

# The Effect of ISO 14000 Environmental Management Systems Application on Corporate Image: A Research in White Goods Industry

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## Abstract

Enterprises need to be distinct in order to survive in the current atmosphere in which competition is increasing and lifespan of products and differences between products are decreasing due to the globalization. In the increasingly competitive atmosphere; quality, price and service quality are no longer the factors that distinct businesses from each other. A positive corporate image as “a business that is innovative, strong and promising, able to establish strong communication with its employees and customers based on mutual interaction and able to fulfill its social responsibilities” will strengthen the position of that enterprise in the market.

In this atmosphere, enterprises need to create a corporate image by fulfilling their responsibilities towards the ecological environment which is a part of social responsibility. For enterprises to form an effective and strong corporate image can also be achieved by demonstrating in all their activities that they are environmentally conscious. Therefore, having ISO 14000 (The International Organization for Standardization) Environmental Management Systems, which regulates enterprises' responsibilities for the environment, is one of the most important factors for enterprises to have a positive image.

This study was conducted on enterprises and customers in the white goods sector in order to examine whether the environmental management practices have effect on the creation of positive corporate image and to determine enterprises' attitudes towards environmental issues. The research hypotheses were; “ISO 14000 Environmental Management Systems is one of the factors affecting corporate image” and “There exist differences between the opinions of producers and customers on the contribution of ISO 14000 Environmental Management Systems to corporate image”. The data collection tool was a questionnaire form which had been formed through primary sources.

The questionnaire form was prepared according to 5-point likert scale. In the evaluation, “1” denotes very low, whereas “5” denotes very high level. The data obtained from 60 employees of 18 firms operating in the white goods sector and a total of 157 customers were analyzed with statistical

methods. The SPSS 16 software was used in statistical analyses. These analyses were reliability, calculation of means, and the independent t-test technique for the comparison of the perspectives of producers and customers, respectively.

It was concluded that the firms operating in the white goods sector in the Eskişehir Organized Industrial Zone have adopted the active approach towards environmental issues. In enterprises that adopted the active approach, environmental activities are performed in order only to comply with the environmental laws and regulations.

White goods firms operating in the Eskişehir Organized Industrial Zone consider ISO 14000 environmental management systems to be a system that is worth investing, and the creation of an environmentally-conscious corporate image is one of their aims in investing in these systems. However, as the conclusions demonstrate, environmental issues are not among the firms' prioritized issues and they do not aim to align the environment issue with the Total Quality Management by having all workers to internalize this issue within the framework of the policy of continuous development. In short, firms describe their consciousnesses on the protection of environment as increasing sales by creating an environmentally-conscious corporate image and fulfilling the legal obligations on this issue.

The conclusions suggest that ISO 14000 Environmental Management Systems are considered by producers and customers to be a factor influencing the corporate image. Therefore, it becomes evident that the hypothesis "There exist differences between the opinions of producers and customers on the contributions of ISO 14000 Environmental Management Systems to corporate image" was not verified after the t-test. In other words, there is not any difference between the opinions of producers and customers on the contributions of environmental management systems to corporate image; both groups believe that these systems provide enterprises with a positive image. However, the rate of having the certificate of ISO 14000 Environmental Management Systems is very low. Reasons of this finding are thought to be high costs and the lack of knowledge on this issue.

**Keywords: Environmental Management Systems, The Concept of ISO 14000, Corporate Image**

## **Introduction**

According to Howard(1998:4) the corporate image which is a significant concept for sustainability of corporations comprises all the visual, verbal and behavioral elements that make up the organization. Marken (1990:21) defines the corporate image as the perceived sum of the entire organization, its objectives and plans. The corporate image encompasses the company's products, services, management style, communications activities and actions around the world. The corporate image is from the customer perspective. In brief, it is the picture in the mind of customers for the corporate in accordance with all the information about the corporation (Ind, 1992:21).

In this respect, the corporate vision which explains the position that a corporate wants to have in the future, its goals and the reason of its existence, the corporate vision which distinguishes it from other corporations and reflects the special duties that are undertaken, the corporate culture which is the basis of its world view, the communication strategies and the corporate design which are composed to express its social responsibilities are the most prominent components of corporate image. Therefore, the corporate image is significant for the corporate operations for two reasons: First one is about giving

information in order to determine and maintain the relationship, whereas the second one is significant to maintain the sustainability of the corporation.

Smith(1993:655) identifies four areas from which the corporate image is formed. These are *product or services*, including product quality and customers care; *social responsibility, corporate citizenship, ethical behaviour and community affairs*; *environments*, which include offices, showrooms and factories; and *communications*, which include advertising, public relations, personal communication, brochures and corporate identity programs.

Therefore, one of the effective components to have a positive corporate image is performing environmentally-conscious applications as one of the factors of social responsibility. This study seeks to find out the extent to which this statement is valid for consumer and producer in Turkey.

## **ISO 14000 Environmental Management Systems**

According to Whitelaw (1997), environmental management can be described as a methodology by which organization acting in a structured manner assess their operations to ensure that they are functioning in an environmentally legitimate way (Jones et al., 2005: 213). An environmental management systems (EMS) provide a framework for organizations that wish to effectively manage their environmental affairs. It allows an organization to control the impact of its activities, products or services on the natural environment. Steger (2000:24) defined an EMS as a ‘transparent and systematic process’ known corporate-wide, with the purpose of prescribing and implementing environmental goals, policies and responsibilities, as well as a regular auditing of its elements.

ISO 14000 is a series of international standards on environmental management. It provides guidelines for development of an EMS and the supporting audit programme (Schaarsmith J. H., 2005:5). Series ISO 14000 includes seven areas: environmental management systems, environmental auditing and other related, environmental investigations, environmental performance evaluation, environmental labeling, life cycling assessment, environmental aspects in product standards and terms and definitions ( ISO,2002)

If ISO 14000 standards are integrated with other operations of organizations, it enables various advantages for the corporations. The benefits are operational cost saving, sound business practices, conformance to regulations, conformance to customer requirements, increase access to capital, increased competitiveness, improved corporate and marketing image, higher levels of safety, reduced insurance premiums, and limitation of liability (Quazi, 1999:306). Furthermore, it provides for the corporations naturally obey to the legal obligations regarding to the environment and to make positive effects on the life of society. ISO 14000 certified companies are able to contribute to a cleaner, healthier environment for the community and improve the global environmental health. Being certified allows the company to contribute in a real and substantial way to cleaning up the environment and improving the health of the workers and others in the community (Ritchie and Hayes, 1998)

Regarding to the environmental management approaches of the organizations, Borri and Boccaletti (1995:39) mention three approaches which are classified as passive, active and proactive. In the organizations which adopted passive approach in environmental management, environment is seen as one of the cost factors, new opportunities are not taken into consideration while showing resistance for transformations. In the organizations which adopted active approach in environmental management, environmental activities are performed in order to obey the obligations. In the organizations which adopted proactive approach in environmental management, environmental issues are seen as the

primary issues of organizations and in the framework of sustainable development policy it is aimed to provide the adoption of environmental issues by all employees and to accord the environmental issues with the Total Quality Management.

Top management actively supports the environmental activities in the organizations which adopted proactive approach in environmental management. In these organizations, environmental policies are established with its planning and programs in order to integrate with the objectives of organizations. In the organizations which are proactive in environmental issues it is aimed to develop environmental education for each level of employees. The importance of open communication channels is deduced for the transmission of the environmental issues to the related parties and therefore management structures which are based on team work have been constituted. By implementing the necessary transformations in their production management functions, the organizations which adopted this approach evaluate this as an opportunity for the sustainability of their corporations to have a positive corporate image and to increase their market share thanks to environment friendly products.

### **The Aim And The Hypothesis Of The Study**

This study is done on the organizations that are active in white goods sector and on the consumers to examine whether the environmental management applications have an effect to establish a corporate image or not. In this research, it is aimed to determine the approaches of companies, which are operating in white goods sector in Eskisehir Organized Industrial Zone, to the environmental issues and to evaluate the view points of consumers and producers regarding to the role of Environmental Management applications in the establishment of corporate image. Especially, the last objective shows the significance level of environmental management applications as an effective strategy to have a positive corporate image. The research hypotheses were; “ISO 14000 Environmental Management Systems is one of the factors affecting corporate image” and “There exist differences between the opinions of producers and customers on the contribution of ISO 14000 EMS to corporate image”.

### **The Method of the Study**

The data gathering tool to achieve the aim of the study is the questionnaire form prepared using primary sources. The questionnaire form was prepared using a 5-point Likert scale. In the evaluation, “1” denotes very low, whereas “5” denotes very high level.

The consumer questionnaire form consists of two parts. The first part consists of the questions that are prepared to determine the personal characteristics of the consumers and to measure the information level of consumers about the ISO14000 Environment Management Systems. The second part includes the questions to examine whether the environment management has an effect to have a corporate image or not. The questionnaire form which is prepared for the producers consists of two parts. The first part consists of the questions such as the name of the company, the position of the person who fills the questionnaire, the company’s approach to the environmental issues and the questions to measure the information level of producers about the ISO14000 Environment Management Systems. The second part includes the questions to examine whether the environment management has an effect to have a corporate image or not.

### **Sampling Method**

The sample of this research is composed of all companies operating in white goods sector in Eskisehir Organized Industrial Zone and consumers of all white goods sales distributors in the province. The simple random sampling methodology is used in this research.

The questionnaire was applied to 60 people from all 18 companies operating in the white goods sector and located in Eskisehir Organized Industrial Zone. 49 of these were taken into consideration. The producer questionnaire form was answered by company managers, department managers (production and manufacturing manager, quality control manager, purchasing and sales manager, research and development department manager, external trade manager, planning and logistics manager), engineers, chiefs, technicians and employees. 250 questionnaire forms were sent to the white goods sales distributors in order to collect data from customers. However, only 157 of these questionnaire forms were received back. So, questionnaire return rate is 63%.

## Data Analysis Method

The data obtained from 60 employees of 18 firms operating in the white goods sector and a total of 157 customers were analyzed with statistical methods. The SPSS 16 software was used in statistical analyses. These analyses were reliability, calculation of means, and the independent t-test technique for the comparison of the perspectives of producers and customers, respectively.

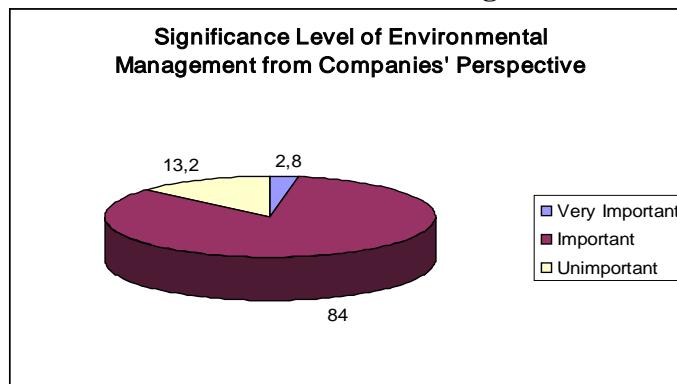
## Findings and Discussion

### Producer Questionnaire Findings

Looking at the general profile of companies which are contributed to this research, it is seen that 11.8% of these 18 companies have environmental engineers (88.2% do not have environmental engineer), 61.1% of them have R&D departments, 83.3% of them have ISO 9000 Total Quality Certificate and just 1 of these 18 companies has ISO 14000 Environmental Management Systems Certificate.

When the distribution of producer questionnaire contributors according to their company positions is reviewed, 36.7% of them are from management, 26.5% of them is from department managers, 18.4% of them is from engineers and 18.4% of them is from chiefs, technicians and employees. Opinions of the questionnaire contributors in the environmental management are presented in Figure 1.

**Figure 1 Significance Level of Environmental Management from Companies' Perspective**



86.8% of questionnaire contributors denote that the environmental management is significant for companies whereas 13.2% of them denote that it is insignificant. Furthermore, 61.2% of contributors have information about ISO 14000 and 67.3% of them want to have information about ISO 14000. The rate of contributors who have information about ISO 14000 but still needs to have additional information about it is 53.3%

71.4% of contributors evaluate ISO 14000 environmental management system as it is worth to investment. The reasons of this evaluation are given in Table 1.

**Table 1. The Reasons of Evaluating EMS as a Worthy Investment by Producers**

<i>The Reasons of Evaluating ISO 14000 EMS as a Worthy Investment by Producers</i>	Frequency	Percentage (%)
Need to obey legal obligations related to this issue	11	31,4
To create a corporate image that is sensitive to the environment	15	42,9
Our responsibility to environment	7	20
Having a scientific basis	1	2,9
Being practical, useful and easily applicable	1	2,9
<b>TOTAL</b>	<b>35</b>	<b>100</b>

As seen from the table, *creating an environment-friendly company image, legal obligations regarding to this issue and responsibility to environment* are primary reasons for producers. The reasons of evaluating EMS as a worthless system are presented in Table 2.

**Table 2. The Reasons of Evaluating ISO 14000 EMS as a Worthless Investment**

<i>The Reasons of Evaluating ISO 14000 EMS as a Worthless Investment</i>	Frequency	Percentage (%)
High cost	6	42,9
Lack of environmental consciousness	4	28,6
Insufficient legal sanctions	2	14,3
Lack of information	2	14,3
<b>TOTAL</b>	<b>14</b>	<b>100</b>

In this situation, *high cost and lack of environmental consciousness* are the primary reasons for producers.

57% of producers state that they know the benefits of ISO 14000 environment management standards for the companies. According to the results of the questionnaire the opinions of contributors in terms of benefits of an effective environment management system are summarized in Table 3.

**Table 3. Benefits of an Effective EMS**

<i>Benefits of an Effective Environmental Management System</i>	Frequency	Percentage (%)
To meet the environmental demands of customers	3	6,1
To protect a well ordered public/civil relationship	3	6,1
To provide a positive corporate image	5	10,2
To increase the market share	11	22,4
To provide convenience according to investors' criterion and easiness to obtain capital	7	14,3
To obtain the opportunity of having insurance with a reasonable amount	6	12,2
To gain the conditions back which are documented with suppliers	4	8,2
To find the opportunity of refining the waste in their sources	4	8,2
Limiting the responsibility	1	2,0
To obtain input and energy saving	2	4,1
Easiness to choose location and to have required permissions	1	2,0
To obtain the opportunity of developing and transferring technology	1	2,0
To increase the success level related with the environmental issues and to improve the general situation of the environment	1	2,0
<b>TOTAL</b>	<b>49</b>	<b>100</b>

According to the table, the questionnaire contributors expect *to have a more positive image, increase in the market share, providing convenience according to investors' criterion and to have insurance with a lower cost.*

To determine the environmental management approach of producers, 38.8% of the producer questionnaire contributors think environmental issues *as a cost factor*. The rate of the contributors who think that environmental activities are just for *obeying the environmental obligations* is 73.4%. The rate of the contributors who think that giving importance to the environmental issues creates *a competition advantage* is 14.3%. 67.3% of producers believe that environmental issues *do not create a competition advantage*. 61.2% of producers believe that revenues from the projects which are performed to prevent pollution *do not compensate the costs of these projects*. The rate of contributors who think that environmental activities in companies provide significant opportunities to decrease the source of pollution is 2%. With a high rate (93.9%) producers oppose to the opinion that environmental activities in companies provide significant opportunities to decrease the source of pollution.

As a result of all data obtained, to determine the environmental management approaches of the companies operating in white goods sector in Eskisehir Organized Industrial Zone, which is one of the objectives of this research, it is observed that companies adopt *active approach*. In brief, environmental issues are not seen as primary issues of companies and environmental activities are thought to be performed just to obey the environmental laws. In the sustainable development policy framework, adoption of environmental issues by all employees and accommodation of the environmental issues with Total Quality Management are not aimed.

### **Consumer Questionnaire Findings**

The findings related to the demographic variables of consumer in the table below

**Table 4. The Values for Demographic Variables of Consumer**

Demographic Variables		n	%	Demographic Variables		n	%
<b>Gender</b>	Female	77	49	<b>Net Income</b>	300-500 TL	51	32.5
	Male	80	51		500-1000 TL	47	29.9
	<b>Total</b>	<b>157</b>	<b>100</b>		1000-2000 TL	40	25.5
<b>Age</b>	21-30	56	35.7		2000-3000 TL	16	10.2
	31-40	70	44.6		3000 TL+	3	1.9
	41-50	29	18.5		<b>Total</b>	<b>157</b>	<b>100</b>
	51+	2	1.3	<b>Educational Background</b>	Primary School Graduate	45	28.6
	<b>Total</b>	<b>157</b>	<b>100</b>		High School Graduate	27	17.2
	Married	99	63,1		University Graduate	31	19.7
<b>Marital Status</b>	Bachelor	47	29.9		MB and PHD	54	34.4
	Widowed	5	3.2		<b>Total</b>	<b>157</b>	<b>100</b>
	Divorced	6	3.8				
	<b>Total</b>	<b>157</b>	<b>100</b>				

58.6% of consumer questionnaire contributors have information about ISO 14000 certificate and parallel to this the rate of consumers who prefer more expensive product with an ISO 14000 certificate instead of the cheaper product without an ISO 14000 certificate is 82.2%. The reasons of the consumers who prefer the products with an ISO 14000 certificate are shown in Table 5.

**Table 5. The Reasons of Preference of a Company Certified With an ISO 14000 Certificate**

The Reasons of Preference of a Company Certified With an ISO 14000 Certificate	Frequency	Percentage (%)
Since it is a market-known company	6	3,8
Since it performs the environmental responsibilities	44	28,0
Since it produces appropriate products for technological developments	18	11,5
Since it produces its products according to safely consumable standards	89	56,7
<b>TOTAL</b>	<b>157</b>	<b>100</b>

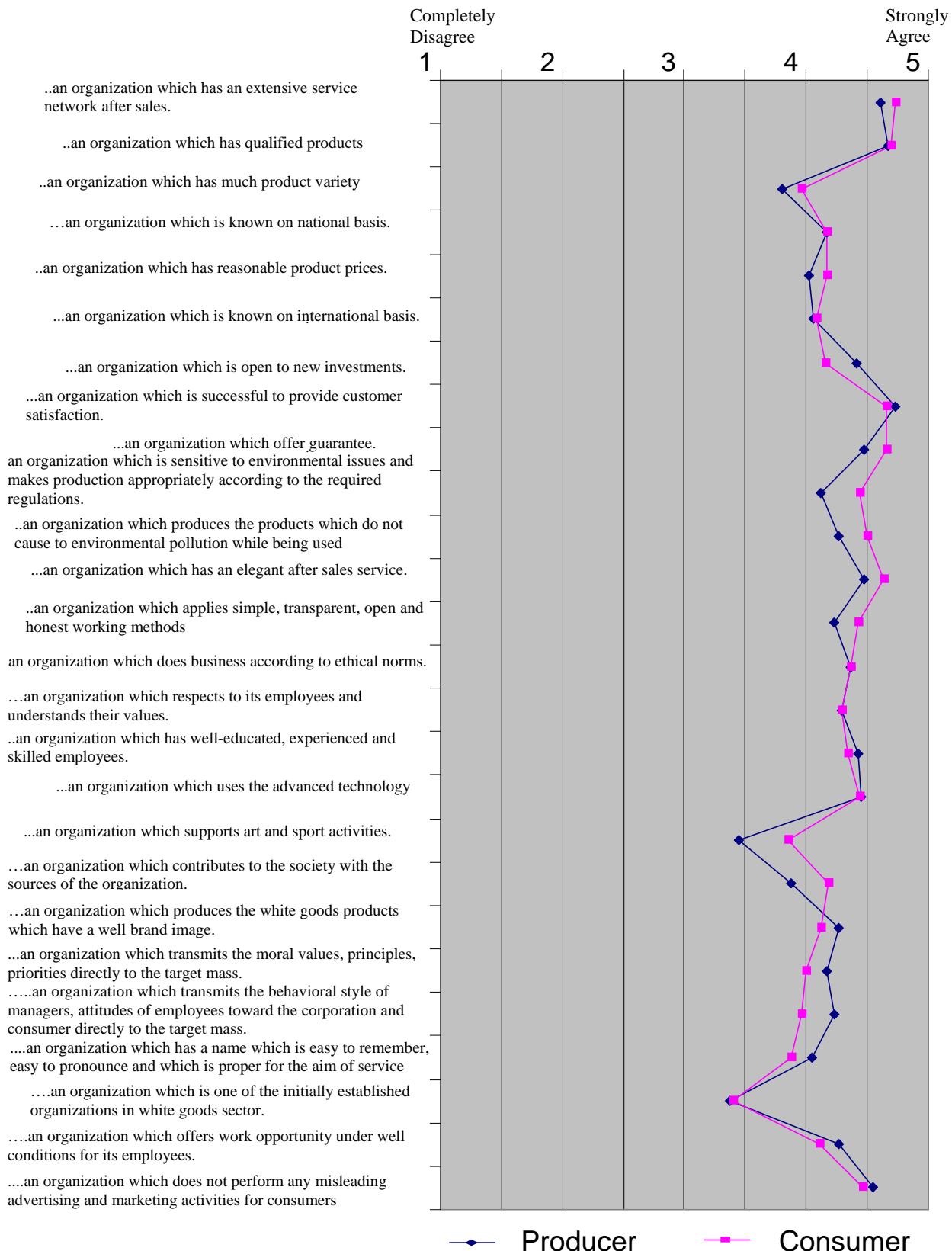
As seen from the table, the primary reasons are *the safely consumable products of companies* and *the accomplishment of environmental responsibilities*.

**Findings of Identical Questions of Consumer Questionnaire and Producer Questionnaire**

In consumer questionnaire Part II the statements in questions A and B are same with the statements in questions A and B in the Producer questionnaire Part II. Therefore, these questions are evaluated together. These questions are prepared according to Likert scale and alpha coefficient is used in order to test the reliability of the results obtained from consumers and producers. Alpha (Cronbach) coefficient is equal to 0,9326 for the Producer questionnaire Part II questions and it is equal to 0,8992 for the Consumer questionnaire Part II questions. These values are found reliable since these results are bigger than 0.60.

In the research to examine the characteristics that should be kept by corporations in order to have a positive corporate image, the average values of the answers of consumers and producers are very close to each other. Contribution level of subjects to these statements is high. Both producers and consumers have same tendency according to the average values. The average values diagram of characteristics of a corporation which has a positive corporate image is presented in Table 6.

**Table 6. The Average Values Diagram of Characteristics of A Corporation Which has a Positive Corporate Image**



Contributors determine that the most significant factors to create a positive corporate image are having *an extensive spare parts and service network, providing consumer satisfaction, having qualified products, providing after sales service well, offering guarantee and avoidance of misleading advertisement activities*. Furthermore, it is determined by the contributors that a corporation which is *sensitive to environmental issues, makes production appropriately according to required regulations* and which *does not create environmental pollution* also has a positive corporate image. The statements of supporting *art and sport activities* and being *the first established corporation in white goods sector* are the least agreed factors by contributors compared to other factors.

T test is performed in order to test whether there is a difference both for producer and consumer in terms of characteristics of a corporation which has a positive corporate image. T test results are given in Table 7.

**Table 7. T-Test Analysis According to the Characteristics of a Corporation which has a Positive Corporate Image for Consumers and Producers**

The organization which has a positive corporate image is		Frequency	Mean	Standard Deviation	t	Sig(2-tailed)
...an organization which has an extensive service network after sales.	Producer	49	4,61	0,53	-1,342	0,181
	Consumer	157	4,73	0,51	-1,317	0,192
...an organization which has qualified products.	Producer	49	4,67	0,52	-0,242	0,809
	Consumer	157	4,69	0,53	-0,245	0,807
...an organization which has much product variety.	Producer	49	3,80	0,98	-1,035	0,302
	Consumer	157	3,96	0,98	-1,036	0,304
...an organization which has reasonable product prices.	Producer	49	4,16	0,77	-0,017	0,986
	Consumer	157	4,17	0,86	-0,018	0,986
...an organization which is known on national basis.	Producer	49	4,02	0,85	-1,061	0,29
	Consumer	157	4,17	0,83	-1,046	0,299
...an organization which is known on international basis.	Producer	49	4,06	0,92	-0,153	0,878
	Consumer	157	4,08	0,84	-0,146	0,884
...an organization which is open to new investments.	Producer	49	4,41	0,84	1,818	0,071
	Consumer	157	4,16	0,84	1,814	0,073
...an organization which is successful to provide customer satisfaction.	Producer	49	4,73	0,53	0,826	0,409
	Consumer	157	4,66	0,60	0,878	0,382
...an organization which offers guarantee.	Producer	49	4,47	0,58	-2,042	<b>0,042</b>
	Consumer	157	4,66	0,55	-1,987	<b>0,049</b>
...an organization which is sensitive to environmental issues and makes production appropriately according to the required regulations.	Producer	49	4,12	0,83	-2,564	<b>0,011</b>
	Consumer	157	4,43	0,71	-2,359	<b>0,021</b>
... an organization which produces the products which do not cause to environmental pollution while being used (such as providing water and energy saving, not creating noise pollution, giving better result with less detergent, etc)	Producer	49	4,27	0,81	-1,844	0,067
	Consumer	157	4,50	0,78	-1,808	0,074
... an organization which has an elegant after sales service.	Producer	49	4,47	0,79	-1,528	0,128
	Consumer	157	4,63	0,59	-1,313	0,194
...an organization which applies simple,	Producer	49	4,22	0,82	-1,655	0,1

transparent, open and honest working methods	Consumer	157	4,42	0,69	-1,509	0,136
...an organization which does business according to ethical norms.	Producer	49	4,37	0,83	0,037	0,971
	Consumer	157	4,36	0,67	0,033	0,974
...an organization which respects to its employees and understands their values.	Producer	49	4,29	0,82	-0,007	0,994
	Consumer	157	4,29	0,73	-0,007	0,994
...an organization which has well-educated, experienced and skilled employees.	Producer	49	4,43	0,65	0,841	0,401
	Consumer	157	4,34	0,67	0,855	0,395
...an organization which uses the advanced technology.	Producer	49	4,45	0,71	0,137	0,891
	Consumer	157	4,43	0,71	0,137	0,892
...an organization which supports art and sport activities.	Producer	49	3,45	1,17	-2,426	<b>0,016</b>
	Consumer	157	3,85	0,97	-2,192	<b>0,032</b>
...an organization which contributes to the society with the sources of the organization.	Producer	49	3,88	1,05	-2,14	<b>0,034</b>
	Consumer	157	4,18	0,82	-1,874	<b>0,045</b>
...an organization which produces the white goods products which have a well brand image.	Producer	49	4,27	0,70	1,076	0,283
	Consumer	157	4,11	0,90	1,224	0,224
...an organization which transmits the moral values, principles, priorities directly to the target mass.	Producer	49	4,16	0,77	1,194	0,234
	Consumer	157	3,99	0,90	1,29	0,2
...an organization which transmits the behavioral style of managers, attitudes of employees toward the corporation and consumer directly to the target mass.	Producer	49	4,22	0,87	1,962	0,051
	Consumer	157	3,96	0,83	1,908	0,06
...an organization which has a name which is easy to remember, easy to pronounce and which is proper for the aim of service.	Producer	49	4,04	0,87	1,128	0,261
	Consumer	157	3,87	0,92	1,169	0,246
...an organization which is one of the initially established organizations in white goods sector.	Producer	49	3,37	1,15	-0,196	0,844
	Consumer	157	3,40	1,02	-0,185	0,854
...an organization which offers work opportunity under well conditions for its employees.	Producer	49	4,27	0,78	1,19	0,236
	Consumer	157	4,11	0,81	1,212	0,229
...an organization which does not perform any misleading advertising and marketing activities for consumers.	Producer	49	4,55	0,68	0,739	0,461
	Consumer	157	4,46	0,79	0,799	0,426

According to t-test, significant difference is observed from the viewpoints of consumers and producers in terms of the statements which are “an organization which has a positive corporate image is sensitive to environmental issues and makes production appropriately according to the required regulations”, “an organization which has a positive corporate image is an organization which offers guarantee”, “an organization which has a positive corporate image is an organization which supports the art and sport activities”. It is determined that consumers are more agreed with these statements

compared to producers. It can be stated that both consumers and producers have same opinions in terms of other statements.

When the research results are examined, to determine the environmental management approaches of the companies operating in white goods sector in Eskisehir Organized Industrial Zone, which is one of the objectives of this research, it is observed that companies adopt *active approach*. In the organizations which adopted *active approach* in environmental management, environmental activities are performed in order to obey the environmental laws and regulations

The companies operating in white goods sector in Eskisehir Organized Industrial Zone evaluate ISO 14000 environmental management system as a system that is worth to investment and *creating an environment-friendly corporate image* is shown as one of the investment reasons of these companies. However, as seen from the results, environmental issues are not seen as primary issues of companies and in the framework of sustainable development policy it is not aimed to provide the adoption of environmental issues by all employees and to accord the environmental issues with the Total Quality Management. In short, firms describe their consciousnesses on the protection of environment as increasing sales by creating an environmentally-conscious corporate image and fulfilling the legal obligations on this issue.

The conclusions suggest that ISO 14000 Environmental Management Systems are considered by producers and customers to be a factor influencing the corporate image. Therefore, it becomes evident that the hypothesis "There exist differences between the opinions of producers and customers on the contributions of ISO 14000 Environmental Management Systems to corporate image" was not verified after the t-test. In other words, there is not any difference between the opinions of producers and customers on the contributions of environmental management systems to corporate image; both groups believe that these systems provide enterprises with a positive image. However, it is observed that consumers are more sensitive to this issue than producers. Despite the producers think that having an ISO 14000 EMS certificate creates a positive corporate image, when the acquirement rate of this certificate is checked a quite low rate is observed. The reasons of this can be interpreted with high cost and lack of information regarding to this issue.

## Conclusion

By developments in technology and science, from procurement of raw materials to the usage of product and even till the end of the consumption process several environmental problems appear in every stage of the production process. When it is looked at in terms of problems which are brought with technology and science, it is obvious that to stop or limit the production operations in order to protect the environment is not logical. At this point, it should be done that from one side continue to the production according to market requirements, on the other hand decrease the negative environmental impacts of these production operations to the minimum level.

The key of establishment of targeted balance between the production operations and environment is environmental management applications of the corporations. ISO 14000 series standards which appear for this purpose take environmental issues into consideration as well as regarding an effective organization management, therefore affect positively productivity of the organization. If the environmental management systems, which change the action styles of corporations, lead to increase in the effectiveness of their strategic planning, their productivity and competition power, are integrated with the other operations of the organizations, this enables easier trade activities by providing

guarantee in terms of quality and environmental sensitivity in international trade and also this increases the sales volume of products and services by creating a positive corporate image. Furthermore, it provides for the corporations naturally obey to the legal obligations regarding to the environment and to make positive effects on the life of society. Regarding these facts, in this study which tries to determine the opinions of producers and consumers in Eskisehir related with this issue, it is determined that both sides share same view.

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