

Green Consumption in China

And Green Marketing Options for Thule

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This thesis has been written as a part of the degree project course in the Master's program "Sustainable Business Leadership" at the School of Economics and Management, Lund University.

The course was based on the methodology of action learning and self-managed learning. The students were all assigned to an in-company project, having a role as consultants. This project constituted the main part of the course. As a minor part the students were responsible for organizing several learning events addressing relevant issues related to the in-company projects. The students continuously documented their learning in learning journals and participated in tutorials on these journals.

The assessments of the students were done partly on the written thesis, partly on the consultancy process and report to the client company, partly on performance in learning events and partly on ability to document and discuss the students' individual learning and development.

Table of Contents

1. INTRODUCTION	5
2. PURPOSE AND METHOD.....	6
3. ENVIRONMENTAL SUSTAINABILITY FOR THULE IS MORE THAN A POWERFUL TREND.....	8
3.1 OUR ANALYSIS	8
3.2 ACADEMIC THEORY.....	9
3.3 CONCLUSION.....	11
4. THE BACKGROUND OF GREEN CONSUMPTION.....	12
5. LITERATURE REVIEW OF GREEN CONSUMPTION IN CHINA	15
5.1 SUCCESS IN GREEN CONSUMPTION NEEDS THE SUPPORT OF GREEN MARKETING	15
5.2 GREEN CONSUMPTION TRIGGERED BY ENVIRONMENTAL DEGRADATION	16
5.3 GREEN CONSUMPTION IN CHINA IS NOT PERFECT.....	16
5.4 TWO EXAMPLES OF ECO-LABELS IN CHINA	19
5.5 CHINESE CONSUMER ATTITUDE AND BEHAVIOR TOWARD GREEN PRODUCTS.....	20
5.6 SUMMARY	22
6. DESIGN AND MAKE A SURVEY IN CHINA	24
6.1 METHODOLOGY AND DATA.....	24
6.2 OUR LOGIC BEHIND THE QUESTIONNAIRE.....	25
7. SURVEY ANALYZING.....	29
7.1 THE BASIC CHARACTERISTICS OF SAMPLES	29
7.2 THE PRACTICES OF GREEN CONSUMPTION	30
7.3 THE TREND OF GREEN CONSUMPTION	30
7.4 WHAT KINDS OF GREEN PRODUCTS THEY HAVE BOUGHT AND THE MOTIVES?.....	31
7.5 THE WILLINGNESS TO PAY A PREMIUM FOR THULE’S GREEN PRODUCTS	32
7.6 THE CONSUMERS’ COGNITION AND ATTITUDES ABOUT <i>CAR-TRIP</i> EQUIPMENT.....	33
7.7 GREEN CONCEPT IN CAR ACCESSORY INDUSTRY	34
7.8 COMMUNICATION CHANNEL.	36
8. CONCLUSION AND GREEN MARKETING OPTIONS FOR THULE.....	37
8.1 GOOD CONSCIOUSNESS WITHOUT DEED.....	37
8.2 FOLLOW THE ATTITUDES, EXPECTATIONS AND PREFERENCE OF CHINESE CONSUMERS.....	38
8.3 REINFORCE THE GREEN ATTRIBUTE OF THULE’S SUSTAINABLE PRODUCTS	38
8.3.1 <i>Highlight Thule’s Scandinavian Culture That Respect for Nature and the Environment.....</i>	<i>39</i>
8.3.2 <i>Change the Slogan of Share Your Passions.....</i>	<i>39</i>
8.3.3 <i>Seize the Flagship Consumers.....</i>	<i>39</i>
8.3.4 <i>Increase “Face To Face” Communication with Consumers</i>	<i>40</i>
8.3.5 <i>Change Smart Solutions to Professional Solutions</i>	<i>40</i>
8.3.6 <i>Make Association with Quality Lifestyle</i>	<i>40</i>
REFERENCES:.....	41
APPENDIX. BILINGUAL QUESTIONNAIRE	45

1. Introduction

The irresponsibility of the Wall Street and the snatch at the future wealth has made the world hurt enormously (Krugman, 2010). The more and more people are recognizing the significance of environmental sustainability and responsibility in business operations. Among them, the sustainable and responsible environment performance of enterprises is the most prevalent issue in current society. Especially after the Copenhagen Climate Conference 2009, it is a common consensus to pay close attention to environmental protection and boycott the predatory company. Makipere, & Yip, (2008) also mentioned that “corporate environmental scandals, government regulations and a greater consumer concern for ecological issues have heightened company and investor interest in the concept of corporate sustainability”. In terms of this issue, it seems that humanity has never been so unified. The awareness of energy conservation, environmental protection and sustainable development is going to transform from niche to mainstream.

While debates about how to deal with detrimental impacts of human activities on the environment continue in full force, businesses and customers have entered the green consumption and green market (Woolverton, & Dimitri, 2010). The pollution and corporate impacts on environment are regarded as typical negative externalities by economists (Mankiw, 2004). They also put forward solutions from the perspective of government involvement, including Command-And-Control Policies, Pigovian Taxes and Subsidies and Tradable Pollution Permits (Mankiw, 2004). However, we think that these solutions just increase the direct costs of corporate actions that would pollute the environment. These even probably make illegitimate participants get windfall benefits, because undetected environmental pollution would save corresponding costs for him. Contrast to this, green consumption and green marketing could maximize the profits of a company which improves its environmental performance (Woolverton, & Dimitri, 2010). From our perspective, green consumption and marketing not only could promote long-run development but also improve short-term money returns. It thus internalizes the externalities of environmental issues (Mason, 2009). In recent years, green consumption and marketing have triggered close attentions and investments from producers (Aichlmayr, M. 2010).

“Despite their belief that North America is in a recession, 83% of corporate managers plan on increasing green investments over the next two years. Even more startling, 74% of those who believe North America is in a depression are spending more on green. And, more than half say their companies purchased more green products during the depths of the recession than ever before.”

-- Aichlmayr, M. 2010

As students of *Sustainable Business Leadership*, we want to study and realize green

consumption in China from sales and marketing perspectives. It is because that, as the biggest emerging country, China is also the world's biggest emitter of carbon dioxide (Hunt, 2009). Meanwhile, China simultaneously faces other intense environmental pressures (Hou, 2009). Since green consumption is regarded as an excellent solution to prevent environmental degradation, we want to know the current situation of green consumption in China, and how Chinese consumers relate to corporate environmental sustainability, green consumption and green products.

In our thesis, we will not only study and realize green consumption in China by the market of green food. We found that Chinese scholars have already made a lot of studies focusing on green food. As the biggest category of green products, green food is a comparatively mature and representative kind of green products. However, consuming green food is not adequate. The more kinds of green products are consumed, the better it will be. Therefore, we are not limited in the area of green food. we also plan to do a research on green products of Thule, which is rooted in Sweden and a world leader within sports and utility transportation field. Thule delivers “transportation solutions for active families, professional and outdoor enthusiasts wanting to transport their equipment safely, easily and in style” (Thule Co., Ltd. 2009). Although Thule has not produced green products, we think that Chinese green customers’ expectation and motives behind their purchase behaviors are very valuable for Thule’s future environmental sustainability strategy and actions in China.

In the end of the thesis, we will present Chinese marketing options for Thule based on the combination of our study and existing literatures.

2. Purpose and Method

What are the consumers’ cognition, perception, feeling, and buying behaviors toward green products and corporate environmental performance, and what kind of action Thule can do for that? We will figure out the answers from the sales and marketing perspectives. In our report, we are willing to find out how Chinese consumers are related to green products, green consumption and environmental sustainability by reviewing Chinese literatures and analyzing the data of a survey. In addition, we are going to present Chinese green marketing options for Thule based on the our study and existing literatures.

In order to study green consumption in China, we start by understanding the nature of Thule and its products, as well as the significance of environmental sustainability for Thule. We then discuss the background of green consumption. We also plan to figure out the current situation of green consumption in China by reviewing Chinese literatures and reports of corresponding investigations, which include Chinese eco-labeling schemes, consumers’ demand of green products and their characteristics of buying behaviors. In addition, we design a questionnaire focusing on Thule’s

products and outdoor gears, conduct an e-survey, and collect data by E-mail. In the part of survey analyzing, we focus on making a comparison between our data and existing research results, aiming to figure out the similarity and difference between Thule's green products and the general situation of Chinese green consumption. Finally, we provide our suggestions for Thule regarding green consumption in China, which is based on the combination of literature review and statistic results of our survey.

We inquired of a staff in a big retailer (*Sanfo*) of outdoor gears who sell Thule's products on April 2nd 2010. He told us that "Thule's products in China are always classified into *car-trip equipment* category" (Yang F., personal communication, April 2nd, 2010). According to Thule's statement and our recognition, the consumers' attitude and cognition about *car-trip equipment* is similar to that of outdoor gears. The consumers' cognition, perception, feeling, and buying behaviors toward green outdoor gears are similar towards green *car-trip equipment*. In addition, Thule's products in China are not popular so far. "Empirically, many consumers do not know Thule's product" (Yang F., personal communication, April 2nd, 2010). We thus plan to use green outdoor gears as the representative of Thule's green products. We could get indication on how Chinese consumers are related to Thule's green products by analyzing the green attitude of consumers towards outdoor gears.

The E-survey by E-mail is one of the quickest ways to get result from respondent, although sometimes it might not be as clear as face-to-face communication. Due to the time and geography limitation, we choose to use E-survey which we believe it is the quickest and efficient way to communicate with respondent in China. In terms of sampling, the best sampling frame are those who purchase outdoor gears from stockiest-retailers, and the larger sample size, the better analysis we can obtain from statistics point of view. Whereas we cannot acquire data from an appropriate sample size due to the time limitation. Therefore, our survey analyzing will focus on comparing our surveys data with the existing results. We finally sent out 50 questionnaires to our Chinese friends in May 1st to May 15th 2010, since we need to get more realistic data as soon as possible. The questionnaire has three major parts. First of all, it includes a general environmental concerns and trend of green consumption. Secondly, it aims to specific recognition and willingness to pay a premium to Thule's green products as well as other environmental-friendly outdoor gears. Last part is green consumers' characteristics, buying behavior and socio-economic and demographic data.

3. Our Analysis on Environmental Sustainability for Thule

3.1 Basic Analysis of relation between environmental sustainability and Thule

Thule is a leader within sports and utility transportation. they deliver transportation solutions to active families, professionals and outdoor enthusiasts (Thule Co., Ltd. 2009). “In 1942, Thule was founded by the Thulin family, when Erik Thulin, a true lover of the outdoors, put the Thule name on a Pike Trap that he designed and began to sell to the fisherman of Scandinavia.”(History. 2010) So far, Thule that has become an international company still retains the value of a Scandinavian company rooted in Sweden, which is regarded as “*solid quality, timeless design, continuous innovation, empowered and cherished co-workers, and an undying respect for nature and the environment.*”(History. 2010) Today, its brand is captured in three core values: Smart Solutions, Shared Passions and Active Lifestyle (Thule Co., Ltd. 2009), which also can be regarded as an extension of its Scandinavian culture and heritage of the founder. Therefore, we think that environmental sustainability for Thule is inherent connotation of its company culture and a valuable heritage of the founder, which was not performed effectively.

After 2009, Thule operates a portfolio including Roof Racks, Bike Carriers, Cargo Carriers, Snow-sports, Watersports, Snow Chains, Luggage and Packs, and Work Solutions (Products. 2010). As could be readily seen, the function of most Thule’s products is to connect their consumers with outdoor sports and living, such as cycling, skiing, speed boating, and camping, etc. In addition, within Thule’s yearbook (Thule Co., Ltd. 2009) named *Share Our Passions*, almost all the pictures and statements illustrate that Thule’s products is to provide active families, professionals and outdoor enthusiasts with various smart solutions to carry their kayak, rod, bike, skis and gear. “Wherever the road leads.”. “Whatever your ride.” (Thule Co., Ltd. 2009). For consumers, Thule’s products become their bridge to be close to and enjoy natural environment, as well as to fire their passions. Imaginably, it is thus ridiculous and irony if Thule’s product has certain detrimental impacts on environment over its lifecycle. The obvious conflict of philosophies is going to make consumers lose the confidence in these products. Therefore, we think, the environmental sustainability for Thule is determined by the nature of its products.

Thule put solid quality and continuous innovation on the top level of the company strategy. Thule spent € 2,000,000 in investing into a new test center at Hillerstorp, southern Sweden (Thule Co., Ltd. 2009). It is also Thule’s largest development center (Thule Co., Ltd. 2009). According to the statement of Yearbook 2009 (Thule Co., Ltd. 2009), Thule spent a lot in guaranteeing the perfect quality of its products and to develop new technical solutions faster, smarter and better. In addition, Thule thinks

that it should win all the consumer tests against comparable competing products. the test center makes this possible (Thule Co., Ltd. 2009). The **absorption** in products' quality, innovation, and the spirit of striving for perfect, we think, are the performance of being responsible to the consumers. On the other hand, the Internet has radically changed consumers' buying behavior. As Thule said, "nowadays most people begin the process of buying a Thule product with some online research."(Thule Co., Ltd. 2009) In order to match the need, the new website taken 12,000 working hours and cost € 1,500,000 was launched in November 2009 (Thule Co., Ltd. 2009). Through internet, visitors can efficiently acquire information, knowledge and lifestyle of Thule's product, and choose Thule's products or solutions which can be tailored for their own car by the Fit Guide, a complete database. They can also find the nearest retailers on the new website even buy and pay online (on the North America). We agree with Thule that the new thule.com is a platform to directly communicate with the end consumers (Thule Co., Ltd. 2009). Meanwhile, it is also a part of Thule Retail Partner program, which includes a range of supports within marketing and sales process to help Thule-focused retailers conquer challenges in new era (Thule Co., Ltd. 2009). Admittedly, these signify that Thule has paid close attention on the benefits of customers and co-workers. Thule has incorporated the philosophy of being responsible into its corporate culture. We think that it has been a part of it brand image. Therefore, the environmental sustainability for Thule is a sensible supplement to its existing corporate performance. Finally, it could reinforce and strengthen Thule's responsible brand image.

3.2 Basic academic theory on Sustainability

In accordance with the theory of Makipere, & Yip, (2008), the different levels of pressure compel some organizations to have to be more advanced in corporate environmental sustainability. As the world leader within sports and utility transportation, consuming mainly steel, aluminum and special plastics, Thule faces a pressure contributed by 4 principal factors that are: (1) the nature of its industry's product, (2) the level of its industry's energy and resource consumption, (3) the criticality of human capital for its industry's success, (4) the size of the company within its industry (Makipere, & Yip, 2008).

In their article, named *Sustainable Leadership*, Makipere, & Yip, (2008) answered an important question – why some companies are leaders and others laggards in corporate sustainability, by detailedly explaining the four pressures above. According to their theory, we discuss the concrete pressure to be more sustainable that Thule has faced.

For the nature of an industry's product, Makipere, & Yip, (2008) summed up three types of companies. Firstly, in high-energy consuming and heavy-polluting industries, the nature of the companies' products generates a strong demand for developing

greener products. otherwise environmentally conscious customers would shift away from them, such as companies in the fields of energy, utilities and chemicals (Makipere, & Yip, 2008). Secondly, in some industries, the principal products are used to make other companies more sustainable, such as the telecom industry's products which can reduce the need of company travel and transport with energy consuming and atmospheric emissions (Makipere, & Yip, 2008). Thirdly, that sustainability is considered essential in product branding or differentiation would propel these companies to engage in sustainable product development, such as Eurostar with the slogan "Greener than flying" (Makipere, & Yip, 2008). According to the theory of Makipere, & Yip, (2008), we think that Thule could be the third one, because the environmental sustainability for Thule is a significant and latent attribute which is determined by the nature of its products. As we discussed above, it is irony that such products has negative impacts on environment. Meanwhile, the latent, difficultly-detected environmental attribute would make Thule the most dangerous among these three types of companies. Because, in the long run, continuously improving environmental concerns make customers relate Thule's products and services with sustainable image, subsequently earning more market share.

The more volatile and higher energy prices as well as an accelerating depletion of natural resources make some companies strive to discover more efficient manners of consuming energy and nature resources, subsequently achieving greener products or corporate performance at a profit (Makipere, & Yip, 2008). "Steel and aluminum are most important raw materials for the Thule production." (Thule Co., Ltd. 2009) We also found that Thule might be in great demand of some special plastics. Thereby, the profitable energy and resource saving will motivate Thule to achieve sustainability. We think that the energy and resource consumption is the second factor contributing Thule's pressure to be sustainable.

Makipere, & Yip, (2008) suggest that "embracing sustainability is one way to attract and retain the talent a company needs, both to survive as a business." Besides undertaking responsibility for the environment, it also includes enhancing employee satisfaction (Makipere, & Yip, 2008). As a typical Scandinavian company rooted in Sweden, Thule and its staff have accepted the coherent culture of *undying respect for nature and the environment* (History. 2010). The unsustainable corporate performance thus would have more conflict with the culture and recognition in staff's mind. On the contrary, Thule would get a powerful competitive strength in retaining and recruiting top talent. For this perspective, Thule faces the pressure contributed by the criticality of human capital for its industry's success. We think that it is comparatively small but not inexistent.

Makipere, & Yip, (2008) found that the size of the company have an effect on its sustainability success in certain industries, such as the pharmaceuticals and automobile sectors. They also mentioned that every company is possible to become a leader in sustainability (Makipere, & Yip, 2008). Although Makipere, & Yip (2008)

did not refer to the industry of Thule's, we still think that Thule, as an industry leader (Thule Co., Ltd. 2009), faces the risk and pressure of which its competitors would become a sustainability leader in its industry. Therefore, Thule's company size and industry leadership are the fourth factor contributing its pressure to be sustainable.

3.3 Summary on relations between environmental sustainability and Thule.

The environmental sustainability for Thule is important. It is triggered by a combination of endogenous requirements and exogenous pressures. On the one hand, the endogenous requirements include Thule's inherent connotation of Scandinavian culture of undyingly respecting nature and the environment, the nature of Thule's products, the existing actions being responsible to product quality, consumers and co-workers, the abundant energy and natural resource consumption, and Thule's company size and leadership position within its industry. On the other hand, the exogenous pressures involve a powerful tendency of a growing consciousness related to environmental protection, the more volatile and higher energy prices as well as an accelerating depletion of natural resources, and the keen competition within similar industry.

4. The Background of Green Consumption

The recognition of environmental degradation has taken a long time to arise in China (Head, 1996. Chan, 1999). Over recent years, the concerns of environment have been increasingly rapidly in China, especially after the Copenhagen Climate Conference 2009. Now, many Chinese citizens have the awareness and wishes to protect and improve environment. For instance, the investigation conducted by Song, et al. (2009) in Benxi, a city located in northeast of China, indicates that 95.71% of the public believe that the environmental protection are important. 55.28% of the public think that they have a strong consciousness of environmental protection.

While it is continuous debate that how to deal with detrimental impacts of human activities on the environment. Businesses and customers have entered the green consumption and the green market (Woolverton, & Dimitri, 2010). The pollution and corporate impacts on environment are regarded as typical negative externalities by economists (Mankiw, 2004). They also put forward solutions from the perspective of government involvement, including Command-And-Control Policies, Pigovian Taxes and Subsidies and Tradable Pollution Permits (Mankiw, 2004). However, we think that these solutions just increase the direct costs of corporate actions that would pollute the environment. These even probably make illegitimate participants get windfall benefits, because undetectably environmental pollution would save corresponding costs for him. Fortunately, in 1960's, the green consumption or green consumerism was born in Europe and US (Li, & Zhan, 2007), which is a better solution for environmental externalities. In 1963, International Organization of Consumer Unions (IOCU) first proposed the concept of green consumption, pointing out that consumers should have the green obligations, and in 1991 adopted the "green consumerism resolution" to call on the world consumers to support eco-labeling schemes (Gao, et al. 2008). Peattie, (1992) defines green consumption as "the purchasing and non-purchasing decisions made by consumers, based at least partly on environmental or social criteria." After that, Charter et al. (2002) defined it as "the use of individual consumer power to promote less environmentally damaging consumption, while still satisfying consumer wants and needs." Contrast to mandatory government measurement, green consumption and green marketing could maximize the profits of a company which improves its environmental performance (Woolverton, & Dimitri, 2010). For enterprises, green consumption and marketing not only could promote long-run development but also improve short-term money returns. It thus internalizes the externalities of environmental issues (Mason, 2009). In recent years, green consumption and marketing have triggered close attentions and investments from producers (Aichlmayr, M. 2010). In addition, Grunert (1993) asserts that 30% to 40% of environment degradation can be laid at the door of the consumption activities of private households. As a result, to alter consumers' behaviors and producers' actions on green consumption could prevent environmental degradation. With the growing of the public consciousness of environment protection, consumers

are realizing the importance of their individual buying behavior for improving environment. Sharing the experience of developed countries, more and more consumers in China have been recognizing the concept of green consumption that “they buy and consume not only ‘a product’, but also what went into its production, and what will happen in the future as a result of consuming that product.” (Tsay, 2009)

The continuously increasing demand for sustainable products, which is triggered by green consumption, motivates the profit-driven enterprises (Chan, 1999). It creates a balance between the expectations of consumer and profitable commercial motives (Hailes, 1998). From our perspective, green consumption is a positive regulator in three dimensions to achieve environmental protection and improvement. First of all, corporate environmental performance is no longer the burden of costs, on the contrast, it becomes the voluntary responsibility towards environment due to the incentive from market demand generated by green consumption. It is a profitable business practices. Thereby, the existing demand and long-term benefits promote enterprises to reduce the detrimental impacts on environment as well as the waste of nature resources. Secondly, sustainable products and the corresponding buying behavior are an effective and direct environmental education to protect our nature by individuals. Last but not least, the combination of corporate performance and consumer behavior would dramatically prevent the environmental degradation with the win-win manner.

The term of *green* can be generally summed up in low polluting, recycling and resource saving (Tsay, 2009). Specifically, Elkington, Hailes, and Makower, (1993) pointed out several essential characters of green products in their book named *The Green Consumer*. They claim that green products should not:

- ✓ “Endanger the health of people or animals”.
- ✓ “Damage the environment at any stage of its life, including manufacture, use, and disposal”.
- ✓ “Consume a disproportionate amount of energy and other resources during manufacture, use, or disposal”.
- ✓ “Cause unnecessary waste, either as a result of excessive packaging or a short useful life”.
- ✓ “Involve the unnecessary use of or cruelty to animals”.
- ✓ “Use materials derived from threatened species or environments”.

--Elkington, et al. 1993. Green Marketing, 2010.

Eco-labeling is another scheme and need to be discussed when we mention green consumption. Compared with some mandatory product certifications, eco-labeling is a market-based complement to reflect products’ impacts on environment over their whole life cycle, while conveying environmental information to consumers (Ecolabel. 2010). Impartial and expert third party operates thorough evaluation of a product and then awards an eco-label (EU Ecolabel. 2010). For customers, the green products,

services and corporate environmentally friendly practices are easier to identify by their eco-labels. In terms of sustainable products and services, eco-labels are the straightest symbol for customers to pick them up from the mass supermarket shelves. For producers, the leadership criteria of environmental performance required by eco-labeling schemes are a clear guidance to be sustainable. More than two dozens of credible eco-labels operated by NGOs and sponsored by the governments are now in operation worldwide (Tsay, 2009), which are regarded as a solid bridge between green consumption and product environmental performance. In China, there are some eco-labels including *China Environmental Labelling* (China Environmental United Certification Center), *Green Label Scheme* (Hong Kong), *Hong Kong Federation of Environmental Protection* (Hong Kong), and *Green Mark Program of R.O.C* (Taiwan), etc. (Tsay, 2009). We plan to introduce *China Environmental Labelling* in the following section.

Green consumption needs the support of green marketing. For a company like Thule, it could not be adequate to simply supply the green products or improve its corporate environmental performance. It might need a strong marketing strategy to support and reinforce its sustainable performance, namely green marketing. Green marketing was first advanced in first seminar on “Ecological Marketing” held by American Marketing Association in 1975. Tsay (2009) thinks that green marketing includes a range of corporate activities. It involves redesigning current product portfolio, improving manufacturing process, ways of packaging, and the forms of advertising (Tsay, 2009). From our perspective, it also includes improving logistics process and any other adaptation to meet the requirements and expectations of consumers in sustainability. For the sustainable products and corporate environmental performance, the strategy of green marketing must be designed based on the characters of green purchase behavior in target market.

5. Literature Review of Green Consumption in China

As the biggest emerging country, China is also the world's biggest emitter of carbon dioxide (Hunt, 2009). China simultaneously faces other intense environmental pressures (Hou, 2009). Since green consumption is regarded as an excellent solution to prevent environmental degradation, we want to know the current situation of green consumption in China, and how Chinese consumers relate to green consumption and green products, and corporate environmental sustainability.

5.1 Relations between Green Consumption and Green Marketing

In the front of the wave of sustainable development, as a world leader rooted in Sweden (Thule Co., Ltd. 2009), Thule need sustainable development. However, it is one of the key factors on how to choose the path and manner of transformation.

The solution could be complex. Therefore, we try to figure out the Chinese consumers' cognition, buying behavior and psychology, and concerns about green consumption instead, because Thule's corporate sustainability and success in green consumption needs the support of green marketing.

Several Chinese scholars think that in China it is not enough to just perform sustainably alone in manufacturing process, logistics and purchasing raw materials without regard to the consumers' psychology, interest and concerns (Liu, & Yuan, 2002. Zhu, 2006. Luo, 2004. Liang, & Luo, 2009). From their perspectives, as a pioneer of sustainable company, it has to implement a compromise at the moment, namely to selectively, gradually and progressively make the products and itself sustainable, according to the attitude and cognition of consumers toward green consumption. It is because that every enterprise cannot ignore the present commercial essence---consumer-oriented, even considering the importance of sustainability. In short, on the one hand, it must selectively reduce some certain detrimental impacts on environment and the waste of natural resource in the way that consumers can recognize. on the other hand, it simultaneously has to implement a strong green marketing to support and reinforce its sustainable performance, based on the cognition, buying behavior and psychology as well as concerns of consumers' about green consumption. What are the Chinese consumers' perception, feeling and buying behaviors toward sustainable products and corporate environmental performance? We will figure out in subsequent chapters.

5.2 Green Consumption Triggered By Environmental Degradation

In common with the experience of industrialization from most developed countries, China, as the biggest developing country, has also been paying an extremely high ecological price for its rapid economic growth in terms of continually environmental degradation and an accelerating depletion of natural resources (Hou, et al. 1994). We find that environment pollution, the accelerating depletion of natural resources, and economic development took place simultaneously in China. It is a big potential crisis. Some scholars predict that serious environmental damage and depletion of natural resources would make China's economy stop. On the other hand, we also find that the government and the public began to pay close attention to environmental management and protection, perhaps because the Chinese economy and society have developed dramatically, thereby the surplus of social wealth can be used for environment. In recent years, China has been spending a lot in protecting environment and conserving nature resources (Zhao, & Jia, 2005. Gao, & Zuo, 2008). The environmental concerns in Chinese citizens are also increasing. Meanwhile, green consumption, as a win-win business model and a way to prevent environmental deterioration, has also attracted attentions and investment in China (Li, 2006. Gao, et al. 2008. Cheng, & Yang, 2001. Cheng, et al. 2002).

5.3 Green Consumption in China Is Not Perfect

In contrast to Western countries, green consumption in China started late, but develops rapidly (Gao, et al. 2008). In 1963, International organization of Consumer Unions (IOCU) first proposed the concept of green consumption, pointing out that consumers should have the "green" obligations (Gao, et al. 2008). Over that period, the studies of green consumption focused on resource conservation (such as energy, water), product recycling and refuse sorting etc. (Li, & Zhan, 2007) After that, in the late of 1980s and the early of 1990s, the concept of sustainable development had been commonly accepted by the public and the governments. (Li, & Zhan, 2007) They thus got a more comprehensive and profound realization of environmental protection. The environmental friendly attribute of products became a new comparative advantage in the European and US markets (Li, 2006). Compared with those markets, China established its first eco-labeling scheme, or institution of green products until 1993 (Gao, et al. 2008. Cheng, et al. 2002). After more than a decade of development, it has developed to a certification system which covers dozens of categories, such as food, beverages, textiles, building materials, appliances, lighting, automobiles and many other commodities (Cheng, & Yang, 2001). If we only focus on the speed of development, the volume and categories of green products in Chinese market, we might say that green consumption in China develops rapidly. Green food, for example, grow up rapidly from nothing since the 1990s. Now it had 11 categories, over 200 kinds of green food, such as grain, edible oil, fruits, and vegetables in 2001 (Wang, &

Li, 2003). In 2001, total production of green food was more than 20 million tons, and the annual turnover reached € 500 million, it also covered most of China's provinces (Wang, & Li, 2003). In 2001, China also achieved 400 million U.S. dollars in export of green food (Wang, & Li, 2003). However, the development of green food was unbalanced. The quality of green food is comparatively low. In such a big volume, the "AA" grade green foods that achieve standards of ISO14000 are only 2.1% of a total (Wang, & Li, 2003). The most of the other stand "A" green foods just meet green food criteria of China which is lower than the international standards (Cheng, & Yang, 2001). From the environmental perspectives, "A" grade foods are not green enough, which should be named *Safe Food* (Cheng, & Yang, 2001). In addition, compared with a 30% premium of foreign green food, the premium of China's "AA" green food are too high. the price of many green foods is at least 2 to 3 times than that of ordinary products (Qian, & Sun, 2009. Wang, & Li, 2003). We think that green consumption in China is still under developing. Meanwhile, some professional surveys demonstrate a fact that nearly 90% consumers have bought green products (Zeng, et al. 2007. Wang, & Yu, 2007), compared with the percentage of only 38.7% in 1999 (Xie, 2008). However, most of them have a very vague and even shallow recognition of green consumption (Yan, 2003. Cheng, et al. 2002). In short, many aspects of green consumption in China need to be improved.

In China the certification system for green products is imperfect so far (Gao, et al. 2008. Zeng, et al. 2007). In 2004, a report on green food released by China Green Food Development Center and Green Food Office of Beijing illustrates that a lot of "green food" labels were abused, of which some enterprises pretended to make a "green fraud" to mislead customers (Wang, 2005). In addition, the regulations and criteria of some eco-labeling schemes in China are neither stringent nor transparent (Gao, et al. 2008). Sometimes, it is rough-and-tumble. This confusion makes consumers hard to accurately identify and even be reluctant to purchase green products, so as to not only upset the order of the green market but also damage the confidence of green consumption. It thus blocks the development of green consumption and distorts the goal of protecting and improving environment (Liu, 2005). However, in recent years, the government-conducted eco-labeling schemes have fortunately changed the situation to some extent, such as *China Energy Label* launched on March 1, 2005 (Jin, & Li, 2005). We will introduce *China Energy Label* with *China Environmental Labelling* in the following section.

Chinese consumers are not yet fully aware of the environmental and ecological attributes of green consumption (Sohu.com, & China Environment Federation. 2009). As we mentioned above, most of Chinese citizens have experience of purchasing green products, but the environmental attribute is not the main buying motive of them. In 2009, a survey of Consciousness of Green Consumption illustrated that 41.2% of green products consumers believe it benefits for their own health. 35.4% think it is fashion. However protecting environment, as a reason, only accounts for 23% (Sohu.com, & China Environment Federation. 2009). Meanwhile, another survey

conducted by Zu, et al. (2007) demonstrated that 68.9% of consumers prefer to buy green clothing for the purpose of seeking comfort. In addition, Yan, (2003) considers that Chinese green consumers can be divided into light green, medium green, and dark green consumers. In term of this category, most of consumers is light and medium greens. Yan, (2003) also suggests that light green consumers in China are those who have vague green consciousness. Even 2.89% of people believe that green products are the "the product with green color"(Cheng, et al. 2002). Their green purchasing is always random and unstable. They are not willing to afford premium green products. Compared with the light ones, medium green consumers have a strong environmental awareness, but also lack a comprehensive consciousness of green consumption (Yan, 2003). They selectively buy green products that are much more closely linked with the benefits of themselves, such as green food and green building materials (Yan, 2003). The survey of Beijing citizen in 2009 demonstrates green food accounted for 61.12% of all consumed green products (Qian, & Sun, 2009). For them, a 5%-15% premium would be accepted (Yan, 2003). The last category, dark green consumers are *real* green customers who indeed have environmental concerns. They consciously, actively and voluntarily participate in green consumption with a comprehensive and profound consciousness (Yan, 2003). Unfortunately, dark green customers in China merely account for 11% (Sohu.com, & China Environment Federation. 2009). It is because that only 11% of consumers claimed that the environmental issue is their *first* concerns within the process of consumption (Sohu.com, & China Environment Federation. 2009). However, from business perspective, 11% dark green consumers still have a big volume due to China's huge population.

Income and price are still an important factor influencing green consumption. In other words, the price premium is the biggest barriers to disseminate green consumption (Tsay, 2009). For enterprises, to produce the green products signifies, in short-term, additional costs must be spent in reducing detrimental impacts on environment by using environmentally friendly technologies and materials etc. Now, high price thus becomes a character of green products. According to a survey made in Beijing, high price is the first reason of which consumers(56.53%) are unwilling to buy green products (Qian, & Sun, 2009). Cheng, and Yang, (2001) also illustrated that respondents with high-income were significantly more interested in buying green products. Respondents with more than € 1,200 of monthly income are active participants in green consumption (Cheng, & Yang, 2001). Income as a barrier was also testified by Zhang, & Yu, (2006). it is still the most significant decision factor of purchasing green rice. Ideologically, everyone is an environmentalist due to the demand of clean and beautiful nature. but in practice, many people often purchase on the cheap (Cheng, & Yang, 2001). In terms with the premium of green products, in common, customers are willing to pay up to 20%. For example, consumers in Wuhan who are willing to pay less than 10% premium and 10% to 20% for green food account for 45.3% and 50.2% respectively (Zhang, & Liu, 2009). Le, and Zhao, (2008) also illustrated the similar result of 20% premium. The investigation conducted by

Wang, and Yu, (2007) illustrated a little higher result. Customers are willing to pay up to 30% of a premium for green purchasing (Wang, & Yu, 2007). In practice, Qian, & Sun, (2009) found that existing retail price of green food is 3 to 5 times higher than the ordinaries so that most of consumers give up purchasing. Wang, & Li, (2003) also suggests that the price of many green foods is at least 2 to 3 times than that of ordinary products.

5.4 Two Examples of Eco-Labels in China

China Environmental Labelling



Figure 1.
China Environmental Labelling

State Environmental Protection Administration of China (SEPA) launched the *China Environmental Labelling* on May 17th, 1994 to provide guidance for the production of green products with good quality and environmental performance, to improve the public environmental consciousness, and to promote green consumption (Chen, et al. 2007. Yan, & Jiang, 2007). The first administrative organization is China Certification Committee for Environmental Labelling Products (CCCEL). After September 2003, China Environmental United Certification Center Co., Ltd (CEC) took over the work of technology assessment, labeling certification and supervision (Introduction. 2010). Ended in April 2010, a total of 56 categories green products were included in China Environmental Labelling program. In total, more than 2,400 enterprises have been awarded the logo of *China Environmental Labelling* (China Environmental Labelling, 2010).

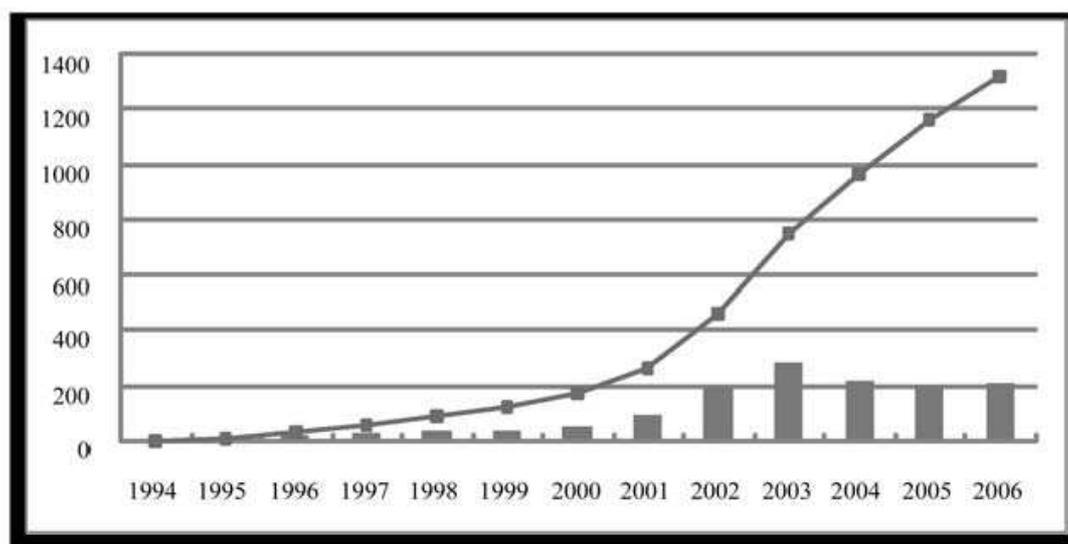


Figure 2. The number of certificated enterprises in China Environmental Labelling Schemes (Chen, et al. 2007)

The approval standards and procedures of *China Environmental Labelling* are

implemented in accordance with ISO14020 (Introduction. 2010). In recent years, CEC actively coordinates with other countries' eco-labeling organizations. It has signed a series of mutual recognition agreement with Germany, South Korea, Japan and Australia for environmental labeling (Certification Introduction. 2010).

China Energy Label



Figure 3.
China Energy Label

With the "Energy Efficiency Labeling Management Approach" promulgated, *China Energy Label* scheme was launched on March 1, 2005 (Cao, & Wang, 2009). China Energy label is the most important mandatory certification system conducted by *National Development and Reform Commission, General Administration of Quality Supervision, Inspection and Quarantine, and Certification and Accreditation Administration of China* (Peng, & Wang, 2008). The objectives of awarding the *China Energy Label* are to promote enterprise innovation of energy efficient technology, green consumption, and achieve energy-saving. It has categorized 4 groups and comprised 15 types of energy consuming products, such as household appliances, commercial installation, illuminating apparatus and office equipment (Cao, & Wang, 2009).

According to the criteria of *China Energy Label* scheme, the energy-efficiency of energy consuming products is divided to 5 levels (Peng, & Wang, 2008). Customers can purchase refrigerators, washing machines and air conditioners with high energy-efficiency identified by *China Energy Label*, thereby promoting energy conservation through market force.

5.5 Chinese Consumer Attitude and Behavior toward Green Products

In China, consumers who purchase green products have the following characteristics:

In general, the percentage of women who have bought green products is higher than that of man, especially for green food (Li, & Zhan, 2007. Cheng, et al. 2002. Cheng, & Yang, 2001. Zeng, et al. 2007). Compared with this, Men are the main buyers of green building materials. the percentage of male purchaser is 7 times than that of females (Sohu.com, & China Environment Federation. 2009). In addition, women are more concerned about the environmental attributes, while the attribute of fashion are men's first reason of green consumption (Sohu.com, & China Environment Federation. 2009). In other words, female green consumers realize the connotation of green consumption, but males more focus on "conceptual consumption" -- green consumption is regarded as a fashion trend and a quality lifestyle (Yan, 2003).

There is a big gap between positive attitude towards green consumption and green

purchasing practices (Yan, 2003). Perhaps the “highway-robbery” price of green products (Qian, & Sun, 2009), the confused eco-labeling schemes (Wang, 2005) and the skepticism of green marketing cause the consequence (Tsay, 2009). Qian, and Sun, (2009) found that existing retail price of green food is 3 to 5 times higher than the ordinaries so that most of consumers give up purchasing. Meanwhile, nearly half of respondents do not know or do not completely trust eco-labels (Sohu.com, & China Environment Federation. 2009). Moreover, people with high-income are significantly more interested in buying green products (Cheng, & Yang, 2001).

The higher the educational level of residents, the stronger the consumption intention in purchasing green products (Yan, 2003). Zeng, et al. (2007) also supported that the participation of green purchasing is proportional to the education level of consumers. Education influences consumer acquiring environmental knowledge, thus affecting the consumer's consciousness of environmental protection and the realization of green purchasing, thereby causing specific consumer behavior (Chan, 2001).

Married consumers attach more importance to green consumption. The proportion of married couples to buy green products is 1.34 times to that of single ones (Zeng, et al. 2007). The investigation conducted by Li, & Zhan, (2007) also identified the similar conclusion. From our perspective, the reason of this phenomenon is perhaps that couples are more concerned about their families' health. “This market segment of consumers may not separate ‘green’ from ‘healthy’ when making purchasing decisions.” (Woolverton, & Dimitri, 2010)

Some studies have found that age is a significant variable for green consumption (Le, & Zhao, 2008. Cheng, et al. 2002), but more investigations illustrate it is a non-significant element (Zu, et al. 2007. Zhang, & Liu, 2009. Zhang, & Yu, 2006. Zeng, et al. 2007). We cannot give a definitive answer, but we know that the main motives of which different age groups purchase green products are different. In China, young consumers, for instance, more focus on environmental attribution and fashion sensations, while the middle-aged more focus on safety and quality lifestyle (Cheng, et al. 2002).

In China, most of green products belong to "private-interest-based" category. (Cheng, & Yang, 2001) and are divided into "private-interest-based" and "public-benefit-based" in term of motivation of green consumption. They also found that most of consumers purchase green products with the motivation of their own health. The dark greens account for 11% of all green consumers, whose *first* concerns within the process of consumption is environmental issues (Yan, 2003). Admittedly, the former is “private-interest-based”. the latter is “public-benefit-based”. That is why green food and building materials, regarded as the typical “private-interest-based” green products, are the largest parts of all green products.

5.6 Summary

Green consumption in China started late, and develops rapidly, but simultaneously is imperfect. In recent years, the environmental concerns of Chinese citizens are enhancing. Chinese government has been spending a lot in protecting, improving environment and conserving nature resources. Green consumption, as a win-win business model and a way to prevent environmental deterioration, has also attracted extensive attentions and investment in China. In contrast to Western countries, until 1993, China established its first eco-labeling scheme. So far, Chinese green product certification system has covered dozens of categories, such as food, beverages, textiles, building materials, appliances, lighting, automobiles and many other commodities. However, the quality of green consumption is not high. Wang, (2005) said a lot of "green food" labels were abused, of which some enterprises pretended to make a "green fraud" to mislead customers. In addition, the regulations and criteria of some eco-labeling schemes in China are neither stringent nor transparent. Fortunately, the government-conducted eco-labeling schemes have changed the situation to some extent, such as *China Energy Label* launched on March 1, 2005.

According to previous survey result and secondary resources, Chinese consumers seems be less understanding about the concept of green consumption, less motivation to protect, improve environmental, and promote sustainable development. In 2009, a survey of Consciousness of Green Consumption illustrated that 41.2% of consumers to purchase green products is because of the benefits on their own health. 35.4% is because of fashion. nevertheless protecting environment, as a reason, only accounts for 23% (Sohu.com, & China Environment Federation. 2009).

There is a big gap between positive attitude towards green consumption and green purchasing practices. Ideologically, everyone is an environmentalist due to the demand of clean and beautiful nature. but in practice, many people often purchase on the cheap. Perhaps the "highway-robbery" price of green products, the confused eco-labeling schemes and the skepticism of green marketing cause the consequence. Income still and price are still the biggest barriers to broader disseminate green consumption.

In China, most of green products belong to "private-interest-based" category. That is why green food and building materials, regarded as the typical "private-interest-based" green products, are the largest parts of all green products.

Compared with a 30% premium of foreign green food, the premium of many green foods in China is 2 to 3 times than that of ordinary products, but Chinese consumers are willing to pay up to 30% premium for green consumption.

Some surveys demonstrate a fact that nearly 90% consumers have bought the green

products (Zeng, et al. 2007. Wang, & Yu, 2007). Compared with the percentage of only 38.7% in 1999 (Xie, 2008), it illustrates the positive trend of green consumption in China.

Chinese literatures show that heavy buyers who would usually purchase green products are those who are married with good education background and high income, while trusting eco-labeling schemes and green marketing. women who concerns about environmental attributes of green products. men who focus on "conceptual consumption" -- green consumption is regarded as a fashion trend and a quality lifestyle. young who focus on environmental attribute and fashion sensations of green consumption. the middle-aged who focus on safety and quality lifestyle.

6. Design and Make a Survey in China

The review of Chinese literatures shows Chinese scholars have already made a lot of studies focusing on general green consumption and green food. Even though the green food is the biggest category of green products, consuming green food is not adequate. The more kinds of green products are consumed, the better it could be. Therefore, we are not limited in the area of green food. we also plan to do a research on green products of Thule which is the world leader rooted in Sweden within sports and utility transportation. Thule delivers “transportation solutions for active families, professional and outdoor enthusiasts wanting to transport their equipment safely, easily and in style” (Thule Co., Ltd. 2009). Although Thule has not eco-labeling, we think that Chinese green customers’ expectation and motivations behind their purchase behaviors are very valuable for Thule’s future environmental sustainability strategy and actions in China.

We will make a survey focusing green consumption and green consumers’ similarity and difference from those mentioned above. We plan to investigate the consumers’ demand of green products and their buying behaviors in outdoor gears and car accessory (*car-trip equipment*) industry. We also plan to survey their attitude and purchase habit related to green and environmentally friendly products in this area. Finally, we are going to figure out the consumer’s willingness of paying more money to purchase products with better environmental performance, and how much the premium they are willing to pay?

6.1 Methodology and Data

To analyze Chinese green consumers, we design a questionnaire focusing on Thule’s products and outdoor gears, conduct an e-survey, and collect data by E-mail. In the part of survey analyzing, we will focus on making a comparison between our data with results of existing researches so as to figure out the similarity and difference of Thule’s green products from the general situation of Chinese green consumption. The questionnaire has third parts involving a general environmental concerns and trend of green consumption, specific recognition and willingness to pay a premium to Thule’s green products and outdoor gears with environmentally friendly performance, and green consumers’ characteristics, buying behavior and socio-economic and demographic data.

We inquired of a staff in a big retailer (*Sanfo*) of outdoor gears selling Thule’s products on April 2nd 2010. He told me that “Thule’s products in China are always classified into *car-trip equipment* category” (Yang F., personal communication, April 2nd, 2010). According to Thule’s statement and our recognition, in China, the consumers’ attitude and cognition about *car-trip equipment* is similar to that of

outdoor gears. Sometimes it is outdoor gears. The consumers' cognition, perception, feeling, and buying behaviors toward green outdoor gears are similar that of green *car-trip equipment*. In addition, Thule's and related products in China is not popular. "Empirically, many consumers do not know Thule's product" (Yang F., personal communication, April 2nd, 2010). We thus plan to use green outdoor gears as the representative of Thule's green products. We could get results of how Chinese consumers relate to Thule's green products and corporate environmental sustainability by analyzing the green attitude from consumers of outdoor gears.

The e-survey by E-mail is not traditional face-to-face communication. the respondents could complete the questionnaire in a free and relaxed atmosphere so as to guarantee the quality of results. Nonetheless, in terms of sampling issues, e-survey cannot aim at an optimum sampling frame. From our perspective, the best sampling frame is those who purchase outdoor gears from stockiest-retailers. Meanwhile, due to the time limitation, we also cannot acquire data from an appropriate sample size. Therefore, our survey analyzing will focus on making a comparison between our data with the results of existing researches so as to figure out the similarity and difference of Thule's green products from the general situation of Chinese green consumption. We finally plan to send out 50 questionnaires in our Chinese friend circle for data acquisition in May 1st to May 15th 2010.

6.2 Our Logic behind the Questionnaire

Question No 1.

As consumers, during the last six months, which efforts you have make to protect environment?

Do people in China have habit to support environment protection through buying sustainable products? In addition, how many people with the purchasing habit are there?

It is a survey related to sustainable business in China. We thus think it is very important to realize the purchase habit on green or sustainable products. In our case, the first question looks like asking people's behaviors to support environment conservation, but my real purpose is to know that "do people in China have been familiar with and have experienced the way of buying green or sustainable products to support companies good environmental performance?"

Question No2.

Have you ever heard about green products, eco-products, and energy-saving products? When is the first time?

We want know the trend of recognition and purchasing toward green or sustainable products.

We do think there is a certain period between realizing and practicing green

consumption, but the consequence by statistics of question 2 can give us the changing tendency.

Question 3, 4 and 5.

No3. Did you buy any products listed below over the last 6 months?

No4. What are your top 3 motives of purchasing green products (besides green and eco-food)?

No5. What are your top 2 motives to purchase green, eco, and organic food?

What kinds of green and sustainable products they have bought and the corresponding reasons or motives?

We should know whether the customers concern about the producers' environmental performance. Or are they only or more interested in what the attributes will do for them and what benefits they will get? (Tangible and Intangible) The motives behind the concrete buying behavior are important. We always say sustainability in a company is not what you have done on environment alone. It also includes the struggles to promote or make your customers associate your environmental performance with a good feeling, perceiving and thinking that customers like. It is so-called green marketing.

Question 6 and 7.

No6. Many people think it is the government or enterprises' responsibility to take care of environment issues. The customers have no obligations to spend money for it. As a customer, would you willing to pay a premium for green consumption?

No7. There is two car-trip equipment, or outdoor gears. They have similar functions, style, quality etc., but different environmental performance, such as energy and natural resource consumption, and the impact on the environment. The product with better environmental performance is more expensive, otherwise cheaper.

Are people willing to pay a premium to buying outdoor gears with a better environmental performance? How much they are willing to spend at most?

We are not sure. However, according some literatures, the principle or idea of protecting environment by the demand side effects is definitely not prevalent. We want to realize the fact. By the way, we inquired of a staff in a big retailer (*Sanfo*) of outdoor gears selling Thule's products on April 2nd 2010. He told me that "Thule's products in China are always classified into *car-trip equipment* category" (Yang F., personal communication, April 2nd, 2010).

Question No 8.

For a company that produces car-trip equipment (or transportation accessory), outdoor gears, how importance are its concerns and actions of improving product environmental performance that you think?

We want know the importance of environmental performance on Thule's products in consumers mind.

According to Thule's statement and our recognition, in China, the consumers' attitude

and cognition about *car-trip equipment* is similar to that of outdoor gears. Sometimes it is outdoor gears. The consumers' cognition, perception, feeling, and buying behaviors toward green outdoor gears are similar that of green *car-trip equipment*. In addition, Thule's and related products in China is not popular. "Empirically, many consumers do not know Thule's product" (Yang F., personal communication, April 2nd, 2010). We thus plan to use green outdoor gears as the representative of Thule's green products. We could get results of how Chinese consumers relate to Thule's green products and corporate sustainability by analyzing the green attitude from consumers of outdoor gears.

Question 9.

Which Top 3 items that you think environmentally responsible companies should be better than others?

What kinds of environmental performance is consumers' favorite?

As we said above, it is important to satisfy the appetite of consumers, which must be recognized as a most crucial part of green marketing.

Question 10, 11 and 12.

No 10. What kind of car do you have?

No 11. How often do you travel by your own car?

No 12. How many outdoor activities do you have per year ?

We want know the target market and potential customers in China for Thule's products.

10, what kinds of car do they possess?

11, the frequency of car trip (or car travelling)

12, their frequency of practicing professional and semi-professional outdoor sports

Question 13 and 14.

No 13. According to your reality, which equipment (car accessories) do you want to equip your car?

No 14. How much you would like to pay for those car accessories?

Compared with EU market, Chinese market is emerging, potentially giant one for Thule. Moreover, up to now, there are not many users. We want know and have to figure out the degree of consumers' acceptance and real demand of Thule's existing products. And how many Chinese consumers are willing to pay?

Question NO.15.

How do you collect the information about car travelling and outdoor activities?

What is the favorite way to get information about outdoor sports and car travelling?

The result also can give us a suggestion for green marketing.

Question 16-19.

No16. Your gender?

No17. How old are you?

No18. What is your highest education background ?

We collect socio-economic and demographic data of respondent.

7. Survey analyzing

The data of 50 surveys are collected from people who were born in Chengdu and work in Shanghai, Chengdu, Beijing by E-mail in May, 2010. Beijing is the capital of China. Shanghai is economic center of China. Chengdu is the biggest city in west of China. It is also the most important economic centers, transportation and communication hubs in Western China. In addition, the outdoor sports are very prevalent in Chengdu. It is also the second largest city of private car ownership throughout China.

Our survey analysis will focus on making a comparison between our data with the results of existing researches so as to figure out the similarity and difference of Thule's green products from the general situation of Chinese green consumption.

7.1 The basic characteristics of samples

The survey covers mainly young people (64%), male (80%). 38 questionnaires are returned out of 50 totally. Questionnaires returned have been filtered according to the survey specification and there are 36 questionnaires valid. In accordance with those 36 questionnaires, the basic characteristics of samples are shown in table 1.

Age	Less than 25	4%
	26 ~ 30	56%
	31 ~ 35	4%
	36 ~ 40	8%
	41 ~ 45	20%
	46 ~ 50	4%
	More than 50	4%
Gender	Male	80%
	Female	20%
Education	Master and above	48%
	Bachelor degree	48%
	Others	4%
Monthly income	Less than 250 Euro	12%
	250 ~ 500 Euro	20%
	500 ~ 800 Euro	24%
	800 ~ 1000 Euro	8%
	1000 ~ 1500 Euro	8%
	More than 1500 Euro	28%

Table 1. Basic Characteristic of Samples (Question 16-19)

7.2 The Practices of Green Consumption

In order to avoid deliberately varnishing themselves, we designed the first question to realize the concrete green consumption in China. The result shows that the prevalence of green consumption in China, described in existing literatures, is not true. We find that there are just only 48% consumers having purchased green products. Meanwhile, according to the data in Table 1, nearly half of them belong to high income consumers based on Chinese living standard (more than 800 Euro per month). However, according to our survey, we fortunately find the positive results about environmental consciousness of Chinese citizens', 88% respondents having made positive behaviors to prevent environmental degradation. Therefore, the first barrier of green consumption is not income, while the practices of green purchasing is relatively low, compared with results of our review.

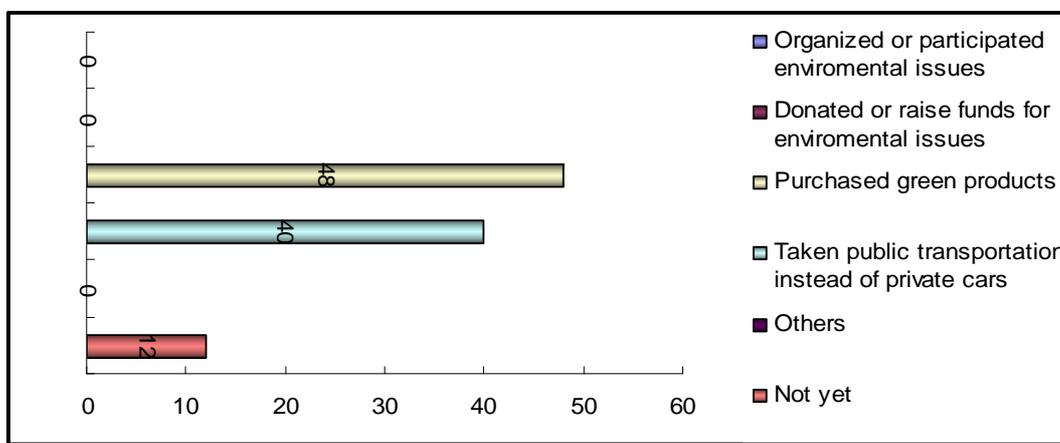


Figure 4. Concerns and Actions of Environment and Green Consumption (Question 1)

7.3 The Trend of Green Consumption

The survey shows all the people have heard about green products and organic food etc. Compared with results of existing literatures, we still find the positive trend of green consumption in China.

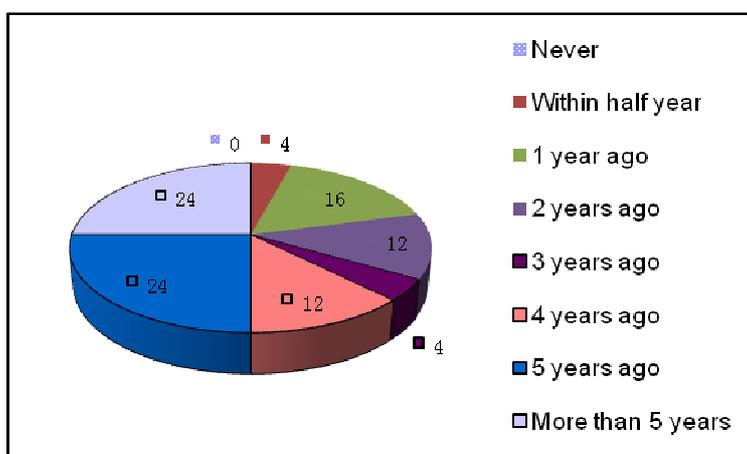


Figure 5. When is the first time that you heard about green products, eco-products, and energy-saving products? (Question 2)

7.4 What kinds of green products they have bought and the motives?

Like the results from existing research, we find that the public also mainly concern about green food, energy-saving household appliances and digital products. The green outdoor gears are less concerned. The reason mentioned above is that most of green consumers in China belong to "private-interest-based" participants.

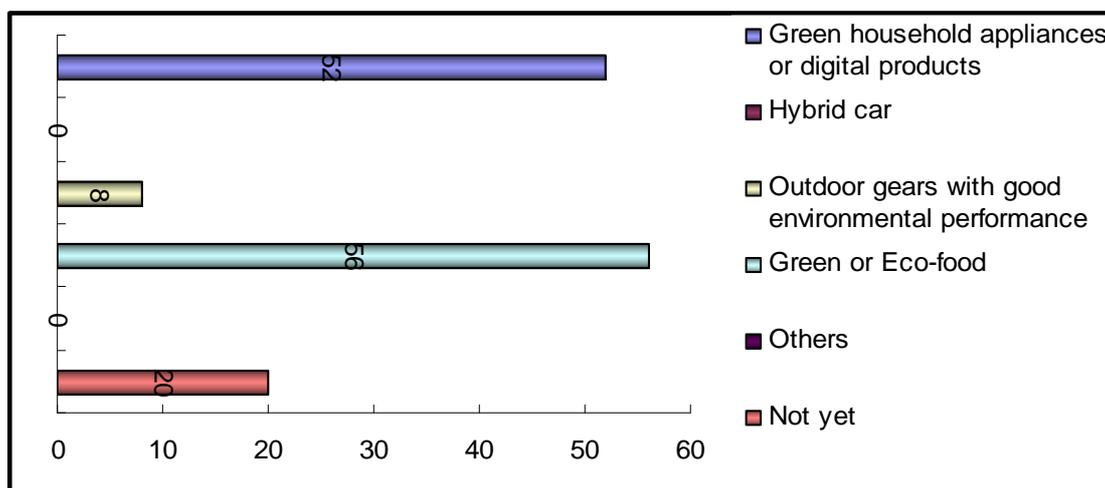


Figure 6. Green and Sustainable Products They Have Bought (Question 3)

The Figure 7 illustrates the top3 motivations for Chinese people to buy green products are health, good association and saving expense. The biggest motive definitely is health, which was proved by existing literatures. In addition, good association must be paid close attention. For Thule, the green attribute of its green products cannot promote consumers’ health and save expense either. Therefore, the motive of good associations will be the most important activator for green marketing of Thule’s green products.

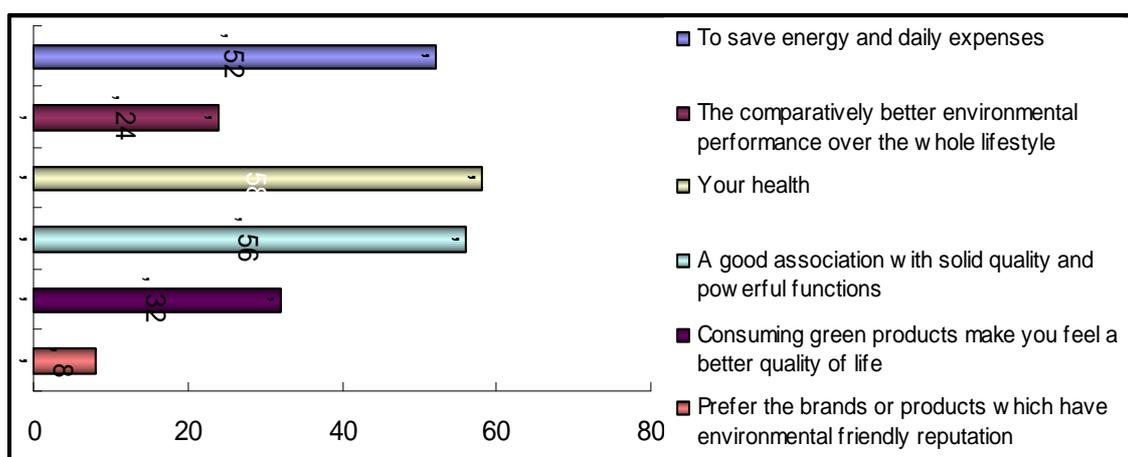


Figure 7. Corresponding Motivation of Green Consumption (Question 4)

As Figure 8 shows, up to 84 % people purchase green food in order to the benefit of

their health. Contrast to this, environmental concerns are not the main motive of green consumption, only 32% and 8% prefer the products with green raw material, logistics and green product brand respectively. We think that our results are similar with secondary literature. “This market segment of consumers may not separate ‘green’ from ‘healthy’ when making purchasing decisions.” (Woolverton, & Dimitri, 2010)

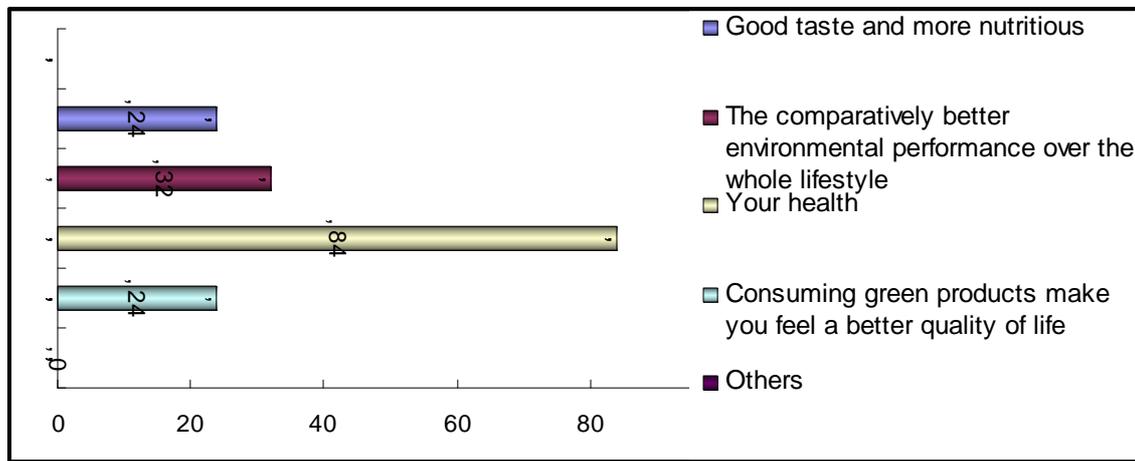


Figure 8. Corresponding Reasons or Motives of Purchasing Green Food (Question5)

7.5 The Willingness to Pay a Premium for Thule’s Green Products

We find that consumers are willing to pay a premium to buy outdoor gears with a better environmental performance, up to 75% people choosing “Yes”. However, for the green products of Thule’s comparison and representative -- outdoor gears, most of consumers only want to pay extra 5%-10% based on original price. According to existing researches, we find that for green food and other green products that closely link with health, Chinese consumers are willing to pay a premium up to 30%. Generally, the willingness to pay for premium for green consumption is relatively lower than another that of European countries..

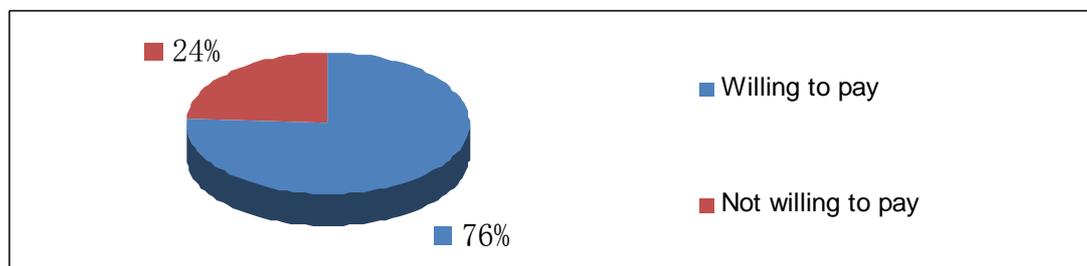


Figure 9. Would you willing to pay a premium for green consumption? (Question 6)

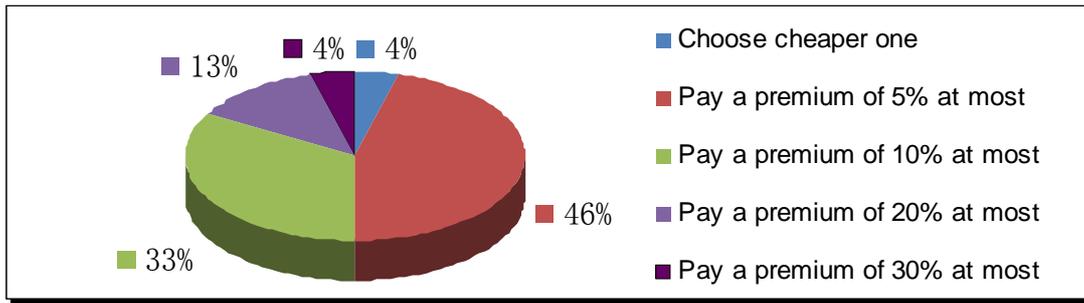


Figure 10. How much premium they want pay for environment? (Question 7)

7.6 The Consumers’ Cognition and Attitudes about *Car-Trip* Equipment

More than 80% respondents think that to improve environmental performance is important or very important for the producers of outdoor gears, the Thule’s comparison and representative. Therefore, the result demonstrates that the nature of Thule’s products determines the importance of the environmental attribute of its products.

Besides the improvement in manufacturing process, 80% of respondents believe that providing recycling service is an important corporate green performance. As a pioneer in its industry, Thule should concern this expectation and preference of consumers’.

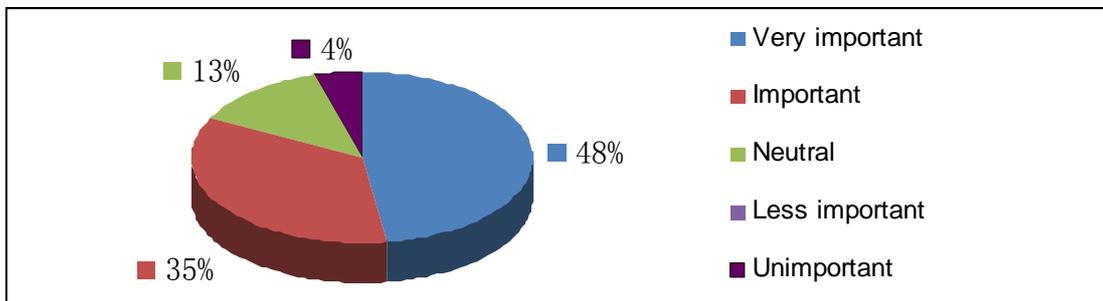


Figure 11. How important are Thule’s concerns and actions of improving product environmental performance? (Question 8)

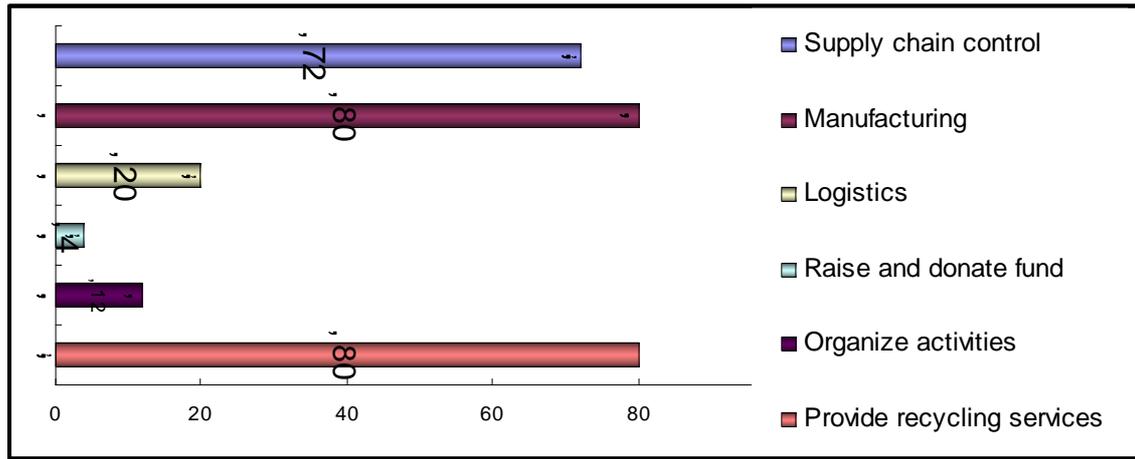


Figure 12. Which Top 3 items that you think environmentally responsible companies should be better than others? (Question 9)

7.7 Green Concept in Car Accessory Industry

From question 11 to 14, we want to figure out how Chinese outdoor and car-trip enthusiasts relate to Thule’s products and their purchasing willingness. However, in terms of sampling issues, e-survey cannot aim at an optimum sampling frame. From our perspective, the best sampling frame is those who purchase outdoor gears from stockiest-retailers.

We still decide to put the primary data of this part in our thesis.

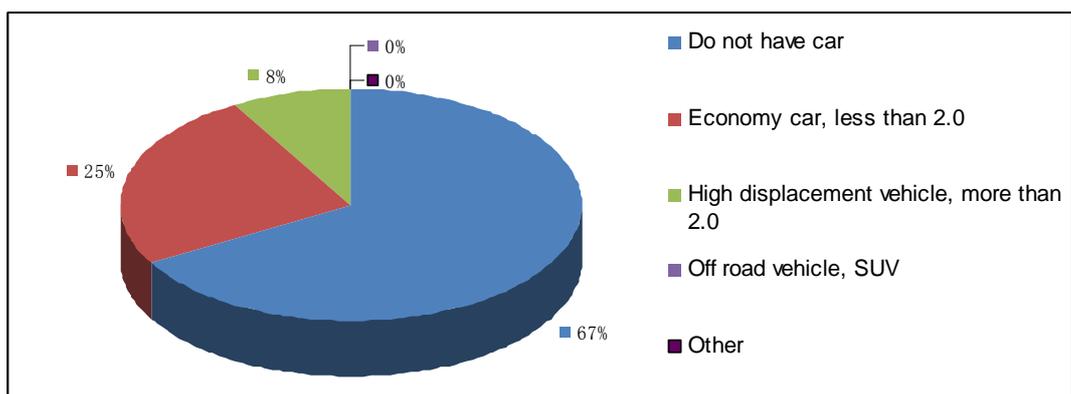


Figure 13. What kind of car do you have? (Question 10)

67% of our responders do not have car so far. However due to the car booming period in China recently, they could be potential car users later.

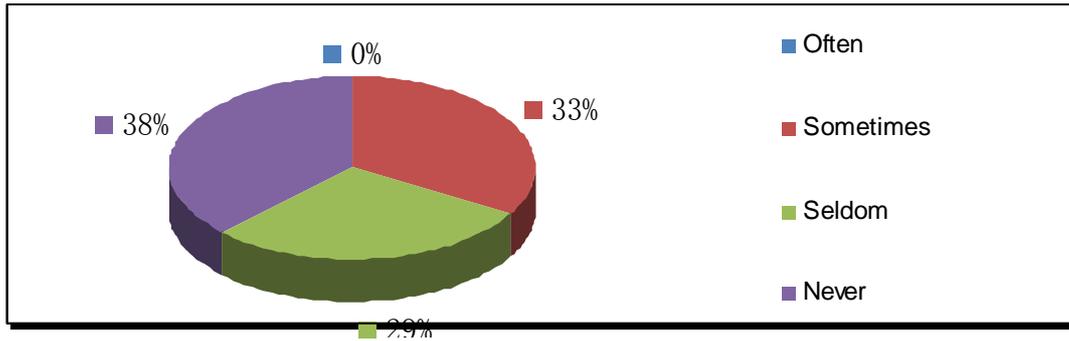


Figure 14. How often do you travel by your own car? (Question 11)

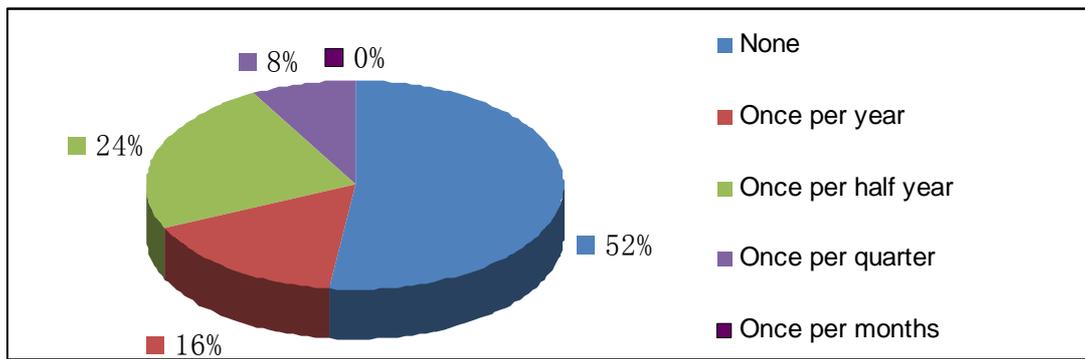


Figure 15. How many outdoor actives do you have per year? (Question 12)

Figure 14 and 15 reflect the characteristic of responder’s outdoor behaviors. The data shows some of them are enthusiasts for outdoor activities, up to 32%. For those people, the top 3 interest products (Figure 16) are Roof Racks (24%), Roof Bike Carrier (20%) and Roof Baskets (12%).

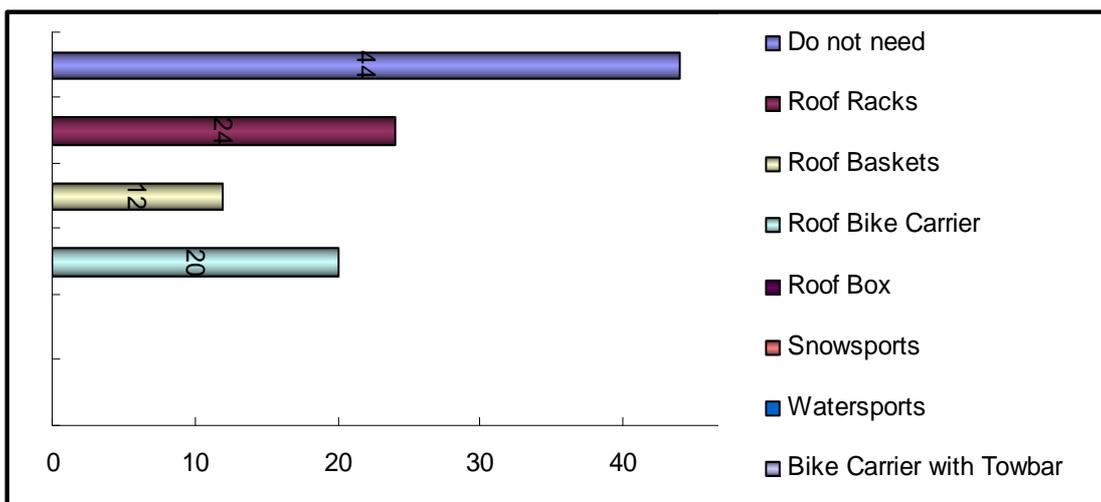


Figure 16. According to your reality, which equipment (car accessories) do you want to equip your car? (Question 13)

According to Figure 16, up to 44% people might have less interest on Thule’s product. There are two main reasons in our opinion, first of all, the more than half percent responders don’t have car. Another reason is that customers are price sensitive. As is shown in Figure 17, up to 63% people just are willing to pay Thule’s products with less than 200 Euro, while only 16% people would like to pay more than 800 Euro.

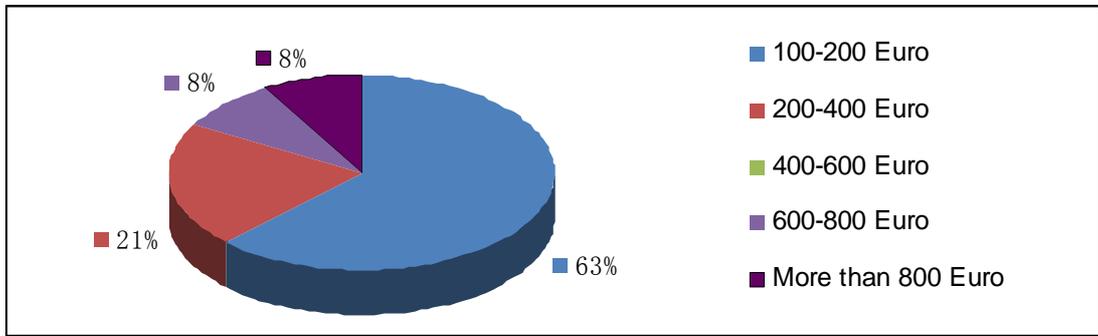


Figure 17. How much you would like to pay for those car accessories? (Question 14)

7.8 Communication Channel.

The Figure 18 indicates the internet and outdoor magazines are the most popular communication channels to share outdoor sports information with consumers. It also indicates those two channels are most efficient ways to post advisements of green marketing for Thule.

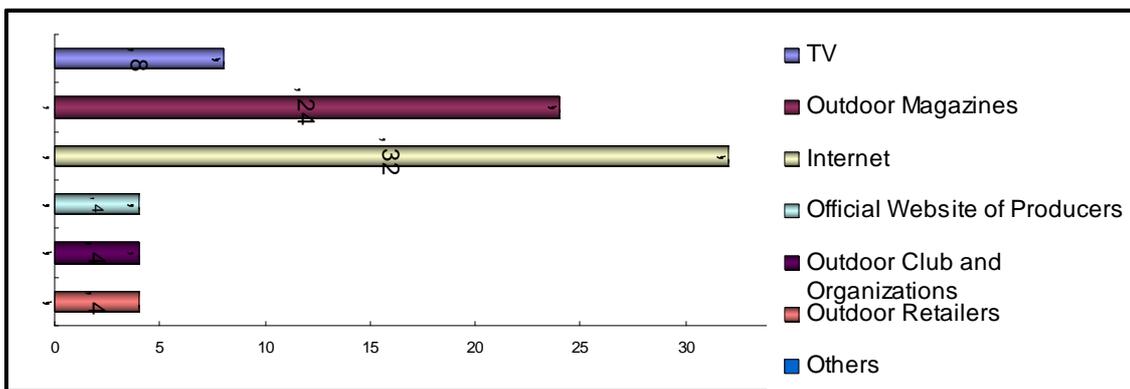


Figure 18. How do you collect the information about car travelling and outdoor activities? (Question 15)

8. Conclusion and Green Marketing Options for Thule

8.1 Good Consciousness without Deed

In accordance with the combination of the results of our survey and the review of existing research, the current situation of China is that green consumption is growing. Consumers have the consciousness of environmental protection, but lack the concrete purchasing behaviors motivated by the green and sustainable attributes to some extent.

Chinese market has possessed the foundation of green consumption, including individual income, eco-labeling schemes and educational level of citizen. After 30 years of reform and opening up, China's economy has undergone enormous changes. China's GDP will exceed that of Japan and become the world's second economy. Shanghai and Beijing's GDP per capita, had exceeded USD 10,000 in 2008 and 2009 respectively. For green consumption with a relatively high price, Chinese citizens have had the economic base to some extent. In addition, after the development of 17 years, eco-labeling schemes in China have had significant progress. Although there are some problems, it is obvious that eco-labeling in China, especially those conducted by the government could positively promote green consumption and disseminate the consciousness of environmental protection (Sohu.com, & China Environment Federation. 2009). Moreover, with the development of economy and social progress, Chinese citizens with bachelor degree and above have dramatically increased. We thus think that Chinese market has possessed the foundation of green consumption, under the situation of continuous environmental degradation in China.

In order to avoid deliberately varnishing themselves, we designed the first question to realize the concrete green consumption in China. The result illustrates that the prevalence of green consumption in China, described in existing literatures, is not true. We find that there are just only 48% consumers having purchased green products. There is a big gap between positive attitude towards green consumption and green purchasing practice (Yan, 2003). According to our survey, we fortunately find the positive results about environmental consciousness of Chinese citizens', because 88% respondents have made positive attitude to prevent environmental degradation. Therefore, the success of Thule's sustainability in China must be based on the premise of eliminating this gap. In the following section we will discuss how to translate the positive awareness to concrete purchasing behavior.

8.2 Follow the Attitudes, Expectations and Preference of Chinese Consumers

Compared with 90% of people who have purchased green products from described in existing literatures (Zeng, et al. 2007. Wang, & Yu, 2007), we find that just only 48% of consumers has purchased green products, the prevalence of green consumption in China is not true. According to the combination of literature review and our survey, we do think that green consumption in China is immature, but the positive development trend is clear.

The result of our survey and the situation presented in existing literatures are similar. It is that the public also mainly concern about green food, energy-saving household appliances and digital products. The green outdoor gears are less concerned. Most of Chinese green consumers belong to "private-interest-based" participants. The top motivations of green consumption are health, good association and saving expense.

According to Chinese literatures, heavy buyers who would usually purchase green products are those who are married with good education background and high income, while trusting eco-labeling schemes and green marketing. women who concerns about environmental attributes of green products. men who focus on "conceptual consumption" -- green consumption is regarded as a fashion trend and a quality lifestyle. young who focus on environmental attribute and fashion sensations of green consumption. the middle-aged who focus on safety and quality lifestyle.

Our survey and the analysis of the nature of Thule's products -- a bridge to connect consumers with natural environment demonstrate that environmental attribute for Thule's product is important. Meanwhile, up to 75% of responders choose "Yes" that they are willing to pay a premium for environment. It is good news. However, compared with 30% premium for green food, consumers just would like to pay more 5%-10%. Therefore, Thule may need to try to control the cost of its green products.

Besides the improvement in manufacturing process, 80% of respondents believe that companies like Thule should provide recycling service is as a green performance. Meanwhile, for consumers, the internet and outdoor magazines are the most popular communication channels to get outdoor sports information. We think Thule also should follow the expectation and preference of consumers.

8.3 Reinforce the Green Attribute of Thule's Sustainable Products

What Thule has to implement, as a pioneer company in its industry, to get short-term profits and long-term comparative advantages?

Like all the green producers, Thule cannot merely improve the green attribute of products over the manufacturing process, and logistics etc. It needs a green marketing

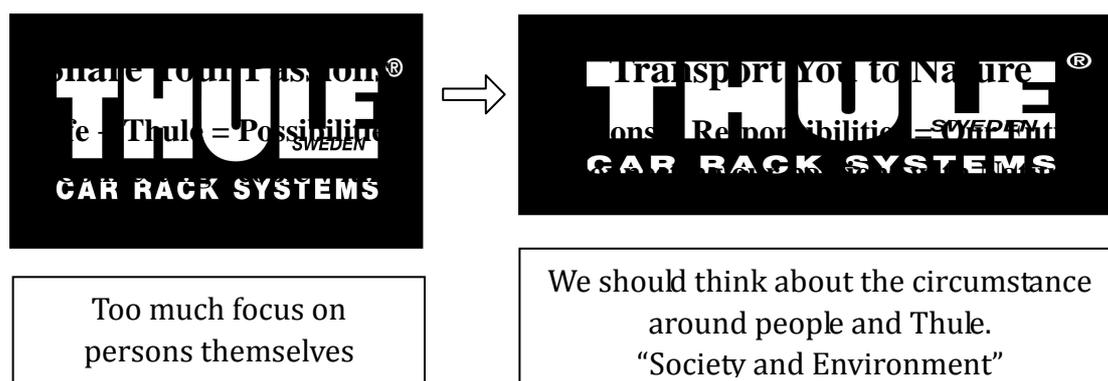
to support and reinforce the green attribute of products and company's sustainable performance. We think that green marketing can effectively guide and promote green consumption. For Thule, the green attribute of its future green products cannot promote consumers' health and save expense either. The motivation of good associations will be one of the important activators for green marketing of Thule's green products. Thule thus might need conduct all the corporate behaviors to reinforce and strengthen the green attributes of its products.

8.3.1 Highlight Thule's Scandinavian Culture That Respect for Nature and the Environment

Fortunately, Thule is a typical Scandinavian company rooted in Sweden. We think that Thule's Scandinavian culture that respect for nature and the environment is an excellent heritage to strengthen its sustainable performance. Moreover, in Chinese consumers' mind, according to our recognition, the Scandinavia is always clean and green. In addition, sustainability strategy is a long-run image-constructing project. We thus suggest rebuilding the Thule's image with strong Swedish and Scandinavian association so as to make Chinese consumers connect Thule's green products with Sweden and Scandinavian environment.

8.3.2 Change the Slogan of *Share Your Passions*

In Thule's Year Book 2009 (Thule Co., Ltd. 2009), we could find *Passions* but none *Nature*. However, the main function of Thule's products is to "transport" consumers to nature. In other words, they are consumers' tools, assistants to be in outdoors, which also are consumer's bridge to be close to and to enjoy natural environment, as well as to fire their passions. The Thule's slogan of green products could be *Transport You to Nature*. We suggest use this modification to enhance and enrich the connotation of Thule's Brand in China.



8.3.3 Seize the Flagship Consumers

As we mentioned above, Chinese green consumers can be divided into light green, medium green, and dark green consumers, while most of them being light and medium greens (Yan, 2003). Cheng, & Yang, (2001) also suggest that most of green consumers are "private-interest-based" participants. The dark green and

“public-benefit-based” consumers are very few. However those consumers concern more of environmental attribute of green products. In addition, they have more perceived consumer effectiveness (Straughan, & Roberts, 1999). Meanwhile, they also have high income and good education. We consider them as flagship consumers. The dramatically exemplary role of flagship consumers is the best form of publicity for Thule’s green products. We suggest seizing the flagship consumers first.

8.3.4 Increase “Face To Face” Communication with Consumers

According to the definition of green consumption, the function of educating consumers is extremely important. According to Thule’s presentation on 26th March, we find Thule rely more on distributors currently. This is not bad, but for green consumption and green marketing it is dangerous. Green consumers need more direct communication with producers. According to the theory of Straughan, & Roberts, (1999), the dark green consumers are altruism. They need the incentives with environment improvement and other positive results. Therefore, we think that Thule could increase the “face to face” communication with consumers so as to share the information that consumers’ behaviors have positive contribution on environment. On the other hand, Thule also can establish an efficient platform to involve their customers into protecting environment and bearing social responsibilities, perhaps through public benefit activities to jointly participate, or through some outdoor club with the mission of environment protection.

8.3.5 Change Smart Solutions to Professional Solutions

According to our recognition, Thule’s current main potential customers in China currently could be professional outdoor enthusiasts rather than family users. Meanwhile, Thule’s products are quality, functional, and professional. However, in order to attract more professional outdoor enthusiasts, we suggest that Thule could highlight its professional attribute by some efforts, such as sponsoring professional mountain bike competition that Thule has done. Maybe they ought to transform Smart Solutions to *Professional Solutions*.

8.3.6 Make Association with Quality Lifestyle

Thule’s current target consumers are 30-45 years old men with high-income. For green consumption, Chinese males more focus on "conceptual consumption" -- green consumption is regarded as a fashion trend and a quality lifeway (Yan, 2003). Meanwhile, the young focus on environmental attribute and fashion sensations of green consumption. while the middle-aged focus on safety and quality lifestyle. (Cheng, et al. 2002). We thus suggest making Chinese consumer associate Thule’s green products with quality lifestyle by advertisement.

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Appendix. Bilingual Questionnaire

您好，我是瑞典隆德大学可持续商业领导力的研究生。我们正在进行中国消费者对环境友好型商品，绿色商品和环境保护以及低碳经济的态度问卷调查。我们需要您的支持。能否占用您5分钟时间？谢谢！

Hello, we are students of Sustainable Business Leadership from Lund University. we are making a survey of your attitude towards environmentally-friendly products, green products and environmental protection and low-carbon economy. To protect environment need your support. Could we take you 5 minutes? Thank you!

近年来中国政府不断出台新政策鼓励和引导新能源产业的发展，并且倡导低碳经济。节能减排，环境保护，绿色购买……这些已经成为大家的热门话题。今天我们希望了解您作为消费者，关于这些问题的态度。

In recent years the Chinese government continued to adopt new policies to encourage and guide the development of green energy, and promote low carbon economy. The discussion of energy conservation, environmental protection, and green consumption ... has become a hot topic. Today we would like to know your attitude on these issues, as a consumer.

1. 作为消费者，在最近6个月中，您为环境保护做出过以下哪些努力？

As consumers, during the last six months, which efforts you have make to protect environment?

- 1, 组织或参与保护环境的宣传、抗议等活动
Organized or participated in dissemination and protests related to environmental protection
- 2, 为治理污染或者保护环境捐款或筹资
Donated or raise funds for pollution abatement and environmental protection
- 3, 购买更加节能、有更好环境表现的商品（又称环境友好型商品、绿色商品或生态商品）
Purchased green products / eco-products / environmentally products
- 4, 减少使用私家车，乘坐公共交通（公交、地铁）
Taken public transportation instead of private cars (e.g. bus, subway)
- 5, 其他， _____
Other
- 6, 暂时还没有
None

2. 您最早听说，绿色商品，环境友好型商品，生态商品，节能环保商品，有机食品是什么时候？

**Have you ever heard about green products, eco-products, and energy-saving products?
When is the first time?**

- 1 没听说过 Never
- 2 最近6个月 Half year ago
- 3 1年前 1 year ago
- 4 2年前 2 year ago
- 5 3年前 3 year ago
- 6 4年前 4 year ago
- 7 5年前 5 year ago
- 8 _____年前 _____years ago

3. 最近6个月您是否购买过以下商品？

Did you buy any products listed below over the last 6 months?

- 1, 节能、环保家用电器或数码产品
Energy-saving, environment-friendly household appliances or digital products



- , 2油电混合动力汽车
Hybrid car
- , 3拥有更好环境表现的户外装备或服装等; 如, Patagonia (巴塔哥尼亚)
Outdoor gears or equipment with good environmental performance (e.g. Patagonia)
- , 4绿色, 生态或有机食品
Green or Eco-food
- , 5其他, _____
Other,
- , 6没有购买过
None

4. 什么是您购买这些产品 (不包括绿色, 生态或有机食品) 最主要的 3 项原因?

What are your top 3 motives of purchasing green products (besides green and eco-food)?

- , 1没有购买过
Has not bought yet
- , 2节约能源, 节省日常开支
To save energy and daily expenses
- , 3这些产品有更好的环境表现 (制造, 运输和使用过程中, 不会对自然环境造成破坏)
The comparatively better environmental performance over the whole lifestyle
- , 4有利于您的身体健康, 更安全, 更放心
Your health
- , 5您觉得质量、性能更好
A good association with solid quality and powerful functions
- , 6购买和使用它们, 让您觉得生活更有品质
Consuming green products make you feel a better quality of life
- , 7热心环保的企业、品牌形象让您感到亲切
Prefer the brands or products which have environmental friendly reputation
- , 8其他, _____
Others,

5. 什么是您购买绿色, 生态或有机食品 最主要的 2 项原因?

What are your top 2 motives to purchase green, eco, and organic food?

- , 1没有购买过
Has not bought yet
- , 2口味好, 营养丰富
Good taste and more nutritious
- , 3这些产品有更好的环境表现 (种植, 运输等过程中, 它们不会对自然环境造成破坏)
The comparatively better environmental performance over the whole lifestyle
- , 4有利于您的身体健康, 更安全, 更放心
Your health
- , 5购买和使用它们, 让您觉得生活更有品质
Consuming green products make you feel a better quality of life
- , 6其他, _____
Others,



6. 很多人认为，保护环境是政府或者企业的事情，消费者没有义务为此多花钱。作为消费者，您愿意为拥有更好环境表现的商品支付更高的价格吗？

(你愿意为那些在原材料生产、加工制造、仓储运输以及使用的过程中不会对环境造成污染，或者说相比之下能更好的保护环境的产品，多花钱吗？)

Many people think it is the government or enterprises' responsibility to take care of environment issues. The customers have no obligations to spend money for it. As a customer, would you willing to pay a premium for green consumption?

- , 1 愿意 Yes
 , 2 不愿意 No

7. 如果有一款车旅装备、或者户外运动的装备、服装等，它们在功能、款式、质量等方面都相同，但是他们在消耗能源、自然资源、以及对环境的影响等其他方面有不同的表现。环境表现好的商品价格要贵一些，反之则便宜一些。

There is two car-trip equipment, or outdoor gears. They have similar functions, style, quality etc., but different environmental performance, such as energy and natural resource consumption, and the impact on the environment. The product with better environmental performance is more expensive, otherwise cheaper.

- , 1 您会选择价格更便宜的商品
I will choose the cheaper one, even if it is not environmental friendly product.
- , 2 您最多愿意为拥有更好环境表现的商品多付 5%
I would like to pay a premium of 5% at most due to the better environmental performance.
- , 3 您最多愿意多付 10%
I would like to pay a premium of 10% at most.
- , 4 您最多愿意多付 20%
I would like to pay a premium of 20% at most.
- , 5 您最多愿意多付 30%
I would like to pay a premium of 30% at most.
- , 6 您最多愿意多付 30%以上
I would like to pay a premium of more than 30%.



8. 您认为作为车旅装备，户外运动装备、服装的生产企业，它们关注、宣传环境保护，提高各自产品的环境表现重要吗？

(降低各自产品在生产制造，仓储运输，使用等过程对自然环境的影响。)

For a company that produces car-trip equipment (or transportation accessory), outdoor gears, how importance are its concerns and actions of improving product environmental performance that you think?

(To reduce the detrimental impact on environment over the process of manufacturing, storage and transportation, and usage)

- , 1 非常重要 Very important
 , 2 重要 Important
 , 3 一般 Neutral
 , 4 不太重要 Less important
 , 5 不重要 Unimportant

9. 您认为对环境负责任的企业应该在哪些方面做得更好，投入更多的人力和物力？
请选择您认为最重要的3项。

Which Top 3 items that you think environmentally responsible companies should be better than others?

- , 1拒绝与破坏环境的供货商合作，只采购拥有良好环境表现的原材料和零配件等；
Only purchasing raw materials and component from suppliers with a good environmental performance.
- , 2在生产制造过程中，节约能源、减少二氧化碳的排放；
Over manufacturing process, to reduce carbon emissions and the waste of energy and raw materials.
- , 3在仓储物流环节，减少长距离运输、提高物流效率、降低二氧化碳排放；
In logistics (storage and transportation), to reduce carbon emissions and the waste of energy.
- , 4为保护环境的公益活动捐款或者筹集资金；
To raise and donate money to support activities and originations of environmental protection.
- , 5组织保护环境的公益活动，和消费者一道积极参与环保实践；
To organize activities of environmental protection and involve their consumers in.
- , 6提供废旧产品回收服务，以免造成二次污染；
To provide services of recycling worn products so as to minimize their impacts on environment.
- , 7其他， _____
Others, _____

10. 您所拥有汽车的类型？

What kind of car do you have?

- , 1我没有汽车 I don't have a car.
- , 2小型轿车(排量在 2.0 以下) Small-displacement vehicles (economy car, less than 2.0)
- , 3大型轿车(排量在 2.0 以下) High-displacement vehicles (More than 2.0)
- , 4越野车、SUV 等 Off-road vehicles or SUV
- , 5其他， _____ Others

11. 您经常自驾车出游吗？

How often do you travel by your own car?

- , 1经常 Often
- , 2有时 Sometimes
- , 3很少 Seldom
- , 4从不 Never

12. 每年，您大约会参加多少次半专业或专业的户外旅行？（徒步，穿越，爬山，长途自驾等）

How many outdoor activities do you have per year?

- , 1没有 None
- , 2一次 1 time
- , 3大约半年一次 About 1 time half year
- , 4大约每季度一次 About 1 time every quarter
- , 5大约每月一次 About 1 time every month



13. 根据您的需求，您会为您的爱车装配以下哪些装置？

According to your reality, which equipment (car accessories) do you want to equip your car?

, 1我对此不感兴趣 I don't need.

, 2车顶架 (Roof Racks)



, 3车顶行李框 (Roof Baskets)



, 4车顶自行车架 (Roof Bike Carrier)



, 5车顶箱 (Roof Box)



, 6滑雪板架 (Snow sports)



, 7水上运动器材架 (Watersports)



, 8后置自行车架 (Bike Carrier with Towbar)



14. 您愿意花多少钱购买此类车旅装置? (人民币)

How much you would like to pay for those car accessories?

- | | |
|---|--------------------|
| <input type="checkbox"/> , 11000-2000 元 | About 100-200 Euro |
| <input type="checkbox"/> , 22000-4000 元 | About 200-400 Euro |
| <input type="checkbox"/> , 34000-6000 元 | About 400-600 Euro |
| <input type="checkbox"/> , 46000-8000 元 | About 600-800 Euro |
| <input type="checkbox"/> , 5 ≥8000 元 | ≥800 Euro |

15. 您一般从什么渠道获取户外运动, 自驾游等相关信息?

How do you collect the information about car travelling and outdoor activities?

- | | |
|---------------------------------------|--------------------------------|
| <input type="checkbox"/> , 1电视广告 | TV AD. |
| <input type="checkbox"/> , 2户外专业杂志 | Outdoor Magazines |
| <input type="checkbox"/> , 3网络论坛 | Internet or BBS |
| <input type="checkbox"/> , 4制造商官方主页 | Official Website of Producers |
| <input type="checkbox"/> , 5专业俱乐部或团体 | Outdoor Club and Organizations |
| <input type="checkbox"/> , 6零售商, 销售店铺 | Outdoor Retailers |
| <input type="checkbox"/> , 7其他, _____ | Others, |

16. 您的性别 **Your gender?**

- , 1男 Male
 , 2女 Female

17. 您的年龄? **How old are you?**

- | | | | |
|-------------------------------------|-----------------|-------------------------------------|-----------------|
| <input type="checkbox"/> , 1 ≤25 岁 | ≤25 years old | <input type="checkbox"/> , 226-30 岁 | 26-30 years old |
| <input type="checkbox"/> , 331-35 岁 | 31-35 years old | <input type="checkbox"/> , 436-40 岁 | 36-40 years old |
| <input type="checkbox"/> , 541-45 岁 | 41-45 years old | <input type="checkbox"/> , 646-50 岁 | 46-50 years old |
| <input type="checkbox"/> , 7 ≥50 岁 | ≥50 years old | | |

18. 您的最高学历? **What is your highest education background?**

- | | |
|-----------------------------------|------------------|
| <input type="checkbox"/> , 1硕士及以上 | Master and above |
| <input type="checkbox"/> , 2本科 | Undergraduate |
| <input type="checkbox"/> , 3其他 | Others |

19. 您的每月的收入是多少? (人民币) **Your monthly income?**

- | | |
|---|----------------------|
| <input type="checkbox"/> , 1 ≤2500 元 | ≤2500 Euro |
| <input type="checkbox"/> , 22500-5000 元 | About 250-500 Euro |
| <input type="checkbox"/> , 35000-8000 元 | About 500-800 Euro |
| <input type="checkbox"/> , 48000-10000 元 | About 800-1000 Euro |
| <input type="checkbox"/> , 510000-15000 元 | About 1000-1500 Euro |
| <input type="checkbox"/> , 6 ≥15000 元 | ≥1500 Euro |

