

Green marketing strategy for restoring Environment- Net Zero operation emission by Indian Oil Corporation Limited.

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Abstract

Holistic marketing concepts has been implemented by Multinational Corporation in general and big corporations as part of sustainable development for the betterment of society. The new concept–Green Marketing has emerged to grasp the new emerging prospects and to ensure a better standard of living. Green marketing means the marketing of products and services that are acknowledged for a safe eco-friendly production and environment. There are many activities like modification of products and services, bringing changes into the process of production, transmission with ecological packing ideas, plus modified advertisements and many more tasks integrates into Green marketing strategies.

At present large corporates open up with new green marketing ideas and initiatives. The brand image has been improved by showcasing environmentally sustainable products. Moreover, market trends and practices are changed to increase demand for such types of eco-friendly products. It has been acknowledged by many brands that green marketing achieved new height to attract new customers and make more profits further. Indian Oil Corporation Limited(IOCL) is India's leading public sector undertaking under the ownership of the Ministry of Petroleum and Natural Gas. The corporation has been providing energy security to its customers in all its operations as part of its principles of responsible corporate. IOCL working on GRI standards for the last eighteen years to maintain its flagship as the leading implicating oil company of the country as well as a responsible global citizen. IOCL has taken an initiation to implement the green marketing strategy for restring the environment with the net-zero operation.

The main purpose of the paper is to highlight the neo practices on how green marketing activities are performed by IOCL to reiterate the environment. The present paper has been divided into three parts. The first part of the paper will be explained the conceptualization of Green marketing. The second part of the paper will be explaining about the green marketing mix strategy for the long-term vision of organization performance. The third part of the paper will be explained the major outcome of the study.

Keywords: Green Marketing, Marketing mix strategy, Sustainable development, net zero operations.

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Introduction

Holistic marketing concept, now a day, has been implemented by the big corporation for the betterment of society as part of sustainable development. The new concept of Green Marketing has emerged to grasp the new emerging prospects and to ensure a better standard of living. Green marketing means the marketing of products and services that are acknowledged for a safe environment. There are so many activities involved in Green marketing like modification of products and services, bringing changes into the process of production, transmission with ecological packing ideas, plus modified advertisements and many more tasks integrates into this discipline. Individual organisations are also bringing in green practices in their work. 'This process of exploring green products is a continuous journey which will yield the results over some time and the results would be a healthy environment for our next generations' Moreover, based on various study performance of an organization has been influenced by operative marketing strategies (Raghavendra & Kushwaha, 2021). It has been observed that the United States (US) the Federal Trade Commission and the National Association of Attorneys-General have developed extensive documents examining green marketing issues. (Federal Trade Commission (FTC)., 1991). Recently, the Indian government and various organizations have also motivation for green marketing for sustainable development. (Shinh C, 2017). IOCL is one of the leading public sector units of India in the energy sector. The pollution has been released through vehicles and industry waste disposals in air, land and water, considering these climate change, global warming and other environment-related issues are generated. Indian Oil has been taking initiatives as an environmentally responsible and socially inclusive organization with various green marketing strategies. The organization work on the corporate level under the separate group of 'Alternate Energy & Sustainable Development' Group to account for the environmental issues. (Crafting green fuel A sustainability report 2020-2021)

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I. Conceptualization of Green Marketing:

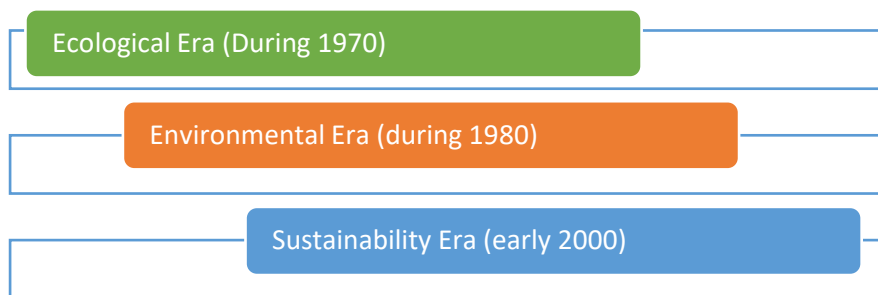
As per the study of polononsky and Michael green marketing also called Environmental Marketing, involves the minimal harmful impact on the natural environment of entire activities, planned to generate for ease any exchanges proposed to satisfy human needs. (Polonsky & Michael , 1994).

The meaning of Green marketing denotes the process of offering products and services to customers without damaging the natural environment, whatever offered product or buying decision of customers should be environment friendly on the base of greenness.

Evolution of Green Marketing

The concept of green marketing is not recent: As per the study (Peattie 2001), there are three phases involved to describe: first phase Ecological Era- During 1970 –During this time the major growing concern of the natural resources which are damaged through pollution and

protected by the use of pesticide to protect crops and plant. It was just remedied for environmental problems. The second phase (Environmental era- During 1980): In these stages "Environmental" green marketing started to solve the problem of air, water, land and noise pollution by designing new innovative products with clean technology and waste management. In the third phase (Sustainability Era - late 1990 and beginning of 2000) Sustainable" green marketing.



Source: Evolution of green marketing (Asare, Azumah, & Mohammad, 2022)

Motives of Green Marketing:

There is a delusion about green marketing, it is not only related to promote greenness and promotion of environment-friendly products and services, it is a very broad concept to recyclable, refillable, ozone-friendly, and phosphate-free, and there are other terminologies also used to define green marketing including societal concept, environmental marketing, holistic marketing and ecological marketing (Kinoti, 2011). Very shortly, the concept of green marketing is growing and going to flourish in future (Dangelico, R. M., & Pujari, D, 2010). The motive of green marketing is to bring regulatory compliance, pollution prevention, product stewardship and corporate responsibility for sustainable development towards the environmental problems that face by the world today. In practice, green marketing is applied to industrial goods and services (Kinoti, 2011). Another expert views Green marketing as meaning "marketing of products that are assumed to be environmentally safe". This definition leads companies to take gain and delivers flexibility in green marketing (McClendon, 2010).

All over the world perception of the customers have changed, about eco-friendly products and services due to increased awareness. Even people are willing to pay more for green products/services, so there is a rise in green marketing practices specially in an educated society. Value education leads people toward harmony with nature so they desire to hand over clean earth to the next generation. There are new job prospects and business start-ups possible in the area of green marketing.

Green Marketing Mix Model: Green 4"p's"

Green Product: Green products are environment-friendly (jute bags), reusable and recycled products (milk bottles). It does not waste resources and not pollute the environment, and saves energy to keep and enrich resources for a healthy environment (electric vehicles). To reduce the use of poisonous elements, marketers offer ecological products that surviving from damage.

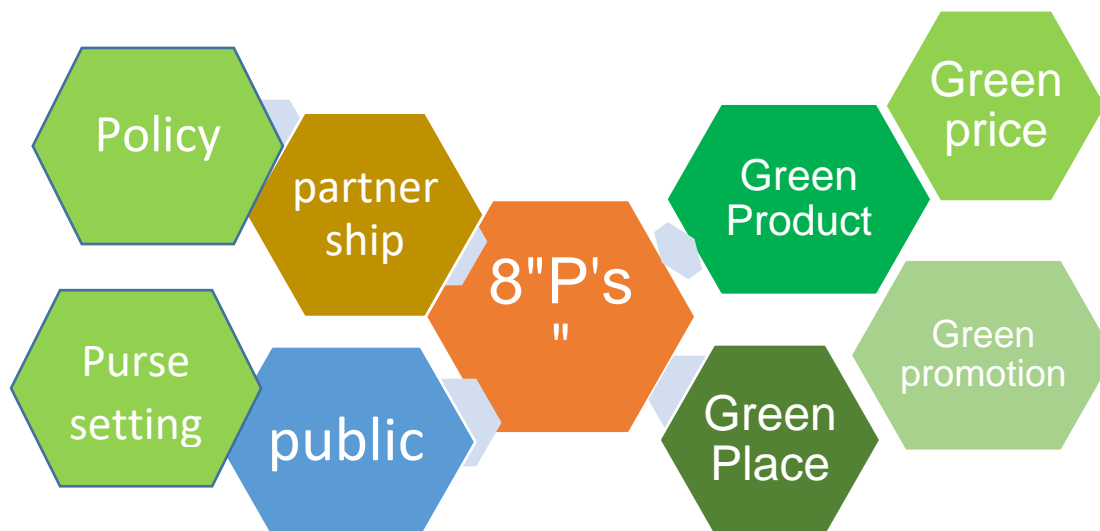
Price: The green price is a very important element of the marketing mix which has intrinsic value for the organization. Green products and services have always a competitive advantage as compared to normal products and services. They always have the bonus of environmental benefits, in comparison, value and quality products are better so the price for green products is mostly the extra costs incurred by consumers. (Yusiana, Widodo, & Hidayat). Generally, the price of such products are higher than the alternative available but the target group LOHAS (Lifestyles of Health and Sustainability) are ready to pay more for green products and services (Panday, 2016).

Place: The availability of the product according to time((when) and place(where) has a substantial impact to attract customers of green products/services but the mass is very less in this segment. The location is very important and under the image that the company wants, because it differentiates from the competitors. As part of green marketing, ecotourism (most luxurious) in trends, for example Coconut Lagoon in Kerala 100% eco-friendly place. Moreover, logistics is a crucial part of the distribution channel including ecological packaging for refilling bottled milk must follow the life span of freshness and Government standards of packaging for perishable products.

Promotion: To be a smart green marketer one must have the skill to use integrated communication tools in practice for sustainable marketing. So effective promotion of green goods and services with public relations, sales promotion and green advertisement have been implemented for their target group.

Additional social marketing "P's" that are used in this process are:

- **Publics:** Effective Social Marketing knows its audience, and can appeal to multiple groups of people. "Public" is the external and internal groups involved in the program. External publics include the target audience, secondary audiences, policymakers, and gatekeepers, while the internal publics are those who are involved in some way with either the approval or implementation of the program.
- **Partnership:** Most social change issues, including "green" initiatives, are too complex for one person or group to handle. Associating with other groups and initiatives to team up strengthen the chance of efficacy.
- **Policy:** Social marketing programs can do well in motivating individual behaviour change, but that is difficult to sustain unless the environment they're in supports that change for the long run. Often, policy change is needed, and media advocacy programs can be an effective complement to a social marketing program.
- **Purse Strings:** How much will this strategic effort cost? Who is funding the effort? The level of greening—strategic, quasi-strategic, or actual—dictates what activities should be undertaken by a company.



II. Green Marketing Strategy a long term Vision of IOC

Indian Oil has been working on environmental sustainability since 2005 to fulfil the national energy need and scent as a "responsible global citizen". In addition, the long-term visions of IOC are altered for a greener future. The organization has been putting their continued efforts on emission mitigation by offering green products, green hydrogen, biofuels, renewables, carbon offsetting through ecosystem restoration, Carbon Capture Utilisation and Storage (CCUS) and mitigating supply chain emission towards net zero destination by 2046 (Chairman IOC Vaidya Shrikant, 2023)

What is NET Zero Aspiration?

Net zero means the balance between the amount of greenhouse gas (GHG) produced and the amount that's removed from the atmosphere, this can be accomplished by emission reduction or emission removal and with a combination of both.

The company tries to lower operational with current emission moderation. For that, they put efforts to reduce the environmental impact of products and enhance the performance of the Greener supply chain by developing a 15000 km pipeline network in length instead of rail and road transport. IOCL has put more effort into the 20000+ retail outlets and set up solar power units with a total capacity of 111.5 MW. (IOC, 2023)

Strategic level Green Marketing: More working on in-house R&D and audits, engaging with subject matter experts, and Greener supply chain performance. Corporation in the plant to meet the renewable power for the refinery expansion to fulfil electricity need for a net zero perspective.

IOC put efforts to upsurge the number of greener fuels in the existing product mix

Indian Oil's products form the backbone of India's fuel needs. At present OCL fulfils the 30 million people's fuel requirement in all over India on daily basis. It contributes approx. 75% of energy consumption contributes to global emissions. IOC offered some proactive greener

products like SERVO Raftaar, Xtra Tej, XP95, Xtra Green, Indi Green. IOC working as a responsible corporate by making India's energy secure by dropping its carbon footprint.

Green Marketing mix

IOC GREEN PRODUCT MIX

Product mix	Engine Oil	Indane Gas	Petrol fuel	Diesel	CNG
Marketing Mix					
Green Product	Servo rafter Servo Green mile	XtraTej	XP 95	Xtra green	Greeny More greener fuel than petrol and diesel
Green price	Approx. Price of \$T motorbike oil Rs,200/can(900ml) High mileage engine oil - 450/900ml	1500 to1700 per cylinder	6./7 Rs. higher than normal petrol	3\4 Rs. higher than normal diesel	CNG green Kit 30000 to 46000.
Green place	Easily available at Petrol pump retail outlets and the online shop also	Indane Agency	Petrol pump in tire 1 and 2 cities, retail outlets	Petrol pump in tire 1 and 2 cities, retail outlets	Petrol pump in tire 1 and 2 cities(less than petrol/diesel)
Green Promotion	TV advertisement, sales promotion, News releases, public relation material, Conferences, Awareness programs press releases, Websites, Social Media Marketing	Industry brochures, Hoardings and standees at the agency, IOC websites, Social Media Marketing	TV Advertisements, sales promotion by local employee press releases, IOC websites, standees and hoardings at petrol pumps, Social Media Marketing	TV Advertisement, sales promotion by local employee press releases, IOC websites, standees and, Social Media Marketing hoardings at the petrol pump	websites, standees and hoardings at petrol pumps, IOC websites, Social Media Marketing

Green Product- Fuel is the basic need of Indian customers. To fulfil the need of 3cr customers daily. These product mixes are all deference product widths of IOC like Servo engine oil and Green mile are eco-friendly and reduce carbon footprint. Servo rafter oil to enhance diesel vehicle performance and green mile premium engine oil for petrol cars and SUVs both are anti-oxidant properties to control oil consumption, Xtra Tej Gas(Indane gas has been developed for commercial and Industrial purposes which are developed in IOC R&D centre to improved heat output/efficiency), XP95 Petrol (this petrol good for high-performance car to give approx. 4% fuel economy) Xtra Green Diesel(new edge fuel have benefited over Diesel to improved 5to 6% of fuel economy and carbon dioxide emission reduction in the environment) and Indigreen is CNG fuel used to minimise pollution.

Differentiations: the concept of eco-friendly, renewable energy and zero emission itself competitive advantage.

Positioning: IOC communicates their green values through H, S & E policy and PR with people-friendly and eco-friendly products. With the transparent promotion, strategies are perceived to be by their customers.

Product Positioning: Indian Oil is focussing on CNG (compressed natural gas), Autogas (LPG), ethanol blended petrol, bio-diesel, and Hydrogen Energy in the country's search for alternative sources of energy.

Green Price – The green price depends on purchasing behaviour of consumers, generally expenditure in the manufacture of green products has differed from normal products has been seen from the above table. price of Rafter and green mile little, Xtra Tej and other products are more expensive than its regular product. Value-based pricing strategy implemented by IOC. Customers who prefer eco-friendly products pay high for X95 and Indi Green very popular products in customers. similarly, to educate the customer for the purchase these products presentation and various green promotions done by IOC.

Green Place-there are more than twenty-eight thousand retail outlets with cleaner and greener Fuel. Buddy is the one of the partner for the distribution of servo products. The company has a very long and strong partnership for Indane gas services with a local distributorship. They are distributing Xtra Tej to industry people. Company Owned Company Operated (COCO) services Indian Oil CNG outlets available in Mumbai and Delhi as a franchisee of Mahanagar Gas Ltd.

Green Promotion: IOC messaging to Green promotion at a different level to their audience by different activities. The brand mascot Rhino is the perfect storyteller of IOC various brands for the strong brand positioning of IOC. They launched brand mascot Rhino on 62 Indian oil day celebrations in September 2021. Rhino is a serious component in the ecological system, and it is key for the sustenance of the ecological chain, IOC spread this awareness to society. Likewise, there are various public relations activities performed by IOC as part of Corporate Social Responsibility. They are working on various renewable energy products. It's "Zero emission" eco-conscious design for the promotion is so effective. It has been reflected in TV advertisements, Press releases, Magazines, news channels, newspapers and websites and interviews by Chairman and CEO's social media on its websites. They do their advertisement in all regional languages, and very effective green promotion on the IOC website with the genuine tagline of each green product some examples are: Xtra Green:" make the world greener place, MILE BY MILE", Extra Tej used in commercial and industrial applications - LPG that last longer "Double saving Ki sugaat", for the renewable source and availability of BS-VI "We are committed towards greener and cleaner tomorrow".

Green Partnership: IOC has a Retail outlet and KSK (kisan Sahkar Kendra) pursues partnerships to deliver fuel in all over India. To accelerate progress toward its stated goals on renewable energy Indian Oil Corporation and L&T have also contracted a joint venture with equity participation to produce green hydrogen. The company is collaborating with NTPC to develop a solar retail outlet with a capacity of around 2.8 GW. Indian Oil R&D in collaboration with SIAM (Society of Indian Automobile Manufacturers) and other vehicle manufacturers, had undertaken extensive field validation exercises to arrive at the optimal Hydrogen percentage to be spiked in CNG. Indian Oil has entered into an MOU with Indian Railways for the plantation of Jatropha on railway land for a biodiesel bend (The Hindu Businesslines, 2023).

Green Policy: IOC works on "H S & E" (Health, Safety & Environment) policies under these IOC adopting best practice ensure the use of appropriate, reliable and safe personal protective equipment at their location to maintain the highest standard. Sustainable efforts of IOC to promote environmental protection and preserve and reediness to respond during an emergency. Zero tolerance safety violations followed by IOC to develop a safety culture among all stakeholders.

Under Government Pradhan Ujwala Yojana IOC also support providing Indane gas services benefits to below poverty line (BPL)customers in the village area to minimise air pollution by traditional cooking (smokeless cooking) style. IOC Government of India announces new policies to encourage green hydrogen /ammonia development, as part of this in the first stage of policy government expects to produce 5 million tonnes per annum output by 2030. Under this IOC plans to switch 'grey hydrogen' to 'green hydrogen' to produce 'clean hydrogen' thru renewable energy (outlook, 2022).

IOCL has designed a Board Committee on Corporate Social Responsibility and Sustainable Development (CSR&SD) at the corporate level, which guides and monitors the initiatives related to Sustainability & CSR.

III. The outcome of the study

- I. IOC has been taking initiatives to invest in low-carbon energy technology and in partnership with other organizations to produce green hydrogen, Carbon Capture, Utilisation and Storage (CCUS), alternate energy, EV and start-up tech solutions.
- II. IOC will plan work on renewable power projects for their refinery electricity need, as a long-term vision of a net zero perspective by IOC, its future expansions will be focused on emission growth.
- III. IOC put efforts to upsurge the amount of greener fuels in the product mix. IOC greener products like SERVO Raftaar engine oil, Xtra Tej(industrial gas cylinder) chotts and Munna (2 kg and 5 kg cylinders), XP95, (petrol) Xtra green(Diesel), Indi Green etc. Company to make India energy safe through dipping its carbon footprint.
- IV. IOC meeting with value chain partners to reduce emissions across the present linkage IOC adopted across its value chain to deliver on its promise by bringing greater efficiencies and greening of the value chain to craft a greener future for all.
- V. To achieve net zero operational emissions: IOC has been putting efforts to progress its various operations, to decrease the ecological effect on green products and develop a supply chain recital. To accelerate development to its specified goals IOC occupys experts commences audits and in-house Research and Development to improve performance, and pursues various partnerships (IOC, 2023).
- VI. IOC is the leading among all Oil Marketing Company in India. IOC desires to make India's prime integrated green energy and decarbonisation foremost offering products counting biofuels, renewables, green hydrogen and new low carbon value chains together with carbon counterbalances and CCUS, to become the state-run green refiner.
- VII. IOC has a strong motive to establish a portfolio to accomplices before 2025 by producing renewable energy (3 gig watts) and biofuel (0.6 million tonnes). These performances will be increased by 2030 by producing more renewable energy (35 GW), biofuels (4 MT) and Biogas (1 MMT). In addition, long-term IOC plans to

- develop a portfolio of renewable energy (200 GW), biofuels (7 MT) and Biogas (9 MT) by 2050.
- VIII. Auto Gas (LPG) is a clean, high-octane, abundant and eco-friendly fuel. It is obtained from natural gas through fractionation and from crude oil through refining. petrol to Auto Gas benefits substantially decreases air pollution produced by vehicular emissions (IOC, 2023). It helps to save 35-40% saving as compared to petrol and it is a strong reason for a consumer to convert his vehicle to Auto Gas.
- IX. IOC set up various plants on renewable energy in India area-wise to produce compressed Bio Gas, the refiner has made two setups, first in Jaipur, to produce 100 tonnes per day of Cattle Dung to CBG Plant and second in Gorakhpur with the capacity to produce 200 tonnes per day mixed waste of paddy straw, press mud, cattle dung to CBG Plant.
- X. Indian Oil has entered into an MOU with Indian Railways for the plantation of Jatropha on railway land to prepare biodiesel blend as an alternative diesel property prepared from alcohol and vegetable oil with chemical reaction. It helps to the reduction by 10 to 15% in smoke density. (The Hindu Businesslines, 2023)
- XI. IOC will take initiative in electronic vehicles by setting up more than five thousand charging stations and sixty-six battery swapping stations. To achieve this target company planned a collaboration with an Israeli start-up company Phinergys which is expertise in hybrid lithium-ion and aluminium-air battery systems.

Conclusion

Green Marketing is necessary to protect the environment for the next generation, with reference to that IOC working on a well-executed blueprint and built H, S & E policy with a long-term vision of net-zero emission in 2046. IOC developed its green agenda with an effective product mix which is easily available in retail outlets. Consumer education is very important and willing to pay more for a greener lifestyle. Additionally, with value partners, they are working on several emission mitigation projects for green energy transition and develop greening of the value chain. The greener promotion movement has been performed by the brand mascot Rhino with various public relation tool. To achieve IOC bring greater linkage between employee training, and technology exposure and developed a necessary system to achieve the target and maintain its position as a leader in environmental sustainability.

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