

Designing Green Marketing Pattern in Iran's Oil Industry

Seyed Sadegh Zarghami^a, Bita Tabrizian^{b*}, and Fariz Taherikia^c

^a Ph.D. Candidate, Business Administration Department, Roudehen Branch, Islamic Azad University, Roudehen, Iran

^b Assistant Professor, Department of Educational Sciences and Consulting (Management and Accounting), Roudehen Branch Islamic Azad University, Roudehen, Iran

^c Assistant Professor, Business Administration Department, Firouzkouh Branch, Islamic Azad University, Firouzkouh, Iran

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ABSTRACT

The present study aims to design an eco-friendly marketing pattern in Iran's oil industry to align with the new environmental paradigms. The methodology is sequential exploratory. In the qualitative section, grounded theory is used. The creative data were gathered through a theoretical sampling of in-depth, semi-structured interviews of 15 experts from the oil industry. The initial model of the research was achieved with 19 (major) factors, which were divided into 6 aspects according to the experts' views: causal circumstances, the major factor, background circumstances, interveners, strategies, and consequences. Next, in the quantitative section, the validity of the research was investigated through a surveying method and the questionnaire tool. The statistical population includes a limited number of managers and experts from the oil industry in research and planning fields, counting up to 170 people, from whom 118 were selected through random sampling. After evaluating the reliability of the questionnaire, the questions themselves were validated, and their number was narrowed down. The components were reduced to 14 and the dimensions to 5 by carrying out an explanatory factor analysis. The relationship between the dimensions was assessed through the correlation test, and then the final pattern was designed. Eventually, the theory of the study was developed under the supervision of experts. The significant results of this study were finding the interveners, including productivity, governmental support, social institutions, and sustainable development along with the strategies, including reviewing the energy section structure, improving the managers' perspectives, and developing the green investments.

1. Introduction

Marketing means detecting the potential and actual needs of the customers, identifying target markets, speculating the number of the customers and the income from the sales, and finally providing the needs of the

customers and valuing them. Not only does green marketing pay attention to the requirements of the customers, but it also considers the needs of society, one of the most important of which is environmental concerns. Accordingly, the related activities are in line with the company's social responsibility and sustainable development. One of the crucial reasons green marketing

* Corresponding author

is used in businesses is the incremental increase of environmental awareness and concern in customers and their preference for green or eco-friendly products. In the global energy market, with the introduction of various sources, significant development of technologies, and international contracts to reduce the environmental pollutants, the needs have been evolved, and new paradigms have been created. The advent of renewable energy, unconventional gas and oil resources (shale), electrical and hybrid cars, and saving renewable energies with budget prices are a few examples of how the global market has changed for energy. These changes have caused the introduction of various energies, and thus, the customers have a wider range of options to choose from. Since Iran is rich in fossil energies of gas and oil, the oil industry distributes them. This industry takes up a noticeable share of the country's income and produces a significant part of the pollutants. While preserving the environment and people's health is highly dependent on the emissions of pollutants, the importance of green marketing is further highlighted in the oil industry.

Suppose there is no proper attention to green marketing in the country, especially major industries like the oil industry, and losing economic benefits. In that case, natural resources and people's health are also lost. Wasting underground resources, water, air, and soil pollution, death of aquatic creatures, loss of the ecosystem are some of the casualties of the major industries, and once there is not adequate attention, irreparable loss of life and property will occur. This study aims to answer the following questions:

1. Why should the oil industry move toward green marketing?
2. What are the background circumstances needed for green marketing in the oil industry?
3. What factors are influential in green marketing in the oil industry?
4. What strategies are required to fulfill the green marketing goal in the oil industry?
5. What consequences will be brought by implementing the green marketing strategies?

2. Literature review

According to the definition of social marketing, green marketing is the development of new products and their marketing to minimize the negative impacts on the environment. Green marketing includes all these activities: consumption, production, distribution, and packaging of the products responsible against the environmental concerns. Green products are recognized

through licenses and labels that read as eco-friendly (Norouzi and Mohammadi, 2016). Green marketing is a social procedure where individuals and groups fulfill their needs and requirements through exchanging products and values in a way that is ethical and minimizes negative impacts on the environment (Kai et al., 2015). In other words, green marketing includes all activities to generate and facilitate the exchanges to fulfill human needs and desires while minding how these desires have the least destructive effects on the environment. Rarely does the environment fit in all the aspects of one company. In addition to this, the traditional criteria are being reviewed in terms of success for green innovations in many companies. Each company has its specific marketing (Elena et al., 2013). One of the reasons for green products demand and increasing commercial activities friendly with the environment is rising awareness regarding the environmental issues and adding strict rules by the related international institutions, which has led to a movement for monitoring the performance of the companies (Gurau, 2005).

Green marketing is known for its competitive advantage, low costs due to increasing productivity, recycling the production wastes, and developing new products following the environment by the organizations and the institutions (Aren and Yilmaz, 2008). Environmental concerns have demanded new products, caused reconsideration in the current ones, and, in some cases, have evolved the formula or the production procedure of a product. Most efforts are made to design new products instead of improving what already exists to reduce the adverse effects of production on the environment and society (Souplico, 2016). Success in the development and expansion of green products requires procedures with high levels of homogeneity, communications, good information, careful attention to environmental concepts, support for top management, and a straightforward approach to measurement and modeling (Shamra and Ryler, 2014). Price is a defining factor integrated with green marketing. Most consumers are willing to pay more if only they grasp the importance of the product (Shamra and Ryler, 2014).

Locally focusing on the spread of information is a proper approach that should be taken into consideration in promotional activities, but doing so requires fundamental changes in activities. A company should investigate what the customers consider essential and who should be informed before spreading information (Kumar et al., 2013). Choosing available time and location will have an impact on the customers. Many



green consumers have stated that they have to go a long way to buy the required green products. Fuel consumption and fossil energies to let the products reach the customers is truly an environmental challenge in many businesses. Levying heavy taxes on fossil fuels can significantly influence the economy of transportation, and companies are encouraged to use the inner-distribution services of giving products to companies and local networks. Achieving optimal performance in transportation and distribution is a challenging task (Hekmat Nejad, 2011).

Green marketing seeks to find ways of meeting the customer needs, both the individuals and the industries, using marketing activities and limited resources so that the organization’s sales goals are also satisfied (Kai et al., 2015).

Optimal and effective use of limited resources is one of the purposes of marketing, and if the environmental

goals are also taken into consideration, green marketing occurs (Elena et al., 2013).

Green marketing measurements appear in three stages in any company. These stages are strategic, semi-strategic, and tactical (Shamraand and Iyer, 2014). Green activity in the tactical level causes a drastic change in the operations, and the evolvments take place at the operational level, for instance, changes in promotions and advertisements (Kumar et al., 2013). At the semi-strategic level, being green is equivalent to changes in institutional approaches and in behaviors. At the strategic level, fundamental changes occur in the organization’s philosophy (vision, mission, primary goals, and strategies). Strategic greenness is often in need of a change in the mentality of people (Polonsky and Rosenberg, 2001).

Table 1. The various levels of green marketing (Shamra and Lyer, 2014).

Green marketing levels	Advantages	Effects
Strategic	<ul style="list-style-type: none"> • More effective communication with customers • More profit • Reaching company goals • Achieving competitive advantages • Lowering the costs • Increasing the brand credibility 	Commercial development
Political	<ul style="list-style-type: none"> • Effective use of the resources • Lowering the emission of greenhouse gases • Lowering the air pollution 	Improving the environment
Operational	<ul style="list-style-type: none"> • Increasing environmental awareness • Improving general health of people • Increasing life expectancy 	Social welfare (increasing life quality)

3. Green marketing in the oil industry

The oil industry includes the following procedures: discovery, development, production, processing, transportation of raw oil and oil products, and marketing of oil products. It plays a significant role in the global economy because, in addition to providing the energy of the countries, it causes them to develop and expand.

This industry is divided into three main sections: upstream, midstream, and downstream. The upstream section involves discovering, developing, and producing activities, and the midstream is related to the transportation of oil, gas, and oil products to export

terminals, refineries, and petrochemical units. The downstream is engaged with refineries and petrochemical units that convert oil and gas or petroleum products into higher values.

Green marketing mix generally includes the green product, green price, green place, and green promotion. The following will explain them in the oil industry, considering the experts’ opinions.

A green product refers to a product in the production process environmental concerns of which are observed, the emissions of pollutants of which are minimized, or new eco-friendly products of which are produced. In the oil industry, increasing efficiency, reducing and storing

carbon, reducing waste and scrap or producing new products, and altering fuels with high pollution can be mentioned during the production procedures.

Green distribution refers to taking into consideration the environmental concerns during the distribution of products. Using distribution channels with appropriate delivery times and prices and the lowest pollution emissions is crucial in the oil industry.

The green price pertains to pricing, which increases the efficiency of materials and energy in production sections, and it can leave a considerable impact in improving the environment. In the oil industry, decision-

making regarding subsidized or free pricing will have a noticeable impact on the performance of production units in up and down streams.

Green promotion refers to educating the customers on the activities of a green organization, explaining their benefits for both society and the environment, and encouraging them to buy green products. Informing can occur through advertisements, public relations, media, and social networks.

A summary of the most important studies already been done on green marketing and their most significant results are presented in Table 2.

Table 2. Most important domestic and international studies regarding green marketing and the findings of each study.

Researcher	Topic of the research	Year	Important findings
Elhuni and Ahmad	Key factors in evaluating the sustained development in oil and gas fields	2017	Introduction of critical factors in three categories of economy, environment, and society and evaluating them based on surveying the journalists
Moravcikova et al.	Green marketing as a benefit for competitive advantage for businesses	2017	Innovation, achieving competitive advantage, promoting the environmental performance, increasing the awareness of the customers regarding environmental concerns, and reducing the negative environmental impacts in services and products
Sedaghat et al.	Assessment of the relation between different aspects of social responsibility of companies and customer loyalty	2017	The relationship between customer satisfaction and preserving the environment, minding the society's health, and the positive relationship between customer satisfaction and performance
Haghighi et al.	The influence of management's support from the green activities on the green marketing strategy and the environmental function of industrial business in Iran	2016	The environmental culture in industrial business has a significant, positive impact on green marketing strategy, and the manager's support from green activities can strengthen the environmental culture in these industries in Iran. Adopting a green marketing strategy in Iranian businesses improves economic performance. However, since environmental issues are not considered strategic, the businesses do not pursue the updated standards, and environmental performance is in poor condition.
Azar et al.	Evaluating the provision of green chain in Asalouyeh refineries, using a mixture of fuzzy and nonlinear modeling	2016	National and international pressures, presence in the green chain provision, public opinion pressure, incremental increase of public demand for eco-friendly products, increased number of NGOs supporting the environment, the increased number of institutions improving the environmental performance, and achieving the competitive advantage
Omidvar et al.	Analysis of green supply chain management barriers using interpretive structural	2015	Lack of support from chief managers, lack of presence and competition in international markets, lack of technical infrastructure, lack of knowledge and training for environmental issues, lack of



Researcher	Topic of the research	Year	Important findings
	modeling case study: Pars Khodro Company		sufficient legal leverage to implement environmental laws, and lack of environmental purposes and strategies in the company
Rood Poshti et al.	Designing a sustainable model of marketing in the automobile industry of Iran	2014	Standardization, improving the processes of design and production, reducing the costs, acquiring export markets, being innovative, preserving the environment, increasing safety in addition to developing technologies, and reducing effluents and waste, which are of supreme importance in the oil industry
Schneider et al.	Moving towards a sustained development in oil and gas	2013	Introduction of environmental assessment indicators of oil industries such as the waste rate of hydrocarbons and the degree to which they are recycled, greenhouse gas emission rate, controlled disposal of hydrocarbons, collected amount of wastes harmful for the environment, and water consumption rate and its treatment
Menguc et al.	The mutual effects of inner and outer factors on a hyperactive environmental strategy and its impact on the performance of the company	2013	The impact of the attitude of the owners of the organization on adopting a green marketing strategy, improving the performance of the companies by green marketing strategies, and balancing the relationship between the perspective of the founders and the green marketing strategies by governmental regulations
Manafi et al.	The relationship between consumers' environmental awareness and companies' strategies	2011	The effect of the customers' environmental awareness on the companies' strategies, the significant impact of anthropological factors, and the psychological characteristic of the customers on the strategies of the companies
Mohammadian and Khataei	The relationship between psychological, social, and behavior of the green user	2011	The presence of a relationship between environmental perspectives, individual norms, perceived effectiveness by the green users, and social norms with the behavioral aspects of the users (shopping behavior and support behavior of environmental practices)

4. Research methodology

The methodology is a sequential exploratory one and has a qualitative and quantitative section. In the exploratory, the qualitative section is prioritized. The studies which are carried out based on this method are usually categorized into two levels. In the first stage, the researcher uses the qualitative approach, gathers information, and analyzes them. Then, it uses these data in the quantitative section. This method is often used when the researchers want to develop the criteria or have a better tool to investigate a variable of a finite sample or aim to know whether the results of a small sample (the

qualitative step) can be generalized to a larger community (quantitative step) or not. One of the features of this method is that data gathering and analysis in both qualitative and quantitative approaches happen linearly and not simultaneously. Data analysis in either of the approaches is done independently and in order, which is used in the quantitative stage. Tables 3 and 4 present the summary of quantitative and qualitative methodologies.

As shown in Table 3, 15 oil industry experts were chosen for interview using theoretical sampling. In theoretical sampling, sample selection (not only people but also the required data) was identified considering the

analysis of the previously collected data. Based on this type of sampling, the researcher has to call individuals aware of the aspects of the research question to gather data (purposive sampling). Once theoretical saturation is reached, sampling finishes, that is, the stage when we realize that no new material is added to the subject under discussion.

The interviews continued up until we were saturated. The saturation level is when no new data is added to the

previous findings, and only repetitive codes are achieved. Data gathering occurred through semi-structured in-depth interviews, and the methodology was grounded theory. Data analysis required open, axial, and selective coding. The content-creator software generated these codes (Atlasti), and their reliability was confirmed by the responsive validation method. In this method, the findings are double-checked with a few experts.

Table 3. Methodology in the qualitative section.

Statistical population	15 members of oil industry experts
Sampling method	Theoretical
Methodology in the qualitative section	Grounded theory
Data gathering tool	Semi-structured deep interview
Data gathering tool assessment	Responsive validation method
Data analysis method	Open, axial, and selective coding with the help of experts and Atlasti software tool

Table 4. Methodology in the quantitative section.

Statistical population	170 members of oil industry experts
Sampling method	Simple stratified sampling
Sample size	Morgan table-118 samples
Data evaluation method	Surveying
Data evaluation tool	Questionnaire
Data evaluation tool assessment	Formal validity by the experts' ideas Structural validity (based on the confirmatory explanatory factor) Reliability based on Cronbach's alpha coefficient: 0.901
Data analysis method	Factor analyses and descriptive and inferential statistical analyses (investigating the normalcy of the data through Kolmogorov–Smirnov test, analyzing the relationship between the coefficients using Spearman correlation and structural equation tests, model fitting by structural equation test using SPSS and LISREL software)

In the quantitative section, based on Table 4, the surveying method is used, and the questionnaire tool made it possible while it was validated. The statistical population of the quantitative section includes managers and researchers of the oil industry in research and planning parts who have a vision of upstream, midstream, and downstream sections of the oil industry, counting up 170 people. The sample size was measured to be 118 according to the Morgan table. Simple

stratified sampling was used in distributing the online and paper questionnaires. Cronbach's alpha method and SPSS software were used to evaluate the reliability of the questionnaire. In the beginning, 30 questionnaires were pre-tested, and after validation, all the questionnaires were distributed. The reliability of all 118 questionnaires was 0.901, indicating that it was reliable enough. The reliability for the main variables is shown in Table 5.



Table 5. Reliability of primary variable.

Cronbach's alpha	Number of elements	Main variables
0.840	4	Strategies
0.776	3	Inventions
0.852	4	Background circumstances
0.875	2	Major topic
0.912	1	Causal circumstances

Once the validation and reliability of the questionnaire were confirmed, exploratory and confirmatory factor analysis, along with descriptive and inferential statistical analysis, was carried out using statistical software¹¹.

5. Research findings

The initial model of the research was achieved with 19 (primary) factors divided into six aspects according to the experts' views: causal circumstances, the major factor, background circumstances, interveners, strategies, and consequences. How the main categories are divided into the aspects of the research is presented below.

Causal circumstances include the requirements and the effects of the environment, people's health. The primary factor is green marketing, and background circumstances are environmental impacts on upstream, midstream, and downstream sections of the oil industry; the oil industry structure; and technical knowledge.

Interveners are political, social, and governmental elements. Strategies are macro energy policies, structure, energy efficiency, economics, technology, manager's attitude, human resources, investment, and culture. The consequences are sustainable development.

The repetition rate of each aspect in the interviews is presented in Table 6. As can be seen, the highest rate belongs to the major factor (57), and the lowest belongs to consequences (22). These numbers show that most interviewees pay more attention to the major factor (green marketing) than the consequences (sustainable development). Other aspects to which the interviewees have paid attention are background circumstances (52), causal circumstances (39), and interveners (24).

Table 7 presents the dimensions, major factors, and concepts. It can be understood by analyzing this factor how research dimensions can relate to initial concepts yielded from open coding.

Table 6. Research code repetitions in the interviews.

Dimensions	Interviews' number															Total Sum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Background circumstances	3	15	2	4	3	9	0	0	5	0	1	0	1	4	5	52
Causal circumstances	4	0	1	5	2	4	4	3	5	1	2	5	3	0	0	39
Major factor	2	3	3	11	4	4	2	5	1	2	1	2	9	4	4	57
Interveners	0	1	0	1	0	1	2	8	3	0	0	1	3	3	1	24
Consequences	0	0	2	0	8	3	0	0	1	0	0	4	0	2	2	22
Strategies	20	9	22	16	7	17	6	13	11	11	19	25	0	6	4	186
Total codes	29	28	30	37	24	38	14	29	26	14	23	37	16	19	16	
Total sum	380															

¹ SPSS, LISREL

Table 7. The relationship between the concepts, important topics, and the dimensions of the study.

Initial coding	Major topics	Dimensions
Energy's impact on the environment, international laws about the environment	Environmental	Causal circumstances
The price of the fuel, green marketing, green products	Green marketing	Axial topic
Energy market, international relations, policy-making, initial study, renewable energies, and strategies	Macro policies	
Teaching human resources	Human resources	Background circumstances
Long-term planning, oil organization, oil policy-making, oil laws, and energy-providing companies	Oil structure	
Clean energy, innovation, and technology	Technology	
Indirect costs of the pollutants	Health	
Energy efficiency	Energy efficiency	Interveners
Immigration, NGOs, and social costs	Social	
Taxes, standards, rewards, and government	Governmental	
Resource diversification, development in three axes: economic, social, and environmental	Sustainable development	
Environmental structure (health, safety, and environment), structure, laws, and regulations	Structure	Strategies
People's attitudes and strategic management	Managers' attitudes	
Developing investments	Investment	

Up to this point, open and axial coding occurred, as has been explained before. For selective coding, which is the research theory, the model was first validated, and the research theory was then presented based on the final model.

In the quantitative section, to validate the achieved model from the qualitative section, the measurement tool, i.e., the questionnaire, was designed according to the interviews and the codes. Then, once the questionnaires were distributed and filled, the statistical analysis was carried out.

In the exploratory factor analysis, the questionnaire questions were first validated by software, and their number was reduced to 49 from 78. Next, the questions

from the software were divided into 14 groups, and accordingly, the factors, which were the major topics, were reduced from 19 to 14. In the final stage, the factors were grouped and diminished to five dimensions. In confirmatory factor analysis, the relationship of components with each other and with the questions was investigated and confirmed.

Statistical tests were used to ensure the data were distributed normally, and the coefficients were appropriately used to determine the relationship between the variables and illustrate the final model.

Having determined the relationship between the variables, the final paradigm model (final axial coding) is depicted in Figure 1.

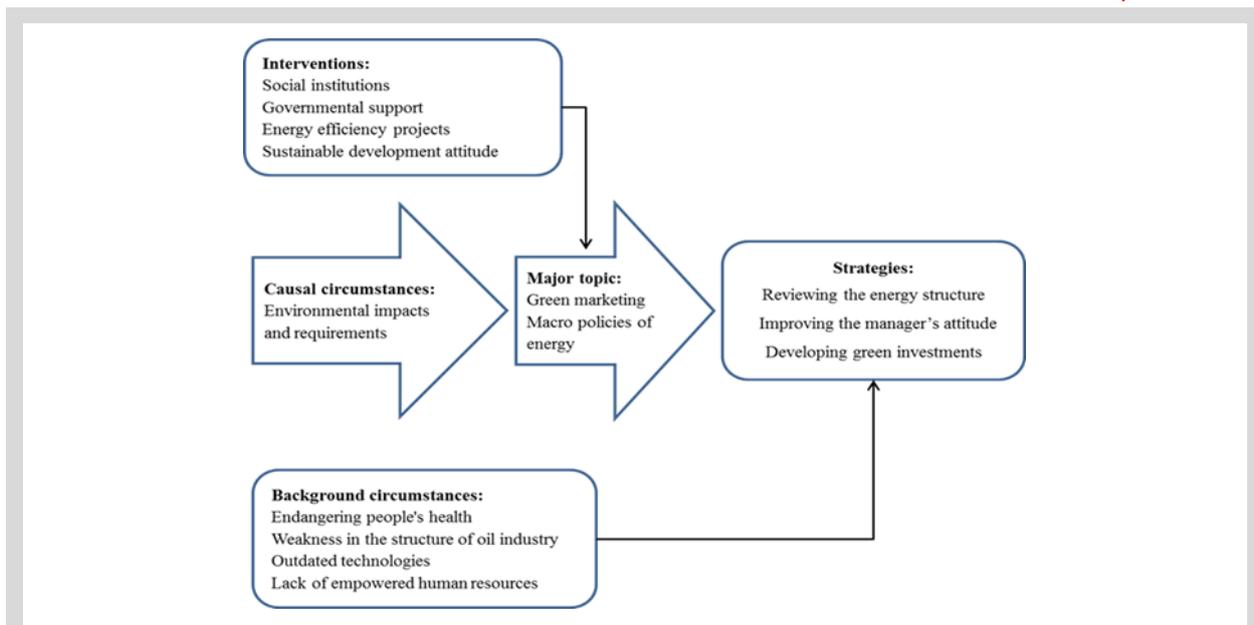


Figure 1. The final paradigm model of the research.

According to this figure, the major variables (dimensions) are causal circumstances, the major factor, background circumstances, interveners, and strategies for which different factors will be explained. Causal circumstances are the requirements and the effects of the environment.

The major factors are green marketing and macro energy policies. Background circumstances include people's health, oil structure, technologies, and human resources.

Interveners are social institutions, governmental support, energy production, and sustainable development.

Strategies include energy section structure, manager's perspective, and investment development.

According to the final model and the relevant concepts to each component achieved by open coding, the theory of this research (selective coding) was finalized with the help of the experts as follows.

5.1. Theory of the research

Based on the green marketing pattern in today's oil industry of the country, attention should be paid to the environmental strategies which are in line with economic ones in order to meet the needs of the customers and environment activists in the international markets for energy, prevent jeopardizing people's health, preserve the planet, and observe the rules from international

contracts on the environment growing in number due to the crises. Taking action briskly toward sustainable development is necessary for the oil industry, accordingly.

Environmental impacts stemming from gas pollutants in the air in all three upstream, midstream, and downstream and wastes in production units of the oil industry, low production of energy, lack of updated technologies, and lack of proper organization structure all form background circumstances. An appropriate organizational structure should be designed to monitor environmental impacts throughout the value chain while facilitating the interactions of marketing and environmental units. Efficient projects should compensate for low energy production, and technical knowledge should also be essential due to its ability to influence research development, expanding and lowering environmental impacts everywhere, including flares, wastes, and effluents.

Green marketing can hugely help the oil industry become green by identifying current markets and predicting the future of energy using tools such as standardization, green labeling, in production procedures and distribution along the value chain; substituting clean products with polluting ones; pricing the products; and promoting green activities, including promotion of knowledge and green culture.

The interveners play a significant role and should be considered when making decisions for implementing

green marketing. The identified interveners in this model are social factors such as nongovernmental institutions and associations to promote green culture and governmental support such as punishing and rewarding policies like carbon and energy taxes, tax exemptions, energy efficiency projects, and attitudes toward sustainable development. Detecting these interveners and how they impact green marketing should receive attention.

Macro strategies to implement green marketing in Iran's oil industry are designing a proper structure for the energy section, improving manager's attitude, and developing the investments; now, the dominant attitude in the oil industry is moving toward economic development and increasing production and sales of petroleum products and products which will keep the country from having a clean environment, healthy people, and obeying the international contracts.

This model's most important consequences are efficient energy production; balanced economic, environmental, and social development; and a move toward sustainable development because of its optimal energy use.

6. Discussion

This section compares the findings of this study to the previous research, already mentioned in the literature review section.

In Elhuni and Ahmad's study, key factors were identified in the economy, environment, and society categories and evaluated by surveying the energy sector experts. In the same line, Schneider et al. introduced environmental assessment indicators of oil industries and evaluated important oil companies. The set of these indicators can be used in the implementation of green marketing in the oil industry. In the study of Moravcikova et al., the advantages of green marketing prove to be innovation, achieving competitive advantage, promoting environmental performance, increasing the awareness of the customers regarding environmental concerns, and reducing the negative environmental impacts in services and products. In contrast, in this study, the relevant factors are parts of the advantages of green marketing patterns in the oil industry, discussed in the literature review section. In the study of Sedaghat et al., the relationship between customer satisfaction, preserving the environment, and minding the collective health of the society were approved. In this study, these two factors lead to green marketing in the oil industry in a related pattern.

Haghighi et al. focused on the influence of management's support of the green activities on green marketing strategy and the environmental function of industrial business in Iran.

The findings show that the environmental culture in industrial business has a significant, positive impact on green marketing strategy, and the manager's support from green activities can strengthen the environmental culture in these industries in Iran. In this study, similarly, promoting the attitude of the managers is considered a strategy for implementing green marketing strategies, which pertains to the spread of environmental culture and education in the oil industry. In Azar et al.'s study, based on the findings, the factors that move the supply chain of the petrochemical industry toward becoming green are national and international pressures, incremental increase of public demand for eco-friendly products, increased number of NGOs supporting the environment, and achieving the competitive advantage. In addition to the factors mentioned above, factors such as energy efficiency and technical knowledge are considered in this study. Omidvar et al. analyzed the barriers to green supply chain management in Pars Khodro Company. Based on the findings, the essential factors are lack of support from chief managers, lack of presence and competition in international markets, lack of technical infrastructure, lack of knowledge and training for environmental issues, lack of sufficient legal leverage to implement environmental laws, and lack of environmental purposes and strategies in the company. In this study, the factors like lack of IT infrastructure and lack of sufficient legal leverage to enforce environmental laws are considered in the revision of organizational structure in the strategy section.

In Shafiei Rood Poshti's study, the tools for applying green marketing are standardization, improving design and production processes, reducing costs, acquiring export markets, being innovative, preserving the environment, and increasing safety. However, in this study, in addition to the mentioned factors, environmental technologies for reducing effluents, waste, and carbon emissions are considered, which are of supreme importance in the oil industry. In a study entitled "Mutual Effects of Inner and Outer Factors on a Hyperactive Environmental Strategy and its Impact on the Performance of the Company", Menguc et al. showed that the attitude of the owners of the organization is effective in adopting a green marketing strategy and will improve the company's performance. Meanwhile, the findings revealed that governmental rules could balance



this relationship. In this study, improving the managers' perspectives is considered a strategy, and governmental support is one of the interveners in the final model. In the research done by Manafi et al., the relationship between consumers' environmental awareness and companies' strategies has been studied and confirmed. In the present study, the environmental knowledge and diffusion of its culture are considered in green marketing patterns, and a new environmental paradigm is considered the conclusion to environmental awareness. Mohammadian and Khataei investigated the relationship between psychological, social, and behavior of the green user and confirmed it as accurate. This study describes the effect of consumer behavior and environmental awareness on the production processes and products in the oil industry.

7. Conclusions

The results highlight the importance of moving organizations toward green marketing, emphasizing environmental awareness, national and international environmental commitments, and environmentalist pressures. Some advantages are achieving competitive advantages; innovation creation; expanding environmental knowledge and culture; and paying attention to standards in production, transmission, and distribution processes. Factors like attributes of senior managers, governmental rules, and environmental knowledge can highly affect green marketing strategies. Substantial barriers to implementing environmental marketing include lack of vision and strategic goals, lack of environmental knowledge and training, lack of technical infrastructure, and lack of legal leverages to implement environmental laws.

In this study, a green marketing pattern has been demonstrated, and the strategies are achieved. In line with this research, the following studies are suggested:

- Detailed studies of green marketing patterns and studying their sub-projects
- Reviewing the organizational structure of the oil industry along with green marketing
- Reviewing the vision of energy and planning green marketing
- Implementing punishing and rewarding policies such as monetary and else to enlarge green marketing
- Studying the opportunity to create added value from pollutants and wastes of upstream and downstream sections
- Spreading the sustainable development culture in the oil industry to grab the attention of senior

managers to the economic, environmental, and social components in development activities simultaneously.

- Empowering NGOs to support environmental activities
- Supporting energy efficiency projects
- Analyzing the world's most recent technologies in the oil industry and being able to implement them in the country

References

- Arif khan, Mohammad. (2011), A study of factors that influence green purchase, Umea school of business and economics
- Azar, A., Mahmoudian, O., Hashemi, M. (2016), Evaluating the provision of green chain in Asalouyeh refineries, using a mixture of fuzzy and nonlinear modeling. *Quarterly Journal of Energy Economics Studies*, 12(48), 173–194.
- Borin, N., Cerf, D., and Krishnan, R. (2011). Consumer effects of environmental impact in product labeling. *Journal of Consumer Marketing*, 28, pp 76–86.
- Chan, H., He, H., Wang, W. C. (2012). Green marketing and its impact on supply chain management in industrial markets, *Industrial Marketing Management*, 41(4), pp 557–562.
- Chomorro, Antonio. And Banegil, Tomas. (2006), Green marketing philosophy: a study of Spanish firms with ecolabels, corporate social responsibility, and environmental management banner, Vol. 13, No. 1, pp 11–24, February 2006.
- Corbin, J., and Strauss, A. (2008). *Basics of qualitative research: techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Elena, F., Eva, M., and Jorge, M. (2013). Green marketing in B2B organizations: an empirical analysis from the natural-resource-based view of the firm. *Journal of Business and Industrial Marketing*.
- Elhuni, Redha. Ahmad, Munir. (2017), Key performance indicators for sustainable production evaluation in oil and gas sector, Intl Conference, June 2017, Modena, Italy.
- Eren, D. Yilmaz, I. (2008). Otellisletmelerinde Yesil Pazarlama Uygulamalari, Nevsehirliornegi, Ulusalpazarlamakongresi, 25–29.
- Gurau, Calin., Ranchhad, Ashok. (2005), International green marketing, a comparative study of British and

- Romanian firms, international marketing, 22(5), 517–551.
- Haghigh, Manizhe; Yazdani, Hamid; Kiasarayi, Fatemeh (2016). Support of senior manager from environmental activities on the green marketing strategy and the environmental performance of industrial businesses in Iran, *Modern Marketing Techniques*. 6(1), 23–88.
- Hekmat Nejad, Hamed. (2011). Evaluating the influence of green marketing on the economic-environmental performance of the companies. Master Thesis, Islamic Azad University of Yazd.
- Kai Chan, H., He, H., and Y.C. Wang, W. (2015). Green marketing and its impact on supply chain management in industrial markets. *Industrial Marketing Management*, 557–562.
- Kumar, V., Rahman, Z., Kazmi, A.A. (2013), Sustainability marketing strategy: an analysis of recent literature, *global business review*, 14(4).
- Manafi, Hasan. Rezayi, Amer, and Kabootari, Sadegh. (2011). The relationship between consumers' environmental awareness and companies' strategies. *Business Management*. No. 2, pp. 36–48.
- Menguc, B., Auh, S., and Ozanne, L. (2010): The interactive effect of internal and external factors on a proactive environmental strategy and its influence on firm's performance, *Journal of Business Ethics*, 94(2), 279–298.
- Mohammadian, Mahmoud. Khataei, Amir. (2011). The relationship between psychological, social, and behavior of the green user. *Business Management*, 3(7), 143–160.
- Moravcikova, D., Krizanova, A., Kliestikova, J., Rypakova, M. (2017), Green marketing as the source of the competitive advantage of the business, *Sustainability*, 9(12), 18–22.
- Noroozi, Hossein. Mohammadi, Razieh. (2016), *Green marketing management*, Tehran: Mehraban Book Institution.
- Omidvar, Reza; Sardari, Ahmad; Yazdani, Naser. (2015). Analysis of green supply chain management barriers using interpretive structural modeling case study: Pars Khodro Company. *Bi-Quarterly Journal of Business Strategies*, 22(5), 35–38.
- Polonsky Michael Jay and Rosenberger III, Philip J. (2001), Reevaluating green marketing: a strategic approach, *Business Horizons*, 44(5), 21–30.
- Schneider, Jennifer. Ghetas, Salim. Brown, Mervin. (2013), Toward sustainability in the oil and gas sector: benchmarking of environmental, health, and safety efforts, *Journal of Environmental Sustainability*, 3(3).
- Sedaghat Bayati, Mahdieh; Sardari, Ahmad; Yazdani, Naser. (2017). Assessment of the relation between different aspects of social responsibility of companies and customer loyalty (case study: Raja Transportation Company). *Bi-Quarterly Journal of Business Strategies*, 24(9), 88–89.
- Shafiei Rood Poshti, M., Khodadad Hosseini, S.H., Kord Naiej, A., Mohammadian, M. (2014). Designing a sustainable model of marketing in automobile industry of Iran. *Journal of Business Strategies*. Vol. 21, No. 3.
- Shamra, A., and R. Iyer, G. (2012). Resource-constrained product development: implications for green marketing and green supply chains. *Industrial Marketing Manament*, 41(4), 599–608.
- Suplico, L. T. (2016), Impact of green marketing on the students purchase decision, *Journal of International Business Research*, 8 (2), 71–81.