

A study on Green marketing in selected Automobile Industry

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1. INTRODUCTION

Enormous economic growth, advent of scientific and technological innovations, intense competition in money making strategies coupled with population growth have exploited the natural resources to its maximum level. This has resulted in the degradation of our natural environment. Its repercussions have threatened the health of the planet which includes rising greenhouse gases, land degradation, acid rain, global warming, hole in ozone layer, depletion of forest cover, extensive loss of biodiversity and natural habitat etc. **Green marketing** refers to the process of selling products and/or services based on their environmental benefits. Such a product or service may be environmentally friendly in itself or produced and/or packaged in an environmentally friendly way. Concept of green marketing concerns with protection of ecological environment. Modern marketing has created a lot of problems.

Growth in marketing activities resulted into rapid economic growth, mass production with the use of advanced technology, comfortable and luxurious life style, severe competition, use of unhealthy marketing tactics and techniques to attract customers, exaggeration in advertising, liberalization and globalization, creation

of multinational companies, retailing and distribution by giant MNCs, etc., created many problems. Excessive pollution has provoked the Nature and the Nature starts behaving in unnatural ways (in form of global warming v/s global cooling, heavy rains v/s draught, and other natural calamities like frequent earthquakes and tsunami, cyclones, epidemics, and so forth). Economic growth via production and consumption threatens peaceful life of human being on the earth. Terms like Phosphate Free, Recyclable, Refillable, Ozone Friendly, and Environmentally Friendly are some of the things consumers most often associate with green marketing. Thus green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. Yet defining green marketing is not a simple task.

OBJECTIVES

- To study the impact of the green marketing in current scenario.
- To analyse the benefits of having green marketing strategies of selected Companies
- To understand how the green marketing strategies are developed by selected companies.

METHODOLOGY FOLLOWED

The research is based on secondary data. The data have been collected from

Website, annual reports, books, journals and articles, websites, newspapers, magazines, case studies.

Five Effective Green Marketing Strategies

In recent decades, sustainability has become a priority for consumers, who are increasingly on the lookout for products that are high-quality, affordable and environmentally-friendly. This has led companies to devise green product and marketing strategies. According to a June 2014 Nielsen study, 55% of global online consumers “are willing to pay more for products and services from companies that are committed to positive social and environmental impact.” In fact, as early as 1992, the European Commission established the EU Ecolabel, a Europe-wide voluntary environmental labeling scheme that aims to help consumers identify sustainable products and services. Companies have employed marketing tactics to assure consumers that their products are green. Green issues are often complex and highly technical, so consumers are sometimes unknowingly persuaded into buying products that are misleadingly advertised as sustainable or ecologically friendly. It is extremely important for companies to develop legitimate and effective green product and marketing strategies. A company that is honest and genuinely committed to sustainability can earn the respect and loyalty of consumers.

1. Green Design

A fuel-efficient car that experts are raving about on social media may contain conflict

materials. The most important green marketing strategy is to design products and services that are green to begin with. If a product or service is environmentally-friendly from the ground up, there is no need for green marketing.

2. Green Positioning

A company should explicitly promote its sustainability performance—and those of its products and services—as a key component of its business activities. Everything a company does should reflect its sustainability values. They cannot claim to be sustainable while engaging in unsustainable business practices such as making employees work under sweatshop conditions. Doing so will ruin the company’s credibility with consumers.

3. Green Pricing

A company should highlight how a green product or service can help consumers save key resources. A car company, for instance, can promote its latest vehicle by emphasizing how it is more fuel-efficient compared with other leading car brands. This allows consumers to actively participate in sustainability. They become aware that their choice is about investing in something that will allow them to save money and resources in the future, rather than making a short-term purchase.

4. Green Logistics

In addition to a product or service being green, its packaging must also be green. Packaging is the first thing that consumers see. Unsustainable packaging has the potential to dissuade consumers from purchasing sustainable products.

5. Green Disposal

An effective green marketing strategy takes into consideration every aspect of a product's life cycle. From production to disposal, everything must be sustainable. Unsustainable disposal practices can be hazardous to both the environment and human health.

Ford Motor Company outlines its top 10 green initiatives

Ford created a Top Ten list that focuses on some of its latest "green" initiatives. Ford's comprehensive global sustainability strategy includes a focus on the development of environmentally friendly vehicle technologies, including hybrids, diesels, bio-diesels, advanced engines and transmissions, E85 ethanol, plug-in hybrids, hydrogen internal combustion engines and fuel cells. In addition, Ford is introducing sustainable efforts throughout the company in manufacturing, materials and facilities management.

Ford's commitment to green vehicle technologies will result in improved fuel economy for its customers and reduced CO₂ emissions. Other green efforts will help it minimize its environmental impact through the conservation of energy and a reduction in pollution, while saving the company and customers money.

1. Use of Sustainable Fabric – The 2008 Ford Escape is believed to be the first U.S. automotive application of 100 percent recycled fabric seating surfaces. The new fabric, supplied by Interface Fabrics, Inc., is produced from 100 percent post-industrial waste. Post-industrial waste is something originally intended for retail use that never makes it to the consumer. It can include anything from plastic intended for pop bottles to undyed polyester fibers that don't make the cut for consumer use.

This plastic and polyester is processed, spun into yarn, dyed and woven into seat fabric. Recycling waste otherwise destined for landfills has obvious environmental benefits.

Interface Fabrics estimates that Ford's use of post-industrial recycled materials, rather than virgin fibers, will conserve up to:

- 600,000 gallons of water 1.8 million pounds of carbon dioxide (CO₂) equivalents
- the equivalent of more than 7 million kilowatt hours of electricity

2. Leader in Fuel-Efficient 6-speed transmissions – Ford, Lincoln and Mercury offer 15 models that are available with fuel-saving 6-speed transmissions. Ford plans to produce approximately 1.3 million 6-speed transmissions annually by 2008. Two out of every three vehicles will be offered with 6-speed transmissions by the end of next year. Fuel efficiency is improved up to 7 percent in highway driving over typical 4-speed transmissions while offering better performance and smoother, more precise shifts.

3. Ford Introduces First Clean Diesel in Heavy-Duty Pickup Segment – Ford is leading the diesel revolution with the 2008 Super Duty, offering the segment's first clean diesel engine. The new 6.4-liter diesel utilizes Ford Clean Diesel Technology and meets the most stringent emissions standards in the world while increasing power and torque in an engine that is smooth and quiet. The 6.4-liter PowerStroke clean-diesel makes an impressive 350 horsepower at 3,000 rpm and 650 foot-pounds of torque starting at 2,000 rpm while reducing particulate output by up to 97 percent to a level on par with gasoline engines.

4. Sustainable Landscaping Preserves Environment and Looks Good – In an

effort to conserve natural resources, improve habitat and lower costs, Ford has installed nearly 200 acres of sustainable landscaping around its corporate properties in Dearborn and Allen Park, Mich. The comprehensive grounds maintenance plan incorporates fields of wildflowers, natural prairies and fallow fields. Several prairie fields are designated “Grow Zones,” meaning they contribute to a sustainable environment by preserving natural resources, providing wildlife habitat, absorbing rainwater, reducing erosion and saving maintenance costs.

5. First Two-Time Winner of EPA’s Energy Star Award – Ford’s actions to increase energy efficiency and reduce greenhouse gas emissions from its facilities have earned it the U.S. Environmental Protection Agency’s coveted Energy Star 2007 Partner of the Year Award in Energy Management. Ford is the first automaker to receive the award two years in a row. In 2006, Ford improved energy efficiency in the U.S. by 5 percent, resulting in savings of approximately \$25 million. Since 2000, Ford’s U.S. facilities have improved energy efficiency by 25 percent, equivalent to the amount of energy consumed by 220,000 homes.

6. Ford Escape and Focus Are More Than 80 Percent Recyclable – Dismantlers and shredders process more than 94 percent of all salvaged vehicles. They collect parts and materials for reuse, remanufacturing and recycling. Usually, 75 percent of an automobile’s content is recycled – including steel, iron, aluminum, copper and other non-ferrous metals. The Ford Escape and Focus exceed the norm, being more than 80 percent recyclable.

7. Paint Fumes Become Fuel at Michigan Truck Plant – Ford’s

innovative Fumes-to-Fuel system burns paint fumes in a process that produces electricity at the Michigan Truck Plant in Wayne, Mich., home of the Ford Expedition and Lincoln Navigator. The patent-pending Ford system uses a Stirling cycle engine to burn the fumes from solvent-based paint used to paint cars and trucks. Not only does the process virtually destroy the volatile organic compounds (VOCs) in the fumes, it also produces electricity for the plant. The program burns one-third of the fumes in one paint booth, yet 45 to 50 kilowatts of electricity are produced – enough to meet the typical demand of an average suburban block of houses. Currently, Ford’s North American assembly plants incinerate the VOCs in solvent-based paint fumes, but the process requires a significant amount of energy, substantial floor space and produces some carbon dioxide (CO₂). The only by-products of Ford’s Fumes-to-Fuel system are small amounts of water vapor, CO₂ and nitrogen oxides.

8. Keeping Cool With Geothermal Cooling System – The Lima (Ohio) Engine Plant, home of production for Ford’s award-winning Duratec 35 engine, uses cold water from two abandoned limestone quarries on the property to cool a portion of the plant and its equipment. The geothermal system saved Ford \$300,000 in installation costs – compared with the cost of installing a traditional cooling tower – and saved more than \$300,000 in annual operating costs. Although actual cost savings are difficult to determine at this point, the system is capable of providing chilled water using 0.1 kilowatts per ton of cooling vs. traditional chiller systems with cooling towers, which consume around 0.7 kw/ton or more. In addition, several hundred thousand gallons of domestic water have already been saved

due to the elimination of some existing cooling towers.

9. Police Go Green with the 2008 Crown Victoria Interceptor – The 2008 Ford Crown Victoria Police Interceptor will be the first and only police fleet vehicle offered with flexible fuel capability, allowing it to operate on E85 ethanol or gasoline. Ford is the largest producer and seller of police vehicles, with more than 80 percent of the market. As police and government agencies move toward becoming more environmentally conscious and seek alternative fuel vehicles for their fleets, Ford is in the position to fill this need for its police customers. Ford's current lineup of flexible fuel vehicles (FFVs) includes the Ford F-150, Crown Victoria and Mercury Grand Marquis models.

Ford has placed more than two million flexible fuel vehicles on the road and has pledged to make half of its production capable of running on alternative fuels by 2012, provided the necessary fuel and infrastructure are in place. The company recently announced it has achieved 50-state certification for all of the Ford and Mercury 2008 flexible fuel passenger car models. In an effort to differentiate its FFVs from standard gasoline vehicles, Ford will begin equipping the E85-capable vehicles with yellow gas caps by the end of this year.

10. World's Largest Green Roof – Ford's Dearborn Truck Plant has the World's Largest Living Roof, according to Guinness World Records. The 10.4-acre living roof is part of Ford's redevelopment of the Ford Rouge Center, which includes a number of progressive environmental initiatives. The roof is composed of a drought-resistant perennial groundcover called sedum which is planted into a specially layered bed. Virtually maintenance-free, it can absorb up

to 4 million gallons of rainwater annually and is part of a broader storm-water management system installed at the Rouge. In addition to absorbing rainwater and carbon dioxide, the sedum roof produces oxygen and provides natural overhead insulation for the final assembly building, thereby reducing energy costs. It also is expected to last twice as long as a traditionally constructed roof.

Green Manufacturing initiatives by Maruti Suzuki India LTD(MSIL)

Suzuki, the leader of the automobile industry in India, also boasts of the largest manufacturing facilities in the country. Although both the manufacturing facilities work at full capacity, the company ensures that this does not harm or damage the environment. Over the years, MSIL(Maruti Suzuki India LTD) has taken special initiatives to minimize the carbon footprints of its manufacturing facilities, products, and supply chain operations. The company believes that investing in environment friendly technologies makes business sense as it shall bring good results in the medium to long term. Keeping in line with this vision, MSIL has always remained ahead of the environment regulations and improved its products, manufacturing and supply chain operations to minimize environmental impact of its business operations on society.. The company is going ahead with investments in environment friendly technologies and waste minimization to make its operations greener and environment friendly going forward. Although the initial investment is high, the company has realized that in the long term, it gives a better return of the investments made. The company is investing and implementing such initiatives/processes in both their

manufacturing facilities in various verticals. Maruti Suzuki has the distinction of being the first automobile company in India to register a Clean Development Mechanism (CDM) project with the United Nations Framework Convention on Climate Change (UNFCCC)*.

Green Manufacturing

Since manufacturing is the core aspect of the company, the company has maintained a special focus on this. MSIL follows basic philosophy of smaller, lighter, shorter and neater facilities. The company has identified five focus areas for protection of the environment and optimum utilization of resources.

The initiatives undertaken can broadly be classified under the following verticals:

1. Material use and weight reduction
2. Energy conservation
3. Water conservation
4. Air emissions reduction
5. Waste management
6. Dry wash system

Material use and weight reduction

MSIL has embarked on to improve its processes for efficient use of resources. It continued with its “one gram one component” program to reduce material consumption through re-engineering and design modification of existing vehicles. With this program in place, MSIL is aiming to reduce overall raw material consumption. Saving and efficient use of raw material does not stop here, MSIL has further implemented a system to use the scrap generated from their press shops. The scrap generated in press and casting operations is sent to vendors who manufacture child parts. The company focuses on yield improvement to conserve resources. The scope of this activity was

extended from their traditional sheet metal to plastics, electrical and casting operations.

Energy Conservation

In any manufacturing plant, energy consumption is a major vertical for costs and carbon footprints. Even in this aspect MSIL has been taking initiatives to reduce costs and carbon footprints. Both the facilities run on captive power plants that use natural gas, clean & green fuel. The newly commissioned plant at Manesar has been designed to use maximum use of natural light, thereby reducing the need for artificial lighting in day light. Specific to the plants, in Gurgaon, the following steps have been taken: Installed waste heat recovery boilers and steam turbine generators to generate power from waste heat recovered from existing gas turbines at Gurgaon plant. Introduced a new generation electro-deposition (ED) paint coating that operates at low voltage and consumes less energy in paint operations. Aerodynamic energy-efficient fibre reinforced plastic (FRP) blades replaced the standard blades at the cooling towers for lower energy consumption. The voltage in the shops was optimised for lighting and motor loads. Desiccant-type air dryers were introduced to reduce energy consumption.

In Manesar, (Haryana) the following steps have been taken:

Installation of LED lights at the newly commissioned second plant, making it the first car manufacturing plant in India to use LED technology entirely. (A normal tube light uses 50 watts of electricity and the initial purchasing cost is around Rs. 60. An LED light uses 22 watts of electricity and costs around Rs. 1,500.) Installation of Gravity conveyors in welding shop of second plant to transfer body panels

thereby eliminating the need for electrical motors. In addition to this, energy efficient motors installed in utility equipment. Regular energy audits of vendors to reduce energy consumption and costs by sharing its best practices and benchmarking.

Water Consumption

Water is another scarce resource and MSIL is making all efforts to conserve & promote efficient use of it. The company has achieved a “zero discharge status” since 2003-04 in Gurgaon and since 2006-07 at Manesar. The company uses canal water for most of its manufacturing processes to conserve ground water. The total water consumption for both the Gurgaon and Manesar plants was 1,801,322 m³ comprising 1,495,754 m³ canal water, 305,018 m³ tube well water and 550 m³ rain water. Other water saving initiatives of the company includes:

A total of 1,234,767 m³ of water was recycled and it is reused in accounting for 41% of the total water requirement of both manufacturing facilities. The company has achieved zero waste water discharge status.. Introduction of direct cooling systems for air-conditioning. Use of air-cooled dryers instead of water-cooled dryers in the compressed air plant. Use of recycled water instead of raw water in paint shop in Gurgaon plant. Installation of air-cooled condensers in place of water-cooled condensers in Gurgaon and Manesar plants.

Air emissions reduction

The major source of Green House Gas (GHG) emission at Maruti Suzuki is the combustion of fuel for power generation and process requirements, accounting for over 90% of the Company’s total GHG emissions. The total GHG of both plants was 3,14,355 T (CO₂) for 2011-12. GHG reporting has been done as per Scope 1 and 2 of the WBCSD/WRI Protocol. Ambient

air quality and stack emission parameters (SO_xNO_x, SPM etc.) are monitored regularly by a government approved external agency. The monitored values are well within the prescribed limits of the Pollution Control Board. Initiatives to reduce emissions that were undertaken in the reporting year include: A special fluidized bed type incinerator installed for cleaning of paint booth gratings instead of a direct burning type incinerator. Improvement in the operational efficiency of gas turbines.

Waste Management

The hazardous wastes produced as by-products of manufacturing operations at Maruti Suzuki include paint, phosphate and effluent Treatment Plant (ETP) sludge, incinerator ash and used oil. The used oil is sold to authorised recyclers. Maruti Suzuki has been sending paint sludge, phosphate sludge and ETP sludge to the cement industry for co-processing since 2010-11. This has eliminated the need for incineration and land filling. The saleable solid wastes such as metal scrap and glass waste are sold to recyclers. All in-process and vehicle related e-waste is disposed off through authorized recyclers only. Maruti Suzuki as a responsible corporate strongly believes that this is the right time to put the foot on the pedal and scale up its sustainable growth programs. With this resolve to make the company and its value chain more sustainable, the company moves ahead in their journey.

Dry wash systems:

In this system the final water wash process has been replaced with vehicle cleaning using special eco-friendly wash chemicals. The Company uses a special bio-degradable dry chemical wash that has helped reduce washing time and water consumption by over 216 Million litres per annum. In 2016-

17, nearly 2.28 Million vehicles were cleaned using the dry wash system against 5.7 lakh vehicles on 2015-16, over three-fold increase. This system has been implemented in 1,130 workshops across the service network.

Automated oil management system: The new Automated Oil management system protects against oil spills, saving both time and effort. It also provides greater control and a method to monitor oil quantity used, thereby preventing wastage and improving productivity. As of 30th March 2017, 697 workshops have implemented the oil management System, preventing spillage and improving efficiency..

CONCLUSION

Conclusively we can say that green marketing concept is evolving at a rapid pace in India. The adoption of green marketing practices by many companies has made a remarkable impact to the environment by planning for sustainable conservation of natural resources and making our environment protected. Although the government and many private companies have been making an effort to bring about a green mindset among the people and promote green products, a lot still need to be done to make green products truly viable and workable in India. Activeness about green marketing by government, companies, customer & society as a whole should be amplified as environment should be top management priority. Moreover responsibility of environment protection should be communal driven efforts. The environment and society is looking forward for practices from the companies who have not yet implemented.

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