

Green Marketing Mix (5P's) and Marketing Strategy for Green Automobile in India

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Abstract

The incorporation of word green bestow immortality to the concept of sustainable development. In today's era of globalization automobiles accelerate the pace of development, without which we cannot do work as fastly as we can today. To some extent internet tired to bridge to gap but till today physical distance is a barrier for human being. So, to continue the wheel of development working we have acute need of automobile industry.

But use of automobile creating some type of pollution which are hazardous for mother nature as well as for human beings. Here we need incorporation of word green in our development. For a while we must sit and think about tomorrow. We are running very fastly without taking care of our environment and ourselves. The article focuses mainly how we can make our green marketing mix effective and efficient for a sustainable development.

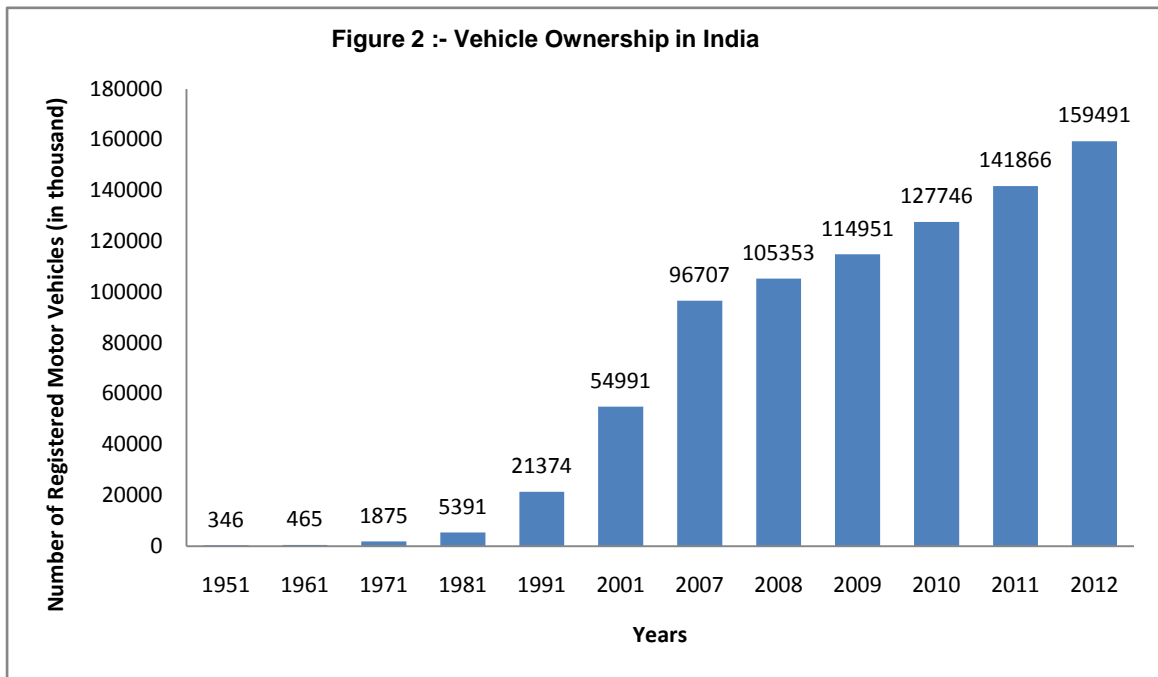
Keywords: Green Marketing, Sustainable Development, Green Marketing Mix.

Introduction

Green marketing gained importance in late 1980s and 1990s after the workshop was held on ecological marketing in Austin (Texas) US in 1975. Volumes of books have been written on green marketing afterwards. A sense of apathy and reluctance is prevailing among consumers because of lack of standards and public opinions to what constitutes green. Green marketing mix is the panacea for all problems of pollution and environmental protection. The tangible and intangible benefits of green product should be highlighted in the promotional programme (less fuel consumption, energy saving, durable, low maintenance requirement). Intangible benefits like clean environment which is good and wholesome for health which in turn ensures healthy and efficient people in the society. The clean and safe environment is of critical importance for the developing country like India where the emission norms are not stringent. Green marketing encompasses a wide range of activities including changes in the product and production process making product indispensable from the point of view of total cost of ownership. The meaning of green to consumers in the diagrammatic form is as follows



Source : A Paper on Green Marketing by Brijesh Sivathanu Pillai & Kanchan Pranay Patil



Source : Yojana November 2015. Page No. – 25

Due to increasing number of vehicle ownership we need green automobile for sustainable development. The number of ownership with due course of time is given in the following bar chart.

Data Sources

This study is based on secondary data with various sources like research papers, journals, books, magazines and internet.

Objective of Study

1. To discuss the need for green automobile industry in India.

2. Present position regarding green marketing mix in automobile industry in India.
3. Problems and barriers in adopting green marketing mix strategy in automobile industry.
4. Strategy for green automobile marketing.

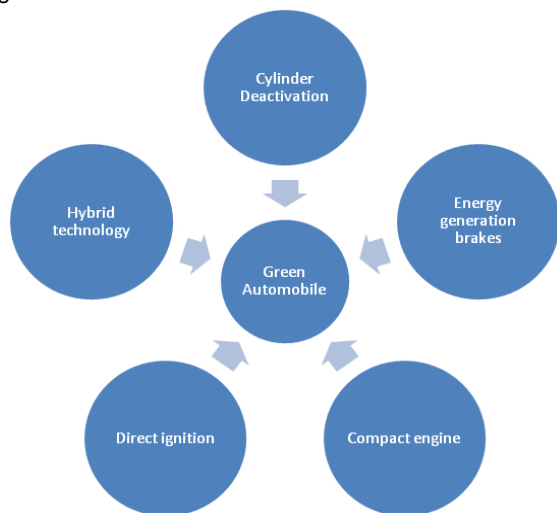
Need for Green Automobile in India

India being the second most populous country in the world having acute need of environmental protection and rules and regulations. Sustainable development is of paramount importance in the present scenario. An automobile is the backbone of development. It is the major source of air

and noise pollution. Fuel consumed by it is depleting our natural resources. As we know resources are scarce, we must use it efficiently to have a better future. Air pollution created by emission which contain SO₂, NO₂, CO₂ & CO etc. lead contained fuel is mining everyday a major part of lead particle in air which is highly hazardous for human being. Increasing level of CO₂ (CF₂Cl₂ & other carbon compound) in the atmosphere is giving rise to the problem of global warming and ozone layer depletion. Increased level of noxious gases in the environment is creating a lot of health hazards which in turn reduces the life expectancy and efficiency of people at work place, hampering the growth and development of the nation.

Being agriculture based economy, India cannot afford to have high pollution level. Air pollution causes acid rain and irregularity in rainfall which causes less production of food grains and there are lots of thing which have impact of pollution. The growing awareness of the need for green automobile is igniting spark in the R & D team of leading automobile companies in India to produce eco-friendly vehicles and to be competitive in international market. For this we need green marketing product strategy.

Next Generation technology for cleaner & greener automobile



Source : Business today August 16, 2015

Cylinder Deactivation

Shut down some cylinders of the engine, thus reducing fuel consumption & emissions.

Energy Regeneration Brakes

Converts Kinetic Energy of the vehicle into electric energy which charges the battery, thus lowering emissions.

Compact Engines

Lesser displacement, lower friction and thus lower loss of energy.

Direct Injection

Directly pushes high pressured fuel into combustion chambers allowing the fuel to burn more evenly.

Hybrid Technology

The vehicle uses both electric and hydrocarbon based fuels. It lessons dependence on fuel that creates pollution.

To apply all these above mentioned point we must understand the value of green in general terms. Green values of automobile includes following point :

1. Lower emissions.
2. Affordable price
3. Total lower cost of ownership.
4. Green technologies including parts and maintenance.
5. Replacing human resource in hazardous manufacturing operations to automation.
6. Exchange offer of green auto with petrol and diesel version cars.
7. Promotional incentive to customers to try the green product.
8. Create and promote loyalty programme for repeat purchase.
9. Proper disposal of automobile at the end of its life.
10. Educating the people the benefits of using green product.
11. Fuel efficient and safer cars
12. Providing manual regarding maintenance procedure and frequency.

Green marketing is not only important for us but indeed inevitable for us. Slogan of "sustainable development" is the mother of green marketing.

There is paradigm shift in the development. Earlier it was only development but now the slogan is "green development". After understanding the term green we must switch over to paradigm shift in the given course of development.

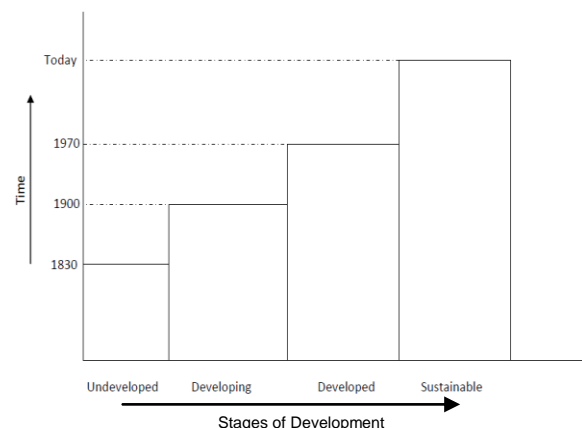


Diagram of Paradigm Shift in Terms of Development

Present Position Regarding Green Marketing Mix in Automobile Industry in India

Actually as it was said by Bradley the number of Ps is not important, some prefer 4p's while others prefer 8 In this paper we decided to use the most common model and just to play with 5p's.

Product

1. Remanufacture i.e. to create new product based on old one or manufacture totally a new product which is environmental friendly.
2. Use less quantity of raw material or reduce the waste material.
3. It provides more benefits than its earlier version.
4. Taking due care at design stage to minimize its environmental impact.

5. To develop products than can be recycled i.e. after use it can be converted into raw material to be used in the same product or another product.
6. Design and manufacture a product that can be used many times before being disposed of.
7. Creating labels for certifying products to be environmentally responsible and friendly.
8. Extending the product life by repairing and reconditioning.
9. Design and produce products which can have multiple use.
10. Enact legislation for the companies to green the product.
11. Improve the value addition processes to reduce, its environmental impact and evaluating the effectiveness of management system in this regards.
12. Reducing the quantity of material in the entire production cycle as we are required to reduce the quantity of resources in the production to reduce its environmental impact.
13. Stop using material when it is unnecessary it reduces the cost of production.
14. Use less electricity which causes in pollution.
15. Each of the model of Toyota must follow a baseline in 6 categories: fuel efficiency emissions, noise, disposal recovery rate, synthetic organic composed and overall life cycle environmental impact.
16. Toyota has started to install Eco Drive indicators in its cars. This encourages environment friendly driving. It lights up when the vehicle is being used in a fuel efficient manner. The aim was to increase drivers' awareness regarding environmental issues and give him tools to improve his driving behaviour. The main technology proposed by Toyota is its hybrid system. The hybrid product provides many technological solutions.
17. Toyota was the first brand to introduce an ecological car with the prius which was at this time the first hybrid car in the world. The prius is not only model to give to consumers 15% premium since the I.Q. also allows it. Toyota also proposes two other models, ejecting less than 115 g/km of carbon dioxide, the Aygo and the yaris. Volkswagon Polo is one of the most environment friendly car due to its low consumption and low CO₂ emission. Reynold's Twing is quite ecological when equipped with a diesel engine. Which the Clio of Reynold rejects 120 gm/km of CO₂. BMW as a luxurious brand is not trying to propose the environmental friendly product as a choice any more, however when the choice still exist the more ecological one is cheaper.
18. This way they will understand that it is worth paying premium price.

Price

Fair price is the demand of the day as consumers are very much concerned about environmental friendly product and sustainable development.

1. Identify and target niche segment where the consumers are willing to pay premium for green

products. They are less price sensitive and are very much concerned about environment.

2. Rational consumers are willing the pay extra for green products but they want to real benefits of clean environment.
3. If the products are at par with other on price, quality, performance and other aspects then the consumer will prefer the one with environmental qualities.
4. One of the way of getting a competitive advantage is to develop a product with a bundle of green attributes at a low cost.
5. Consumers are willing to pay a premium price only if there is a perception of additional product value in terms of improved performance function, design, visual appeal or taste.
6. Consumers must be aware of the green features of the product and its benefits

Place

The location of the product must be easily accessible.

1. Position the green product broadly in the market place so that they are not just appealing to small green niche market.
2. An obvious link must also be visible between image the brand wants to show and the location.
3. It is essential for a company to have an attractive location of store and quality displays, promotion inside the store.
4. Use environmental friendly materials inside the store. An ecological store is consistent with ecological product and will reinforce the green feeling of the consumer.
5. Propose a recycling facility inside the store for the conditioning of the recyclable material.
6. Finding vehicles that are ecological and yet practical.
7. Ensure that distributors are green and associate this responsibility with your product.
8. A distribution planning to co-ordinate the transports can reduce the product movement and thus the emission of gases.

Promotion

It Includes All Kinds of Contact with the Public

Advertising, public relations, promotions, direct marketing.

1. New communication tools and practices e-mails can be used instead of mailings, use of recycled materials if a printing is really necessary, more efficient processes like water less printing – Electronic means of communication should always be privileged.
2. Align with environmental groups. Use shopping bags produced by environmental groups in some shops.
3. A company should never overstate its implication in environmental protection.
4. Highlight and put forward its green achievement of the initiatives of some employees.
5. Firm should encourage its customers to act green. Through its promotion a company can enhance the responsibility of the consumers but also its employees, its patrons etc towards the environmental issues.

6. "Know your customer" the only way to sell a green product into make sure that the people know that is green and are concerned by the problem. A lack of information could inhibit or discourage the consumer to purchase a green product even though they want it.
7. "Empower consumers": The consumes must feel they can make a difference. People will buy a green product if they have a feeling that their purchase will make a difference in the world.
8. "Be transparent": People must believe that what is said in the advertising is true, that the product is what the company claims it is.
9. "Reassure the buyer": consumer must believe that the product can perform the job it is suppose to do. It is good thing to offer a green product but if this one is not efficient people will not keep buying.
10. The company should only reinforce the product qualities with it benefit for the environment, such as use of recycled materials.
11. It has been proven that it is more efficient to target women which are most of the time responsible on the buying of products for the whole family. The influence of children on their parents is also a factor that should not be forgotten.

Package

Adopt and use material that produces less pollution.

1. Use biodegradable material and also package that can be reused or recycled.
2. Avoid use of packs with artificial material.
3. Avoid using oversize packages as it reduces cost and also transportation cost through number of units carried in a truck.

Sources

A case study of integration of green marketing within the automobile industry by de-cracker from cois and de-wulf loic.

Barriers in introducing Green Marketing in India

1. Technological support to create green marketing does not exist to that extent and automobile companies haven't invested towards it. But whatever technology is present is too expensive to be introduced in the Indian market.
2. Already existing fuel cars network can't be replaced overnight.
3. Awareness amongst people towards emissions, its causes, health effects, economic damage etc. is very limited in developing countries like India.
4. Lack of a comprehensive strategy to encourage the development of a green transport sector.
5. Lack of understanding of the policy tools that can be used to influence behavioural change, e.g., the role of (a) taxation or subsidies and (b) other regulatory, economic or persuasive measures appealing to economic interest and moral/ethical considerations.
6. Failure to realize the full potential of technological changes or innovations leading to cleaner fuels and greener vehicles.
7. Lack of appreciation of the role of and need for public investment in infrastructure, e.g. pedestrian and bicycle ways, light rail, good bus service and other forms of mass transit.
8. No green fuel network or innovation present.

Sources

Analyzing the feasibility of green marketing in Indian Automobile industry by Prof. Shewa Batra and Amit Shankar.

Strategy for Green Automobile Marketing

India has a mammoth burgeoning population. Therefore implementing green automobile we must have a look at increasing number of roadways also which is clear from the given table.

**Table - 2
India's Road Network Since 1951**

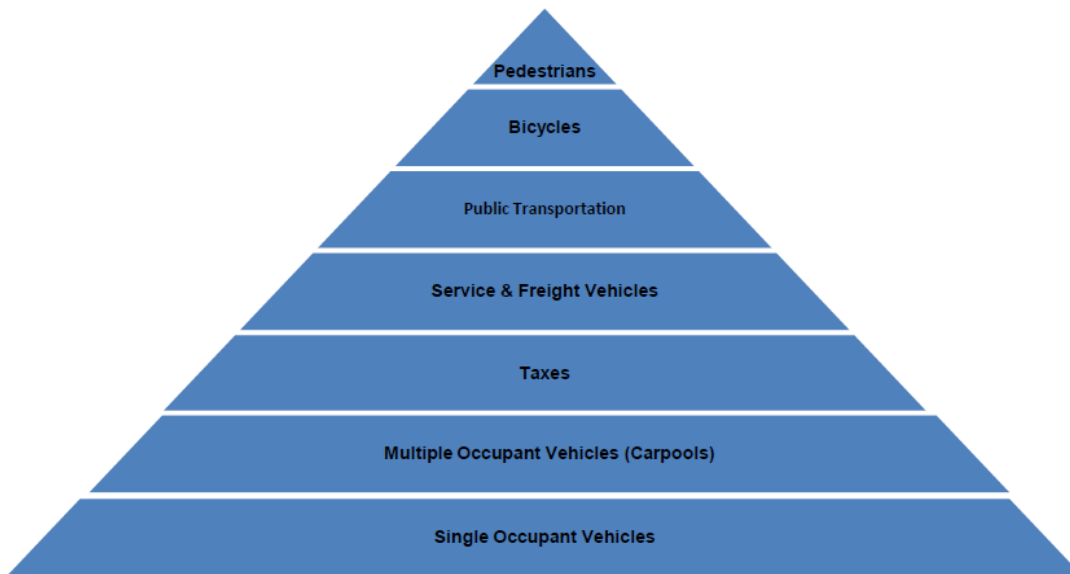
Road Category	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2011-12	2012-13
National Highways	19811	23798	23838	31671	33650	57737	70934	79116
State Highways	0	0	56765	94359	127311	132100	163898	169227
Other PWD Roads	173723	257125	276833	421895	509435	736001	998895	1066747
Rural Roads	206408	197194	354530	628865	1260430	1972016	2749804	3159639
Urban Roads	0	46361	72120	123120	186799	252001	411679	446238
Project Roads	0	0	130893	185511	209737	223665	281628	310955
Total	399942	524478	914979	1485421	2327362	3373520	4676838	5231922

Sources : YOJANA November, 2015, Page No. – 25

It is obvious from the table the roadways are increasing day by day which has both pros and cons affect our climate. Therefore, government proposing given highways which is the need of hour "Green

automobile" must have hand in hand with "green highways" for sustainable development. Which can be attained with the help of green transport hierarchy.

**Figure 1
Green Transportation Hierarchy**



Sources : Road Transport Year Book (2011-12). M/o Road Transport and Highways Gol. YOJANA November, 2015, Page No.-24

Strategy Taken by Automobile Companies in India

1. Investment in green products like CNG/LPG kits in the cars for other source of fuel.
2. Hybrid cars developed and marketed by companies like Toyota and Honda with other catching up.
3. Electric cars are creating a buzz and are supposed to be the future with the lithium ion batteries put in them.
4. Also government policies are in favour of the green products promoting them such as strict laws for emissions by cars e.g. euro IV and bharat IV.
5. Gasoline prices rising up to make people buy CNG and other variants. Also greener fuel are

- used now i.e. shift from leaded to unleaded fuel.
6. Delhi CNG program transformed public transportation and controlled air pollution.
7. Technological advancement in I.C. engines and fuel economy e.g. a shift from 2-stroke engines to 4-stroke.
8. Vehicles emission control switches are installed in automobiles to control emissions and keep a check on it.
9. Measures can be taken to influence travel behaviour amongst public.

Source: Analysing the feasibility of green marketing in Indian Automobile Industry a paper by Prof. Shweta Batra, Amit Shankar

Implementation of Green Marketing Strategy

Marketing Research	Focus on sustainability to obtain on environmental issue from stakeholders on products, communication, pricing and distribution strategies. Diffusion characteristics : relative advantage, observability, complexity, triability.
Production	Change production and processes to be more environmentally sensitive. Diffusion characteristic : relative advantage, observability, complexity, trialbility.
Distribution markets	Create more circular market. Using multichannel distribution (or just via internet) for easy to find and buy products or services. Create new market or niche. Diffusion characteristics : relative advantage, observability, complexity and triability.
Price	Emphasize long term costs and ownership and use rather than short-term price (e.g. Energy Efficiency) Offer price incentive. set prices of green innovations to meet or be lower than the competition.
Promotion	marketing communication should use new media (internet mobile marketing) and promote green values and benefits compatible between organizational sellers and buyers. Offer sales promotion incentive to customers to try the product. Create reward/loyalty programs to reward repeat purchase. Education on green policies and strategies to various stakeholders. Emphasize long term cost of ownership/use Diffusion characteristics : related to mainly observability but also related to compatibility, complexity and trainability and relative advantage.
Partnership	Create "Eco-alliances" with stakeholders for input strategy and implementation. Diffusion Characteristics : relative advantage, observability and compatibility.

Source : A Paper on Green Marketing by Brijesh Siva Thana Pillar and Kanchan Prahay Pail

With help of all these strategies implementation We can absolutely attain a better green tomorrow.

Conclusions

After studying these dimensions of green automobile marketing we can visualize a better future. But actualization requires the consistency between plan and action. The plan come into effect really when it goes from paper to people .For this we need a co-operative attitude of technocrat- beurocrat -managers -government -people. The automobile companies in collaboration with government should create awareness campaign to make people conscious of the necessity and benefits of green automobile. As the people state adopting green automobile, the price of the automobile will come down and the affordability will become better for people, this marketing in not the exception of the law of diffusion of innovation. All there effort are directed towards a green earth.

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