholder engagement	o Stakeholder consultation
		- Conducting stakeholder surveys
		- Participating in public policy debate
		o Transparent reporting and communication
		- Getting external validation
		- Using quality assurance methods

Category		Content / Classes of Activities / Items
6	Community activities	o Giving employee time
		- Using full-time secondment
		o Giving other kind of contributions
		- Loaning facilities and assets
		- Giving assets or products
		o Being a good neighbor
		- Promoting social cohesion in the community.
7	Environmental activities	o Environmental product responsibility
		- Assessing impacts in product life-cycle
		- Using product take-back schemes
		- Addressing politically sensitive environment issues

• 2nd Question

The second question asks “Do the CSR policies and practices of Toyota Motor Corporation improve the responsibility standards in its Thai subsidiary?” It was found that the global convergence forces upwardly harmonize environmental standards through the headquarters global policy. This follows the regulations in key global markets especially in the European Union.

TMT has full compliance to Thai law and has zero cases of fines which shows the basic achievement of responsibility standards. The level of performance is remarkably high in the areas which relate to mandatory standards in its export market (such as EU) and the areas which have been emphasized by TMC as their global policy. The action plan does improve the responsibility standards in its subsidiary company in various subjects. This includes the resource use and carbon reduction, waste reduction, air pollution control, substance of concern and environmental management in the supply chain.

Several areas of 5YEAP comply to the regulations and accounting methodology of the EU which does not exist in Thai regulatory practices. All areas are designed to be above the local legal standard and in many areas aims to achieve the No. 1 status among automotive manufacturers in the region.

However, although the practice is in line with the EU, not all of its operations are of the same quality that Toyota practices in Japan and the European Region. The level of its CSR performance is inconsistent and quite selective. The spread of global environmental standards remain high in terms of product quality but not all parts of the manufacturing system management. In other words, TMT does not upgrade its environmental performance through every subsidiary equally.

For example, in the management of Substances of Concern (SoC) TMT practice is better than Thai standards but has a lower level of management than Toyota Motor Europe. Moreover, in terms of the end-of-life product return scheme, TMC carries on the practice in Europe and Japan and has plans to study the possibility of setting up such scheme in Russia, India, China, Mexico, Turkey and Vietnam. There is no plan to include Thailand in its global policy (Toyota Motor Corporation, 2011a: 38). The areas which are not emphasized by TMC are reportedly set according to the Thai regulation standards, with 20% higher than the regulation baseline to reduce the risk of accidently breaching the laws. It was also found that several regulations and voluntary schemes in Thailand and worldwide are following or referring to the strict EU environmental regulations.

• Finally, we came to the conclusion that Toyota's environmental CSR policy and practice elevate the responsibility standards of their operation in Thailand. They are also evidently associated with higher regulatory and voluntary frameworks in key international markets especially in the EU.

• 3rd Question

The third topic of the study investigated how the TMC interacts with the local subsidiaries and its national institutional factors in the formulation and implementation process of their CSR plan. The results reveal that the formulation process and resulting practice contains high consistency with the direction of its

global headquarters. The only areas lacking from the plan are the areas that involve R&D and Management of ELVs.

The divergence in TMT policy that was found when compared to the global policy are;

1) The lack of policy in ‘Vehicle Recycling’, ‘Management of ELV’ and ‘Products’ Entire Lifecycle Environmental Impact Account And Design’

2) The management of CO2 Emission Reduction, Recycle and Environmental Management System (EMS) among TMT dealers. TMT performs better than TMC requirements and expands their scope of action plan to the ‘After-Sales Services’

3) In terms of social contributions, TMT doesn’t have the plan to promote green business but emphasizes further on the community development projects by cooperating with the Non-Profit sectors.

• TMC established the ‘consolidated environmental management’ to strengthen the consistency between global policy and local practices. They created the global spaces for diffusion and exchange of best practices in environmental management. They encourage higher performance through close monitoring systems, high level of coordination and communication, consultation and infuse competition among subsidiaries.

• The global management of CSR by TMC is very strict in terms of key areas concerning the manufacturing process which contains specific targets. It is less strict in the stakeholder management part, and allows more room for TMT’s local initiatives in ‘cooperation with society’ or social contribution areas. The activities in the later part play an important role in TMC cooperation with important institutions in Thailand. These include National Municipal League of Thailand, the Department of Environmental Quality Promotion (DEQP), Ministry of Natural Resources and Environment, Thailand, the Energy Policy and Planning Office (EPPO), Ministry of Energy, Thailand, Office of the Basic Education Commission, Ministry of Education, Thailand.

A more flexible management approach in this area is also compatible with the divergent nature of local institutional environments, suitable for the different conditions of institutional settings and allows the programs to be more responsive to the Thai society.

• From the interviews, we found that the process of design and implementation is in the form of close cooperation where TMT remains autonomy over the decision but keeps close communication and consultation from TMC.

• Here we conclude the factors of Global Convergence and Local Divergence in TMT's 5YEAP policy and practice by gathering the results from Topic 4.1 – 4.6. The results are summarized in Table 25.

• The presumption was that the MNCs headquarters will be the actor that induces convergence and local institutional systems will be the forced to encourage divergence. This proved to be true in overall picture. However, it is crucial to note that such proposition is not true in all cases. The TMC also induces divergence to differ the environmental management practice in some areas of each subsidiary. The local institutional systems of Thailand in our study appear to encourage both divergence and convergence. The divergence force from local systems appears to be limited; one of the reasons is due to the weak institutional capability, poor regulations and enforcement frameworks.

• In conclusion, the result shows that CSR policy formulation and implementation in TMT is considered a hybrid process with inclination to global integration. Though the influence of institutional factors in Thailand remains significant, it appeared be limited when compared to the power of influences from key global markets such as the EU and the Toyota Motor Corporation (TMC)'s policy.

Table 25 Factors creating Global Convergence VS local Divergence in TMT's 5YEAP Policy and Practice.

Global Convergence	Local Divergence
Organizational Characters	
• Level of ownership over TMT (86.43% owned by TMC). • TMT's Source of funding (FDI through Direct loan with TMC) • Close coordination and control system within TMT, and between TMC and affiliates • The organizational structure of the plan which requires approval from TMT President (Japanese Expatiate from TMC) and approval from Headquarter TMC.) • The network of local dealers which are mainly the subsidiaries of TMC's partners in Japan and worldwide. • Close communication both inside TMT and among TMC, TMT and other oversea affiliated countries • The importance of TMT as a regional and global production base of IMV project which establish TMT as crucial	• The nature of TMT operation which concerns only some parts of value chain in automotive industries, and produces only some models of Toyota cars.
TMC's Policy and Local Employee's Initiatives	
• Very strong corporate culture, values and beliefs to ensure consistency and achievement of policy choices. • The "Consolidated environmental management" plan, which is	• The TMC policy choice to emphasize some advanced CSR initiatives and practices only in some selected countries. • The initiatives from TMT's Thai local employees which try

Global Convergence	Local Divergence
the managerial scheme started in 2000 to ensure the consistency of environmental standards through all subsidiaries. • Global principles and vision and charter from TMC which originated the framework of each environmental policy world-wide • The Global 5YEAP framework from TMC with specific action and benchmarking of environmental performance in each area • The intensive training and environment education program for 100% of staffs – guidelines and knowledge from TMC • Through Global Liaison conferences, consultation, motivation and monitoring program. • Textbook and guideline such as the 'Green Purchasing Guideline"	to achieve the 5YEAP goal in innovative ways or suggest several options for social contribution projects
Global Trade & International Regulations	
• Stricter regulations in key global markets such as the EU and Japan which upwardly harmonize the environmental standards.	
National Business System	
• The Thai political system which integrates TMT to the Global markets and facilitate the convergence in their global environmental CSR management.	• The local regulations which set the baseline for environmental performances in areas that are not emphasized by TMC.

Global Convergence	Local Divergence
• The weaker local institutional framework, regulations and enforcement • The cheaper baht and long-term stability in Thai financial system after 1997 • Incentives and Requirements of BOI • The compatibility between two cultures which induced conformity	• The financial cost for carrying out the initiatives in local environment • The network of organizations in political system which form the activities and partnership in social contributions area. • The high reach of education, strong network of schools but poor condition of environmental education quality which form the activities and partnership in social contributions area. • The Thai Buddhist culture which encourages employee volunteerism activities.

5.2 Discussion

• Overall, it was found that global convergence forces are mainly induced by the MNC headquarters policy. This creates a strong standard in the market of developed countries such as the EU and Japan raises up the standards of environmental management.

The implementation and formulation process has been conducted in a hybrid way that is inclined to convergence. The institutional pressure in local settings does play a role in divergence forces but is considered limited compared to the convergences of TMC global policy.

• Both global actors such as TMC and global markets as well as the local institutional systems have created both convergence and divergence influences on TMT's CSR management. In many cases the local instructions facilitated the integration of CSR practices to global standards in both direct and indirect ways.

• Our conclusion resides with the third camps of the debates on Globalization, MNC and CSR, which describe the process as hybridization (or crossvergence). The empirical results are not polarized as some parts of TMT operation is above the local standard with some parts carried out according to the baseline of local regulations. (Chapple & Moon, 2007)

• The compatibility of culture, extensive training programs, high levels of communication and implementation of strong corporate culture has created the soft power which encourages Thai TMT staffs to follow TMC's policy in a non-authoritative and harmonious way. According to the information extracted from the interview, we can see that the TMC put strong control in many areas in policy design such as the numeric numbers enforced to curb resources use and externalities. In parts of social contribution, we also found that a remarkable resemblance with TMC global initiatives in some activities. For example, the technical practice of planting trees by Dr. Miyawaki, which TMT staffs voiced that this cost them excessive amount of money and complexity in procedures. The Biotope, eco-forest and environmental learning at plants, were also established in Japan prior to TMT projects.

But when asked TMT interviewees about the opinion on level of influence from TMC in the formulation of 5YEAP, almost all staffs first replied that TMC left it depends to them and they felt that they had power to determine the policy. Though the structure and direction of plan comes from TMC, the local staff remain autonomous in their management choices. These help the plan to be achieved in the most efficient way concerning the cost and possibility in the local environment.

The results in this topic are consistent with findings from Muller (2006) (see page 35-36) who concludes that the mode of management that allows more autonomy entails the performance of voluntary responsibility practice that is convergent to the global standards.

• It is also important to note that the success of this plan didn't come from the local autonomy over policy decision alone, the integration of environmental concerns and into every part of operation, the process of **"Communication & Cooperation, Presentation and Positive Reinforcement"** (see page 122), and the supporting activities and events designed by TMC are also the key factors leading to the achievement of this policy goal.

The TMC also created different choices for each country of operation based on potentials, necessity and resources. We proposed that Multinationals create their internal basic standards for CSR, but then choose the implementation level based on necessity and efficiency of the local environment and global pressure. For example, TMC requires all of its main subsidiaries to have CSR reports comply with GRI guidelines but the application for report level is not mandatory in every nation.

For the end-of-life vehicle recycle scheme, the cost for such program is still costly to implement in another country if not forced by other regulations or influences. A study from Smith and Crotty (2008) analyzed the influence of the EU End of Life Vehicle Directives (ELVD) from the point of view of ecological modernization. They found little evidence that this new regulation stimulated product innovation beyond short-term, incremental technological trajectories.

A study from Akaraj (2008) on *'End of Life Vehicle Directive and Evaluation of Potential Management of Thai Automotive Industry'* found that that there was no direct laws for ELVs management in Thailand. The control and management of industrial hazardous waste were not systematic and the parties involved lack the technology. The knowledge in this field is still very dependent on foreigners and foreign companies.

• Although the result on the application of the NBS framework facilitated the study of local institutions power, it appears limited when comparing the result to the work of Matten and Moon (2008). However, there are some very crucial elements which might contribute to the conversion of analysis.

The framework of Matten and Moon (2008) describes characteristics and behaviors of corporations which are established and operating in the U.S. and Europe. It doesn't mention the multinational corporations which operate in the transnational context of both developed and developing nations. These MNCs could have been influenced by the origin country (as the place of forming global CSR strategy and the owner of capital and knowledge), and the recipient country (as the context where CSR is embedded and implemented upon).

There is a possibility that NBS analysis could entail more prolific results if applied to the Japanese system. Gamble et al. (2003), who studied firms from Japan and South Korea, proposes that different origin countries of business affect the way firms form their strategy in internationalization. The degree of integration into Chinese society appears to be less among Japanese enterprises comparing to Korean firms.

According to Whitley et al. (2007), the Japanese multinational companies are commonly perceived as giving little authority to foreign subsidiaries, pursuing largely colonial or domestically dominated patterns of cross-national authority sharing and career development.

Their foreign operations are often considered to function as delivery pipelines for centrally planned products and services, which replicate domestic production processes and management systems and rely extensively on expatriate managers to control subsidiaries tightly, and to teach foreign managers and workers the 'X company way' of working.

However, the perceptions towards Japanese MNCs has been slightly modified by recent empirical research on how they manage their European and US, especially in the car manufacturing industries.

According to the new research, some policies from Japanese headquarters were still applied in foreign settings without a great deal of modification. For example, the production systems still rely extensively upon Japanese machinery and the connections to Japanese suppliers, the use of Japanese standard procedures and manuals are still promoted. The methodology in managing labor welfare and unions remains similar to Japanese model.

In other areas such as policy in job rotation, promotion of low rank workers to higher supervisory roles and involving them in problem solving, are not standardized as much across foreign subsidiaries but rather depend on the labor context of each nation they are operating in.

The authors also conclude that internationalization of Japanese MNC was increasing during the 1980s and 1990s and foreign subsidiaries were beginning to exchange ideas and practices between themselves, especially those in the UK and USA, occasionally without direct control from Japan.

Our finding is very much consistent with Whitley et al. (2007)'s proposition and shows the spectrums of integration varied across issues and topics with the lowest integration in production area.

Lastly the high environmental responsibility performance of Toyota could also be associated with the prestigious status of Toyota in Thailand and Japan. As seen

from the Chapter , Toyota is the first JAMNC that became the No.1 manufacturer of world automotive industry and have market share of the market share of 41.39% in Thailand.

In the global policy of 5YEAP, the descriptions in many areas of policy items are directing the subsidiaries at pursuing the No.1 position in their countries or regions. According to the interviews, TMT officers and experts also expressed that TMT feel responsible for contributing to the society because it has a very high market share in Thailand.

'Toyota Way of Continuous Improvement' and 'Lean Production' also have great penetration in global manufacturing practice. TMC remains the leader in recycling of ELV in Japan, the world first mass manufacturer of Hybrid technology vehicles and is the first Japanese company to achieve ¥ 2 trillion in consolidated net income (Using U.S. accounting standards) (Toyota Motor Corporation, 2011b).

Eiichiro Adachi, the counselor of the Japan Research Institute (JRI) and Japanese delegation to the ISO/Social Responsibility Standards (ISO 26000) working group, addresses the role of Toyota in Japanese society:

> "*The more you achieve, the more your stakeholders expect you to achieve. So the hurdle will continue to get higher and higher as the company achieves more and more.*
>
> *What's more, the expectations may well go far beyond just manufacturing cars"*
>
> (Toyota Motor Corporation, 2011b: 53)

This goes along with Tangsupvattana (2012) work, which compares the Japanese and U.S. modes of CSR. He concludes that at the final stage of corporation's social responsibility in Kaku's model of *kyosei*, company must realize that it has a bigger role in society. Moreover, the Japanese concept of CSR also represents the symbiosis of all stakeholders and much more

concern on morals and social responsibility than building efficiency and effectiveness.

5.3 Recommendations

• It was found that global MNCs have the tendency to upwardly harmonize their environmental performance to be consistent with international practice on a voluntary basis. However, such standards are not necessarily the best practices of CSR. The study shows that trigger-down of environmental practices and CSR does occur through globalization but it doesn't happen automatically. The level of implementation depends on necessity and cost. Therefore the government could enhance better standards through the supporting programs.

For local governments hosting the subsidiaries, imposing strict regulations might reduce competitiveness. We therefore encourage the establishment of institutionalized voluntary programs to compliment the international standards. For example the CSR-DIW, and initiated programs that strengthen the environmental voluntary standards to be in line with the EU and Japanese regulations.

The investment incentives should also be provided to the industries that have export markets that mainly focus on EU and Japan as they have high environmental standards. Such a policy could encourage better environmental practice that would later be diffused into the country.

As seen in the studies and literature, the global MNCs already possess knowledge, technology and resources to elevate their subsidiary standards to meet the practices in the EU as most of them also have manufacturing sites in the European region. If the government helps facilitating the transfer of best practice by making the adoption of these advanced environmental management systems easily accessible and more financially feasible for the MNC, such practices will have higher potential to be widely adopted by multinational firms.

• For MNCs operating in developing countries, we encourage the adoption of TMT's management approach of CSR (Topic 4.5). This method enables the practitioners to exploit the advantages of convergent and divergent CSR while minimize the disadvantages of both practices. However, the CSR policy design should be based on the nature of business and characteristics of the host country.

The TMT and TMC were able to design the policy which best suit the local operation through the effectiveness of is cooperation and communication. The active flow of information in both horizontal and vertical direction is one of the main elements that enables them to make the most efficient policy choice while moving towards the same direction.

• The issues of environmental management require a higher level of technical understanding. Strengthening environmental education programs among the public is therefore the basis of advocating better environmental practices from businesses.

Advocacy groups working towards better business social & environmental responsibility should also emphasize an improvement in Thai education standards. This would allow the public to understand the importance and support the movement for better environmental practices.

• The source of best practice in CSR in this case appeared to be the global actors outside the country. This indicates that there hasn't been enough pressure on the local industries or enough organization to create effective CSR innovation. It is necessary that Thailand develops their civil society sector, strengthens the work of R&D and think-tank organizations in order to improve the CSR practice in Thailand

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BIOGRAPHY

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The experience from developing CSR programs has driven her to pursue academic knowledge in International Development Studies. This thesis contributes to her interest in global sustainability and the potentials of the voluntary mechanisms of business as tools to enhance the sustainability practice in an emerging economy.