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## **AN ANALYTICAL STUDY OF GREEN BUSINESS PRACTICES IN INDIA WITH SPECIFIC REFERENCE TO SELECTED INDIAN COMPANIES.**

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### **Abstract**

Sustainable business, or a green business, is an enterprise that has minimal negative impact on the global or local environment, community, society, or economy—a business that strives to meet the triple bottom line. The notion of “green business” emerged at the end of the 20th century in the wake of the ever-increasing public concern about the sustainability of economic development. The latter, in turn, was roused up by the growing awareness of environmental issues such as the accelerating depletion of natural resources and the deterioration of environmental quality. While the origins of the modern “green movements” can be traced down to the middle of the 1960s, it took almost 20 years for business to adapt to the “greening” trends and adopt them into its ideology and practice, coining the term “green business” for that purpose. However, even today, the substance of the green business concept is rather ambiguous as demonstrated by the variety of its definitions that could be found in different sources. Green business practices are still far from being universally embraced and applied by business entities around the world, with perceptible differences of business penetration by the “green” ideas in various countries. This is due to several reasons, one of them being the fact that the “greening of business” is still largely perceived as an extra burden (in terms of cost increase or revenue loss), and the other reason being related to the national specifics in terms of cultural, political, and economic differences. The paper highlights the relevance of green business practices in current scenario and analyzes how these practices are implemented by selected reputed companies in India and what impact it has on their performance and efficiency.

*Keywords: Green Business, sustainability, environmental quality, greening of business.*



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## **Introduction**

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Often, sustainable businesses have progressive environmental and human rights policies. In general, business is described as green if it matches the following four criteria:

- It incorporates principles of sustainability into each of its business decisions.
- It supplies environmentally friendly products or services that replace demand for non green products and/or services.
- It is greener than traditional competition.
- It has made an enduring commitment to environmental principles in its business operations.

A sustainable business is any organization that participates in environmentally friendly or green activities to ensure that all processes, products, and manufacturing activities adequately address current environmental concerns while maintaining a profit. In other words, it is a business that “meets the needs of the present [world] without compromising the ability of future generations to meet their own needs.” It is the process of assessing how to design products that will take advantage of the current environmental situation and how well a company’s products perform with renewable resources.

## **Need of Green Business**

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Going green may seem to be the latest trend, but it is a trend with a variety of benefits for business owners. Applying green processes to the workplace creates a healthy environment for employees, reduces unnecessary waste and recognizes the role that businesses play in leading the way for social change. For the business that is thinking about going green, a variety of reasons exist to take the plunge.

- ✓ **Reduced Waste:** Going green can improve the overall efficiency of a business. Reducing unnecessary waste can trim operating costs for the business.
- ✓ **Improved Workplace:** Providing green options within a company can offer overall workplace improvements. Green cleaning supplies can help employees who suffer from respiratory and other health-related conditions, because green products contain fewer



chemicals—such as sodium hypochlorite and nitrobenzene—that are connected to physical problems.

- ✓ **Public Response:** While public response alone is not necessarily the best motivation for going green, it might be a good side effect. With green initiatives increasing in popularity, economic studies have shown that companies utilizing green technology and selling green products are seeing an increase in profits.

### Importance of Green Business

Green businesses adopt principles, policies and practices that improve the quality of life for their customers, employees, communities, and the planet. The members of the Green Business Network are changing the way India does business.

- ✓ **Green businesses are socially and environmentally responsible:** Green companies adopt principles and practices that protect people and the planet. They challenge themselves to bring the goals of social and economic justice, environmental sustainability, as well as community health and development, into all of their activities -from production and supply chain management to employee relations and customer service.
- ✓ **Green businesses care for their workers:** Green businesses ensure they don't use sweatshop or child labor. Everyone who works directly for them or their suppliers earns a living wage and works in healthy conditions. They create jobs that empower workers and honor their humanity.
- ✓ **Green businesses protect their customers and clients:** Green businesses ensure that they use the safest ingredients, to keep their customers and clients and their families healthy. They also provide green living alternatives to improve quality of life, with products and services that help in areas like affordable housing, sustainable agriculture, education, clean energy and efficiency, fair trade, healthy air, clean water, and more. And they reduce, reuse and recycle, setting a good example.
- ✓ **Green businesses improve their communities:** Along with ensuring their facilities aren't polluting their local communities, many green businesses take steps to make the places that they call home better. Green businesses often spring up in marginalized communities— inner cities, rural and indigenous communities.



- ✓ **Sustainability:** The larger value of going green relates to maintaining the health of the environment. Utilizing sustainable methods can prevent the waste of natural resources, helping reduce the risk of depletion on the long run.

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## **OBJECTIVES**

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1. To study the importance and need of Green business practices in India.
2. The paper studies and compares various Indian companies where green business practices are applied and performance of various companies on the scale of efficiency in relation with green business practices.

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## **RESEARCH METHODOLOGY**

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1. Theoretical and exploratory research is used in this study in order to obtain proper knowledge regarding how green business practices are implemented by various companies, main focus is on five selected companies.
2. Data collected is mainly secondary in nature. The source of data for this thesis include the literature published online by various companies websites, various acts, newspapers, journals including research papers and books dealing with current scenario of green business practices in India.

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## **LIMITATIONS**

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The study is undertaken by the use of secondary data collected from various sources which may have some deficiencies.

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## **REVIEW OF LITERATURE**

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In context of green business, there are various guidelines and strategies available for corporate has been studied and analyzed in restricted sense by many Scholars, Researchers, Business person and Organizations etc.

Many initiatives are taken by Government of India and Systematic reviews of such available literature are stated as under:



John R. Rathgeber (2007) has said in his research that many business leaders are embracing Corporate Sustainability and Green Business practices as a way to improve their operations and enhance their competitiveness.

According to Justin Victor (2008), in his research one half of HR professionals indicated that their organizations have a formal or informal environmental responsibility policy. Top Three green practices reported by HR professionals were encouraging employees to work more environment friendly, offering recycling programs and donating / discounting used furniture supplies

According to José F. Molina Azorín, Enrique Claver Cortés, Maria D. López Gamero, Juan J. Tari(2009) in their research paper “Green management and financial performance”: findings are derived from an exhaustive literature review of quantitative studies that have studied the green management-financial performance link. In addition, ideas for improving future research in this field are provided

Chaturvedi (2010) reviewed that increasing green awareness among Indian hotel companies indicates that going green not only enhances the brand worth but also underlines the core values. Since following green practices does not need much maintenance, hotels reduce their expenses and improve the image of the hotel. Expenses incurred on diesel and energy can be reduced with the help of materials that can be recycled and drip irrigation system.

According to Douglas W.S. Renwick(2012) in his research paper “Green Human Resource Management: A Review and Research Agenda” makes a case for the integration of the largely separate literatures of environmental management (EM) and human resource management (HRM) research. The paper categorizes the existing literature on the basis of Ability–Motivation–Opportunity (AMO) theory, revealing the role that Green human resource management (GHRM) processes play in people-management practice.



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## GREEN BUSINESS STRATEGIES

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Green business strategies can aim to take advantage of sustainable revenue opportunities, while protecting the value of business against increasing energy costs, the costs of meeting regulatory requirements, changes in the way customers perceive brands and products, and the volatile price of resources.

Not all eco-strategies can be incorporated into a company's Eco-portfolio immediately. The widely practiced strategies include: Innovation, Collaboration, Process Improvement and Sustainability reporting.

Here we will study and analyze Green Business practices of companies such as:

1. TCS
2. ONGC
3. ITC
4. WIPRO
5. MRF

### Companies That Practices Green Business in INDIA

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#### 1. Tata Consultancy Services:

TCS has a globally recognized Sustainability practice and has already topped the Newsweek's top World's Greenest Company title. It also has a global green score of 80.4% and this has mainly happened due their initiative of creating technology for agricultural and community benefits. Following are the measures taken by TCS:

- i. ***Conservation of energy, technology absorption, foreign exchange earnings, and outgo***  
***Conservation of energy:*** The Company is committed to reduce its energy consumption through four key levers: green buildings, efficient operations, green IT and the use of renewable energy. Green buildings are energy efficient by design and hence help us reduce energy footprint. Over half of the Company's real estate portfolio is green buildings. Some 80% of all the TCS-owned offices are LEED/IGBC certified. The Company's Remote



Energy Monitoring and Control initiative has enabled real-time energy monitoring and performance optimization, including that of data centers. All the owned campuses have onsite solar photo voltaic power generation. The Company has significantly increased its use of renewable power year on year.

- ii. **Energy Conservation:** As part of their remote energy monitoring and control initiative, TCS has completely digitized the energy monitoring process for over 135 locations in India and 23 key data centers. A centralized Resource Operations Center at Kochi helps monitor and streamline energy consumption with real-time analysis of usage patterns.
- iii. **Water Conservation:** All of their facilities are built for water conservation to ensure 100% treatment of sewage and rainwater harvesting. Implementation of roof top collection systems, storage tanks, and recharge trenches and pits has led to a 25% increase in the rainwater harvesting potential at TCS sites in FY17 over the previous year.
- iv. **Waste Reduction and Reuse:** The emphasis is on reducing municipal solid waste, as well as electronic and electrical waste. TCS' waste management practices (Exhibit 3) seek to ensure that less than 5% waste is sent to landfills by 2020 by ensuring segregation at source, reuse, and recycle wherever possible.

## **2. Oil and Natural Gas Company:**

ONGC, India's largest oil producer is all set to change the way with the invention of green crematoriums, that would serve as a perfect replacement for the funeral pyres that emit so much smoke and uses up excess oxygen. Towards making ONGC a 'Carbon-Neutral' Company, several initiatives such as 'Paperless Office' and optimizing water foot print in operations have been rolled out. The Company has 15 registered CDM projects with UNFCCC with potential to yield about 2.1 million Certified Emission Reductions (CER) annually. In terms of the share of green energy forms in the energy portfolio, the Company presently has two operational wind farms with a combined capacity of 153 MW. ONGC is among few Indian corporate to feature in the Newsweek Global 500 Green Energy Rankings. The company has taken following initiatives:



**i. Measures taken for Carbon Management & Sustainable Development:**

The Company's hydrocarbon exploration & production (E&P) operations are being carried out in varied climate and environment are as ranging from deserts to coastal areas, hilly terrains to forest areas, shallow water to deep waters and also in ultra-deep water areas. The Company adopted Environmental Policy in Commissions meeting no 2(1)/9 dated 16th May, 1983 and declared Environment Protection as one of the prime objectives in July, 1988. A policy was framed to conduct Environment Audits.

**ii. Measures taken for Mitigating Air Pollution:**

There is no major risk for air pollution in process industry. The source of air emissions are flaring of natural gas, exhaust from running of DG sets, use of heavy equipments, construction activities, movement of vehicles etc. In order to reduce the gas flaring, generators have been installed in the field to utilize low pressure gas for generation of electricity for internal consumption. The measures undertaken are:

- Gaseous Emissions Control through Box Flare
- Smokeless Flaring
- Real Time Monitoring Stations (RTMS)
- Turbines and DG Sets. Vapour Recovery System
- De-sulphurization of Sour Gas

**iii. Measures taken for Mitigating Water Pollution and its Management Conservation of fresh water:**

Towards conservation of an important natural resource 'fresh water' through its replenishment in the aquifer to prevent its further depletion and to sustain ground water table. Six wells to collect the discharge water at different locations of the KDMIPE campus are active. The measures undertaken are:

- Waste Water Management
- Water Conservation through Rain Water Harvesting
- Effluent Treatment Plants.
- Oil Spill Management - Response and Combat



- iv. **Measures taken for Soil Pollution control: Bio-remediation:** The oil is recovered from the oily waste produced during drilling operation as far as possible. The remaining waste and oil contaminated soil is subjected to Bioremediation where the oil content is reduced to less than 1% TPH
- v. **Measures taken for Noise Pollution Control:** Following mitigation measures to control noise impacts:
- Regular noise monitoring is done to measure and monitor sound levels around equipments and machineries and high noise areas are demarcated.
  - Acoustic enclosures are provided around gen sets to reduce noise pollution.
  - Personnel Protective Equipment (PPE) like ear muff/plugs is provided to personnel working in noise prone areas.

### **3. ITC:**

ITC has adopted a Low Carbon Growth Path and a Cleaner Environment Approach and has already introduced ozone treated elemental chlorine free bleaching technology that has improved the lives of millions worldwide. ITC is today a global exemplar in sustainability. ITC's businesses have generated sustainable livelihoods for 6 million people, many of whom represent the weakest in society. It is the only enterprise in the world to be carbon positive (12 years), water positive (15 years), and solid waste recycling positive (10 years). Over 48% of the total energy requirement of ITC is met from renewable sources. ITC has pioneered the green building movement in India, establishing 22 green buildings. All its premium luxury hotels have the unique distinction of being LEED® Platinum certified. ITC's Afforestation Programme provides marginal and tribal households with a commercially viable land use option for their low productivity lands by assisting them to convert these into pulpwood plantations. The renewable plantations cultivated as part of this initiative enable ITC to offer the greenest paper and paperboards products manifest in stationery brands such as Classmate and Paperkraft. These plantations also provide a competitive source of wood pulp to ITC's Paperboards and Specialty Paper Business. Spearheading a journey of growth that has led the Harvard Business Review to rank its CEO Mr. Sanjiv Puri as the 7th Best Performing CEO in the world, his stewardship



has guided ITC to become India's foremost FMCG marketer, the country's largest and greenest Paperboards and Packaging Business, a globally acknowledged pioneer in farmer empowerment through its wide-reaching Agri Business, the second largest Hotel Chain in India and a trailblazer in 'green hoteling'. The Company's wholly owned subsidiary, ITC Infotech India Limited, is also a player of promise in the Information Technology sector. Today, ITC is a global exemplar in sustainability and is the only Company in the world of comparable dimensions to be 'carbon positive', 'water positive' and 'solid waste recycling positive' for over a decade. The Company's businesses generate livelihoods for around 6 million people, many of whom represent the poorest in Rural India. The pioneering farmer empowerment initiative, ITC e-Choupal, is today the world's largest rural digital infrastructure and is a case study at the Harvard Business School besides receiving several global awards.

#### **4. Wipro:**

Wipro, has not only helped in the creation of technology that helps in saving energy and preventing wastes, but its corporate headquarters in Pune is the most eco friendly building in this sector all over India. Ecological sustainability is a cornerstone of their charter on natural capital stewardship. Our approach is built on the pillars of Energy efficiency and Green House Gases (GHG) mitigation, Water efficiency and Responsible Water management, Pollution and Waste management, and Biodiversity. The increasing centrality of issues like climate change and water stress in the last few years has led organizations to look beyond their boundaries. While internal business drivers like resource efficiency, waste management and pollution mitigation have been the primary levers of any corporate environmental program, organizations have come to realize that in order to make a real impact at a larger, systemic level, one can no longer ignore the externalized costs of ecological damage. At Wipro, our community programs on water and waste are two examples of such interventions.

*Scope of Reporting India:* 55 locations (includes 3 operational data centers) representing 79% of their workforce. The majority of operations are based out of 23 owned locations.



*Overseas*: 163 locations, which include 7 customer data centers. A majority of the office locations overseas are leased. They have been following the guidelines of the ISO 14001 framework for more than a decade now as one of the cornerstones of our Environmental Management System (EMS). 18 of their campus sites in India and 2 in Australia are certified to ISO 14001:2004 standard. They take the following measures for it:

- **Energy efficiency & GHG mitigation**

They undertook a target setting exercise to propose targets. They used the science based target setting framework from WRI (World Resource Institute) that tries to align itself with the 2 degree imperative i.e. global emissions by 2050 to be 20% of 1990 levels so as to stay within the threshold of 2 degree rise in average surface temperature. They have adopted targets for 2025 and 2030 also and these will be revisited at the next target review exercise in 2020.

- **Energy Intensity:** EPI for office spaces, measured in terms of energy per unit area is flat at 2015 figures of 195 units per sq. meter per annum. While absolute India offices energy consumption has decreased by 4% due to energy efficiency, operating area shows a sharper reduction of 6.3% as of March 2017 due to consolidation of operations.
- **Emissions Intensity:** Their India office space emissions intensity (Scope 1 and Scope 2) is at 128 Kg Co2 eq. per Sq. Mt. per annum, an increase of 4.7% from last year, largely due to a decrease of 6.3% in operating area due to consolidation of operations throughout the year.

## **5. MRF**

Conservation of energy is a key focus area in operations at MRF they have an ongoing program to reduce specific consumption of fuel and power. Benchmarking of best performance of previous year and identification of losses is used in setting targets. Energy management systems are being introduced in plants. Focus on renewable energy and alternate sources of energy are being explored. Several power saving projects and fuel saving projects have been undertaken. Some of the key initiatives are given below:



**(i) Steps taken or impact on energy conservation:** The following measures were implemented to reduce specific fuel consumption:

- a) Identification of the areas of energy loss in steam consuming areas and immediate corrective measures.
- b) Parallel deployment of energy management system in various units to monitor & benchmark steam consumption at sub plant and equipment level.
- c) Parallel deployment of all the successful energy saving projects across all units of the Company.
- d) Ensuring the quality of steam generated by boiler.
- e) Reduced steam consumption by modifying the process parameters.
- f) Increased productivity ensured in curing by modifying the existing curing presses.
- g) Usage of improved insulation to reduce the radiation losses.

**(ii) Steps taken by the company for utilizing alternate source of energy:** In order to reduce its carbon footprint the Company is continuously exploring.

- a) Power purchase from open access using power exchanges ensures significant portion of power drawn from renewable hydroelectric and wind based power.
- b) Usage of skylight in structures ensures reduction of day time lighting consumption.
- c) Rain water harvesting ponds planned in all units to conserve water.
- d) Recycling of waste water for the process by introducing second pass reverse osmosis plant to reduce water consumption.

**(iii) Capital investment on energy conservation project:** Investments have been carried out for implementing energy conservation proposals which have long term saving impact and reduction of losses in the system.



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## CONCLUSION

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1. First, keep in mind that there is no easy one-step approach to becoming sustainable; sustainability is a continuous process that requires critical self-analysis, honesty, innovation, and risk. That is, before beginning this journey toward sustainability, a business should be prepared to be self-reflective, critical, and honest about all its operations and associated impacts, and a business should be ready to take risks and be innovative, moving beyond its comfort zone, or business as usual.
2. Second, consider that green business sustainability encompasses the operations of the entire business: every process, every activity, and every function. A business will not be able to implement one or a few changes and proclaim that the business has achieved sustainability. A business should be prepared to apply the aforementioned critical self-analysis, honesty, innovation, and risk across all processes, all activities, and every function of the business. Sustainability is a company-wide change in mindset, philosophy, views, and practices related to how the business operates.
3. Lastly, realize that green business incorporates a triple bottom line in evaluating company performance: the environmental, social, and economic impact of the business (also referred to as planet, people, and profit). Though a lot of companies are going green in India and have shown exemplary initiatives for practicing green business, it still has a long way to go to be at par with the rest of the world.

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## SUGGESTIONS

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Marketers should play crucial role since they have the responsibility to make the consumers understand the need for and benefits of green products as compared to non-green ones. In these times, Green business assumes even more importance and relevance in developing countries like India.

Along with Private sector, Government initiatives are most important, intense efforts should be made by Government for following these practices for wellbeing of next generations.

Firms should give best vendor award for initiation and implementation of green business practices. Study reveals that government regulations and competitors forces plays crucial role in green endeavors, so government should spend some more amount on research and development for innovating eco friendly technologies, and should give subsidies to those who are practicing. There is close association between green business practices and market performance. Hence, Companies should focus more on to develop environment friendly products and put an endeavor for eco-friendly modification in product design which will increase market share and give competitive advantage.



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