Brand Development of the Hong Kong Environmental Industry

香港環保產業的品牌發展

Compilation

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Tel 電話:	(852) 2443 8188
Fax 傳真:	(852) 2789 3346
Website 網址:	http://www.hkenvia.org

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Section 1: Introduction

This report explores the development of green branding in the environmental industry of Hong Kong based on the findings of a study conducted by a research team of the Hong Kong Polytechnic University in 2013. It first provides an overview of the industry which forms the conceptual and factual background to the study. The process through which relevant data were collected is then described, followed by an analysis that reveals the existing trends of corporate environmental management in Hong Kong, from which one can deduce the possible impact they might have on the market tomorrow. The implications of the findings are also spelled out so as to provide pertinent suggestions for elevating the competitiveness and green branding of the industry.

1.1 The Background: Overview of the Industry

Over the past decades, with the growing recognition of the importance of environmental protection and sustainable development, most governments in the world have introduced increasingly stringent policies to tackle environmental challenges. In Hong Kong, the local government has also brought in its own strategic plan to address environmental issues since the late 1980s. A White Paper entitled “Pollution in Hong Kong: A Time to Act” was published in 1989, which laid down a comprehensive 10-year environmental initiative. Under the evolving environmental regulatory regimes, many industrial sectors have started to adopt cleaner technologies and environmentally friendly practices in order to survive and compete in the local and global markets. As a result, Hong Kong has seen a swift emergence of an environmentally oriented industry engaged in providing technologies, goods and services for pollution control and resource conservation in various areas [1].

1.1.1 Defining the environmental industry

There is little agreement on the definition of “environmental industry”. For the purpose of this report, the environmental industry is defined as the grouping of all companies engaged in producing goods and services capable of measuring, preventing, limiting, minimising or correcting environmental damage to water, air and soil, as well as problems related to waste, noise, energy and eco-systems.

Broadly speaking, the environmental industry consists of two major categories: environmental goods providers (EGPs) and environmental service providers (ESPs). According to the Federation of Hong Kong Industries (FHKI) [1], EGPs design, supply or manufacture (1) pollution control, waste handling or recycling equipment, (2) environmental monitoring or measurement equipment, (3) environmentally-friendly products (e.g. degradable packaging materials), and (4) other related environmental equipment or products (e.g. energy saving devices). ESPs provide services in (1) environmental consulting or testing, (2) waste management or recycling, and (3) operation and/or maintenance of equipment produced by EGPs listed above.

The environmental industry in Hong Kong can be also classified into six segments or subsectors, including (1) water conservation and pollution control, 2) air pollution control, 3) waste management, 4) noise control and mitigation, 5) energy conservation and 6) other environmental services.

1.1.2 Industry features

According to the latest research updates by the Hong Kong Trade Development Council [2], the added value of Hong Kong's environmental industry grew approximately to HK$6.5 billion in 2011, accounting for about 0.34 % of Hong Kong's total GDP of that year. The industry is characterized by a small number of large enterprises dominating a few market segments and a large number of small and medium-sized enterprises (SMEs) taking up the rest of the market. It is estimated that currently the industry consists of some 300 establishments, among which 89% are SMEs with less than 100 staff. The industry employed 38,350 persons in a year, representing 1.1% of the total local workforce.

The strength of Hong Kong's environmental industry lies in a number of aspects. Many companies in the industry possess invaluable assets, such as the global informational network, talents with an international mindset, good intellectual property rights protection, strength in finance and excellent understanding of and rich experience in the China market. A considerable number of them also have sophisticated technical capabilities in their specialty areas, such as air pollution control, water conservation, waste management and recycling, noise control and energy conservation [3]. Meanwhile, they are perfect partners of foreign enterprises planning to enter the Mainland China market with advanced environmental technologies.

However, the environmental industry in Hong Kong is still in its early stage of development and faces serious challenges. Since the majority of companies in the industry are SMEs, they generally have only limited capabilities and resources in developing and integrating innovative environmental technologies. Support from external stakeholders in the development of the industry is also insufficient. Both internal and external difficulties have weakened the industry's ability to respond to the rapidly advancing technological needs and evolving regulatory requirements to take full advantage of the market opportunities [3].

Despite these difficulties, the potential of the industry is huge. As one of Hong Kong's six advantageous industries, the environmental industry has been promoted by the local government. China, with its fast growing markets for environmental technologies and services and its leading position in clean technology investment in the world, has also opened up enormous business opportunities for Hong Kong's environmental companies. It is therefore urgent and essential for the local environmental industry to quicken its pace of development so as to grasp these business opportunities. In this report, we will focus on the topic of green brand development.

1.2 The Concept of Brand and Branding

Brand and branding are controversial concepts. The definitions of “brand” vary greatly from the very shallow and tangible (such as a name, a logo and a legal instrument) to the much more profound and intangible (such as an image in the consumer's mind, a value system, a personality, a relationship and an evolving entity) [4, 5]. For the purpose of this report, brand is defined, at a more holistic and profound level as “the complexity of which demands strategic planning and integration of the brand in the core of the firm” [5]. It is a value indicator for various stakeholders.

Branding refers to the expression of the brand of an organisation, a product, or service. It consists of active communications to target audiences of characteristics, values, and attributes that clarify what this particular brand is and is not. Consequently, green branding or positioning a brand as a “green brand” entails the differentiation of the brand from its competitors through its environmentally sound attributes and the publicity of such attributes to the target audience [6]. In other words, for an environmental company, green branding requires an active communication on how its products or services are greener than those of its competitors, who also provide environmental products or services, as well as values associated with such differentiation.

1.3 The Study: Aim and Objectives

With the aim of exploring the development of green branding in the environmental industry in Hong Kong, this study looks at both the external market of the environmental industry and the perception and practice of green branding within the companies. Five specific objectives are developed as follows:

1. To gain an overview of corporate environmental management of Hong Kong enterprises in the PRD region;
2. To understand the current status of the local environmental market;
3. To investigate the perception and development of green brand among the local environmental companies;
4. To identify the barriers to green branding and business development;
5. To make recommendations for enhancing the competiveness of the industry.

The first objective is realized through a questionnaire survey of companies from various industrial sectors in the PRD region. The design and results of the survey will be detailed in Section 2. The other four objectives which concern specifically the phenomenon of branding of environmental industry are achieved by face-to-face interviews with top management from 28 companies. This will constitute the substance of Section 3.

Section 2: Corporate Environmental Management of Hong Kong Enterprises in the Pearl River Delta (PRD) Region

2.1 Survey

A survey of corporate environmental management of Hong Kong enterprises in the Pearl River Delta (PRD) region was conducted in September – December 2013. It consists of a 15-page questionnaire with 12 parts:

Part One : Environmental Implications of Business Activities
Part Two : Company Activities Related to Corporate Environmental Management
Part Three : Motivations for Environmental Initiatives
Part Four : Obstacles to Introducing Corporate Environmental Initiatives
Part Five : Other Considerations
Part Six : Challenges to Environmental Compliance
Part Seven : Environmental Orientation and Awareness
Part Eight : External Support
Part Nine : Company Information
Part Ten : Biographical Information
Part Seven : Personal Views
Part Twelve : Comments on this Survey and Contact Information

Before the 2013 survey, the research team conducted a similar survey in 2007, with results there were useful as a guideline for the industries to increase their awareness of corporate environmental management and improve their corporate environmental performance. The 2013 survey aims to bring up to date knowledge of the reality of corporate environmental management of Hong Kong enterprises for the Hong Kong environmental industries so that they can explore additional business opportunities and develop their brands.

The targeted respondents are the corporate executives of members and affiliated members of Hong Kong Environmental Industry Association (HKEnvIA) and Federation of Hong Kong Industries (FHKI). The data were collected through a number of channels. The questionnaires were in both hard and electronic copies. The research team constructed a web-based questionnaire using the MySurvey software system offered by the Hong Kong Polytechnic University. At first, an email notice was sent through HKEnvIA and FHKI to their members in July- August 2013, which also posted the e-questionnaire on its website. However, the first attempt elicited only few returned questionnaires. The research team then turned to mailing as the main source of data collection. At different times from early September 2013 to late November 2013, a cover letter describing the study was sent out, along with a questionnaire and a self-addressed, postage-paid reply envelope to members of FHKIs. A few questionnaires were distributed directly to the members through FHKIs in its General Annual Meeting. In the end, a total of 334 organisations participated in the survey with 16% response rate.

2.2 Analysis and Findings

2.2.1 Participants

334 organisations participated in the survey. Responding companies are from manufacturing (79%), services (11.7%), public utilities (3.3%) and other industries (4.6%) [Figure 2.1]. In respect to organisation size, 22.8% are small organisations with less than 100 employees, 27.2% are medium-size with 100 to 499 employees and 48.9% are large organisations with over 500 employees [Figure 2.2]. About 74.6% are wholly Hong Kong-owned companies, 7.5% are Hong Kong-Mainland joint venture companies, 3.9% are Hong Kong-foreign joint venture companies, 10.8% are foreign enterprises [Figure 2.3]. In respect to location of main operations, 25.7% of organisations have main operations within Hong Kong, 57.5% operate in Pearl River Delta region and 15.6% operate worldwide [Figure 2.4].

Figure 2.1 Types of Primary Industry

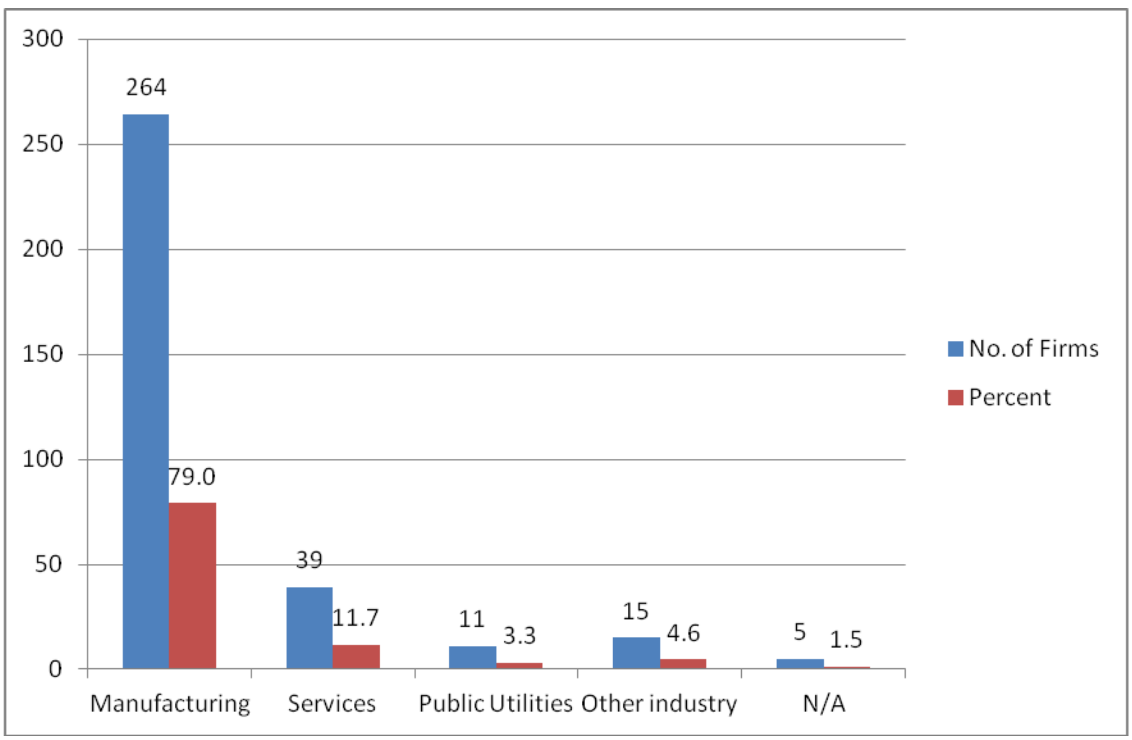


Figure 2.2: Number of Employees in Business

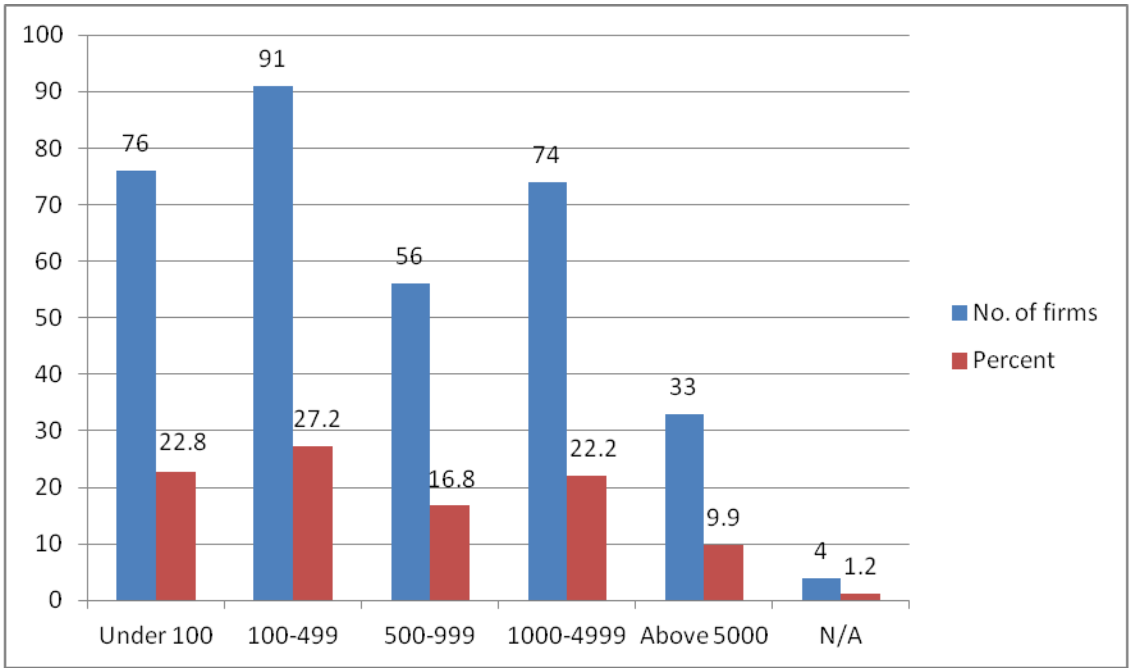


Figure 2.3: Types of Ownership

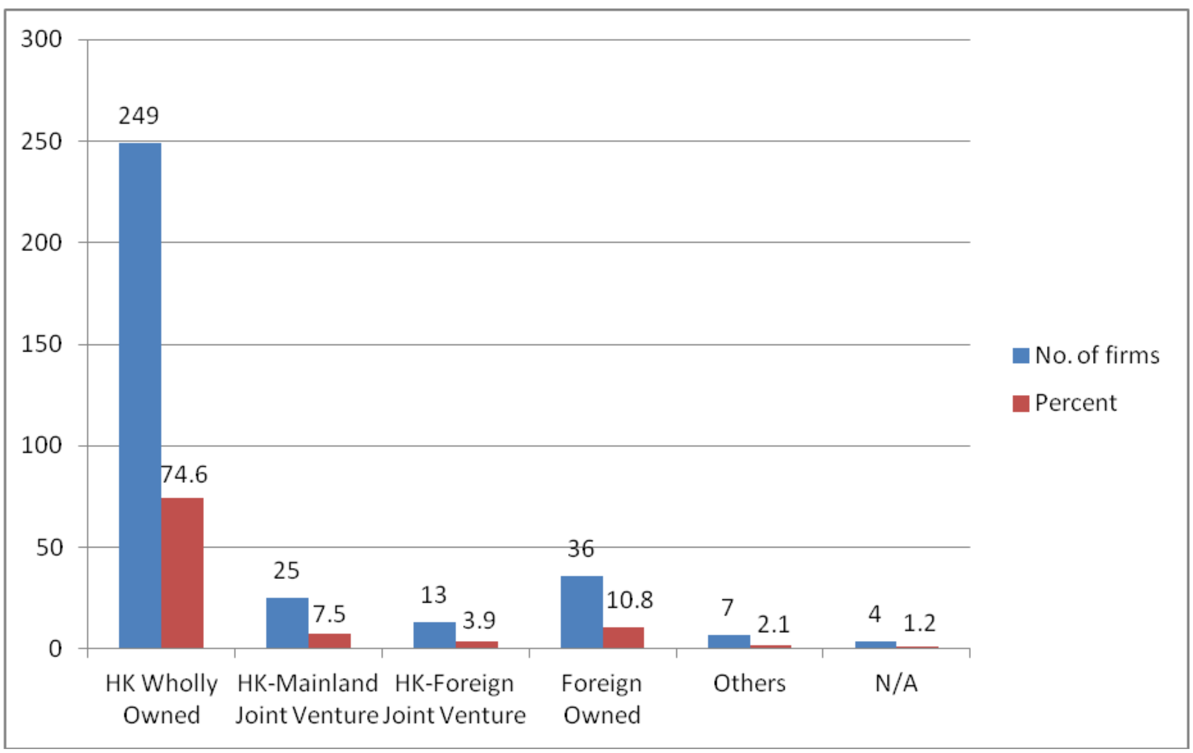
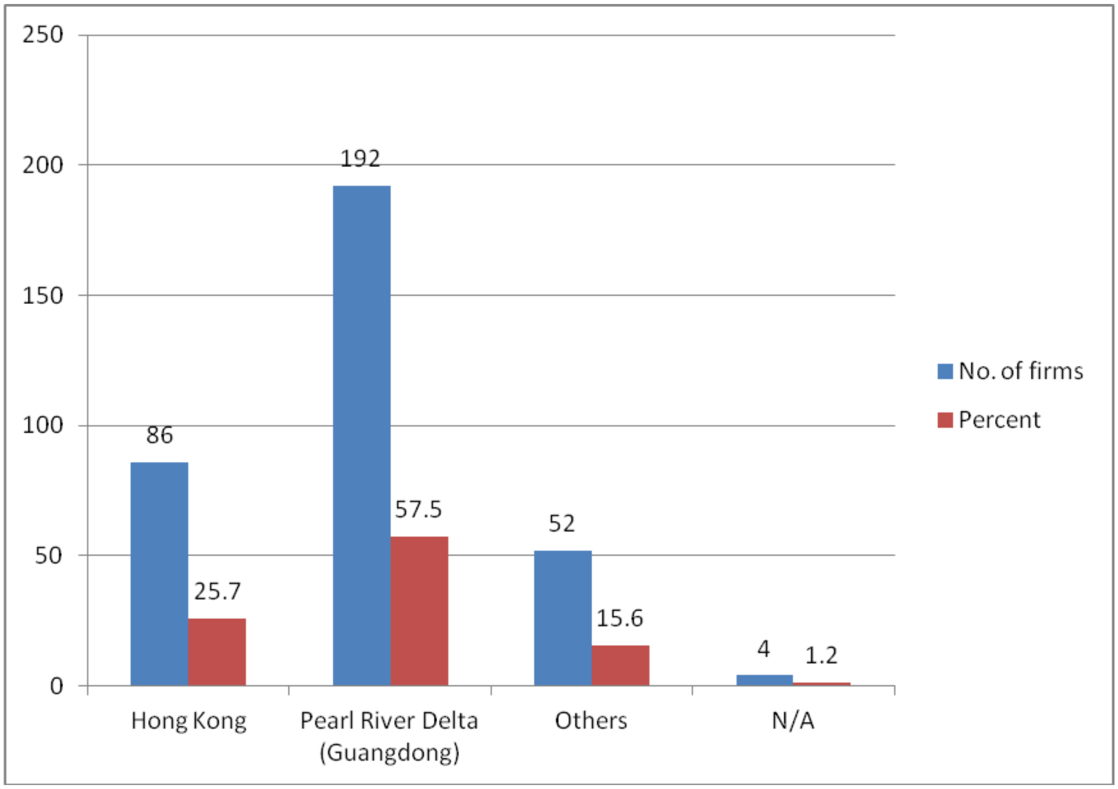


Figure 2.4: Locations of Main Operation



2.2.2 Environmental impact of business activities

The executives were asked two questions about the environmental implications of their business activities. The first question is "Relative to most other enterprises in China, what do they consider to be the degree of the environmental impact of their company's operations?" and the second question is "Relative to most other enterprises in their industry sector, what do they consider to be the degree of environmental impact of their company's operations?", with 1 denoting "Strongly Disagree, and 7 denoting "Strongly Agree". The result shown in Table 2.1 and 2.2 indicates that in general, enterprises do not think that they have large impact on the environment and compared to their other enterprises in the same industry, they believe that they have better environmental performance.

Table 2.1 Environmental Impact of Business Activities – Compared to Enterprises in China

Rank		Mean
1	Has a trivial impact overall on the environment	5.05
2	Uses relatively few biological resources (i.e. plant or animal material)	4.80
3	Uses relatively little energy	4.48
4	Produces large amounts of solid waste	2.67
5	Uses large amounts of mineral resources (extracted minerals)	2.40
6	Produces large amounts of air pollutants	2.29
7	Produces large amounts of water pollutants	2.23

8	Produces large amounts of chemical or other hazardous waste	2.04

Table 2.2 Environmental Impact of Business Activities – Compared to Enterprises in the Industry

Rank		Mean
1	Is environmentally friendly	5.17
2	Has made significant progress in reducing impact on the environment	5.14
3	Has an outstanding record in environmental protection	4.69

2.2.3 Company activities related to corporate environmental management

In order to see how well companies integrated environmental activities into their business model, executives were asked to describe the operation situation of their company's environmental management programmes and activities by 1 = "never considered" to 7 = "a way of life". The result shown in Table 2.3 indicates that the companies tend to adopt more operational environmental activities (e.g., using filters and other emission controls in production processes, recycling waste streams and routine environmental audits) than strategic environmental policies and assessment (e.g., scientifically assessing the life-cycle impact of products) .

Table 2.3 Environmental Activities

Rank		Mean
1	Using filters and other emission controls in our production processes	4.77
2	Recycling of waste streams	4.73
3	Routine environmental audits	4.54
4	Environmental training for managers	4.29
5	Environmental training for operations	4.23
6	Measuring key aspects of our business environmental performance	4.19
7	Setting environmental performance objectives as part of our annual business plans	4.12
8	Developing a certifiable environmental management system (e.g., ISO 14001)	4.06
9	Incorporating ecological themes when marketing some of our products	4.02
10	Making investments in clean production technologies	3.92
11	Company displays about environmental programs	3.79
12	Including environmental performance measures in our management evaluations	3.79
13	Participation in government- sponsored environmental programs	3.78
14	Sponsorship of events about environmental protection	3.64
15	Preparation and release of environmental reports	3.39
16	Scientifically assessing the life-cycle impact of our products	3.25

2.2.4 Likely outcomes of environmental protection measures

Does the implementation of environmental practices bring any benefit to company? The executives were asked to assess the likely outcomes of various environmental protection measures for their companies, with 1 denoting "Strongly Disagree, and 7 denoting "Strongly Agree". The higher score means that the likely outcome has higher possibilities to be achieved. The result shown in Table 2.4 indicates that corporate reputation and compliance with existing environmental regulations are the prime motives for them to implement environmental practices.

Table 2.4: Likely Outcomes of Environmental Protection Measures

Rank		Mean
1	Improve our corporate reputation	5.58
2	Better comply with existing environmental regulations	5.58
3	Avoid negative publicity	5.23
4	Serve our customers better	5.14
5	Attain better relations with government officials	5.12
6	Reduce the risk of lawsuits	5.08
7	Increase the customer base of our products	5.02
8	Improve the quality of our products	4.91
9	Avoid facing stricter environmental regulations in the future	4.88
10	Enhance our employees' commitment	4.61
11	Attain competitive advantages over our nearest competitors	4.57
12	Lower production costs	4.50

2.2.5 Attitude of the top management

The attitude of the top management towards environmental protection is one of the crucial factors that motivate the company to take environmental initiatives. The result shown in Table 2.5 indicates that the top management has positive feedback towards environmental protection measures and they recognize that the company has an ethical responsibility to adopt better environmental protection measures (5.58 out of 7, with 1 denoting "Strongly Disagree, and 7 denoting "Strongly Agree").

Table 2.5: The Attitude of the Top Management

Rank		Mean
1	Recognize that the company has an ethical responsibility to adopt better environmental protection measures	5.58
2	Are personally interested in developing and implementing environmental protection measures within the company	5.21
3	Include environmental protection as a key part of our company's key vision and mission	4.99
4	Want to be viewed as leaders in environmental protection in our industry sector	4.82

5	Believe environmental protection can provide competitive advantages over our nearest competitors	4.54

2.2.6 Influence of stakeholders

To ascertain sources of pressure on organisations to consider the environmental issues in organisational operations and take environmental initiatives, executives were asked to rate which groups of stakeholders have made demands on the enterprises to develop better environmental measures. The result shown in Table 2.6 indicates the influence of various stakeholders, with 1 denoting "Strongly Disagree" (less influential), and 7 denoting "Strongly Agree"(most influential). It shows that the local regulatory parties, i.e., the local government and the local Environmental Protection Bureau and customers are the most influential stakeholders.

Table 2.6: Stakeholder Influence

Rank		Mean
1	The local government	4.45
2	Customers	4.42
3	The local Environmental Protection Bureau	4.37
4	Shareholders / Investors	4.28
5	Industry associations	4.20
6	Employees	4.05
7	Major competitors	4.01
8	Environmental interest groups	3.95
9	The community via legal action	3.78
10	Media organisations	3.71
11	The community via other means	3.56

2.2.7 Obstacles to introducing corporate environmental initiatives

In order to understand the kinds of obstacles faced by the companies in conducting environmental protection, the executives were asked to assess factors affecting their companies in taking on environmental initiatives. The result shown in Table 2.7 indicates different obstacles to introducing corporate environmental initiatives, with 1 denoting "Strongly Disagree" (less influential), and 7 denoting "Strongly Agree" (most influential). It shows that the insufficient awareness of environmental protection of both external (customers and shareholders) and internal parties affect the introduction of corporate environmental initiatives.

Table 2.7 Factors Hindering the Introduction of Corporate Environmental Initiatives

Rank		Mean
1	Too few local customers care about the environment to make environmental initiatives in our company worthwhile.	3.90
2	There is too little awareness in our company that environmental performance may be an important business issue.	3.75
3	All rhetoric aside, shareholders of our company are really only interested in maximizing short-term profitability and growth.	3.75
4	It is nearly impossible to understand all of the relevant environmental regulations that pertain to our business.	3.70
5	Pollution management and environmental protection technologies are generally too expensive for our company to make use of.	3.57
6	It is very difficult for us to get accurate data on the pollution levels of our operation.	3.53
7	A large number of technologies that could significantly reduce the environmental impact of our company are currently not available.	3.52
8	Producing a more environmentally friendly product will generally compromise performance or quality.	3.28
9	Most employees in our company are totally unaware of the need to protect the environment.	3.17

2.2.8 Partnership with external groups

The executives were asked about their partnership with external groups. The result shown in Table 2.8 indicates their appeal for collaborating with different groups, with 1 denoting "Strongly Disagree" (less appealing), and 7 denoting "Strongly Agree" (most appealing). It shows that they are most willing to collaborate with the Federation of Hong Kong Industries and local government environmental agencies.

Table 2.8 Partnership with External Groups

Rank		Mean
1	If the Federation of Hong Kong Industries approached us with projects related to corporate environmental protection, our company would be willing to participate.	5.03
2	If approached by local government environmental agencies, our company would be willing to collaborate on corporate environmental protection projects.	5.01
3	We are willing to work closely with academic institutions on projects related to corporate environmental protection.	4.98
4	If local environmental organisations approached us with ideas for improving corporate pollution, our company would be willing to work with them on corporate environmental protection projects.	4.96
5	We are willing to work with other firms on projects related to corporate environmental protection.	4.87

2.2.9 Locus of internal support for the implementation of environmental practices

The executives were asked about the locus of internal support to implement environmental protection. The result shown in Table 2.9 indicates various internal support, with 1 denoting "Strongly Disagree" (less supporting), and 7 denoting "Strongly Agree" (most supporting), showing that the overall internal support is strong, especially the support from the top management.

Table 2.9 Internal Support in the Company

Rank		Mean
1	Many top-level managers in our company are personally and actively involved in developing environmental policies and monitoring their implementation.	4.85
2	Ideas on pollution management are shared freely among lower, middle, and upper levels within our company.	4.57
3	Our company has an environmental officer at the senior management level.	4.42
4	Environmental managers or those chiefly responsible for environmental management in our company have adequate authority to influence capital investment decisions.	4.22

2.2.10 Environmental awareness

The executives were asked to rate their personal awareness and knowledge of environmental concepts / frameworks, with 1 denoting "Have not heard of it", to 7 denoting "Consider myself an expert in it". The higher the score, the higher is the level of knowledge. The result shown in Table 2.10 indicates that ISO14000, Eco-labels, Environmental Management System (EMS) and Clean Production Technologies are the most acknowledged environmental concepts.

Table 2.10 Environmental Awareness of Business Executives

Rank		Mean
1	ISO 14000	4.42
2	Eco-labels	4.03
3	Environmental Management Systems (EMS)	3.92
4	Clean Production Technologies for My Industry	3.91
5	Green purchasing requirements	3.85
6	Life Cycle Analysis	3.62
7	Full-cost Accounting	3.42
8	Principles of Sustainable Design	3.32
9	Precautionary Principle	3.07
10	Clean Development Mechanisms under Kyoto Treaty	2.92
11	Global Reporting Initiative (GRI)	2.92
12	Global Compact	2.91
13	Industrial Ecology	2.84
14	Factor 4	1.91

2.2.11 Environmental orientation

The executives were asked to assess the environmental orientation of their companies, with 1 denoting "Strongly Disagree" and 7 denoting "Strongly Agree". The results shown in Table 2.11 indicate that the focus of responding companies is mainly on product and production processes. Moreover, adopting environmental practices well beyond regulatory requirements appears to rank low on the list of companies' environmental priorities, suggesting that most companies are probably still regulation-driven.

Table 2.11 Company's Environmental Orientation

Rank		Mean
1	Our company has a program in place to use less toxic and more environmentally friendly components in company's products and production processes.	5.30
2	Our company has stated clear objectives to reduce the quantity of materials used in production.	4.97
3	When thinking of our company's environmental impact, our company focuses mainly on the production of our products, including processes, technologies and raw materials.	4.79
4	In asking ourselves if our company is a successful company, our company usually think about whether the company made a positive contribution to society and to peoples' quality of life, e.g., taking responsibility to environmental protection.	4.74
5	When considering our environmental responsibilities we always take into account what happens to our products after they are discarded.	4.57
6	Our company has adopted environmental protection measures that go well beyond legal requirements.	4.45

2.2.12 Environmental reputation

The executives were asked to assess the green image of their companies, with 1 denoting "Strongly Disagree", and 7 denoting "Strongly Agree". The result shown in Table 2.12 indicates that the responding companies have a slightly good environmental reputation in general (overall mean is 4.67). The most remarkable green images are related to their environmental protection promises.

Table 2.12 Company's Green Image

Rank		Mean
1	Our brand generally keeps promises made for environmental protection.	4.91
2	Our brand is generally trustworthy in terms of its environmental promises.	4.82
3	Our brand's environmental concern generally satisfies salient stakeholders' expectations.	4.76
4	Our brand's environmental commitments are generally high.	4.74

5	Our brand's environmental performance is generally high.	4.68
6	Our brand is generally successful in terms of environmental performance.	4.62
7	Our brand is generally well-established in terms of environmental reputation.	4.61
8	Our brand is generally regarded as the best benchmark for environmental commitments.	4.49
9	Our brand is generally professional about environmental issues.	4.44
	Overall	4.67

2.2.13 External support

The executives were asked the kinds of support their companies would like to obtain. The result shown in Table 2.13 indicates that they would like to get more knowledge on corporate environmental management as well as environmental regulations and their compliance.

Table 2.13 External Support

Rank		%
1	Knowledge on corporate environmental management	88.6
2	Knowledge on environmental regulations and their compliance	86.1
3	Technological support for pollution reduction	83.9
4	Corporate environmental management support	82.3
5	Environmental training opportunities for employees	80.7
6	Sharing the successful experiences of other firms in corporate environmental management	73.6
7	Identify and disseminate "best practices" from within China and abroad.	72.7
8	Environmental audits	72.1
9	Legal advice	71.8
10	Energy audits	68.9
11	Development of a partnership with local government	65.7
12	Initiate an awards program.	62.0
13	Development of a partnership with environmental pressure groups	61.1

Section 3: Brand Development of Hong Kong Environmental Industry

3.1 Interview

The research team proceeded to study brand development of Hong Kong environmental industry through interviews with Hong Kong-registered companies in the PRD region. An initial invitation letter was first sent to these companies, followed by three rounds of phone-calls and e-mail. In the end, 31 companies responded positively to our overtures, 28 among which are from the environmental industry (hereafter referred to as environmental companies) while the remaining 3 are from traditional manufacturing industry. A breakdown of 28 responding environmental companies into ESPs and EGPs is shown in Table 3.1. In most of the cases, the research team was able to interview the top senior managers of the responding companies such as Chief Executive Officer, Managing Director or General Manager. All the responding companies were interviewed face-to-face between June and November 2013.

The interview was semi-structured and guided by a list of questions prepared by the research team prior to the meeting with the companies:

1. What drives your company to engage in environmental industry?
2. In addition to engaging in environmental industry, have you made other endeavors in greening your business (if yes, please give examples, e.g. EMS, greening supply chain, product eco-design, etc.)? Why?
3. What are the benefits, tangible and intangible, of going green?
4. Did your environmental practices turn out the way you planned? Is there a gap between expectations and reality?
5. Do you think that brand reputation is important to your business? How do you establish your brand reputation? What are the major difficulties of building a green brand?
6. Do you think that your green business/practice has obtained sufficient support from society and stakeholders, including the government, industrial associations and the market? What kind of support would you like to obtain for your green endeavors?
7. How do you perceive the future prospects of your environmental business? What are your future initiatives in environmental practices?

It should be noted that these questions served as mere guideposts for the conversations with the companies. In the actual interviews, however, discussions ranged freely over a wide terrain of environmental matters without losing sight of the ultimate goal of the interview to understand the nature of branding in environmental industry.

Table 3.1 – Breakdown of Environmental Companies by Segment or Subsector

Environmental industrial segment/subsector	Number of respondents
Environmental Services Provider (ESP)	21
Energy Management	*5*
Waste Management and recycling	*13*
Other environmental consultancy	*3*
Environmental Goods Provider (EGP)	7
Total	*28*

3.2 Analysis and Findings

3.2.1 Company profile

For the purpose of this study, the data collected from 3 companies in traditional manufacturing industry were excluded and only the data from 28 environmental companies were analysed. Prior to the presentation of major findings, a summary of company profile in terms of the year of establishment and their major target market are provided. The majority of companies interviewed in this study were established between 2000 and 2009, with a history of less than 15 years but longer than 5 years [Table 3.2].

Table 3.2 Breakdown of Environmental Companies by Year of Establishment

Year of Establishment	Number of respondents (%)
Between 1980-1989	2 (7%)
Between 1990-1999	7 (25%)
Between 2000-2009	12 (43%)
After 2010	7 (25%)
Total	28 (100%)

As shown in Table 3.3, Hong Kong is the major market of most responding companies in this study, followed by mainland China. Two companies focus on the whole Asia market and one targets the global market.

Table 3.3 Breakdown of Environmental Companies by Major Target Market

Major Market	Number of respondents (%)
Hong Kong	11 (39%)
HK and mainland China	8 (29%)
Mainland China	6 (21%)
Asia	2 (7%)
Global	1(4%)
Total	28 (100%)

3.2.2 Reasons for entering this industry

There appears to be a number of reasons for companies to enter the environmental industry. It was not surprising to find that foreseeing the coming of environmental trend and business opportunities was cited as the most important factor (C1-5, C9-11, C14, C16, C17, C19, C22, C24 and C26-30). These companies tend to gauge the environmental trend by taking into consideration the direction of the government policy. In this study, three interviewees (C10, C11 and C16) mentioned that the direction of Hong Kong government policy enticed them to enter the environmental industry, but two of them (C11 and C16) also pointed out that the government policies, which were less than persistent or consistent, had subsequently affected their business.

The concern for the natural environment was cited as the second most important reason for companies to enter the environmental industry (C2, C3, C7, C9, C14, C15, C17 and C23). Two interviewees (C2 and C17) stated that the question "how to make use of waste" prompted them to enter the waste management and recycling industry.

The third most important driver appears to be the timely opportunity for business development or transition (C5, C11, C14, C15, C19, C23 and C25). The influence of others including other people, organisations and countries (C1, C10, C17 and C19), as well as personal factors such as strong personal network (C2), education background (C24) and personal hobby (e.g., C8 citing *"love disassembly since young"*) were also mentioned as reasons for engaging in this industry.

3.2.3 Business profitability and growth

Almost all the interviewees agreed that environmental industry was not as profitable as financial and real estate industries and that there was little chance of making big money from it. However, many responding companies (C9, C20, C22, C25, C26, C28 and C29) acknowledged that the overall profitability of providing environmental services (except solid waste recycling) seems to be stronger than traditional manufacturing industries.

It is worth noting that a large majority of respondents (C8, C11, C15 and C18) from the recycling industry claimed that their profitability was getting lower and lower due to the severe and unregulated competition in the market. More surprisingly, we found that companies (C11 and C15) which were engaging in glass recycling were even losing money.

Regarding the business growth trend, about 64% of the responding companies (C1-3, C8-10, C13, C14, C18-20, C22, C24-26, C28 and C29) claimed that their business had experienced steady or slow growth during the past year, while 14% (C15, C16, C21 and C23) claimed that their business profits could only maintain them on a survival level. Another 21% of the respondents (C4, C5, C11, C17, C27 and C30) had not reached the break-even point at the time of interview. Various reasons were reported, including the absence of a feasible business model (C11), huge capital investment in Research and Development (R&D) and infrastructure development (C4 and C17), difficulty in opening the market where people still prefer traditional products (C27 and C30) and others (C5).

3.2.4 Market competition

Market competition in the environmental industry greatly affects the demand-supply relationship of the industry and the kinds of marketing and branding strategies individual companies adopt. In this study, we focus on three primary aspects, namely the level of competition, factors that influence the competition and competitive advantages.

Level of competition

More than 60% of the respondents (C1-5, C8, C10, C14, C16-19, C21, C22, C24, C25 and C27) considered that the market competition in their environmental segment was increasing, especially for the recycling industry and small-scale environmental consultancy. One LED manufacturer (C5) attributed the intense competition to the lack of industry standards and low entry barriers which resulted in unregulated and unhealthy competition in the LED industry. One recycling company (C8) mentioned that the existence of illegal recyclers who did not buy labor insurance for their workers (and therefore could offer more competitive price to clients) led to fierce and unhealthy competition in the recycling market. The relatively low level of technology demand was also cited as another factor that contributes to the strong competition in the recycling industry. We also noted that for companies providing innovative green products (e.g., C14 and C21), competing with traditional consuming habits and mindset and persuading people to favor greener products seemed to be a big challenge.

Five companies (C9, C20, C26, C28 and C29) pointed out that although there were many competitors in the market, only a few of them were able to provide high quality services. In addition, one solar power service provider (C23) and one glass recycler (C11) perceived the competition in their segment to be weaker but the market also seemed to be smaller or more difficult to capture in Hong Kong due partly to the traditional mindset of customers and lack of sufficient policy support.

Factors influencing the competition

When the interviewed companies were asked about their perception of what in the mind of the clients are the most important factors when they do business with the companies, as much as 71% (C1-3, C5, C8, C10, C11, C13-19, C21, C23, C24, C26, C29 and C30) cited price as an important factor although it may not be the only one. It was surprising to find that even for tendering government projects, price was a dominating factor. *"Price competition – the lower, the better"* were used to describe the attitude of the government in offering tenders by a number of respondents whose major clients were government bodies.

Around 32% of the respondents (C8, C17, C19, C20 and C25-29), many of which were environmental services providers and energy consultants, thought that comparing with price, providing high quality services that meet clients' requirements played a more or equally significant role in the market competition. This is especially the case for those long-term or referred clients.

It is worth noting that although quite a few respondents acknowledged the importance of brand reputation when asked about views on branding, very few cited brand reputation as an important factor considered by clients in the current market.

Competitive advantages

Companies were able to identify their own competitive advantages. The most frequently cited advantage seems to be technology. A few companies highlighted the advantages of developing new technologies and/or holding relevant patents in the market competition (C4, C5, C13, C17, and C26-29). As one energy consultant (C28) claimed, *"We need to keep developing new products as others could easily reproduce our technology even when it has got a patent (in China)… Despite the importance of networking in Mainland, technology is also a key to success. Technology is what differentiates us from others."* Another solar power company (C26) also commented, *"Technology is most important. Anyone who has the technology to lower the cost of solar application will win the market...We purchased two solar power companies, one in the US and the other in Germany, which together hold more than hundreds of patents. Our competitive advantages turn out to be technology."*

The second most frequently mentioned competitive advantage is related to providing specialized or customized services or products that satisfy the needs of clients (C9, C17, C18, C20 and C22). For example, one environmental consulting company (C20) claimed *"being willing and able to help clients to figure out how to fulfill legal mitigation measures"* to be their competitive advantages. Another energy consultant (C22) focused on providing analytical-based energy consultancy other than solution-based services generally adopted by their competitors.

Not surprisingly, for a few environmental product providers, the most important competitive advantage appears to be the comparatively greener features embedded in their products (C3, C14, C25 and C30). In addition, one plastics recycling company (C2) highlighted their strong sourcing network and traceable supply chain, as well as a transparent process of closed-loop recycling that allowed clients to conduct environmental audits whenever they wished, all of which were important elements that make them stand out in the competition.

Special business models and clear marketing positioning were also mentioned as competitive advantages (C9, C15 and C24). It was interesting to find that, different from many other recyclers who collected waste from clients free of charge or even pay for the collection, one recycling company (C15) insisted on charging waste collection fee and this business model helped him win a number of clients from international companies who supported the "polluter pays principle". As the company said, *"[with this business model,) we are unable to win the clients from our competitors, while others are unable to win clients from us."* Other identified competitive advantages include serving the clients with "heart" (C16, C18 and C19) and keeping a forefront position in the market (C13). Echoing the findings on factors influencing competition, hardly any company stated explicitly that green brand reputation was one of its competitive advantages.

3.2.5 Marketing strategies/approaches

In order to understand how environmental companies adopted their marketing strategies and the degree to which green branding had been incorporated into such strategies, the responding companies were asked to describe how they marketed their services and products and how they approached potential clients and won contracts.

The findings show that most companies marketed their services and products through exhibition/booth (50% including C2, C3, C5, C9, C10, C14, C21-25 and C27-29), referral/recommendation (36% including C7, C13, C15-20, C22 and C27) and "door-knocking" (including direct mail and call) (36% including C4, C8, C11, C13, C14, C18, C19, C21, C24 and C26). 18% of the companies (C8, C16, C17, C24 and C25) perceived the official website of their companies to be an important channel through which customers could contact them. Personal network was pointed out by 11% of the companies (C26, C28 and C29) as an important way to reach potential clients. Other marketing approaches such as advertisements, cooperation with contractors, showroom, presentations, seminars and roadshows were also mentioned, but by only a very few of companies.

3.2.6 Green branding

Perception of brand

Interestingly enough, although very few companies cited brand or business reputation as an important factor considered by their client, when we asked about their perception of brand importance, 61% (C2-5, C7-10, C14, C20-22, C24-27 and C29) acknowledged the great importance or effectiveness of brand. The following comments from our respondents serve to illustrate the point:

> "*When you do business in China, unless you have very good personal network, the reputation of brand is important for winning business contracts from demanding clients…since environmental regulations are becoming more and more stringent and the whole industry is getting more and more regulated, companies with a good brand reputation and qualifications will be recognized more easily."* (C9)

> *"Brand in our business means whether you have got contracts from large clients… Since our business market is so small, people will easily know your brand image. If something bad happens, it will damage your reputation." (C8)*

> *"For consuming products, brand has great effect on sales because brand reflects the quality of your products and services."(C3)*

> *"Brand in our industry is as important as that of mobile phones. Once you sign a contract for solar energy electricity, it will last for 20 years. Clients have to make sure that the company will be running for at least 20 years. So brand is really important for us…even for clients who are insured, choosing a company with high reputation is still important to them."(C26)*

39% (C1, C11, C13, C15-19, C23, C28 and C30) were of the view that brand was not important in their business because other factors such as price and customer satisfaction were much more influential. This, to some extent, shows that companies' understanding of brand is very limited, as competitive price and customer satisfaction could also be a reflection of the values of a brand (such as Walmart's famous brand promise in low prices).

The study shows that Hong Kong's environmental companies tended to interpret the term "brand" in various ways, such as "a symbol representing something", "a brand name"，"good job references" and "good quality of services or products". It seems that only a very few of them (e.g., C29) perceived environmental elements as an important brand attribute. The role of brand was also perceived by some companies (e.g., C14) to be more for increasing the value-added of and companies' self-confidence in the services and products they provide, but the brand had little impact on the sales and profit.

Business value of "being green"

Even though most companies considered the reputation of a brand to be important for their business, it is interesting to find that very few of them (C3, C22 and C29) thought that the business value of "being green" was high. As revealed by some companies (e.g., C2, C5, C19 and C30), market demand on greener services or products is still relatively low in Hong Kong and there seems to be a noticeable gap between customers' learning interest and purchasing action. In other words, customers' willingness to know about greener products is high but their willingness to pay is low, as the comments below show.

> *"The value of 'being green' is not high since the more environmental elements built in the services or products, the more you/customers usually have to pay. The idea is good, but the return is low. People might be more interested in knowing about it but not be willing to purchase or practice it."* (C19)

> *"Being green is likely to make it a little bit easier to establish the brand, but not much. People will show greater interest in knowing more about environmental products. The number of people who are willing to pay more for environmental products will increase gradually year by year, but (the increase) will not be very big."* (C5)

> *"In the long run, building a green brand is a good strategy. But in the short term, focusing on the concept of EP is not helpful on sales."* (C2)

Views on green awards

Winning awards, especially those that are well-known, is one of the effective ways to increase good publicity and enhance brand reputation for a company. In this study, we find that for many companies (C9, C10, C13-15 and C24-25), winning a green award means being recognized for what has been done, which, however, is not much helpful for actual sales. In the view of quite a few companies, developing technologies (e.g., C17 and C26), obtaining professional certificates (e.g., C1, C14, C18 and C30) and holding patents (e.g., C17) are much more important than winning awards for business development. Some companies (e.g., C19) even thought that awards were more helpful to product providers but not to service providers.

Brand building

When responding companies were asked about whether and how they had developed a brand, most of them pointed out that they had not paid particular attention to brand development. Brand was usually perceived to be more associated with products than services. That is why only most environmental product providers (C3, C5, C10, C14, C21 and C27) claimed that they had dedicated resources to brand building. To most of these companies (C3, C5, C10, C14 and C21), brand building is done in very much the same way as they would market their services or products, namely through exhibition/booths, door-knocking, direct mail or call, showroom, innovative gifts and media advertisement. Engaging in events that increase corporate publicity such as educational programmes, presentations and seminars were also mentioned (C14). In addition, a small number of respondents named obtaining patents, awards and certificates (C14 and C21), as well as accumulating job references (C10) as means of branding.

Only one company (C14) in the study deliberately put great effort in building a green brand for its eco-brick products. It is encouraging to see that the company has not only actively integrated environmental considerations into its products throughout the products' lifecycle, but also actively communicate with its stakeholders about these green achievements. The company has a clear green branding strategy and adopts various approaches to build its green brand. For example, the company provides environmental educational and training programmes, participates in award competitions, obtains environmental certifications, and distributes innovative small gifts (e.g. USB disk and name card holder with the company brand logo and a quick response code) on different occasions. The company also plans to conduct a product lifecycle carbon audit which will be the first in Hong Kong. However, it should be noted that this company has not perceived noticeable benefits that its green branding endeavours have brought to them.

Regarding the difficulties of brand building, several companies (e.g., C3 and C5) highlighted the issue of substantial capital investment associated with branding. One LED manufacturer (C5) described the process of branding with a vivid analogy in the following way: *"Brand building is just like planting. There is no gain in the first two to three years. You have to wait until the plant grows [to bear fruit]. Before the harvest, what you can do is to put a lot of effort. But if the plant dies, you will get nothing."*

3.2.7 Gap between expectation and reality

About 21% respondents (C3, C9, C10, C13, C26 and C28) thought that their business development in the environmental industry had met their expectation. Two companies (C20 and C29) acknowledged that the reality of their business and market development was over their expectation. Another two companies (C18 and C25) said that it was difficult to answer the question because they did not have any expectation at the beginning.

About 64% of respondents (C1, C2, C4, C5, C7, C8, C11, C14-17, C19, C21-24, C27 and C30), on the other hand, believed that the existing environmental market was below their original expectation due largely to the fact that the market development in Hong Kong was very slow. Quite a few interviewees (e.g., C1, C5, C15-17, C27 and C30) attributed the slow market development to the actions of Hong Kong government.

3.2.8 Reasons for staying in this industry

The major reason that companies chose to stay in the environmental industry seems to be the positive perception that they had of the prospect of the industry despite a number of difficulties at the current stage. Having relatively high confidence in the future motivates many companies (e.g., C4, C8, C19, C24, C25 and C30) to try their best to stay in the market. The fact that the profit that they made from environmental business, though not very big, is enough to support them was cited as another reason by some companies (e.g., C13 and C18). In addition, several companies (e.g., C8, C18 and C23) claimed that they would like to try their best to contribute to environmental protection without affecting the normal operation of own business. Quite a few respondents (e.g., C4, C17 and C23) also stressed the idea that *"there is no turning back as environmental protection is a one-way journey that has yet to see an end".*

When asked about the benefits of doing this business beyond making profits, quite a few respondents (C3, C15-17, C19, C22 and C29) cited *"being recognized and appreciated"* as the most significant intangible benefits. *"Being able to help or influence other people"* (C3 and C15) and *"being able to contribute to environmental protection"* (C2, C3, C7 and C15) were identified as another two intangible benefits.

3.2.9 Difficulties of green business development

It appears that challenges faced by environmental companies are very diverse. One of the greatest difficulties is related to manpower (25% including C2, C3, C8, C9, C16, C19 and C20). Quite a few consulting companies (C3, C9, C16, C19 and C20) highlighted the challenge of recruiting and keeping employees with high qualifications, especially skilled mid-level managers. As one interviewee (C19) said, *"It is not difficult to recruit employees, but very difficult to recruit the right person, and it is even more difficult to keep the right person for a long time."* Two interviewees (C3 and C19) attributed this difficulty to the high qualifications required by environmental work and the demanding working setting in this industry. Another two companies (C2 and C8) in the recycling industry also commented on labour issues. But different from consulting firms, they focused more on the cost of labour as these companies usually had very limited resources. As revealed by one recycler (C8), the cost of labour was not only associated with salary, but more with the labour insurance which had put a heavy burden on them. In fact, labour insurance was not only mentioned by recycling companies but also by others (e.g., C16 and C19). It appears that most insurance companies are not willing to provide insurance for workers in environmental industries as insurance companies regard these people as "a high risk group". And when insurance companies or The Hong Kong Federation of Insurers are willing to provide insurance service to environmental companies, they tend to charge a much higher premium than for other industries.

Marketing issue or low market demand appears to be another difficulty facing companies in the environmental industry (C3, C10, C16, C22, C23, C28 and C30). The market development in Hong Kong was claimed to be extremely slow. A number of interviewees (C3, C10, C16, C22, C23, C28 and C30) mentioned the challenge of convincing clients of the advantages of their green products or services and the importance of environmental protection. As the environmental awareness or knowledge of many clients was not high, they tended to hesitate over taking green actions if they had to pay more for it. This is especially the case for environmental goods and energy management services. Moreover, a few companies (C1, C4, C17, C21 and C26) considered that the existing government procurement policy tends to favour conventional and proven technologies and products, and give less recognition to locally developed innovative environmental technologies and products.

25% of the respondents regarded financial pressure (including high operational cost) as a difficulty that inhibits expansion (C3, C5, C14, C15, C19, C24 and C30). A few interviewees (C3, C14, C15 and C19) mentioned that it is very difficult for small companies to get loans from banks since most banks seem to be relatively conservative on environmental investment. It is also difficult to apply for government funds, due mainly to the demanding approval criteria and time-consuming application procedures.

In addition, four consulting companies mentioned technology-related issues which included, among other things, technology application (C4), technological innovation (C29), and system design technology (C9). One consulting company (C19) also revealed that weak R&D and a lack of technology backup made it impossible for them to promote their services effectively. Besides, one company (C9) expressed its concern over internal capacity building by stressing the challenge of building up a professional team that was able to tackle all the project-related issues in a detail-oriented way.

It is worth noting that land resource appears to be a special issue for the recycling companies which require large storing space. They complained that land for doing recycling business in HK was very limited and the rent was more and more unaffordable. There also seems to be a number of problems associated with the Eco-park, one of the waste management facilities of the Environmental Protection Department aimed at promoting local recycling industry. Most frequently mentioned issues included excessive restrictions on applicants and a lack of relevant supporting infrastructure and policies (e.g., rent period is too short to support a company's sustainable development).

3.2.10 Support from stakeholders

This section focuses on issues of support from two important external stakeholders groups, namely, the local government and industrial associations. It includes findings on how responding companies felt about existing support and what additional supports they expected from the stakeholders.

Perception of existing support

Findings from the question regarding the adequacy of support provided by the local government are very disappointing, as about 82% of companies (C1, C2, C4, C5, C7-9, C11, C14-19, C21 and C23-30) perceived relevant support to be insufficient. Only around 18% (C3, C10, C13, C20 and C22) were satisfied with the support the government had provided. One company (C20) providing consulting services on environmental impact assessment (EIA) expressed great appreciation for the introduction and strict enforcement of EIA Ordinance by the local government: *"If not for EIA Ordinance, we wouldn't have had so many opportunities. The government enforces it very strictly. We don't have special difficulties currently."* One ESP (C13) commented that *"the direction of policy is to support the environmental industry. Mr. TUNG Chee-hwa has done a lot. However, vested interest holders are not happy with this as they don't want the existing rule to be broken."* Another two companies (C10 and 17) pointed out that the government had begun to take the food waste problem seriously in recent years. One air purifier provider (C3) also acknowledged that the government had helped a lot in providing platforms for business publicity and promotion (e.g., various exhibitions and SME promotion fund).

As for support from the industrial associations, overall speaking, 32% of respondents (C2, C7, C13, C16, C20 and C23-26) thought that industrial associations were not helpful. On the other hand, 9 companies (32% of all the companies interviewed and 50% of the total number of member of HKEnvIA interviewed) (C1, C3, C5, C8, C9, C15, C19, C21 and C29) considered that HKEnvIA helped promote the industry as a whole, although it might not be helpful for the development of individual companies. It seems that the improvements of HKEnvIA in recent years have gained appreciation from its members. One solid waste recycler (C15) gave his opinion in this way: *"I have joined HKEnvIA for 10 years. HKEnvIA used to have seminars and sign various agreements with different Mainland EPDs, which are useless to me. But beginning from this year, it seems to have changed its approach and tends to collect the views of our peers to bargain with the Government. These changes are much helpful."* Another 25% (C10, C17, C18, C22 and C27-29) named other associations such as Hong Kong Productivity Council, Federation of Hong Kong Industries, The Hong Kong General Chamber of Commerce, and various subsector-oriented associations to be helpful. Since environmental industry includes a variety of disciplines and subsectors, subsector-oriented associations that are usually more specialized appear to be more favourably received to some extent. As one integrated solid waste management solutions provider (C17) noted, *"HKEnvIA is too general in its scope and not very active. More specialized associations seem to be better and fit the need of companies. We have taken part in a lot of activities of Hong Kong Waste Management Association such as visiting landfill and incinerators in Mainland China. These are more relevant to us and we can learn a lot from the activities, so we are more interested."*

Expected support from stakeholders

From the Government

The environmental industry in Hong Kong seems to be in urgent need of appropriate external support, as emphasized by interviewed companies time and again. Support from the government is particularly needed. In general, changing the government's mindset and attitude to provide the right policy and financial support was deemed the most important and helpful in the viewpoint of responding companies.

The government came under strong criticism for being too conservative in introducing and adopting new technology. Several companies (C1, C7 and C17) suggested that the government should be more open-minded and proactive in managing environmental issues through, for example, providing more communication platforms and channels to listen to different voices. Besides, the government should stay focused and insist on the right policy direction. Some companies (C11 and C16) complained that their business was affected by the inconsistency of government policy direction.

Policy support in various areas was suggested by companies in the interviews. Examples include: (1) solid waste management policies based on "polluter pays" principle (e.g., a systematic and holistic recycling plan, comprehensive waste sorting regulation and mandatory glass bottle recycling regulation), (2) food waste charging policies/schemes, (3) relevant standards and guidelines on LED specifications and installation, (4) mandatory indoor air quality regulations (not guidelines), (5) policies on promoting green products (e.g., governmental green procurement policy) and (6) policy support for distributed generation and grid parity for renewable energy.

Financial assistance was also highlighted by interviewed companies as an important means of support for promoting their business and brand development. Many companies (C2, C3, C10, C14, C17, C19 and C23) believed that the government should make more funding available to support various environmental initiatives (e.g., food waste recycling and renewable energy power). The entry barriers should also be set lower with fewer restrictions for applications.

Other types of support needed from the government were also mentioned. For instance, one company (C2) expected that if EPD could provide more comprehensive statistics regarding the daily amount, types and sources of waste plastics, it would be tremendously helpful for their plastic recycling business. To most local recycling companies, providing more land resources by the Government was also deemed essential for their development. Some other environmental services providers (e.g., C1) expected that the government should provide the industry with more opportunities to participate in the governmental and public projects. Another interviewee (C9) made a strategic suggestion, *"If the government wants to help traditional industries to make the transition, it should take the lead and do a little more in coordinating the integration of traditional industry and environmental industry. Since Hong Kong's companies have a higher credibility and overall capabilities than the Mainland companies, if the local government could negotiate with Mainland governments to reduce the influence of officials in business transactions in the China market, the environmental industry will expand greatly"*.

From industrial associations

Suggestion from responding companies on the support of industrial association mainly focuses on two aspects. Industrial associations were expected to voice the issues and difficulties of the industry so as to gain more support from stakeholders, especially the government. At the same time, they should provide more tailor-made support to fit the special needs of different environmental segments.

From local universities

A small number of companies (C3, C9 and C13) expressed their expectation of support from local universities. It was suggested by one environmental technology consultant (C13) that universities could set up incubation centers to help the development of local environmental companies. Besides, universities were expected to train more talents that cater to the needs of various environmental subsectors.

3.2.11 Prospect of the industry

Companies in this study identified a number of development trends of the environmental industry. In general, most companies were positive about the future of the industry. Many of them (C1, C4, C9, C22, C26, C28 and C29) had also acknowledged that there would be a larger market potential in Mainland China due partly to the strong power and determination of Chinese local governments, as well as the larger scale of projects once that determination materializes into action. In addition, many companies (C9, C20, C22, C25, C26, C28 and C29) expected that the room for development of the environmental industry would be bigger than that of the traditional industries. Some companies (e.g., C4 and C9) foresaw that the environmental market would be more and more regulated in the future. However, a small number of companies (e.g., C8 and C16), understandably, were of the opinion that the future development of the industry (especially those policy sensitive segments e.g., recycling) would depend largely on the policy directions of relevant governments.

Section 4: Discussion and Conclusion

4.1 Market Environment

The external market environment for Hong Kong's environmental industry seems to be characterized by strong competition and the domination of price concerns. Findings from this study show that the market competition is becoming increasingly intense in general; for some environmental subsectors (e.g., solar power and glass recycling), competition might be weaker but the market also seems to be smaller, making it difficult to capture without policy support.

In the current environmental market, price is still a dominating factor that influences customers' purchase decisions (which is even the case for government projects), followed by the quality of services and goods that meet customers' needs. Neither "brand image" nor "being green" has been explicitly cited as an important factor considered by customers. This study reveals that price competition put some companies in a difficult situation in balancing price and other important attributes of their products or services such as advanced technologies application and greener features.

Not surprisingly, technology is identified as the most important advantage that differentiates a company from others in the fiercely competitive market. It is clear that the industry is highly dependent on technological innovations and development. In fast growing markets like China, greater emphasis on pollution prevention policies and corporate strategic environmental planning have fostered advancing technological needs and created new market for environmental goods and services. Therefore, enhancing the capabilities in developing and integrating innovative environmental technologies becomes very important for Hong Kong's environmental companies to capture this valuable market opportunity.

4.2 Green Branding

Overall, this study shows a relatively contradictory picture of branding in Hong Kong's environmental industry. As discussed earlier, brand is not cited as an important factor in customers' purchase decision. However, over 60% of respondents from all the four environmental segments acknowledged the positive effect of good brand image, which suggests a relatively high recognition of brand importance in the industry. The fact that 36% of companies obtain their business contracts through referral and recommendation by others has also to a certain extent indicated that good brand image brings positive effect to sales. Key attributes of a brand in the industry still focus on traditional aspects such as quality of products and services, level of specialization and customer satisfaction.

When it comes to the question of the green brand, the picture is different. Surprisingly, "being green" is not regarded as a key attribute of a brand in the industry whose products and services are generally integrated with green features. Findings show that integrating the concept of "green" into products or services does not necessarily bring added value to the business. In the experience of some responding companies, customers even tend to be more hesitant in making a purchase decision when facing greener products because these products are often associated with higher price. Although more and more customers have shown positive attitude towards green products, most of them are still not willing to compromise on the price. Winning green awards also appear to have little help on environmental companies' actual sales.

Despite a high recognition of its importance, this study finds a low level of engagement in branding in Hong Kong's environmental industry. Branding is a systematically planned and implemented process of creating and maintaining favourable images through managing corporate behaviour, stakeholder communication and symbolism [8]. Due partly to intensive capital required in the branding process and low perceived tangible return, a majority of companies, especially the environmental service providers, had not put branding as a top priority or dedicated resources to it. It is found that many companies had not developed a strategic branding plan and did not even have full-time marketing staff at all. For those companies that claimed to have engaged in branding, the initiatives they had undertaken were often unsystematic, piecemeal and fragmented. All of these suggest that the environmental industry in Hong Kong is still in the early stage of brand development. In view of the low business value of "being green", it comes as no surprise that few companies have attached importance to green branding.

On the one hand, with the increasingly stringent environmental regulations and growing environmental consciousness, relevant demands have opened up new market on environmental goods and services. On the other hand, whenever there is a perceived trade-off between green brand and price/functional performance, the market tends to be less positive towards green brand. The low appreciation of green brand makes undertaking green branding initiatives a challenging endeavor for companies who seek to create value from these initiatives.

4.3 Barriers to Development

The development of environment industry in Hong Kong may be hampered by various obstacles. The study identifies major problems in the following areas: regulation, capacity building, market, finance, technology and land resources.

Although environmental regulations are one of the important driving forces for the development of market demand, it may also create obstacles to development when they are insufficient, uncertain or inconsistent. In this study, the development of environmental policy in some areas such as waste management and renewable energy application is criticised for lagging behind its neighbors (e.g., Taiwan, Japan and Mainland China). Uncertainty of environmental policies (e.g., solid waste management policies) and inconsistent application of regulations (e.g., less strict enforcement of Sewage Services Charges than before) also put affected companies in a disadvantaged position. Without doubt, all these regulation-related issues increase risk and uncertainty for supply-side companies and inhibit the development of demand.

Weak capacity building is probably the most important internal factor that hinders the development of the industry. A key to capacity building is human capital. However, lack of human capital, especially on the middle management level, seems to be a common problem facing the industry. Due partly to high qualifications required by the industry and its tough working environment, it is difficult for small companies to recruit suitable talents and keep them for long. How to build up a professional team with all-round skills becomes an urgent problem that needs to be solved in order to make the industry continue to expand.

Market barriers facing the industry are found mostly in the failures of the demand side market. Low environmental awareness of customers, undeveloped markets for new products, lack of information about new environmental solutions, and the small size of local market have all accounted for low market demand on environmental goods and services. Moreover, being one of the most important customers in the environmental market, the local government seems to hold a very conservative attitude towards new environmental technologies and products, which undoubtedly discourages the industry's environmental technological innovation.

Like SMEs in many other sectors, limited financial resources and difficulties in financing exert great pressure on the development of small companies in the environmental industry. The study shows that small companies find it particularly difficult to get loans from banks, due not only to investment risks associated with small-scale business, but also to special characteristics of the industry perceived by investors. New environmental companies and initiatives are often characterised by high level of uncertainty and high dependence upon a regulatory framework beyond the control of the investors. Besides, although a small number of governmental funds are available to the industry, the entry barriers seem to be overly demanding and the administration procedures are excessively complicated, while the funding amount is not all that large.

In addition, technology-related issues such as weak R&D capacities and insufficient external support in technological application and innovation are also regarded by some small environmental consulting firms as barriers to a breakthrough in development. To the solid waste recycling segment whose operation usually requires extensive land, lack of suitable land or recycling park becomes a particular constraint. There seems to be a number of problems (such as excessive restrictions on applicants and lack of relevant supporting infrastructure) for the existing Eco-park provided by the government to the local recycling industry.

4.4 Recommendations

The future prospect of environmental business appears to be positive as this study reveals. However, at the moment, both internal and external constraints inhibit the fast development of the industry. Appropriate external support is imperative to overcome these obstacles and make the industry thrive in Hong Kong.

4.4.1 Recommendations to the government

Based on the forgoing analysis and discussion, we make the following recommendations for governmental actions.

- Prior to developing any supporting policies and initiatives, the local government should change its traditional mindset and conservative attitude towards environmental issues, and be more open-minded and receptive to new environmental solutions, in particular, locally-developed innovative environmental technologies or products. The government should also realize the significance of its role in creating the demand for environmental technologies and products. Instead of stopping at "allowing the market to develop by its own", the government should introduce a demand-pull strategy and take a firm leadership not only in developing and implementing public environmental policies and initiatives, but also in other areas such as adjusting government procurement policy to favour greener products and services.

- The government should be more proactive in providing appropriate policy support in various fields, particularly in the areas that place a significant burden on Hong Kong's nature environment such as municipal solid waste management and energy conservation. As far as solid waste management is concerned, a holistic policy plan needs to be put in place which should take into account the whole waste collection system (from waste separation at source to waste transit in district centres to waste disposal at landfill sites) and supporting infrastructure (e.g., recycling park / land). It will be effective to introduce initiatives based on "producer responsibility" and "polluters-pay-principle" such as a waste disposal charging scheme in order to encourage waste reduction at source. With regard to renewable energy, the government may consider developing policies that support distributed generation and grid parity to promote wider adoption of solar power and therefore create more market opportunities to the renewable energy segment. To enhance energy conservation and regulate LED applications, relevant standards and guidelines on LED specifications and installation should also be introduced.

- The government should dedicate resources to the development of human capital that caters to the needs of the environmental industry. Not only should the government support various training and educational programmes aimed at cultivating environmental professionals, it should also develop initiatives that entice suitable talents to stay in the industry. Furthermore, the government should encourage and support local universities to set up programs to groom the next generation of talents that will contribute to the development of new environmental companies.

- To enhance marketing capabilities of the industry, the government should provide information support in areas such as the development trends of environmental markets and technologies, possible trade leads, financing and investment opportunities, and technology collaboration opportunities. The government should also provide more channels and platforms for the industry to market their products and services, enhance brand awareness and increase corporate publicity. Cooperation with Mainland authorities at different levels is also important to secure business opportunities for Hong Kong's environmental industry.

- There is a need for the government to institute a long-running, coherent and comprehensive campaign to publicise the virtues of environmental protection and sustainable development widely. One of the most important aims of the campaign is to encourage changes towards green consumption patterns in the whole society and thereby create a booming market for green products and services.

4.4.2 Recommendations to industrial associations

In addition to recommendations to the government, we would like to make the following two recommendations to industrial associations.

- Industrial associations like HKEnvIA should play an important role in building a bridge between the industrial sector and the government to voice the concerns of the industry and seeking government support for industry development. It will be particularly helpful for industrial associations to establish a Private-Public Partnership and develop regular communication mechanisms with the government.

- Given the variety of discipline included in the environmental industry, as well as the notable difference between environmental subsectors, initiatives or assistance provided by industrial associations to the industry should be more tailor-made and subsector-focused. Also, supporting initiatives (e.g., training and information support) may not only focus on important areas such as green branding and marketing as well as technology development, but also on issues that are easily overlooked but significant to small companies such as insurance.

4.4.3 Recommendations to the industry

The following recommendations are made specifically to the environmental industry in Hong Kong.

- Companies engaging in the environmental industry must have a passion, courage and determination with a forward-looking vision.

- To capture a larger market share, companies should strengthen their own capabilities on technology innovation, specialisation and customised services delivery to differentiate themselves from competitors in the increasingly intense competition.

- Companies should attach more importance to green brand building. Green branding should focus not only on the functional attributes of products or services (relevant environmental advantages of the product/service compared to competing conventional one), but also on the individual emotional benefits to the customers.
- Companies should enhance communication and coordination amongst various constituents to increase the enthusiastic response towards environmental issues.

4.5 Conclusion

This report investigates the brand development of Hong Kong's environmental industry by a questionnaire survey among 334 companies in various sectors and interviews with 28 companies in the environmental sector in the PRDs. Findings suggest that brand development of the industry is still in its early stage of development. Since price competition still dominates the market and the perceived business value of "being green" is low, green branding has not been given sufficient attention. Due to both internal and external constraints, how to promote the value of "green" and encourage green branding remains a significant challenge. Adequate and favorable supports from external stakeholders especially from the local government are essential to promote the development of the whole environmental industry.

References

1. FHKI. *Position Paper on the Promotion of Hong Kong's Environmental and Recycling (EandR) Industry* 2004 [cited 13 January 2014]; Available from: http://www.industryhk.org/tc_chi/news/news_sp/files/web_Position%20Paper%20on%20the%20Promotion%20of%20Hong%20Kong%20_Final_.pdf.

2. HKTDC. *Environmental Protection Industry in Hong Kong*. 2013 [cited 23 January 2014]; Available from: www.hktdc.com/Rearch.

3. HKITC. *Environmental Technology*. 2013 [cited 13 January 2014]; Available from: http://www.itc.gov.hk/en/area/enviro.htm.

4. Maurya, U.K., *What is a brand? A Perspective on Brand Meaning.* European Journal of Business and Management, 2012. 4(3): p. 122-134.

5. First, I. and D.S. Khetriwal, Exploring the Relationship Between Environmental Orientation and Brand Value: Is There Fire or Only Smoke? . Business Strategy and the Environment, 2010. 19: p. 90-103.

6. Hartmann, P., V.A. Ibán˜ez, and F.J.F. Sainz, *Green Branding Effects on Attitude: Functional versus Emotional Positioning Strategies.* Marketing Intelligence and Planning, 2005. 23(1): p. 9-29.

7. Patton, M.Q., ed. *Qualitative Research and Evaluation Methods*. 3rd ed. 2002, Sage Publications: Thousand Oaks.

8. Einwiller, S. and M. Will, *Towards an Integrated Approach to Corporate Branding-An Empirical Study.* Corporate Communications, 2002. 7: p. 100-109.

第一章：簡介

這份報告是基於香港理工大學一個研究小組在 2013 年所進行的一個項目的調查結果，探討了香港環保產業建設綠色品牌的相關問題。本文首先概述了該研究項目的相關背景，即香港環保產業的總體情況；接著描述了該項目收集數據的方法，並通過分析相關的數據資料，闡述了當前企業環境管理的趨勢以及其對環保市場的影響。通過對調查結果進行深入的分析和討論，本文總結了香港環保行業目前的市場狀況和主要困難，並為如何提升環保產業的競爭力以及建立綠色品牌提出了相關建議。

1.1 背景：環保產業的概述

在過去的數十年裏，人們日益認識到環境保護和可持續發展的重要性，全球大多數政府陸續推行漸趨嚴格的政策和法規來應對在環境方面的挑戰。在香港，政府也於 20 世紀 80 年代末建立了一套策略計劃以解決環境污染問題。1989 年 6 月 5 日，香港政府發佈了名為《對抗污染莫遲疑》的白皮書，提綱挈領地列述一系列對抗污染的工作大綱，為政府此後的環保工作奠定了堅實的基礎。基於環境監管體制的不斷發展，香港許多產業也開始採用更清潔的生產技術和環保措施，以求在本地和全球市場中保持競爭優勢。與此同時，香港的環保型產業也迅速崛起，為多個領域的污染控制和資源保護提供各類技術、商品和服務[1]。

1.1.1 環保產業的定義

目前有關「環保產業」一詞還沒有一致的定義。本報告中，環保產業被定義為專門從事生產與環境保護相關的產品和服務的所有企業的總和，這些產品和服務能夠測量、預防、限制、減少或糾正對水環境、大氣環境和土壤環境的破壞，以及解決廢物、噪音、能源和生態系統等相關問題。

從廣義上說，環保產業包括兩大類，即環境產品提供商（簡稱 EGPs）和環境服務提供商（ESPs）。根據香港工業總會（簡稱工總）的定義[1]， EGPs 設計、供應或製造（1）污染控制、廢物處理或回收相關的設備，（2）環境監察和測量相關的設備，（3）環保產品（如可降解包裝材料），以及（4）其他相關環保設備或產品（如節能設備）。ESPs 提供以下服務：（1）環境諮詢或測試，（2）廢物管理或回收，以及（3）操作和/或維修上述 EGPs 所生產的設備。

環保產業在香港也可以細分為六個細分類別或細分行業，包括：（1）水資源保護和污染控制，（2）空氣污染控制，（3）廢物管理，（4）噪音控制和緩解，（5）節能減排，以及（6）其他環境服務。

1.1.2 行業特點

根據香港貿易發展局最新的研究[2]表明，香港環保產業在 2011 年實現增加值約 65 億港元，約佔當年香港 GDP 總量的 0.34%。該行業特點鮮明，只有少數幾個大型企業控制著某幾個細分市場，而市場的其餘部分則由一批中小型企業（SMEs）組成。據估計，該行業目前包括約 300 個企業，其中 89%是少於 100 名員工的中小企業。全行業一年大概有 38,350 從業員，佔本地勞動人口的 1.1%。

香港環保產業具有多方面的優勢。首先，許多從事環保產業的公司都擁有寶貴的資產，例如全球化的資訊網路、國際視野的人才、良好的知識產權保護、較強的融資優勢，以及對中國市場有較深刻的瞭解和較豐富的經驗。其次，有相當多的企業在一些專業領域，例如空氣污染控制、水資源保護、廢物管理和回收、噪音控制和節約能源等，擁有先進的技術能力[3]。再加上香港的環保企業可作為那些攜帶先進技術進入中國內地市場的外國企業的完美合作夥伴。

不過，香港的環保產業仍處於早期發展階段，並面臨著嚴峻的挑戰。由於大多數公司屬於中小企業，他們用於開發和應用新型環保技術的能力以至資源都比較有限，而外部的持份者對該行業發展所提供的支援也不足夠。內、外兩方面的困難同時削弱了該行業的競爭力，使其對不斷變化的技術需求和法規監管難以作出快速回應，未能充分捉緊市場機會[3]。

雖然環保產業面臨不少困難，但發展潛力還是巨大的。作為香港六大優勢產業之一，環保產業已得到本地政府的重視和推動。中國憑藉自身快速增長的環保市場，以及在全球清潔技術投資領域的領先地位，也為香港環保企業帶來了巨大的商機。因此，對本地環保產業來說，加快發展步伐，從而牢牢把握這些商機是非常迫切和必要的。在這份報告中，我們將專注於綠色品牌發展這一課題。

1.2 品牌和品牌化的概念

品牌和品牌化都是頗有爭議的概念。「品牌」的定義差別很大，從淺顯和有形的（如名稱、標識和法律文書），到更為深刻和無形的（如在消費者心目中的某種形象、某種價值體系、某種個性、某種關係和某種不斷發展的實體），都可被稱之為「品牌」[4，5]。對於本報告而言，品牌是指一個更全面和深層次的「複雜體，其中需要策略規劃，並將其整合融入企業的核心」 [5]。它是各個持份者的價值指標。

品牌化是指對一個組織、產品或服務的品牌進行表達。它包含了如何把所有能用於辨識該特殊品牌的各種特徵、價值觀和屬性，與目標受眾進行積極溝通。因此，綠色品牌化或把一個品牌定位為「綠色品牌」，是需要強調其對環境無害的這個屬性，使其有別於競爭對手，並將此區別向目標受眾廣為宣傳[6]。換句話說，對於一家環保公司來說，要達到綠

色品牌化，便需要把其產品或服務如何比競爭對手更加綠色的這個事實積極向外傳達，更要表達這差異所關聯的價值。

1.3 研究目的和目標

本著探討香港環保產業綠色品牌化發展的目的，此項研究同時著眼於環保產業的外部市場環境和企業內部對綠色品牌的認識和實踐。五個具體目標制定如下：

1. 瞭解珠三角地區港資企業實踐環境管理的總體情況；
2. 瞭解香港本地的環保市場現狀；
3. 探討本地環保公司在綠色品牌方面的感知和發展；
4. 找出環保產業綠色品牌化和業務發展的主要障礙；
5. 為提升環保產業的競爭力提出相應的建議。

其中達到第一個目標的做法是對珠三角地區從事各類行業的港資企業進行問卷調查；問卷調查的設計和結果將在本文第二章進行詳細描述。為了達到另外四個專門關注環保產業品牌化的目標，研究人員與 28 家公司的高層管理人員進行面對面訪談；這將構成第三章的內容。

第二章：珠江三角洲香港企業的環境管理情況

2.1 問卷調查

我們於 2013 年 9 月至 12 月期間進行了有關珠江三角洲香港企業的環境管理情況的問卷調查，這份調查問卷包括 12 個部分，共 15 頁：

第一部分：企業營運對環境的影響
第二部分：企業環境管理的運作
第三部分：提倡環境保護的動機
第四部分：企業實踐環境保護的障礙
第五部分：其他方面的考慮
第六部分：遵守環境保護法規的挑戰
第七部分：環保意識與環保取向
第八部分：外界幫助
第九部分：企業資訊
第十部分：個人資料
第十一部分：個人觀感
第十二部分：對本調查的意見

我們的研究團隊於 2007 年進行首次調查，有關的調查結果給予企業作為指引，增加了企業對環境管理的意識和提高了他們作為企業在保護環境方面的表現。2013 年再進行調查，目的是反映香港企業在環境管理方面的最新情況，為香港環保產業開拓更多商機，進一步提升自身品牌。

是次問卷調查的對象是香港環保產業協會及香港工業總會的企業的高層管理成員或相關成員。問卷數據通過多種不同途徑收集，包括印刷版問卷和電子版問卷。我們的研究團隊應用香港理工大學「我的問卷調查」軟件系統，設計了網上問卷平台。首先，我們於 2013 年 7 月至 8 月期間，通過香港環保產業協會及香港工業總會向會員發出電郵通知，並在香港工業總會的網站上公佈電子版問卷的網址，但只收到少量的問卷回覆。下一步，研究團隊以郵寄問卷為收集數據的主要途徑。自 2013 年 9 月初至 2013 年 11 月底，我們分別三次向香港工業總會會員郵寄問卷，每份信件內包括一份介紹是次調查的附信、一份問卷及一個商業回郵信封。另外有一小部分問卷在香港工業總會年會上直接發給各會員。最後，共有 334 間企業參與了是次問卷調查，回覆率為 16%。

2.2 分析與結果

2.2.1 參與調查的企業

是次問卷調查共有 334 間企業參與，其中 79%屬於製造業，11.7% 屬於服務業，3.3%屬於公用事業，4.6%屬於其他行業圖 2.1。企業規模方面，22.8%是擁有少於 100 名員工的小型企業，27.2%是擁有 100 至 499 名員工的中型企業，48.9%是擁有超過 500 名員工的大型企業圖 2.2。約 74.6%是全港資企業，7.5%是香港內地合資企業，3.9%是港外合資企業，10.8%是外資企業圖 2.3。25.7%的受訪企業主要在香港營運，57.5%主要在珠三角地區營運，15.6%在全球多個地方營運 [圖 2.4]。

圖 2.1：企業類型

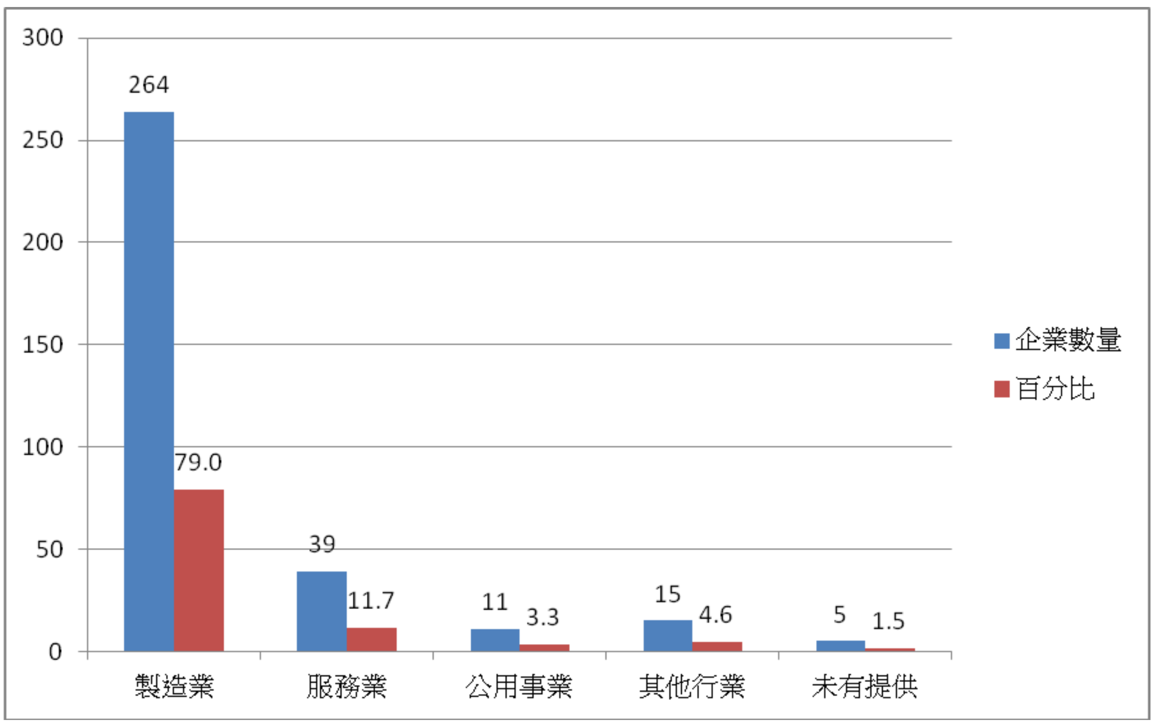


圖 2.2：員工人數

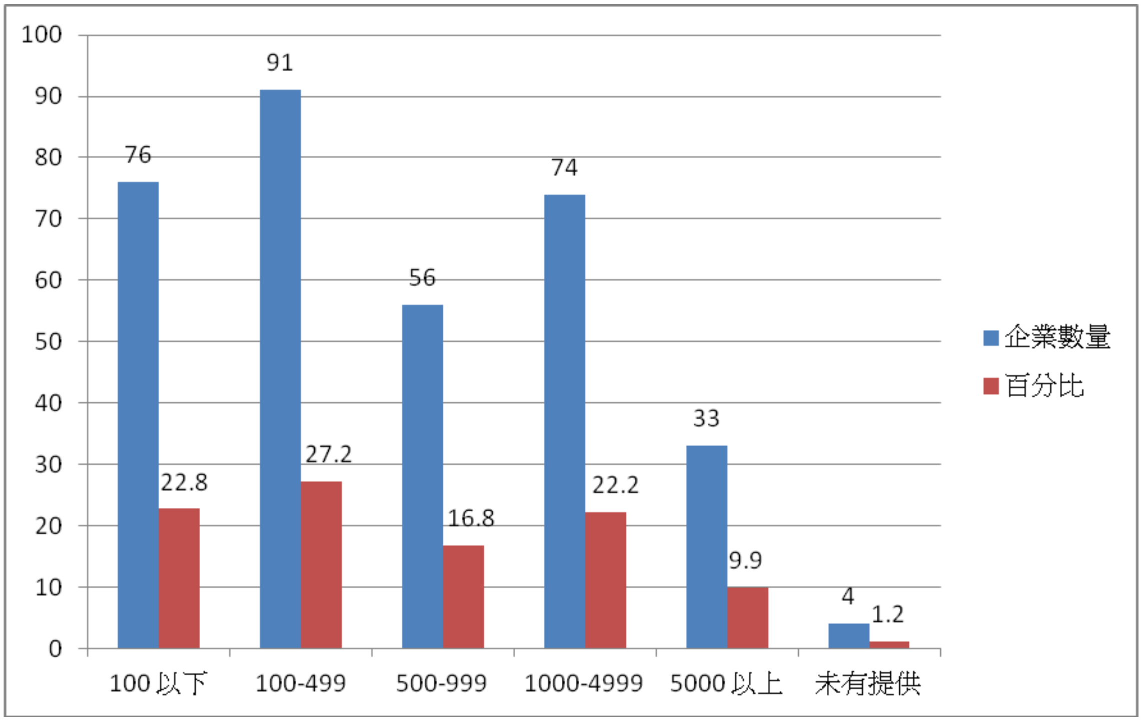


圖 2.3：企業所有權類型

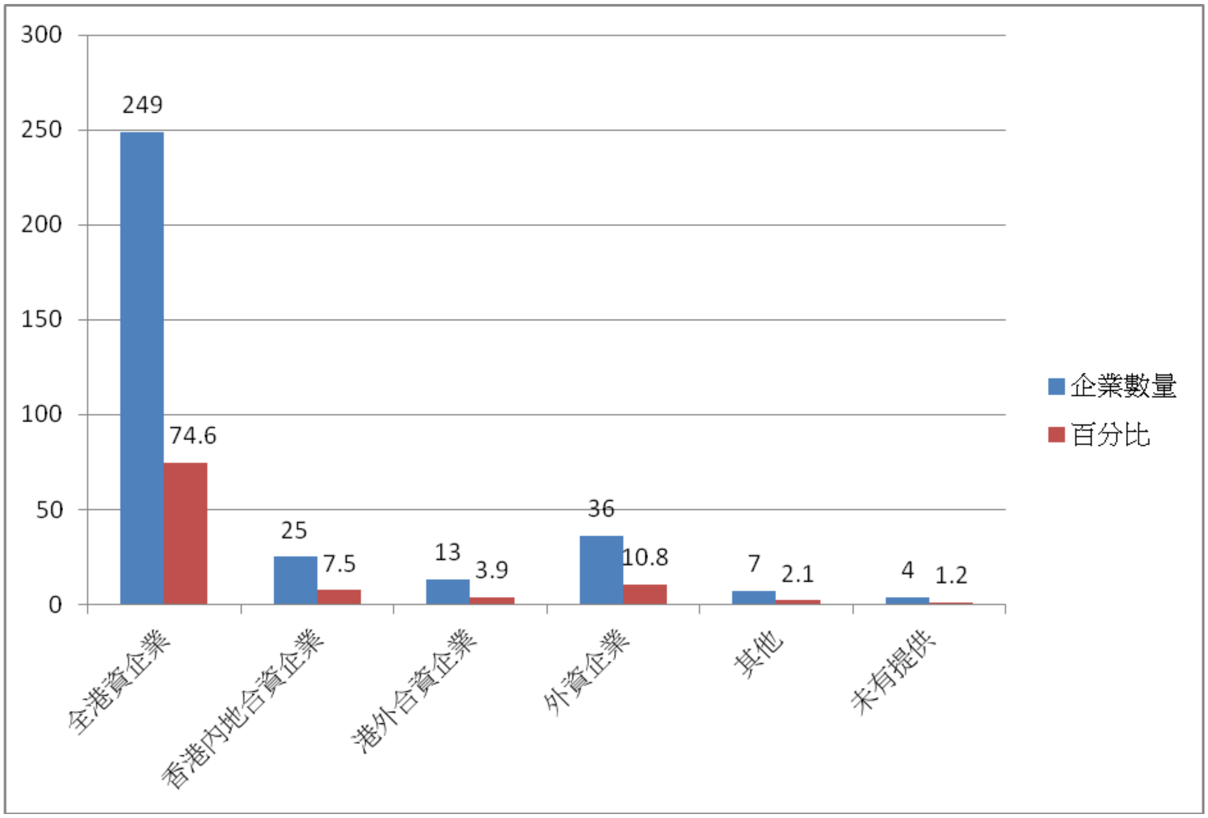
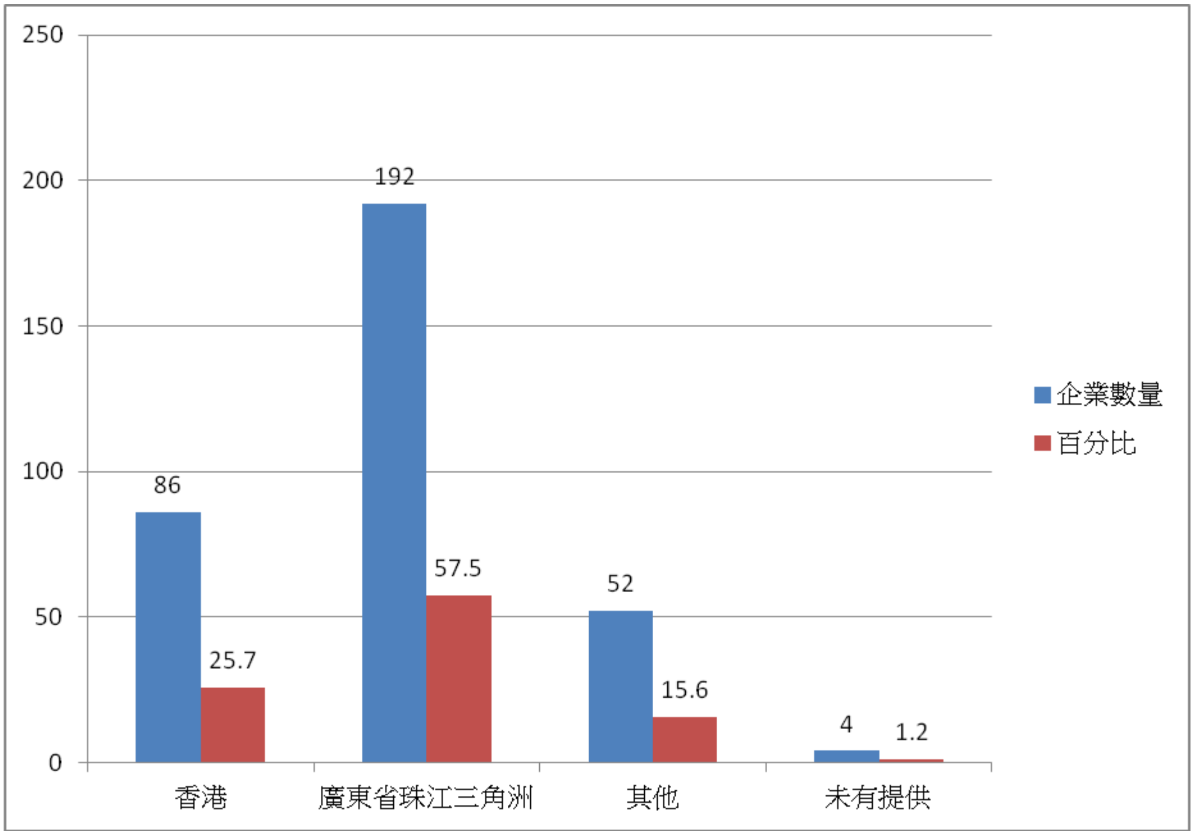


圖 2.4：主要營運所在地



2.2.2 企業營運對環境的影響

關於企業營運對環境的影響，企業管理者在問卷中回答了兩方面的問題：第一個問題是「相對於中國所在地區的大多數企業，您認為貴公司的營運對環境有多大程度的影響？」；第二個問題是「相對於貴公司所屬行業中的大多數企業，您認為貴公司的營運對環境有多大程度的影響？」。1 分表示「完全不同意」，7 分表示「完全同意」。調查結果表 2.1 和表 2.2 顯示，總體而言，企業認為他們的營運對環境產生的破壞是微不足道的，並且他們在環境保護方面的表現優於同行其他企業。

表 2.1 企業營運對環境的影響——相對於中國企業

排序		平均分
1	對環境所產生的破壞，總體而言，是微不足道的	5.05
2	較少使用生物資源(如植物或動物原料)	4.80
3	能源消耗相對較少	4.48
4	產生大量的一般固體廢物	2.67
5	大量使用礦產資源(如煤、原油等)	2.40
6	產生大量的大氣污染物	2.29

7	產生大量的水污染物	2.23
8	產生大量的危險廢物	2.04

表 2.2 企業營運對環境的影響——相對於同行企業

排序		平均分
1	對環境所產生的破壞是微不足道的	5.17
2	在減少對環境的破壞方面，已取得重大進展	5.14
3	在保護環境方面成績斐然	4.69

2.2.3 企業環境管理的運作

爲瞭解企業將環境管理結合於公司整體運作的緊密程度，企業管理者需描述他們企業環境管理專案和措施的運作情況，1 分表示「從未考慮過實施該專案和措施」，7 分表示「該專案和措施已成為公司日常事務」。調查結果表 2.3 顯示，企業更傾向於在營運中採取環境措施（例如：在生產及營運的過程中使用治理污染的設施；在企業內循環使用各種廢物；進行企業環境管理的常規環境審核），而較少採用策略性的環境評估措施（例如：科學地評估產品的生命週期影響）。

表 2.3 企業環境管理的運作

排序		平均分
1	在生產及營運的過程中使用治理污染的設施	4.77
2	在本企業內循環使用各種廢物	4.73
3	進行企業環境管理的常規環境審核	4.54
4	公司高層管理人員的環保培訓	4.29
5	前線員工的環保培訓	4.23
6	評估我們公司主要環節的環境表現	4.19
7	將環境表現目標定為我公司年度計劃目標的一個部分	4.12
8	建立一個可供認證的環境管理系統(例如，ISO 14001)	4.06
9	在推廣產品時，結合生態環保主題	4.02
10	投資清潔生產的技術	3.92
11	公開展示公司的環境專案	3.79
12	將對公司環境表現的評估納入公司管理的總體評估內容	3.79
13	參與政府贊助的環境專案	3.78
14	贊助環境保護項目或活動	3.64
15	編寫及發佈環境報告	3.39
16	科學地評估了產品的生命週期影響	3.25

2.2.4 環境保護措施的可能成效

採取環境保護措施能否為企業帶來成效呢？企業管理者在問卷中評估了環保措施可能為企業帶來的成效。1 分表示「完全不同意」，7 分表示「完全同意」。分數越高，表示獲得該項成效的可能性越高。調查結果表 2.4 顯示，更好地遵守現行的環境保護法規和提高公司聲譽是企業實施環境保護措施的主要動機。

表 2.4：環境保護措施的可能成效

排序		平均分
1	更好地遵守現行的環境保護法規	5.58
2	提高公司聲譽	5.58
3	避免負面的報導	5.23
4	為顧客提供更好的服務	5.14
5	與政府環保管理部門建立更好的關係	5.12
6	降低法律訴訟的風險	5.08
7	擴大公司產品的客源	5.02
8	改善公司產品的品質	4.91
9	防止政府以後有藉口通過更嚴格環境保護法規	4.88
10	增加員工對公司的忠誠度	4.61
11	取得壓倒對手的競爭優勢	4.57
12	降低生產/營運成本	4.50

2.2.5 公司高層管理人員的態度

企業高層管理人員對環境保護措施的態度是推動企業實施環保措施的重要因素之一。調查結果表 2.5 顯示，企業高層管理人員支持環保措施，承認企業負有保護環境的社會責任，並應該為此採取更有效的環保措施（平均 5.58 分，1 分表示「完全不同意」，7 分表示「完全同意」）。

表 2.5：公司高層管理人員的態度

排序		平均分
1	承認企業負有保護環境的社會責任並應該為此採取更有效的環境保護措施	5.58
2	有個人意願去為公司制訂及推行環境保護的措施	5.21
3	將環境保護作為我們公司重要的經營方針	4.99
4	有意成為本行業中的環保倡導者	4.82
5	相信重視環境保護可以為公司取得壓倒性的競爭優勢	4.54

2.2.6 持份者的影響

爲確定企業實施環境管理的壓力來源，企業管理者需描述哪方持份者曾要求企業採取更好的環境保護措施。表 2.6 顯示了各方持份者對企業環境管理的影響程度，1 分表示「完全不同意」（影響最小），7 分表示「完全同意」（影響最大）。調查結果表明，本地監管部門（例如：本地政府、本地環境保護局）和顧客對企業環境管理有最大影響。

表 2.6：持份者的影響

排序		平均分
1	當地政府 (例如：市長，地方人大…)	4.45
2	顧客 (例如：購買環保產品的要求或其他途徑)	4.42
3	當地的環境保護局 (通過罰款、收費及傳票)	4.37
4	股東/投資者	4.28
5	行業協會	4.20
6	公司職員	4.05
7	主要競爭對手 (如對方已採取更為先進的環保措施從而對本公司形成競爭壓力)	4.01
8	環境保護組織	3.95
9	當地社區 (通過法律行動)	3.78
10	傳媒 (例如：報紙、電視、電台等)	3.71
11	當地社區 (通過其他方式，例如：互聯網、 聯合抵制或示威)	3.56

2.2.7 企業實踐環境保護的障礙

為瞭解企業在實施環境保護措施時面臨的各種障礙，企業管理者需評估影響他們公司實施環保措施的因素。表 2.7 顯示實施環保措施的各種不同障礙，1 分表示「完全不同意」（障礙最小），7 分表示「完全同意」（障礙最大）。調查結果顯示，外在持份者（顧客和股東）及公司內部缺乏環境保護意識，均阻礙企業實踐環境保護。

表 2.7 企業實踐環境保護的障礙因素

排序		平均分
1	關心環境保護的本地顧客太少，使得我們公司的環保措施不合化算	3.90
2	在我們公司內很少有人意識到公司的環境表現可能是重要的經營課題	3.75
3	除了言辭外，股東們僅對追求最大限度的短期利潤和增長感興趣	3.75
4	全面理解和掌握所有與我們公司有關的環境保護法規幾乎是不可能的	3.70
5	一般來說，不論污染治理還是環境保護技術，對我們公司都太昂貴，負擔不起	3.57
6	對我們來說，取得關於公司污染排放的準確資料是非常困難的	3.53

7	許多能明顯降低我們公司環境危害的技術現在都無法得到	3.52
8	生產更加環保的產品將會降低產品原有的素質	3.28
9	在我們公司裏大部分的職員完全沒有意識到保護環境的需要	3.17

2.2.8 與外界的合作意向

企業管理者在問卷中表達了與外界組織在環境保護方面進行合作的意向，表 2.8 顯示了他們與不同組織合作的興趣，1 分表示「完全不同意」（最不感興趣），7 分表示「完全同意」（最感興趣）。調查結果顯示，他們最樂意與香港工業總會和本地環境保護主管部門合作。

表 2.8 與外界的合作意向

排序		平均分
1	如果香港工業總會找我們，我們很樂意參與他們有關企業環境保護的專案	5.03
2	如果當地環境保護主管部門找我們，我們很樂意與他們在企業環境保護專案上合作	5.01
3	我們願意與學術界在有關企業環境保護的項目上密切合作	4.98
4	如果地方環境保護組織找我們提供減少企業污染的意見，我們會願意與他們共同合作開展相關的企業環境保護的項目。	4.96
5	我們願意與其他公司在企業環境保護的專案上合作	4.87

2.2.9 推行企業環境保護的內部支持

企業管理者在問卷中回答了公司內部對於推行環境保護的支持力度，表 2.9 顯示了多種不同的內部支持，1 分表示「完全不同意」（最小支持），7 分表示「完全同意」（最大支持）。調查結果顯示，總體而言，企業有較強的內部支持，特別是高層領導人員的支持。

表 2.9 企業內部支持

排序		平均分
1	公司很多高層領導親自並且主動地參與制訂公司的環境保護政策並監督執行	4.85
2	公司的各個階層員工能夠自由探討公司環境管理的問題	4.57
3	公司有一個屬於高層管理人員的環境主管	4.42
4	公司裏主管環境保護的人員擁有足夠的權力影響公司的資本投資	4.22

2.2.10 企業的環保意識

企業管理者在問卷中評估了他們對企業環境管理概念的認知水平，1 分表示「從來沒有聽說過」，7 分表示「是此項環境管理的專家」。分數越高，認知水平越高。調查結果 表 2.10 顯示，認知水平最高的企業環境管理概念是 ISO14000 環境管理體系、環保標識（Eco-labels）、環境管理系統（Environmental Management System, EMS）及清潔生產技術（Clean Production Technologies）。

表 2.10 企業高層管理人員對企業環境管理概念的認識

排序		平均分
1	ISO 14000 環境管理體系	4.42
2	環保標識 (Eco-labels)	4.03
3	環境管理系統 (Environmental Management Systems - EMS)	3.92
4	所屬行業的清潔生產技術 (Clean Production Technologies for My Industry)	3.91
5	綠色採購要求 (Green Purchasing Requirements)	3.85
6	生命週期分析 (Life Cycle Analysis)	3.62
7	全額成本會計法 (Full-Cost Accounting)	3.42
8	可持續設計原則 (Principles of Sustainable Design)	3.32
9	預防性原則 (Precautionary Principle)	3.07
10	京都協議書下的清潔發展機制 (Clean Development Mechanisms under Kyoto Treaty)	2.92
11	全球報告倡議組織 (Global Reporting Initiative – GRI)	2.92
12	全球盟約 (Global Compact)	2.91
13	產業生態學 (Industrial Ecology)	2.84
14	第四個因素 (Factor 4)	1.91

2.2.11 公司的環保取向

企業管理者在問卷中評估了他們公司在環境保護方面的態度和取向，1 分表示「完全不同意」，7 分表示「完全同意」。調查結果表 2.11 顯示他們主要關注產品及其生產過程。此外，對於採取高於法規要求的環境保護措施，企業管理者的取向似乎不太積極，反映大部分公司大概仍是為了守法而實施環保措施。

表 2.11 公司的環保取向

排序		平均分
1	我公司已經制定方案, 在我們的產品及生產工藝中使用毒害較少和對環境更為友善的原材料及已加工的組件	5.30
2	我們公司已制定明確的目標，在生產/營運的過程中減少使用原材料及能源	4.97
3	在分析我們公司對環境的影響時，注意力主要集中在產品的生產過程(包括工序、工藝及原材料)	4.79
4	在反省我們企業是否個成功時，我們通常考慮企業是否為社會和人類生活作出供獻 (如在保護環境方面承擔了責任)	4.74
5	當考慮公司的環保問題時，我們通常會把產品被棄置後將會出現的情況都考慮在內	4.57
6	我們公司已經採取了高於法律法規要求的環境保護措施	4.45

2.2.12 公司的環保形象

企業管理者在問卷中評估了他們公司的環境保護形象，1 分表示「完全不同意」，7 分表示「完全同意」。調查結果表 2.12 顯示，總體而言，企業有較好的環境保護形象（總體平均分 4.67）。其中，企業環保形象與企業對環境保護的承諾有最大關係。

表 2.12 公司的環保形象

排序		平均分
1	一般而言，我們的品牌一直保持對環保的承諾	4.91
2	一般而言，我們的品牌在環保方面的承諾是值得信賴的	4.82
3	一般而言，我們的品牌對環保的關注滿足了主要持份者的期望	4.76
4	一般而言，我們的品牌對環保方面的承諾是高的	4.74
5	一般而言，我們的品牌的在環保方面的表現是高的	4.68
6	一般而言，我們的品牌在環保方面的表現是成功的	4.62
7	一般而言，我們的品牌建立了良好的環保聲譽	4.61
8	一般而言，我們的品牌被認為是環保承諾的最佳指標	4.49
9	一般而言，我們的品牌顯示了對環境問題的專業	4.44
	總體平均分	4.67

2.2.13 外界幫助

企業管理者在問卷中回答了他們公司希望從外界取得的幫助。調查結果表 2.13 顯示，他們希望瞭解更多關於企業環境管理、環境法規及如何遵守的知識。

表 2.13 外界幫助

排序		%
1	企業環境管理的知識	88.6
2	環境法規的知識及如何遵守	86.1
3	減少污染的技術支援	83.9
4	企業環境管理的支援	82.3
5	員工的環境保護培訓的機會	80.7
6	與其他公司分享企業環境管理的成功經驗	73.6
7	尋找與獲得國內外企業環境管理的“最佳實踐方法”	72.7
8	企業內部環境管理的審核	72.1
9	法律建議	71.8
10	企業能源使用審核	68.9
11	與當地政府發展夥伴關係	65.7
12	創立企業環境管理獎勵計劃	62.0
13	與環保組織發展夥伴關係	61.1

第三章：香港環保產業的品牌發展

3.1 採訪

為了深入瞭解香港環保產業的品牌發展，研究小組對珠三角地區內的香港註冊公司進行了一系列的採訪。研究人員首先向這些公司發出電子邀請函，隨後又進行了三輪的電話和電子郵件聯繫。最終，31 家企業接受了採訪邀請，其中 28 家企業來自環保產業（以下簡稱環保公司），其餘三家來自傳統的製造業。28 家環保公司可按 ESPs 和 EGPs 進行分類，如表 3.1 所示。在大多數情況下，研究人員均能採訪到受訪公司的高級管理人員，如行政總裁、董事總經理或總經理。所有的面對面訪談都在 2013 年 6 月至 11 月之間完成。

訪談採用了半結構化的模式。研究小組在與公司會面前準備了以下問題清單：

1. 請問是什麼因素驅使 貴公司從事環保產業？
2. 請問除了從事環保產業， 貴公司是否在其他方面作出努力而令您的企業更加環保（如果是，請舉例，如 EMS、綠色供應鏈、產品生態設計等）？如此做的具體原因是什麼？
3. 請問 貴公司走向環保為您帶來什麼有形的和無形的益處？
4. 請問 貴公司環保實踐的結果是否與之前的預期一致？期望和現實之間是否存在差距？
5. 請問您認為品牌聲譽對 貴公司的業務很重要嗎？貴公司如何建立品牌聲譽？建設綠色品牌的主要困難是什麼？
6. 請問您認為 貴公司的綠色企業/實踐是否得到包括政府、行業協會和市場在內的社會各界的足夠支持？為實現您的綠色事業，您希望得到怎麼樣的支持？
7. 請問您如何看待 貴公司未來的環保業務的前景？在貴公司的環保實踐中，未來會有哪些舉措？

應該指出的是，以上問題只是作為與公司訪談的簡單指引。在實際面談過程中，在不偏離最終訪談目標的情況下，研究人員與受訪公司就一系列廣泛的環保議題進行了自由的討論，期望更深入瞭解品牌在環保產業所充當的角色。

表 3.1 – 環保公司按細分類別/細分行業進行的劃分

環保產業細分類別/細分行業	受訪公司數目
環境服務提供商(ESP)	21
能源管理	*5*
廢物管理和回收	*13*
其他環境諮詢	*3*
環境產品提供商 (EGP)	7
總數	*28*

3.2 分析和結果

3.2.1 公司簡介

為實現本項研究的目的，我們將三家傳統製造企業提供的數據排除在外，只對 28 家環保公司提供的數據進行分析。在呈現主要研究結果之前，我們首先把受訪公司按照成立年份及目標市場進行分類。相關結果顯示，多數受訪公司成立於 2000 年至 2009 年，即公司歷史少於 15 年，但超過 5 年，如表 3.2 所示。

表 3.2 環保公司按成立年份分類

成立年份	受訪公司數目 (%)
介於 1980-1989	2 (7%)
介於 1990-1999	7 (25%)
介於 2000-2009	12 (43%)
2010 之後	7 (25%)
總數	28 (100%)

如表 3.3 所顯示，本項研究中的受訪企業大多數以香港為主要市場，其次是中國內地。其中有兩家公司專注於整個亞洲市場，而另外有一個面向全球市場。

表 3.3 受訪環保公司按目標市場分類

主要市場	受訪公司數目 (%)
香港	11 (39%)
香港及中國內地	8 (29%)
中國內地	6 (21%)
亞洲	2 (7%)
全球	1(4%)
總數	28(100%)

3.2.2 加入環保產業的原因

受訪企業選擇加入環保產業有多種原因。一如所料，「預見未來的環保趨勢」和「商業機會」被列為最重要的因素（C1 - 5 、 C9 -11 、 C14、C16、 C17 、 C19 、 C22 、C24 和 C26 - 30）。這些公司往往通過判斷政府的政策方向來評估市場發展趨勢。在這項研究中，三名受訪者（C10，C11 和 C16）提到香港政府政策的方向促使他們加入環保產業，但其中兩人（C11 和 C16）也指出，政府政策欠缺持續性或一致性隨後影響了他們的生意。

促使受訪公司加入環保產業的第二個最重要原因是對自然環境的關注（C2、C3 、C7、C9 、C14、C15、C17 和 C23）。兩位受訪者（C2 和 C17）表示，為了尋找「如何利用廢物」這個問題的答案，他們主動加入了廢物管理及循環再造的行業。

第三個最重要的推動力是企業發展或轉型的需求和時機（C5、C11、C14、C15、C19、C23 和 C25）。其他被提到的動力因素還包括受其他個人、組織和國家的影響（C1、C10、C17 和 C19），以及受自身因素的影響，例如強大的個人網絡（C2），教育背景（C24）和個人愛好（如 C8 提及「年輕時熱衷拆裝」）。

3.2.3 業務盈利能力及增長

幾乎所有受訪者都認為，環保產業的盈利能力不能與金融和房地產行業相提並論，靠環保產業賺大錢的機會微乎其微。然而，許多受訪公司（C9、C20、C22、C25、C26、C28 和 C29）承認，提供環境服務（不包括固體廢物回收利用）的整體盈利能力似乎比傳統製造業高。

值得一提的是，從事回收行業的絕大多數受訪者（C8、C11、C15 和 C18）聲稱，市場競爭激烈和欠缺管制，令他們的盈利能力越來越低。我們甚至發現從事玻璃回收的企業（C11 和 C15）正遭遇虧損。

至於業務增長趨勢方面，約 64 %的受訪公司（C1–3、C8–10、C13、C14、C18–20、C22、 C2–26、C28 和 C29）聲稱，他們的業務在過去的一年中實現了平穩或緩慢增長；14%的受訪者（C15、C16、C21 和 C23）則聲稱，他們的業務利潤勉強達到了維持企業生存的水平。另外 21%的受訪者（C4、C5、C11、C17、C27 和 C30）表示受訪時企業仍處於虧損狀態，還未取得收支平衡。導致虧損的原因似乎是多方面的，例如有公司提到他們尚未找到一個可行的商業盈利模式（C11），也有公司為研發產品和建設基礎設施投入了大量資金，但還沒獲得足夠的回報（C4 和 C17）；有的公司則在推廣新型產品時遇到了阻力，因為人們仍偏向傳統產品，新產品很難打開市場（C27 和 C30）。

3.2.4 市場競爭

環保產業的市場競爭，極大地影響了行業的供求關係和個別公司所採取的市場營銷及品牌策略。在這項研究中，我們主要關注三個方面，即競爭程度、影響競爭的因素和競爭優勢。

競爭程度

超過 60%的受訪者（C - 5、C8、C10、C14、C16 – 19、C21、C22、C24、C25 和 C27 ）認為，他們所處的環保細分市場的競爭日趨激烈，尤其是回收行業和小規模的環境顧問服務。一家 LED 製造商（C5）表示，缺乏行業標準和准入門檻偏低導致了 LED 行業處於無管制和惡性競爭的狀態。一家回收公司（C8）則提到，由於一些非法回收商沒有為工人購買勞工保險（因而可以提供更具競爭力的價格給客戶），破壞了競爭的公平性，致使回收行業市場陷入不健康的競爭。技術要求相對較低也被視為是促使回收行業出現激烈競爭的一個因素。我們還注意到，提供創新綠色產品的企業（如 C14 和 C21），似乎面對著一個很大的挑戰，就是要與傳統的消費習慣和心態進行競爭，並需努力說服人們青睞綠色產品。

另有五家公司（C9、C20、C26、C28 和 C29）指出，雖然市場上存在許多競爭對手，但真正能夠提供高質量服務的企業並不多。此外，一家太陽能服務提供商（C23）和一家玻璃回收商（C11）均認為他們所處的細分市場競爭相對較弱，但由於客戶傳統的思維定勢，加上政策支持不足，導致相應的本地市場也比較小或比較難以捕捉。

影響競爭的因素

當受訪公司被問及在客戶的心目中什麼是影響業務往來最重要的因素時，高達 71%（C1–3、C5、C8、C10、C11、C13–19、C21、C23、C24、C26、C29 和 C30）表示價格是一個

非常重要的因素，儘管它可能不是唯一的一個。令人感到意外的是，即使是政府招標項目，價格亦是主導因素。一些以政府機構為主要客戶的受訪者形容，政府表現出來的態度就是「價低者得」。

大約 32%的受訪者（C8、C17、C19、C20 和 C25–29）認為，與價格相比，提供優質服務以滿足客戶需求，可在市場競爭中起到更大的作用，或至少與價格同等重要的作用。尤其對那些長期顧客或轉介顧客而言，服務質量更為關鍵。持有此觀點的受訪者，大部分是環境服務提供商和能源顧問公司。

值得注意的是，當被問及對品牌的看法，雖然有不少受訪者認同品牌聲譽的重要性，但只有極少數把品牌聲譽列為目前客戶考慮的重要因素。

競爭優勢

受訪的企業大部分都能夠清楚認識到自己的競爭優勢所在。調查數據顯示，擁有技術專長應該是香港環保產業最大的優勢，因為在採訪過程中，「技術」一詞被提到的頻率是最高的。不少公司（C4、C5、C13、C17 和 C26–29）強調，開發新技術及/或持有相關專利是他們市場競爭的重要優勢。正如一家能源顧問公司（C28）所言，「我們需要不斷開發新的產品，因為別人可以很容易地複製你的技術，即使該技術（在中國）已取得專利……儘管人際網絡在內地很重要，但技術也是成功的關鍵。我們之所以有別於其他人，完全靠技術。」另一家太陽能電力公司（C26）也說：「技術是最重要的。任何人擁有技術，便可以降低太陽能的應用成本，並將贏得市場……我們收購了兩家太陽能發電公司，一家在美國，另一家在德國，這兩家公司合共持有超過數百項專利。結果技術成為我們的競爭優勢。」

第二個最經常被提到的競爭優勢是能夠提供專業化的或定制的服務或產品，以滿足客戶的需求（C9、 C17、C18、C20 和 C22）。例如，一家環境諮詢公司（C20）自稱「願意並且能夠幫助客戶找出如何履行法律要求的解決措施」是他們的競爭優勢。另一家能源顧問公司（C22）則強調，他們提供的能源諮詢服務是以分析為基礎的，與競爭對手所普遍採用以解決方案為基礎的服務不一樣，體現了他們的獨特之處。

而對一些環保產品提供者而言，很顯然，最重要的競爭優勢就是產品中相對更為環保的特性（C3、C14、C25 和 C30）。此外，一家塑膠回收公司（C2）強調，其強大的採購網絡、可追溯的供應鏈，以及透明度很高的整個閉環回收過程，有助於客戶隨時進行環保審核，而所有這些都令他們能夠在競爭中脫穎而出。

此外，部分受訪者把特殊的商業模式和清晰的市場定位視為其競爭優勢所在（C9、C15 和 C24）。調查發現，與其他許多免費甚至支付費用從用戶端收集廢物的回收商不同，一家回收公司（C15）堅持向客戶收取垃圾收集費，這種商業模式幫助他們贏得了許多支持「污染者付費原則」的國際公司客戶。正如該公司所述，「(基於這個商業模式，) 我們無

法從競爭對手那裏贏得他們的客戶，而他們亦無法從我們這裏贏得客戶。」 另外還有其他競爭優勢在採訪中被提及，包括用心服務顧客（C16、C18 和 C19），以及在市場上保持領導地位（C13）。出乎意料的是，幾乎沒有任何公司明確表示擁有綠色品牌聲譽是其競爭優勢之一。

3.2.5 市場營銷策略/方法

為了瞭解環保公司如何採取市場行銷策略，以及綠色品牌化在多大程度上已被納入他們的營銷策略，受訪企業被要求描述他們如何銷售其產品和服務，以及他們如何接觸潛在客戶並贏得合同。

調查結果表明，大多數企業通過展會/展位（50 ％，包括 C2、C3、C5 、C9、C10、C14、C21 - 25 和 C27 -29）、別人介紹或推薦（36 ％ ，包括 C7、C13、C15 - 20、C22 和 C27）和直接敲門（包括直接發送郵件和撥打電話）（36 ％，包括 C4、C8、C11、C13、C14、C18、C19、C21、C24 和 C26）的方式推銷自己的服務和產品。18％的受訪者（C8、C16、C17、C24 和 C25）認為他們公司的官方網站是其客戶可以與他們聯繫的重要渠道。11%的公司（ C26、C28 和 C29）指出個人網絡是其吸引潛在客戶的重要途徑。其他的行銷方式如廣告、與承包商合作、產品展示廳、演講、研討會和路演等，也有公司提及，但為數不多。

3.2.6 綠色品牌化

品牌的認知度

有趣的是，雖然很少受訪公司把品牌或企業聲譽列為其客戶考慮的重要因素，當我們問及他們對品牌重要性的感知時， 有 61 ％ （C2– 5、C 7 - 10 、C14、C20- 22、C24- 27 和 C29）高度認可了品牌的重要性和有效性。以下所列舉的受訪者意見充分說明了這一點。

> 「當你在中國做生意的時候，除非你有很好的人際網絡，否則，品牌的信譽度是很重要的，尤其是你想要從那些要求嚴格的客戶那裏贏得商業合約的時候……因為環境法規越來越嚴格，整個行業也越來越受監管，擁有良好的品牌信譽和資質的公司會更容易受到認可。」（C9）
>
> 「品牌對我們的回收行業來講，意味著你是否已得到大客戶的合同……由於我們的業務市場非常小，人們很容易就能知道你公司的形象。如果有什麼不好的事情發生，它會損害你的聲譽。」（C8）
>
> 「品牌對消費性產品的銷路有很大影響，因為品牌體現了你的產品和服務的品質。」（C3）

> 「品牌在我們這個行業就如在手機行業一樣重要。一旦你簽署一份太陽能發電合同，它將可能持續 20 年，客戶必須確保該公司將至少能營運 20 年。所以，品牌對我們行業來說是非常重要的……即使對已購買保險的客戶而言，選擇一家擁有很高聲譽的合作夥伴仍是重要的。」（C26）

39% 的受訪企業（C1、C11、C13、C15 – 19、C23、C28 和 C30）則認為，品牌對他們的業務來講並不重要，因為其他因素如價格和客戶滿意度更有影響力。這個觀點也在一定程度上反映，這些公司對品牌的瞭解還是比較有限，因為價格優勢和客戶滿意度也可能是該公司品牌價值的一種表現 (例如沃爾瑪著名的「低價格」品牌承諾)。

本研究還發現，香港的環保公司對「品牌」一詞有著不同的解讀，例如包括「代表某物的符號」、「某個品牌名字」、「良好的業績參考」和「優良品質的服務或產品」。似乎只有極少數人（例如 C29）把「環境保護」這個元素看作為一個重要的品牌屬性。另外，部分公司（例如 C14）認為，品牌的作用更多在於增加其產品和服務的附加值，以及增強公司對自身產品和服務的信心，但對企業銷售額和經營利潤則沒多大幫助。

「綠色/環保」的商業價值

儘管大多數公司認為品牌的聲譽對他們的業務是重要的，卻很少有人（ C3、C22 和 C29）認為「綠色/環保」的商業價值是高的。正如一些公司（如 C2、C5、C19 和 C30）所提到的，香港市場對環保服務或產品的需求仍相對較低，顧客對環保產品的關注和實際購買該產品的行為，兩者間似乎存在明顯的差距。換句話說，顧客是頗願意去瞭解更為環保的產品，但付錢購買此類產品的意願卻很低。

> 「『綠色/環保』的價值不高，因為某服務或產品包含的環保元素越多，通常客戶須支付的就越多。『綠色/環保』這個想法是好的，但回報率很低。人們可能有興趣去瞭解這個更為綠色的產品或服務，但不會真的願意去購買或實踐它。」（C19）

> 「利用環保這個概念可能令我們建立品牌容易一點，但不會顯著。人們將會表現出更大興趣去瞭解環保產品。願意為環保產品而付出更多金錢的顧客人數也將慢慢逐年增長，但（增加幅度）不會很大。」（C5）

> 「從長遠來看，建設一個綠色品牌是一個很好的策略。但在短期內，專注於環保的概念，對銷售不會有多大幫助。」（C2）

關於環保獎項的看法

獲獎，尤其是獲得那些著名的獎項，是一家公司提高其正面宣傳效果和提升其品牌聲譽的有效方法之一。在這項研究中，我們發現對許多公司（C9、C10、C13-15 和 C24-25）而言，贏得一個綠色的獎項意味著之前所做的努力受到了認可，但對實際銷售並沒太大的幫

助。在不少公司看來，開發技術（如 C17 和 C26）、獲取專業證書（如 C1、C14、C18 和 C30）和持有專利（如 C17）比獲獎更有助於業務的發展。有些公司（如 C19）甚至認為，獎項對產品提供商比對服務提供者更有益處。

品牌建設

當受訪企業被問及有沒有，以及如何發展品牌時，他們大多指出自己並沒有特別重視品牌發展。不少人還認為，品牌與產品的關係更為密切。這就是為什麼只有那些環保產品提供商（C3、C5、C10、 C14、C21 和 C27）聲稱自己有分配專門的資源來建立品牌。但是，我們發現這些公司（C3、C5、C10、C14 和 C21）建設品牌的方法與其推銷產品或服務的方法極其類似，例如參加展覽/擺設攤位、直接扣門、直郵傳單或打電話、建立陳列室、派發創新禮品和做媒體廣告等。部分受訪者也提到通過舉辦活動增加企業的宣傳，例如開展教育項目、主持演講和研討會（C14）等。此外，有少數受訪者列舉了獲取專利、獎項及證書（C14 和 C21），以及積累業務往績（C10）作為其品牌推廣的手段。

在本研究的所有受訪者中，只有一家公司（C14）花了很多精力建立其環保磚產品的綠色品牌。該公司不僅積極將環境因素納入其產品的整個生命週期，同時也積極與持份者交流有關這些綠色成果。該公司制定了一個非常明確的綠色品牌策略，並採用了各種方法來建立自己的綠色品牌。例如，該公司積極提供環境教育和培訓、參與獎項比賽、獲取環保認證，以及在不同場合派發創新小禮品（如：印有該公司品牌標識和快速反應碼的 USB 存儲設備和名片夾）。該公司還計劃為其環保磚產品的整個生命週期進行碳審計，成為香港首個實行此類碳審計的企業。但必須指出的是，這家公司表示尚未感受到綠色品牌化的努力給他們帶來的明顯經濟效益。

關於品牌建立的困難，一些公司（如 C3 和 C5）均強調一個問題，就是品牌化過程需要大量資金投入。一個 LED 製造商（C5）用一個形象的比喻描述了塑造品牌的過程：「品牌建設就像播種，在頭兩至三年內並沒有收穫，你必須等到植物長大之後才能得見成果。在收穫前，你可以做的就是投入大量的精力。但如果植物死了，你將什麼也得不到。」

3.2.7 期望與現實之間的差距

約 21%受訪者（C3、C9、C10、C13、C26 和 C28）認為，他們在環保行業的業務發展已經達到了原來的期望。兩家公司（C20 和 29）承認，他們業務和市場發展的現實情況超過了預期。另外兩家公司（18 和 25）認為這是很難回答的問題，因為他們一開始就沒有任何期望。

另外，約 64%的受訪者（C1、C2、C4、C5、C7、C8、C11、C14-17、C19、C21-24、C27 和 C30）則認為他們受制於香港市場非常緩慢的發展，現有的環保市場遠小於他們原

先的預期。相當多的受訪者（如 C1、C5、C15-17、C27 和 C30）把市場發展緩慢歸因於香港政府的不作為。

3.2.8 留在環保行業的原因

受訪公司選擇繼續留在環保行業的主要原因是他們對這個行業的前景感到樂觀，儘管在目前的階段仍有許多困難。研究顯示，由於對未來抱有較大信心，促使許多公司（如 C4、C8、C19、C24、C25 和 C30）盡其最大努力繼續留在環保這個市場。另有部分受訪者（如 C13 和 C18）表示，雖然來自環保業務的利潤不是很大，但已足以維持公司營運。此外，一些公司（如 C8、C18 和 C23）聲稱，他們希望在不影響自身業務正常運行的情況下，盡力為環境保護做更多的貢獻，所以他們也堅守著環保這個產業。相當多的受訪者（如 C4、C17 和 C23）還強調「環保這條路是沒有盡頭的，也沒有回頭路可走，一旦選定了就唯有堅定地一直走下去」。

當被問及除了賺取利潤之外，從事環保行業還有什麼好處，不少受訪者（ C3、C15- 17、C19、C22 和 C29）都指出「被認可和被讚賞」是其中最重要的無形得益。「能夠幫助或影響其他人」（C3 和 C15）和「能夠為環保做出貢獻」（ C2，C3 ， C7 和 C15）也是環保事業帶給受訪者的特別快樂和滿足的無形好處。

3.2.9 環保業務發展的困難

本研究發現環保公司面對的挑戰是非常多樣的。其中一個最大的困難與人力資源有關（25%，包括 C2、C3、C8、C9、C16、C19 和 C20）。不少從事環境諮詢的公司（C3、C9、C16、C19 和 C20）強調招聘和留住高素質員工的困難，特別是經驗豐富的中層管理者。正如一位受訪者（C19）所說，「招聘員工並不難，但請到合適的人很難，長時間留住合適的人才就更難。」有兩位受訪者（C3 和 C19）認為這是因為環保工作對人才素質的要求比較高，而且這個行業的工作環境比較辛苦。另外兩位來自回收業的受訪者（C2 和 C8）還談到勞工問題；但與環保諮詢公司不同的是，他們更側重於勞動力成本，因為這些公司的資源通常非常有限。據一間回收商（C8）透露，勞動力成本不僅與員工薪金相關，更與勞工保險有關，購買保險成為該企業的一個沉重負擔。事實上，除了回收公司，其他受訪者（如 C16 和 C19）也提到勞工保險的問題。似乎大多數保險公司都不願意為環保行業的工人提供保險，因為這些人通常被認定為「高危險群」。即使保險公司或保險業聯會願意提供保險服務，他們對環保公司收取的保費也往往比對其他行業收取的高得多。

市場營銷問題或市場需求偏低似乎是受訪企業面臨的另一個困難（C3、C10、C16、C22、C23、C28 和 C30）。香港的環保市場的發展被認為是極其緩慢的。一些受訪者（C3、C10、C16、C22、C23、C28 和 C30）指出，要說服客戶相信他們的綠色產品或服

務，以及認同環保的重要性是一個很大的挑戰。由於許多客戶的環保意識或環保知識不高，如果購買綠色產品和服務意味著需要支付更高費用的話，客戶們往往很不樂意。這一現象在環保產品和能源管理服務等領域尤為明顯。此外，一些公司（C1、C4、C17、C21 和 C26）認為現行的政府採購政策往往更有利於傳統和成熟的技術和產品，而對本地自我開發的創新環保技術和產品卻給予較少的認可。

25%受訪者認為經濟壓力（包括高營運成本）是阻礙其公司發展的一個困難（ C3、C5、C14、C15、C19、C24 和 C30）。幾個受訪者（C3、C14、C15 和 C19）均表示，對小企業來說，從銀行獲取貸款是一件很困難的事情，因為大部分銀行似乎都對環保投資表現得比較保守。小企業也很難申請到政府資金，這主要是由於政府基金的審批條件比較苛刻，申請手續也很費時。

此外，四家受訪的諮詢公司提到與技術相關的問題，其中包括技術應用（C4）、技術創新（C29），以及環保系統的設計技術（C9）等問題。據一家諮詢公司（C19）透露，研發能力的薄弱以及技術後盾的缺乏導致他們難以效地推廣自身的業務。另外，一受訪公司（C9）表達了其對自身內部能力建設的擔憂；在他看來，如何建立一個能夠細緻解決所有工程問題的專業團隊是他們面臨的最大挑戰。

值得注意的是，對需要龐大儲存空間的回收企業來說，土地資源是回收行業面臨的特殊問題。受訪的回收商抱怨，在香港，可用於回收行業的土地極其有限，而且租金越來越難以承受。由環保署建立的旨在促進本地回收再造業的廢物管理設施之一「生態園」，似乎也存在很多問題，例如對申請人限制過多，以及缺乏配套的基礎設施以至相關政策的支持（例如土地租賃期過短，導致租用公司難以可持續發展）。

3.2.10 持份者的支持

本節重點介紹兩個重要的外部持份者群體（即本地政府和行業協會）對環保行業的支持情況，包括受訪企業如何看待現有的支援，以及他們希望從持份者取得哪些額外的幫助。

對現有支援的看法

關於本地政府提供的支援是否足夠的問題，答案非常令人失望，因為高達 82 %的受訪公司（C1、C2、C4、C5、C7 -10、C11、C14 -19、C21 和 C23- 30）認為相關的支持是不足夠的。只有約 18 % （C3、C10、C13 、C20 和 C22）滿意政府現時提供的支援。一家提供環境影響評估（EIA）諮詢服務的公司（C20）對本地政府引進和嚴格執行環境影響評估條例表示了極大的讚賞：「如果不是因為環境影響評估條例，我們不會有這麼多的機會。政府的執行是非常嚴格的。我們目前沒有特別的困難」。一個環境服務提供商（C13）評論說，「政策的總體方向是支持環保產業的。董建華先生已經做了很多。但是，既得利益者並不滿意這個，因為他們不希望現有的規則被打破。」另外有兩家公司

（C10 和 17）指出政府在最近幾年已經開始認真對待食物垃圾的問題。一家空氣淨化器供應商（C3）也認為，政府在為企業的宣傳和推廣提供平台（如各種展覽、中小企業發展基金）這方面已經幫了不少忙。

至於來自行業協會的支援，整體而言，32%的受訪者（C2、C7、C13、C16、C20 和 C23- 26）認為，行業協會對他們業務的發展沒有什麼幫助。在另一方面，9 家受訪企業（佔所有受訪公司的 32%和受訪 HKEnvIA 成員的 50 %）（C1、C3、C5、C8、C9、C15、C19、C21 和 C29）認為 HKEnvIA 有助於推動整個行業的總體發展，雖然它不一定對個別公司的發展有所幫助。HKEnvIA 近年來的改進似乎獲得不少成員的讚賞。一個固體廢物回收商（C15）提出了這樣的意見：「我加入 HKEnvIA 已有 10 年。HKEnvIA 過去側重於舉辦研討會，以及與內地不同的環保部門簽署各類協定，這對我們是沒多大作用的。但自今年起，協會好像開始改變一些做法，變得更重視收集同業的意見，並會代表業界向政府爭取權益。這些就有很大的幫助了。」另外 25 % 受訪者（C10、C17、C18、C22 和 C27 - 29）指出其他團體，例如香港生產力促進局、香港工業總會、香港總商會以及各種細分行業協會對大家有所幫助。由於環保產業涵蓋了多種學科和細分部門，以細分部門為導向的協會通常更加專業，在某種程度上也更容易獲得好評。正如某一綜合固體廢物管理解決方案提供商（C17）所指出，「HKEnvIA 包含的環保範圍太廣，且不太活躍。更細分的專業協會則能更好地滿足企業的需求。我們已經參與了很多香港廢物管理協會的活動，如參觀中國內地的垃圾堆填區和焚化爐等。這些是更切合我們實際需要的，我們也從中學到很多，所以我們更感興趣。」

期待持份者給予的支持

來自政府的支持

正如受訪公司一次又一次所強調的，香港的環保產業迫切需要一些適當的外部支援，尤其是來自政府的支持。總體而言，受訪企業認為，最重要和最有幫助的，就是去改變政府的觀念和態度，令其為業界提供適當的政策和資金支援。

不少受訪公司批評政府在引進和採用新技術方面過於保守。有幾家公司（C1、C7 和 C17）建議政府應該開通更多交流平台和管道以聆聽不同的聲音，亦要通過各種方式更加開明和積極主動地管理環境問題。此外，政府制定政策時應該保持專注，並且堅持正確的方向。有些受訪者（C11 和 C16）抱怨說，政府政策方向反覆無常，使他們的業務受到影響。

受訪公司提出了在多個領域上支持業界的政策的建議，主要包括：（1）基於「污染者付費」原則的固體廢棄物管理政策（例如一個系統周全的回收計劃、全面的垃圾分類法規和強制性玻璃瓶回收監管等），（2）食物垃圾徵費政策/計劃，（3）LED 規格和安裝的相

關標準和指南，（4）強制性室內空氣品質法規（而非指導方針），（5）推廣綠色產品的政策（如政府綠色採購政策），以及（6）支持可再生能源發展，例如分散式發電和電網平價的相關政策。

受訪公司同時強調了資金援助是促進他們業務和品牌發展的重要支援手段。許多公司（C2、C3、C10、C14、C17、C19 和 C23）認為政府應該提供更多的資金，用於支援各項環保措施（如廚餘回收和可再生能源發電），而且准入門檻應該更低，對申請者的限制也應相對更少。

受訪者還提及其他類型的政府支持。舉例來說，某一受訪企業（C2）提到，如果環保署能夠在廢塑膠的每日數量、類型和來源等方面提供更全面的統計資料，將對塑膠回收業務起到很大幫助。而大多數本地回收企業認為，為了這個行業的發展，政府必須提供更多的土地資源。其他一些環境服務提供者（如 C1）期望政府能讓業界有更多機會參與政府或公共的環保項目。另一位受訪者（ C9）則在政府總體策略方面作出建議，「如果政府希望幫助傳統產業轉型，它應該起帶頭作用，並在傳統產業和環保產業的整合過程中做出更多的協調。由於香港企業比內地企業有更高的信譽和整體能力，如果特區政府能與內地政府磋商，以減少中國市場中官員對商業交易的影響，香港的環保行業將得到非常大的提升和拓展」。

來自行業協會的支持

針對行業協會的支持，受訪企業主要提出了兩個方面的建議。他們希望行業協會能夠積極向外界溝通，表達環保行業面臨的問題和困難，以獲得各持份者，特別是政府方面更多的支持。與此同時，他們應該提供更多為企業量身制定的支援，以適應不同環保細分行業的特殊需求。

來自本地大學 的支持

少數受訪公司（C3、C9 和 C13）提到希望獲得自本地大學的支持。其中一個環保技術顧問公司（C13）建議，大學可以設立資源育成中心以幫助本地環保企業的發展。此外，大學必須培養更多的人才，滿足各種環保細分界別的需求。

3.2.11 行業前景

本研究的受訪公司指出了環保產業的一些發展趨勢。總體而言，大多數公司都對這個行業的未來表示樂觀。當中的許多受訪者（C1、C4、C9、C22、C26、C28 和 C29）同時認為，鑒於中國地方政府有堅定的動力和決心，而且一旦計劃落實，專案規模通常會比較大，中國內地的市場潛力無疑將會非常優厚。此外，許多公司（C9、C20、C22、C25、C26、C28 和 C29）預期環保產業的發展空間將會大於傳統產業。部分公司（如 C4 和 C9）預見未來的環保市場將越來越受監管。然而，也有少數公司（如 C8 和 C16 ）認為該

行業未來的發展（尤其是對政策敏感的細分行業，例如回收業）將在很大程度上取決於有關政府的政策方向。

第四章：討論和總結

4.1 市場環境

香港的環保產業外在市場環境的主要特徵是競爭激烈和以價格為主導。本研究結果顯示，環保市場的競爭大致上是日益激烈的；雖然某些環保細分行業（如太陽能和玻璃回收）的競爭可能相對沒那麼大，但市場也相對較小，在沒有政策扶持的情況下要爭取相關市場很難。

在目前的市場環境下，價格仍然是影響客戶購買決策的一個主導因素（即使政府項目也是如此），緊接著才是滿足客戶需求的高品質服務和產品。無論是「品牌形象」還是「環保」都尚未被客戶明確視為考慮的重要因素。這項研究顯示，由於價格競爭的關係，令一些企業難於對其產品或服務的價格與其他重要屬性（如先進技術的應用和更環保的特點）作出平衡。

毫無疑問，技術已被認為是一家公司令自己在激烈的市場競爭中有別於其他公司的最重要優勢。環保行業很顯然已高度依賴於技術革新和發展。在增長快速的市場，例如中國，對污染防治政策和企業策略性環境管理的日益重視，已大大推動了技術革新的需求，為環保產品和服務開創了新的市場。因此，對香港環保企業而言，為了更好的捉緊市場機遇，提升其自身的開發和集成創新環保技術的能力變得非常關鍵。

4.2 綠色品牌化

總的來說，這項研究顯示了香港環保產業在品牌建設方面的一個相對矛盾的現象。如前所述，品牌並非影響客戶購買決策的重要因素。然而，來自所有四個環保細分行業的超過60%的受訪者均承認了良好品牌形象的積極作用，這表明在本行業內，品牌的重要性受到了較高的認可。約 36%受訪公司曾通過他人轉介和推薦而贏得生意合同，這個事實也在一定程度上反映良好的品牌形象為銷售業績帶來了正面影響。在目前的環保行業中，「品牌」的關鍵屬性仍主要集中在傳統層面上，如產品和服務的品質、專業化以及客戶滿意度等。

當涉及綠色品牌這個問題時，情況卻又不同。出乎意料的是，「綠色/環保」並不被這個本身就提供與環保相關的產品和服務的行業視為是其品牌的一個關鍵屬性。調查結果顯示，把「綠色/環保」概念整合融入產品或服務，並不一定能為公司業務帶來附加價值。根據一些受訪公司的經驗，客戶甚至在決定是否購買相對更綠色的產品時表現得更為猶豫，因為這些產品往往意味著更高的價格。雖然越來越多的顧客已對綠色環保產品表現出積極的態度，他們大多仍不願在價格上作出妥協。此外，榮獲綠色獎項也似乎對環保公司的實際銷售幫助不大。

儘管對品牌的重要性有較高的認同，本研究發現香港環保產業的品牌化建設仍處於較低水準。品牌化是創造和維護良好形象的一個有系統的規劃和實施過程，主要通過管理企業的行為，與持份者進行溝通和把相關形象象徵化[8] 。由於品牌推廣過程中需要大量資本，其有形回報又比較低，大部分企業，尤其是那些環保服務提供者，還沒有把品牌化作為首要任務來對待，亦未分配專項資源來處理。研究發現，很多企業還沒有為自己品牌建立策略計劃，甚至連專職行銷人員都沒有。對於那些聲稱已進行品牌建設的公司，他們所採取的方法往往是非系統化，既零碎且分散的。所有這些反映出香港環保產業仍處於品牌發展的初期階段。鑒於「綠色/環保」所帶來的商業價值偏低，很少公司重視綠色品牌化也就變得不足為奇。

一方面，隨著環保法規的日益嚴格和環境意識的日益增強，相關需求已開闢了環保產品和服務的新市場。另一方面，每當需要在綠色品牌和價格/功能性能之間做出權衡時，市場往往更加消極地對待對綠色品牌。鑒於綠色品牌的低商業價值，對那些力求從相關舉措中創造價值的企業來說，建設綠色品牌是一項極富挑戰性的工作。

4.3 發展阻力

香港環保產業的發展受到各種阻礙因素的影響。本研究確定的主要問題有以下幾個方面：政策法規、能力建設、市場、資金、技術和土地資源。

雖然環境法規是市場需求發展的重要推動力之一，但是當法規不足夠、不確定或不一致時，也可能對發展造成障礙。在這項研究中，香港政府在某些領域（如固體廢物管理和可再生能源應用）的環境政策發展，被批評落後於臨近地區（如台灣、日本及中國內地）。環境政策的不確定性（例如固體廢物管理政策），和法規前後的非一致性（例如《污水處理服務費》的執行沒以前嚴格），也使得某些受影響的公司處於不利地位。所有這些法規方面的問題，均增加了作為市場供應方的環保企業的風險和不確定性，也抑制了市場需求方的發展。

較弱的能力建設，幾乎是阻礙環保行業發展最重要的一個內部因素。能力建設的一個關鍵是人力資本。然而，缺乏人力資本，特別是中層管理人員，似乎是整個行業面臨的共同問題。由於業界對人才素質要求較高，以及工作環境相對較辛苦，小型企業要招聘到合適的人才並長期留住他們尤為困難。環保行業若要繼續擴展的話，如何建立一支擁有全方位技術的專業團隊，是他們急需解決的一個問題。

與市場有關的阻力則主要影響了需求方市場的正常發展。顧客環保意識較低、新產品市場尚未開發、新的環境解決方案等資訊缺乏，以及本地市場規模較小等，所有這些都導致了市場對環保產品和服務的需求偏低。此外，本地政府作為環保市場的最重要客戶之一，對新的環保技術和產品的態度非常保守，這無疑阻礙了該行業在環保技術方面的創新發展。

像其他行業的許多中小企業一樣，環保行業的小公司財力資源有限，融資困難，給企業發展帶來巨大壓力。研究顯示，小型公司發現自己向銀行申請貸款特別困難，這不僅因為企業規模太小，可能引發投資風險，也因為在投資者眼中該行業比較特殊。新的環保公司和環保項目經常被定性為不確定性高，且高度依賴於超越投資者控制範圍的法規框架。此外，雖然政府提供了一些基金可供業界申請，但基金申請的准入門檻卻過於苛刻，行政手續也過於複雜，而且資金量不是很大。

此外，與技術相關的問題，如研發能力薄弱，以及在技術應用和創新方面的外部支援不足等，也被一些小型環保諮詢公司列舉為阻礙他們企業突破發展的因素。在固體廢物回收行業，其操作通常需要大量的土地，所以缺乏合適的土地或回收工業園是對行業發展的一個特別的掣肘。而由政府為本地回收再造業提供的生態園則似乎存在許多問題，例如對申請者的條件過度限制，以及缺乏相關的配套設施。

4.4 建議

這項研究顯示，環保業務未來的前景是樂觀的。然而，現階段存在的一些內在和外在的阻力都抑制了這個行業的快速發展。為了克服這些障礙並促使該行業在香港蓬勃發展，適當的外在支持顯得非常必要。

4.4.1 給政府的建議

基於上述分析和討論，我們為政府的行動提出了以下建議。

- 在提出任何支援政策和措施之前，政府應該改變傳統的思維方式和對環境問題所持的保守態度，以更開放的心態，接受新的環境解決方案，特別是本地自行開發的創新的環保技術或產品。政府也應該認識到政府本身對環境技術和產品在創造市場需求方面的重要作用。政府應該引進一個需求拉動的策略，而且不僅在制定和實施公共環境政策和舉措方面保持堅定的領導地位，在其他領域，如調整政府採購政策使其有利於環保的產品和服務，也應起帶頭作用，而不是一味強調「讓市場自己自由發展」。

- 政府應更加積極主動地在各個領域提供相應的政策支持，特別是在對香港的自然環境已產生顯著負擔的領域，如城市固體廢物管理和節約能源方面。在固體廢物管理方面，政府應該引進一個全面性的政策計劃，並把整個垃圾收集系統（從垃圾源頭分類，到城區中心的廢物轉運，再到垃圾堆填區的廢物棄置）和配套基礎設施（如回收公園/土地）等相關問題都納入考慮範圍。本報告同時認為，政府推出基於「生產者責任」和「污染者自付」原則的行政方案，如通過廢物棄置收費計劃以鼓勵源頭減廢，將會是行之有效的舉措。至於可再生能源方面，政府可考慮制定政

策，支持分散式發電和電網平價，以促進更廣泛地採用太陽能發電，從而為可再生能源行業創造更多的市場機會。為了加強節能減排和監管 LED 的應用，政府也應引進規範 LED 規格和安裝的相關標準和指南。

- 政府應針對環保產業的需求，投入更多的資源發展人力資本。政府不僅應當支持各種旨在培養環保專業人士的培訓和教育計劃，也應該提出吸引合適的人才留在這個行業的舉措。此外，政府應鼓勵和支持本地大學設立課程以培育下一代人才，這將有助於新的環保企業的發展。

- 要提高行業的市場行銷能力，政府應在多方面提供資訊支援，如環保市場和技術的發展趨勢、可能的貿易訊息、融資和投資機會，以及技術合作機會。政府也應提供更多的渠道和平台給業界推銷其產品和服務，提升品牌知名度，以及增加企業的宣傳。在不同層面與內地當局合作也很重要，以確保香港環保產業的商機。

- 有必要由政府出面建立一個長時間運行的、連貫和全面的運動，廣泛宣傳環境保護和可持續發展的意識。該運動其中一個最重要的目標是鼓勵全社會在綠色消費模式上做出改變，從而為環保產品和服務創造一個蓬勃發展的市場。

4.4.2 給行業協會的建議

除了向政府提出建議，我們給行業協會提出以下兩項建議。

- 行業協會例如環保產業協會（HKEnvIA）應發揮積極作用，在環保行業和政府之間搭建一座橋樑，表達行業關注的問題，並向政府尋求相關的支持以促進產業的發展。行業協會與政府建立一個公私夥伴關係（Private-Public Partnership），並制定定期溝通機制，也將特別有助於環保產業的發展。

- 由於環保行業涵蓋了各種學科，各環保細分行業之間的差異也較顯著，行業協會為該行業提供各種舉措或援助時都應該更加度身訂造，並以細分行業為側重點。此外，配套措施（如培訓和資訊支援）不僅應著眼於重要的領域，如綠色品牌、市場推廣和技術發展之類，同時也應關注那些容易被忽視，卻對小公司影響顯著的問題，如保險問題。

4.4.3 給環保產業的建議

以下建議是專門為香港的環保產業提出的。

- 從事環保行業的公司必須要有熱誠、勇氣和決心，以及前瞻性的眼光。

- 想要爭取更大的市場份額，企業應該在技術創新、專業化和提供個別訂制服務等方面加強自身的能力，從而在日趨激烈的競爭中脫穎而出。
- 企業應該更加重視綠色品牌建設。綠色品牌不應該只專注於產品或服務的功能屬性（產品/服務優於同類對手的環保屬性），同時也應重視客戶的個人情感利益（emotional benefits）。
- 公司應加強與其他各種機構的溝通和協調，以增加社會對環境問題的正面回應。

4.5 總結

這份報告通過對 334 家來自多個行業的公司進行問卷調查以及對 28 家環保公司進行訪問，深入研究了香港環保產業的品牌發展情況。研究結果顯示，該行業的品牌發展仍處於早期發展階段。由於價格競爭仍然主導著市場，且一般認為「綠色/環保」的商業價值很低，綠色品牌化尚未得到足夠的重視。受內外因素的同時制約，如何推動「綠色/環保」的價值並鼓勵綠色品牌化，仍然是一個嚴峻的挑戰。外在持份者特別是本地政府提供充分而且有利的支持，對促進整個環保產業的發展是必不可少的。