

# Environmental Sustainability by Indian IT Industry with Special Reference to Wipro and Infosys

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## Abstract

*Due to change in climatic conditions across the globe, environment protection has been a major challenge for each one of us. There are many instances in ancient Indian text books like DighaNikaya, Ishavasya Upanishad, Charaksamhita, Attharvaveda etc. that highlight the importance of environmental protection as a duty towards society and that sustainable growth is the real growth. Today the world is facing the challenge of climate change, water scarcity, and loss of biodiversity, pollution and depletion of natural resources. Since corporate sectors are using the natural resources directly or indirectly, they owe some responsibility as well as accountability towards environment sustainability.*

*In India, with the amendments in companies Act 2013 and increased concern for social responsibilities, the companies are now participating in CSR Governance. The disclosure activity is taken by companies as a compliance activity rather than a voluntarily disclosure. The present paper is an attempt to find out the level of environmental reporting by two top IT companies (as per CSR ranking 2020), namely Infosys and Wipro, towards environment protection and to see how far they have been able to play the role of environment stewardship.*

**Keywords:** *Environmental Accounting, Green Accounting, Circular Economy, Infosys, Wipro, Pollution, Carbon Emission*

## Introduction

*"The wise and moral man shines like a fire on a hilltop, making money like the bee which does not hurt the flower."*

*- DighaNikaya*

There are many instances in ancient Indian literature which emphasize that we take so much from the environment then it is our responsibility that in return we care for it. According to the Ishavasya Upanishad, the entire universe and everything in it, animate and inanimate, belongs to God. We should not covet anything. We should treat everything around us reverently, as custodians. We should enjoy but neither hoard nor kill. According to Charaksamhita the destruction of forests is most dangerous for the nation and for human beings. The ancient Indians considered the terrestrial earth as

mother. The Attharvaveda has a whole prayer named Prithvi-Sukta in praise of earth. The earth nourishes us all, but 'when angered by misdeeds of her children punishes them with disaster'. In modern times also with the growing concern for the protection of environment and maintaining ecological balance the industries have realised that sustainability is far more important than economic development.

From the last few decades the concern towards duty to protect environment and sustainable growth has increased worldwide. The then UN Secretary General in Conference on Environment and Development 1993 aptly remarked that every business that impact on the environment must accommodate the fact that the environment will have an important impact on its business. The growing concern resulted in reflection in

the annual reports of the corporate entities. It is an effort to identify and portray the exhausted resources and cost rendered by organizations in return, to the environment. This reflection started in relatively new branch of accounting termed as Environmental Accounting or Green Accounting. Corporate world has to properly account for cost benefit analysis under CSR requirement.

UN Conference (Earth Summit) in 1992 recommended that countries should implement environmental-economic accounts. The framework designed in 1993, revised in 2003 and 2007, was finally accepted as International Statistical Standard in 2012 by UN Statistical Commission named as SEEA (System of Environmental Economic Accounting).

In India 'National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business' issued by Ministry of Corporate Affairs in July 2011 became mandatory, as per SEBI, to be included as Business Responsibility Report in annual reports of corporate for those in the top 100 listed entities based on market capitalization (M-Cap) at BSE and NSE as on March 31, 2012. For other listed entities it was voluntary disclosure. From the financial year 2015-16 it was extended to top 500 listed companies. It was further extended to top 1000 listed companies from the financial year 2019-20.

On May 10, 2021 SEBI introduced Business Responsibility and Sustainability Report (BRSR) format to make the Indian sustainability reporting as par with that of global reporting standards. This format is based on the nine principles given in National Guidelines on Responsible Business Conduct (RBC Guidelines). This reporting format is mandatory from FY 2022-23 while it is voluntary for FY 2021-22. The environmental aspect of this BRSR format is based on the principle that Businesses should respect and make efforts to protect and restore the environment (Principle 6). The disclosure requirements under this format are:

- a) Resource usage (energy and water) and intensity metrics
- b) Air pollutant emissions
- c) Greenhouse gas emissions (Scope 1, Scope 2, and Scope 3)
- d) Waste generated and waste management practices
- e) Impact on biodiversity

### **Review of Literature**

**Bennett and James (1988)** have defined environmental accounting as, "The generation, analysis and use of financial and non-financial information in order to

optimize corporate, environmental and economic performance for achieving a sustainable business".

**Singh et al, 2014** opined that if the environmental problems are ignored, that can further lead to the more problems of environmental degradation, and shortage of natural resources harming the industrial growth and development of a nation. The Corporate social responsibility covers a wide range of activities for environment protection including environmental sustainability initiatives, maintaining ecological balance, protection of flora and fauna, promoting animal welfare, improving agro-forestry, conservation of natural resources and ensuring quality of soil, air and water.

**Aaron, Mcmillan and Cline (2012)** examined the investor reaction to signals of environmental Management Reputation. The share prices of the companies having favourable recognition to environmental practices had positive impact in short term while for the companies not having favourable recognition to environmental practices share prices had negative impact in short term.

**Dangwal and Sharma (2014)** in their study in selected Indian Pharmaceutical Companies found that all the companies are disclosing the important parameters of environmental reporting voluntarily and most of the companies avoid disclosing the sustainability reports separately along with annual reports.

**Rahman, Rasid and Basiruddin (2014)** examined carbon reporting practices of Malaysian companies in which they studied the relationship between carbon performance, carbon reporting and firm performance.

**Malik & Mittal (2015)** in the study of green accounting Practices in India found that environment accounting was in preliminary stage in India and whatever shows in the accounts in this regard is more or less compliance of relevant rules and regulations in the act.

**Kumar and Prakash (2019)** in their study on Indian banking sector to analyze the extent of sustainability reporting by the Indian banks found that the Indian banking sector is very slow in adoption of environmental sustainability activities. Their major focus is on their core business practices that are financial in nature. Moreover, there is a big difference in their actual practice and reporting of environmental sustainability practices in reports.

**Jain (2021)** opined that the Indian IT industry has been doing many efforts towards sustainable growth in the recent past, especially during the pandemic outbreak. All their efforts can be categorised into three pillars: People, Planet and Profit. Some of major IT giants in India like Wipro and TECH M are working for Rejuvenating the Environment by reducing GHG emission and shifting to renewable Energy, becoming water positive, sustainable waste management.

**Objectives:** The paper aims:

- To identify the environmental disclosures and evaluate the status of environmental reporting practices of major IT Companies .
- To analyze the extent of participation in environment sustainability by the major IT Giants.

### Data Base and Research Methodology

The study is exploratory in nature. Secondary source of data is used in this research. The sample under study is top 2 Indian IT companies as per the Responsible Business Ranking of Top Indian Companies for Sustainability and CSR 2020. The data has been taken from various web resources such as FUTURESCAPE, The CSR Journal, CSRBox, NGOBox and CSR database maintained by Ministry of Corporate Affairs. The annual reports of these two companies for the last three financial years i.e 2018-19, 2019-20 and 2020-21 have been studied. Environment reporting being a part of ESG (Environment Social Governance) framework, ESG reports of both the companies have also been studied. The descriptive statistics have been used to further analyze the data.

### Elaborations

Corporate Social Responsibility (CSR) initiatives have become an important aspect of Indian IT companies' operations. These companies have recognized the need to give back to society and have implemented a number of CSR initiatives, with a special focus on environment protection. Indian IT companies have been implementing a number of environmental sustainability initiatives in order to reduce their impact on the environment and promote sustainable practices.

### Environmental Sustainability by WIPRO and Infosys:

**Wipro Limited** is a global information technology, consulting, and business process services company founded in 1945 by M.H. Premji in India, and has since grown to become one of the largest IT services companies in the world. Wipro operates in over 50 countries and serves clients in diverse industries, including banking, finance, insurance, healthcare, energy, utilities, retail

and manufacturing. Wipro's services include digital strategy, data analytics, cloud services, artificial intelligence, automation, and cyber security. Wipro is also known for its commitment to sustainability and corporate social responsibility (CSR). The company has implemented a number of initiatives to reduce its carbon footprint, conserve energy and water, and promote sustainable transportation. Wipro also actively engages in community development initiatives and has set up a foundation to support education, health, and community development projects.

**Infosys Limited** is a global technology company headquartered in India that provides consulting, technology, and outsourcing services. It was founded in 1981 by seven engineers, including Narayana Murthy, who later served as the company's CEO. Infosys has since grown to become one of the largest IT services companies in the world, with operations in over 50 countries. Infosys provides a range of services, including software development, application management, infrastructure management, and business process services. The company also specializes in digital transformation, cloud computing, artificial intelligence, and analytics. Infosys has a strong reputation for its expertise in banking, financial services, insurance, retail, and manufacturing industries. Infosys is also highly committed to sustainability and corporate social responsibility (CSR). The company has implemented a number of initiatives to reduce its carbon footprint, conserve energy and water, and promote sustainable transportation. Infosys also actively engages in community development initiatives and has set up a foundation to support education, health, and community development projects.

The disclosure status of company has been discussed in the following paragraphs. The table 1 shows company wise amount spent on CSR over the years. Both the companies have spent more than the prescribed expenditure during FY 2018-19 and 2019-20 on CSR activities. In FY 2020-21 in spite of lockdown due to Covid-19 Wipro spent more than the prescribed expenditure. However, Infosys could not spend the prescribed amount and Rs. 49.52 crore was left unspent.

**Table 1. Expenditure on CSR by Wipro and Infosys**

Particulars	2018-2019 Rs. Cr.		2019-2020 Rs. Cr.		2020-2021 Rs. Cr.	
	Wipro	Infosys	Wipro	Infosys	Wipro	Infosys
Average Net Profit for the last three financial years	8802.2	17018	8344.2	17978	8281.7	18620
Prescribed CSR expenditure (2% of Average Net Profit as above), Amount to be spent	176.1	340.35	166.9	359.56	165.6	372.39
Total Amount Spent	185.3	342.04	181.8	359.94	251.2	325.32
Amount Unspent	-	-	-	-	-	49.52

Source: Annual Reports

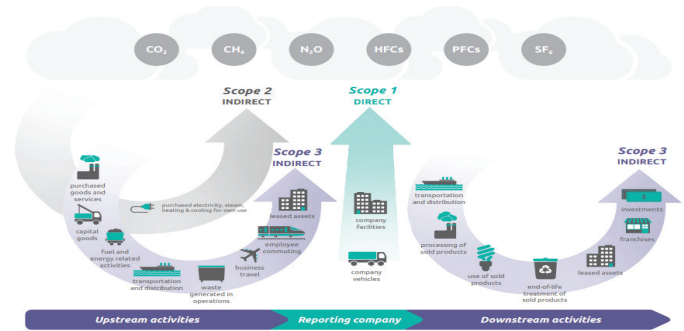
Companies Greenhouse Gas Emissions are measured and assessed by way of three different scopes. Scope 1 and 2 are those emissions that are owned or controlled by a company, whereas scope 3 emissions are a consequence of the activities of the company but occur from sources not owned or controlled by it.

**Scope 1** Direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment.

**Scope 2** accounts for GHG emissions from the generation of purchased electricity consumed by a company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated.

**Scope 3** is an optional reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company. Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of products and services.

**Overview of GHG Protocol Scopes and Emissions across the value chain**



Source: [https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard\\_041613\\_2.pdf](https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf)

Comparative absolute emission profile of the companies shows that in case of Wipro the scope 1 emission has decreased by 0.43% in FY 2019-20 as compared to previous financial year. While in case of Infosys it has increased by 13.81%. Due to covid 19 this emission decreased quite considerably in case of both the companies because of work from home. Same happened in the case of purchased electricity (scope 2). It decreased in 2020-21 due to covid situation but it increased by 19.93% in case of Wipro and by 4.87% in case of Infosys in FY 2019-20. Companies should make efforts to decrease these emissions.

**Table 2: Absolute Emission Profile (tons of CO2 eq)**

**Scope 1**

	Companies	FY 2018-19	FY 2019-20	FY 2020-21
Fuel & Refrigerant - India Offices	Wipro	13424	13366	10855
	Infosys	13482	15344	8678

**Scope 2**

	Companies	FY 2018-19	FY 2019-20	FY 2020-21
Purchased Electricity - India Offices and DCs	Wipro	103866	124564	86463
	Infosys	118293	124063	68673

**Scope 3**

	Companies	FY 2018-19	FY 2019-20	FY 2020-21
Employee Commute	Wipro	79160	84536	18,055
	Infosys	57762	54372	4717
Business Travel	Wipro	1,17,819	1,23,789	13,538
	Infosys	75869	71217	8068
Waste	Wipro	760	274	140
	Infosys	NA	202	127

Upstream Fuel+Energy emissions	Wipro	76,659	72,888	53,937
	Infosys	21747	25913	12061
Purchased goods/services	Wipro	82,246	1,00,460	2,15,830
	Infosys	187469	196342	120751
Upstream leased assets	Wipro	24,302	39,580	12,606
	Infosys	-	23,556	3156
Work from home emission	Wipro	-	-	36,230
	Infosys	-	-	64634

In scope 3, in case of emission due to employee commute Infosys performed better as its emission decreased in FY 2019-20 while Wipro's emission increased. Same was the case in emission due to business travel. In case of upstream fuel and energy emission Wipro performed better as it could manage to reduce it in the FY 2019-20 from the previous FY. In 2020-21 all these emissions decreased due to work from home that happened as a result covid situation. Companies are planning to use this hybrid work culture in future also.

#### **Various Environmental Sustainability Initiatives**

**Renewable energy:** Companies have invested in renewable energy sources such as solar and wind power. They have set targets to generate a certain percentage of their energy requirements from renewable sources by a certain date. These companies have also implemented energy-efficient technologies in their buildings and data centers to reduce their energy consumption.

**Water conservation:** Companies have implemented initiatives to conserve water. These include rainwater harvesting and recycling systems, as well as water-efficient technologies in their buildings and data centers. They have set targets to reduce their water consumption.

**Afforestation and wildlife conservation:** Both companies have actively been involved in afforestation and wildlife conservation. They have taken up plantation drives and have also adopted wildlife conservation programs. These initiatives help to protect the environment and create awareness among employees and local communities.

**Waste management:** These companies have implemented a number of initiatives to reduce, recycle, and reuse waste generated by their operations. These include composting and recycling facilities and a zero-waste policy.

**Sustainable transportation:** these companies have implemented carpooling and bike-sharing programs for their employees and invested in electric vehicles to reduce their transportation emissions.

**Community development:** these are actively engaged in community development initiatives, which are also

related to environment protection such as cleanliness drive, plantation and green cover promotion in nearby areas and supporting community-based organizations.

**Projects :** Butterfly Park and Wetland Biodiversity Zone : First biodiversity project of Wipro was unique Butterfly Park and Wetland Biodiversity zone at Electronic City campus in Bengaluru which uses recycled water. The second project in Pune focuses on trebling the number of native species and includes five thematic gardens – Aesthetic and palm garden, Spring garden, Ficus garden, Spice and Fruit garden. For the past eight years Wipro is supporting the “World Sparrow Day” and “Wipro-Nature Forever Society Sparrow Awards”.

**Rejuvenating Hebbal Lake :** The Hebbal lake in Mysuru is spread over an area of 40 acres in the Hebbal Industrial Area, and was once known as an important source of potable water. But over a period of time, the lake lost its charm due to massive urbanization around it. Untreated sewage started flowing into the lake and its surroundings from residential and industrial establishments. The company joined hands with the Mysore administration – KIADB and MUDA to rejuvenate the lake and restore its past glory. The project involved desilting and beautification, including creating a walking path and planting trees around it.

These initiatives demonstrate the companies' commitment to environmental sustainability and its efforts to reduce its impact on the environment. The companies' targets and goals are aligned with India's Nationally Determined Contributions (NDCs) under the Paris Agreement. Infosys has also been recognized and awarded for its environmental sustainability efforts by various organizations. Within the organization Wipro has given priority to identify energy efficiency and Green House Gases mitigation, water efficiency and responsible water management, pollution and waste management and campus biodiversity whereas outside the organization it has given emphasis on community ecology by engaging through partners.

### **Recommendations to IT Industry to improve Environmental Sustainability in India:**

Based on the study, here are few recommendations to Indian IT Industry to improve environment protection and sustainability in India:

- **Increase renewable energy use:** IT companies in India can increase their use of renewable energy sources such as solar and wind power. They can set ambitious targets for the percentage of energy they generate from renewable sources and work towards achieving them.
- **Implement energy-efficient technologies:** IT companies can invest in energy-efficient technologies such as LED lighting and smart building management systems to reduce their energy consumption.
- **Promote sustainable transportation:** IT companies can encourage employees to use public transportation, carpool, or bike to work. They can also invest in electric vehicles for their transportation needs.
- **Adopt green procurement policies:** IT companies can adopt green procurement policies that prioritize the purchase of environmentally friendly products and services.
- **Encourage sustainable practices among employees:** IT companies can encourage employees to adopt sustainable practices such as recycling, composting, and reducing water consumption. They can also provide training and education on environmental sustainability.
- **Collaborate with other stakeholders:** IT companies can collaborate with other stakeholders such as government, other IT companies and other industries to develop and implement sustainable practices.
- **Invest in green infrastructure:** IT companies can invest in green infrastructure such as green roofs, green walls, and rainwater harvesting systems to reduce their environmental impact.
- **Support community-based organizations:** IT companies can support community-based organizations that are working to protect the environment and promote sustainable practices.
- **Align with National and International policies:** IT companies can align their environmental sustainability goals and targets with the National and International policies
- on environment protection and sustainable development.

### **Conclusion:**

Thus, it has been observed that Indian IT companies are making conscious efforts in maintaining environmental sustainability and also assuming a great sense of responsibility and accountability. These companies are committed to walk through the path of sustainable growth and there is hope to witness many such innovative initiatives to achieve environment protection targets in near future. Renewable energy and energy conservation are the most trending area among the IT companies. More efforts are required towards water and waste management programs to preserve the natural resources and preventing the environment degradation too.

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