GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES

GREEN MARKETING AND SUSTAINABLE DEVELOPMENT

Kanak Tara*1 and Ritesh Kumar2

*¹Research Scholar, Indian Institute of Technology (ISM), Dhanbad-826004, Jharkhand (India) ²Scientist, CSIR-Central Institute of Mining & Fuel Rsearch, Dhanbad-826015, Jharkhand (India)

ABSTRACT

The negative impact of human activities on environment is well known to all of us. The government all around the globe is making immense efforts to minimize the human impact. Corporates are fastly responding to this new societal issue that has threatened our own existence. Corporates are actively participating in this green marketing movement and accordingly are reshaping their businesses. Government is also trying to have her say through various laws and regulations to address the issues in their own way. The paper examines issues of green marketing and sustainable development and discusses on the need and significance of green marketing in the 21 century. This paper attempts to capture some of these initiatives within and outside India, which may provide ideas for other companies that are becoming part of this green movement. This paper also talks about the bank regulatory environment, way forward of green marketing, obstacles in the way of green marketing in the form of green washing and support from the government and regulatory bodies for the success of green marketing.

Keywords- Green Marketing, Sustainable development, Green Washing, Regulatory Bodies, Corporates, Environmental Impact.

1. GREEN MARKETING

In the era of increasing environmental issues and tremendous climate change the 'go green' mantra has taken the front seat in almost all spheres of life. Human beings are getting more and more environmental and health conscious at the same time. The growing concern of the people on the environment related matters has given the speed and shown the path to the emerging sustainable and socially responsible products and services. Every sectors of business are adopting the sustainable practices formula and are trying to prove itself a responsible entity of the society. Every business is trying to reduce its carbon footprint. Collectively, such initiatives are referred to as 'Green Marketing'. The concept of green marketing owes its origin from the limited resources available on the planet earth and the unlimited wants that the human being carries. Thus it becomes very important for the marketers to make judicious and efficient use of the limited resources. According to American Marketing Association - "Green marketing is the marketing of products that are presumed to be environmentally safe." Similarly, Polonsky (1994) has defined "Green or Environmental Marketing" as all such activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment. The "Green Marketing" is holistic marketing concept incorporates a broad range of activities, wherein the production, marketing, consumption and disposal of products and services happen in a manner that is less detrimental to the environment. There are numerous other definitions but the key meaning and focus of all is satisfaction of customer needs and wants with no or minimum harm to the natural environment.

Sustainable development is now being talked in almost everything. Sustainable development, as per Brundtland Commission is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". It contains within it two key concepts:

- the concept of **needs**, in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of **limitations** imposed by the state of technology and social organization on the environment's ability to meet present and future needs."

2. GREEN MARKETING AND SUSTAINABLE DEVELOPMENT

Green marketing is typically practiced by companies that are committed to sustainable development and corporate social responsibility. More and more organizations are making an effort to implement sustainable business practices as they recognize that in doing so they can make their products more attractive to consumers and also reduce expenses, including packaging, transportation, energy/water usage, etc.

Green marketing or sustainable marketing can contribute to sustainable development not only through everyday's practice of minimizing the environmental impact but also by implementing new policies and strategies to bolster a wider concept of sustainable growth as a fundamental part of economic entities. Sustainable marketing should therefore be regarded as an initiator and trigger of a sustainable society in a way that all of its functions are focused on the goal to preserve and protect environmental and social factors and finally, on creating a general culture of sustainability within a



society. Sustainable marketing is undoubtedly a social, ecological and nature-centred model and hence it has great potential as a force for shaping cultural changes of the whole society. Bearing in mind the fact that marketing has, in a number of cases, largely contributed to the creation of many unsustainable habits, one can assert that its version in the form of sustainable marketing may, due to its authenticity, community and responsibility, represent its, so to say, "redemption" and classification into an extremely desirable type of business conduct which will be seen as a function of sustainable development and thus as a benefit for future generation.

3. CURRENT SCENARIO

The business fraternity from all the sectors across the world and in India is now participating in this green movement. This shows a commitment of companies, either as part of their corporate social responsibility or otherwise, to do something worthwhile in this direction. Some of the green marketing initiatives worldwide and in India are listed in Table 1 and Table 2, respectively.

4. OPPORTUNITY

Huge investments for developmental works are going on across the globe. This new concept of marketing 'green marketing' will definitely show a right path to such investments and open several other opportunity for the business fraternity to prove their existence in the society both socially and ethically. Consumers' awareness has increased these days. Consumers are nowadays looking for products that are not only good for their health but are also less detrimental to the environment. Such preferences of the consumers can be looked upon by the company as an opportunity to take hold of the market by fulfilling the customers' needs. Opportunities are tremendous.

Table 1: Green Initiatives taken by Corporate outside India

B 1 E 11	
Business Entity	Remarks
Bank of America	Reduce paper use; recycling paper; rewards for use of hybrid cars for employees
Ceres	Persuading Dell Computer to support national product "take back" legislation; convincing
	Bank of America to spend \$20 billion on the growth of eco-friendly business practices.
General electric	Since 2006, the company has sold over \$12 billion of its Ecomagination products (including
	solar panels); participating in cleaning of Hudson river
DuPont	Reduced greenhouse gas emissions and airborne carcinogens emissions; reduced greenhouse
	gas emissions.
McDonalds	Collaborated waith PETA for performing its business practices in more human as well as
	environment friendly.
A. Pratt and Whitney	Has highly focused on lowering down the waste and factory emission.
B. Star-Bucks	The company has partnered with environmental organizations for community welfare. Since
	2006 company is using coffee cup sleeves made up of recycled paper, this initiative has saved
	around seventy eight thousand trees per year.
C. Wal-Mart	Wal-Mart planned to power every store using 100% renewable energy sources. The company
	has also very strictly adopted the waste- elimination corporate philosophy to make its
	operations eco friendly.
D. Tesla Motors	Tesla Motors have taken up the initiative of producing electric cars which are effective and
	equally efficient.
E. Coca-Cola	Coca Cola has focused highly on water stewardship, sustainable packaging, energy
	management and climate protection. The company's community water programs are designed
	to support healthy watersheds and sustainable programs to balance the water used throughout
	our production process. The company has focused on the conservation of natural resources and
	protection of the soil, water and climate required to sustain life on earth.
F. Toyota	Toyota is famous for offering the Prius, the world's first mass-market hybrid vehicle. The
	popular car is now sold in over 40 countries and is the most fuel-efficient car available for
	purchase in the U.S. and it has been ranked as the third least carbon-emitting auto in the
	country
G. Dell	Through its "no computer should go to waste" recycling program, Dell allows customers to
	return any Dell-branded product back to the company – for free. The company also accepts
	computers, monitors, or printers from other companies for safe disposal, as well.
H. Hewlett-Packard	The company has gotten out in front of the computer disposal issue by owning and operating
	enormous "e-waste" recycling plants that shred discarded, obsolete computer products into raw
	materials that can be recycled into the industrial food chain. HP has also agreed to take back
	computer equipment of all brands, and taken steps to ensure that its own products are 100%
	recyclable in the manner discussed above.

Table 2: Green Initiatives taken by Corporates in India

Table 2: Green Initiatives taken by Corporates in India	
Business Entity	Remarks
Idea Cellular	Implemented its national campaign 'Use Mobile, Save Paper'.
	Organized Green Pledge campaigns to save paper and trees.
Nokia's	Known for policy to take back, recover useful materials and dispose of waste in a
	manner that causes least harm to the environment.
IBM	Selling green solutions to corporate data centers where energy constraints and costs are
	limiting their ability to grow, with the promise that energy costs would be reduced by
	half.
Wipro InfoTech	India's first company to launch environment-friendly computer peripherals. Wipro has
	launched a new range of desktops & laptops called WIPRO GREEN WARE for Indian
	Market.
Samsung	Launched first ever eco-friendly mobile handsets namely, W510 and F268- in India
	(made of renewable materials).
Tamilnadu	The company was awarded Green Business Leadership Award in the pulp and paper
Newsprint And	sector for the year 2009-10, based on the EVI Green Business Survey conducted by
Papers Limited	Financial Express.
(TNPL)	•
Oil &Natural Gas	Introduced energy efficient Mokshada Green Crematorium, which saves 60 to 70% of
Corp. Ltd. (ONGC)	wood and a fourth of the burning time per cremation.
I. REVA	India's very-own Bangalore-based company was the first in the world to commercially
	release an electric car.
J. Honda India	Introduced its Civic Hybrid car.
K. Mahindra Group	One million trees would be planted under project Mahindra Hariyali nation-wide by
	Mahindra employees and other stakeholders including customers, vendors and dealers.
L. ITC	Has introduced Paper kraft, a premium range of eco-friendly business paper. The
	company's social and farm forestry initiative has greened over 80,000 hectares of arid
	land. ITC has been 'Carbon Positive' three years in a row (storing twice the amount of
	CO2 than the Company emits). 'Water Positive' six years in a row (creating three times
	more Rainwater harvesting potential than ITC's net consumption). Close to 100% solid
	waste recycling.
M. INDUSIND:	Installed the country's first solar-powered ATM and thus brought about an eco-savvy
Bank	change in the Indian banking sector.
N. SUZLON	Energy manufactures and markets wind turbines, which provide an alternative source
	of energy based on wind power.
O. Bharat	Bharat Petroleum launched a campaign to position itself as a responsible corporate
Petroleum	'green' entity. Introduced renewable energy-solar and wind power-it installed solar
	panels on its service stations. It also ran a program to cut production of greenhouse
	gases by 10% across its units worldwide and achieved it much ahead of schedule.
	Cleaner fuels such as Greener Diesel (ultralow sulphur content) and BP Auto gas were
	developed. Almost all of its plants are ISO 14001 certified. Currently it is running a
	program to contain its net emissions at current levels for ten years.
P. Hindustan	It owns a massive e-waste recycling plants, where HP takes back any brand of
Petroleum (HP)	equipment; its own machines are 100 percent recyclable.
Q. Proctor &	Proctor & Gamble's (P&G), Tide Coldwater, is designed to clean clothes effectively in
Gamble	cold water which is saving 80 to 85% of the energy used to wash clothes from heating
	water.

5. BANKS' REGULATORY ENVIRONMENT

Banks' Regulatory environment now encourages green investment by the industries. Now banks have come up with the idea of green financing to encourage industries that are ready to take up projects with low energy consumption. At this instance some of the examples of banks across the globe are worth quoting to understand how banks are responding to this green move and showing their active participation. China Banking Regulatory Commission, China's top banking regulators, ordered lenders to cut loans to industries with high energy consumption and pollution and favour green industries. The United States encourages investments in renewable energy projects by offering tax credits on them.



Similarly, Indian Banks also offers several tax benefits to the industries that are ready to adopt green practices within their working culture.

6. WAY FORWARD

The 'go green' mantra is going to stay and so are the clean technology investments. Banks role here is to keep a close vigil on such funds and monitor the profitability. The increasing concern for the deteriorating environment to all stakeholders will keep this market moving.

7. OBSTACLE IN THE PROGRESS OF GREEN MARKETING

Green washing will be one the biggest challenges before the consumers that has to be looked upon very strictly. Green washing refers to the practice of making an unsubstantiated or misleading claim about the environmental benefits of a product, service, and technology or company practice. Greenwashing can make a company appear to be more environmentally friendly than it really is. It can also be used to differentiate a company's products or services from its competitors by promising more efficient use of power or by being more cost-effective over time. Such unethical practice should be carefully watched and one should prevent himself or herself in getting cheated.

8. SUPPORT FROM GOVERNMENT AND REGULATORY BODIES

- Development of ISO 14000 Series of Standards: The ISO 14000 family of standards (i.e. ISO 14001, 14004, 14010, 14011 and 1412) has been developed to help any company in any country to meet the goal of sustainable development and environmental friendliness. This was brought forward first as an official document in 1996. The ISO series aims to provide guidance for developing a comprehensive approach to environmental management and for standardizing some key environmental tools of analysis such as labeling and life cycle assessment.
- Eco-Labeling Initiatives: Eco-labels are assigned to products that pass eco-friendly criteria laid down by government, association or standards certification bodies. The product's life cycle impact on the environment is researched and then a criterion is set to assign eco-labels to the said product. In other words, eco-label provides information regarding the environmental performance of products. The objective of eco-labeling is to provide authentication to genuine claims regarding the environmental impact of products and processes by manufacturers. It should be noted here that the eco-labels and green symbols are not the same. In green symbols the environmental claims are unverified and created by the manufacture or service provider whereas a product that has been awarded an eco-label are assessed and verified by an independent third body and are guaranteed to meet certain environmental performance requirements. Eco-labels generally focus on certain environmental aspects of the product like energy consumption, water use, etc. and are usually funded and backed by the national government. It is administered by the third party.

In India the government has introduced the eco-mark scheme since 1981. The objectives of the scheme are: a) To provide incentives to manufacturers and importers to reduce the adverse environmental impact of products. b) To reward genuine initiatives by companies to reduce adverse impact of environmental impact of products. c) To assist consumers to become environmentally responsible in their daily lives by providing them information to take account of environmental factors in their daily lives. d) To encourage citizens to purchase products that has less environmental impact.

• Eco-Labeling Schemes in India: Rapid industrialization, unplanned urbanization, unchecked population growth and changing consumption patterns to have and showcase better living standards has raised an alarm to everyone. The issue of environmental protection has brought the sections of the society together like industry, the government or the consumers. Each one is expected to play their role to help minimize the impact of human activity. In order to raise awareness before the consumers the Government of India launched ecolabelling scheme known as 'Ecomark' in 1991 for easy identification of environment-friendly products. The Ministry of environment and forest of government of India has prescribed the following criteria for products that: a) They cause substantially less pollution than comparable products in production, usage and disposal. b) They are recycled and/or recyclable whereas comparable products are not. c) They contribute to a reduction on adverse environmental health consequences. d) They comply with laws, standards and regulations pertaining to the environment. e) Their price is not exorbitantly higher than comparable products.

Eco-Mark in India: Eco-Mark is an eco-labeling scheme constituted by the Government of India in 1991 for
easy identification of environment-friendly products. Under the concept, products which are less harmful to the
environment or have benign impact on environment through the various stages of development-manufacture,
packaging, distribution, use and disposal or recycling may be awarded the Eco-Mark. An earthen pot has been
chosen as the logo for Eco-Mark scheme in India

The specific objectives of the scheme are as follow: (1) To provide an incentive for manufacturers and importers to reduce adverse environmental impact of products, (2) To reward genuine initiatives by companies to reduce adverse environmental impact of their products, (3) To assist consumers to become environmentally responsible in their daily lives by providing information to take account of environmental factors in their purchase decisions, (4) To encourage citizens to purchase products which have less harmful environmental impacts and (5) Ultimately to improve the quality of the environment and to encourage the sustainable management of resources.

9. CONCLUSION

The time for green marketing has come. Industries in India are accepting the need for such move which is reflected the way new products are introduced in the market with label of green. Although it is in the nascent stage steps are needed to bridge the gap between its understanding and implementation. It is high time now that the environmental issues should be taken care of and customer need should also be given due importance. The problem of green washing is placing an obstacle in the good work of green marketing. This has to be looked into seriously and the culprits involved in such practiced should be strictly dealt with. Despite these challenges, green marketing has continued to gain significance, particularly in light of growing global concern about climate change. This concern has led more companies including the service sectors e.g banks to go for green initiatives. Also Government has taken measures to introduce and implement the green approach in its policies. However, it is only a beginning and the constructive results are awaited in this direction.

In the end, there is definitely a huge opportunity for investment in green projects like projects for clean technologies, renewal energy and many more. The entire government machinery and the regulatory bodies need to work in tandem to bring about this shift in the market, and banks being an integral part of our economy must lead from the front.

REFERENCES

- 1. Bansal, P. and Roth, K. (2000). Why Companies go Green: A Model of Ecological Responsiveness. Academy of Management Journal, 43(4), 717-736.
- 2. Charter, M. (1992). Greener Marketing: A Responsible Approach to Business. Sheffield, England: Greenleaf Publishing, UK.
- 3. Ghosh, M. (2010). Green Marketing A Changing Concept in Changing Time. BVIMR Management Edge, 4(1), 82-92.
- 4. Gilg, A., Barr, S. and Ford, N. (2005). Green Consumption or Sustainable Lifestyles? Identifying the Sustainable Consumer. Future, 37(6), 481–504.
- 5. Gupta, A. (2012). BSE Launches India's First Carbon-efficient LiveIndex called Greenex. Retrieved from http://articles.economictimes.indiatimes.com/2012-02-26/news/31101643_1_first-carbon-efficient-bse-greenex-energy-efficiency.
- 6. Hartmann, P., Ibáñez, V. A. and Sainz, F. J. F. (2005). Green Branding Effects on Attitude: Functional versus Emotional Positioning Strategies. Marketing Intelligence & Planning, 23(1), 9–29.
- 7. India and Carbon Credits. Retrieved from http://www.onlinecarbonfinance.com/india-and-carbon-credits.htm
- 8. Khanna, M. and Anton, W. Q. (2002). Corporate Environmental Management: Regulatory and Market-based Pressures. Land Economics 78(4).
- 9. King, A. A. and Lenox, M. J. (2001). Does it Really Pay to be Green? An Empirical Study of Firm Environmental and Financial Performance. Journal of Industrial Ecology, 5(1), 105-116.
- 10. Kumar, R. and Kumar R. (2013). Green Marketing: Reality or Green Washing. Asian Journal of Multidisciplinary Studies, 1(5), 47-53, December.



- 11. Manjunath, G. and Manjunath, G. (2013). Green Marketing and its Implementation in Indian Business Organizations. Asia Pacific Journal of Marketing and Management Review, 2(7), 75-86, July.
- 12. Menon, A. and Menon, A. (1997). Enviropreneurial Marketing Strategy: The Emergence of Corporate Environmentalism as Market Strategy. Journal of Marketing, 61, 51–67, January.
- 13. Mishra, P. and Sharma, P. (2010). Green Marketing in India: Emerging Opportunities and Challenges. Journal of Engineering Science and Management Education, 3, 9-14.
- 14. Nagy, S. (2004). Environmental Conscious Marketing, PhD Thesis, University of Miskolc, Northern Hungary. (http://www.gei.uni-miskolc.hu/phd/en/tezisfuzetek en/nagysz