# GREEN ACCOUNTING PRACTISES: A STUDY OF SELECT COMPANIES IN INDIA

Aarathi B<sup>1</sup>
BCOM (F&A)
Final year student
Department of professional studies
Christ (Deemed to be university)
Bangalore, India

Shweta Sasidharan<sup>2</sup>
BCOM (F&A)
Final year student
Department of professional studies
Christ (Deemed to be university)
Bangalore, India

Sneha Srivastava<sup>3</sup>
BCOM (F&A)
Final year student
Department of professional studies
Christ (Deemed to be university)
Bangalore, India

 $\label{eq:Dr.} Dr.~Kavitha~D^4$  Department of Professional Studies, Christ University, Karnataka, India

#### **Abstract**

Environmental sustainability is a major concern with increasing Global Warming. One of the best ways to portray the companies' responsibility is by following green accounting practises and disclosure. There are companies doing their voluntary practises and disclosure for the same but till today there is no specific set of rules and regulations at the national or state level for them to comply with. This study focuses on the prominent five companies of India who made their name into the CDP (Carbon Disclosure Project) list. There are no recent company specific studies conducted to know the effectiveness of following green accounting. Therefore, the main aim of the study is to analyse the practises incorporated by the companies namely, L&T, Essar & oil, Wipro, TCS & Tech Mahindra followed by the comparative analysis of the same. The paper encompasses the achievement attained by the companies after following green accounting.

Keywords: Green accounting, environmental accounting, environmental sustainability, carbon footprint.

#### 1. Introduction

The environmental externalities caused by the corporate have increased to an alarming rate and it is crucial to take effective measures to protect the environment. Therefore, many of the organisations and associations understood the need of the hour and started to protect and create awareness regarding this cause. Environmental awareness and the need for accounting the same are growing at a threatening pace today. To act accordingly the business entities are coming up with new steps and other eco-friendly measures to have an impact on the present as well the future.

Green accounting or environmental accounting is a new but fast-growing branch of study that aims at accounting for environment and its sustainability. In India, green accounting is still at a developing stage. Green accounting encompasses accounting for environmental assets, the costs associated with them and the monetary quantification of impacts that the organization has on the environment. In other words, environmental accounting refers to identifying, collecting, analysing, disseminating, and using environmental cost information for environmental decision-making within an organisation.

### 2. Review of Literature

Dr. Minimol M.C and Dr. Makesh K.G(February 2014), in their research paper, Green accounting and reporting practises among Indian corporate, has developed a model specifying 6 aspects to be covered to measure the performance of the company. It has also studied the level to which environmental reporting is actually practised in India. The green accounting is at a nascent stage in India at corporate as well as national level. It has 3 faces: physical accounting, monetary valuation and integration with economic accounting. This study helped find out the parameters upon which companies does green accounting. The

study comes out with the conclusion that even though there are regulations in respect of environmental pollution there are no clear cut rules and procedures to account for them.

Dr.R.K.Tailor (July-Sept., 2017), in a study the impact of green accounting on sustainable development, tries to analyse green accounting in an Indian concept. Growth cannot be measured only in monetary terms. Green accounts emphasises inclusion of environmental costs into the accounts of the company. This will help us know the environmental impact the company is making. But this has a lot of problems. For example the natural stock accounting is difficult when the stock is not usually sold in market, either to know the change in stock level or the flow of stock. Next depreciation of natural capital is accounted for as income. A nation that has plenty of resources may show a considerable increase in performance in the initial years but will later on face the problem of sustainability.

A study of environmental accounting practises in selected Indian companies, a project done by Ramesh.L (December 2013) tries to analyse the measurement, recognition and measurement of environmental costs. The main limitation is that it is very difficult to exactly quantify environmental costs and benefits incurred by the company. Therefore their inclusion is accounts are a major concern. This paper reveals that majority of corporate are aware of the environmental issues as well as laws regarding disclosure requirements. Yet the number of companies following it is low. Moreover there are some trends observed such as large companies disclose more than that of small companies. Also when the company discloses it discloses in descriptive manner and not quantitative terms.

Even though most of the companies are aware of the need for environmental protection practices, in India, which is at the preliminary stage of green accounting, there are a lot of deficiencies when it comes to practicing and reporting of environmental related practices or in other words, Green Accounting. According to Dr.Preeti Malik and Dr.Alka Mittal, Green accounting is the best tool for assessing the cost and benefit of environmental practices. The standards and rules for reporting the same has been implemented at both national and international level by various authorities and organisations. Different kinds of reporting has also come into picture, be it satellite reporting with the help of internet or GRI reporting, each one has got its own prominence and usefulness. In India, there is a strong legal backbone which assists the protection of environment through the constitution, Acts and other legal bodies. Mere adherence to the standards and rules won't suffice the need of the hour. Everyone should be aware of this new concept and voluntarily should put in their part of contribution.

Green Accounting which is in a budding stage in India is a very significant part of Corporate Social Responsibility which helps in knowing the resource utilisation and cost incurred towards environment. The manufacturing companies add more value to the green accounting when compared to non-manufacturing companies according to the survey conducted in New Delhi. Apart from that determination of environmental costs helps in finding the financial outcome of a firm's operation. The success of this new concept is when everyone is aware about it and follows it according to the requirements.

The main emphasis is given on green accounting while measuring the National wealth and not the out-dated and primary tool used most of the times, which is the GDP growth indicator. So the decision makers need the correct information in order to analyse the development indicator and the citizens also have the right to know the same. This implies that there is a need to come up with a system of national accounting that fully incorporates the capital stock that determines the company's earnings. For better analysis the Green Accounting is gaining momentum everywhere and it will also measure the social cost which will be beneficial for the society at large. The main agenda of the paper is to clarify the theoretical background behind green accounting.

N Anil Kumar, T Sai Pranitha and N Kiran Kumar, their research paper: a study on green accounting and its practices in India, have discussed the various green practices adopted and the Environmental protection laws prevalent among the Indian companies. The concept of green accounting has been divided into three categories namely, global environmental accounting, national environmental accounting and corporate environmental accounting. The importance of green accounting has been explained in context of people,

profitability and planet. Therefore, it has been concluded here that Environmental Accounting and reporting in India is in developing stage, at the corporate level as well as at the national level and that it is one of the best methods to be followed for sustainable development

The research paper Green accounting for sustainable development: Case study of industry sector in West Bengal (2017) authored by Maniparna SyamRoy, throws light on the fact that the conventional indicator (GDP) cannot be the right indicator for sustainable development and that green accounting is a better means for that. But it has been further explained here that due to inadequate knowledge available there are data gaps in case of green accounting. Thus this paper takes into account water and air resources as industrial source of West Bengal as the source of data for study to illustrate the methodology and data types that can help provide the balance between green accounting system of the state and the country as a whole for the formulation of sustainable development-oriented policy.

Sherine Farouk, Jacob Cherian & Jolly Jacob, in the research paper Green accounting and management for sustainable manufacturing in developing countries, discuss that how limited literature is available on social and environmental accounting in emerging and developing nations. The objective of this paper is to evaluate how environmental accounting has been examined and evaluated by different authors, and based on such study a conceptual procedural model is to be selected which is most suitable for the developing countries. It has been discussed that how a sound accounting system can help in better environment performance of organizations. Further, Future research need to be presented in a manner that academicians are completely considerate towards approaches related to green accounting promotion so that the problems of environmental accounting practices are recognized.

# 3. Gaps in the study

- Most of the papers reviewed are specifying only qualitative characteristics of green accounting.
- None of the papers we reviewed have analysed company wise impact of green accounting. ii.
- The papers reviewed are not based on data of recent years. iii.

# 4. Importance/ need of the study

The importance of the study is to make the people as well as the companies aware about the concept of green accounting. Since there is no awareness, the benefits and advantages of this budding concept is unknown to all. Following the same will also help in regenerating and improving the environment conditions prevailing currently in India. This will also become one of the major criterions and basis considered by the stakeholders, especially the investors and customers while investing in the company. And on top that it helps in sustainable development of the environment. So the benefits from the environment will be enjoyed by future generations as well, which will in turn help in nation's growth and prosperity.

#### 5. Objectives

The primary objective of undertaking this research study is to analyse the impact of green accounting practises on the overall performance of the company.

The primary objectives of the study are supported by the following:

- 1. To study the green accounting & sustainability practises followed by select companies.
- 2. To make a comparative analysis of different green accounting practises of select companies.
- 3. To analyse the level of achievement attained by the companies by incorporating green accounts.

#### 6. Scope

Green accounting, in its full-fledged form, is followed by very few Indian companies. The research study focuses on five eminent Indian companies namely; Larsen & Toubro, Tata Consultancy Services, Essar Oil, Tech Mahindra and Wipro, which have adopted green accounting practices. Further, the scope extends towards the formulation of a procedural model which can be adopted by the organizations for the incorporation and implementation of green accounting.

#### 7. Manner of collection of data

The collection of data consists of secondary method of data collection. The secondary data is collected from most of the research papers, journals and articles on the concerned topic.

# 8. Sample size

The study is company specific. We have selected 5 eminent companies who follow green accounting which are as follows: Tech Mahindra, Wipro, Tata Consultancy services, Essar oil, Larsen & Toubro.

# 9. Analysis & interpretation of green accounting practises by the 5 companies

#### A. Larsen and Toubro

#### **Green Portfolio**

With the help of the ESG framework, an evolving risk management tool, the overall performance and sustainability of an organization can be analysed from Environment, Social and Corporate Governance criteria. The Environment criterion overviews as to how a company performs with respect to its natural capital. Low environment impacting products form part of LT's green portfolio. In the Financial Year 2016, LT witnessed a growth of 49% to INR 161.3b in its green products and services portfolio and the contribution of the same to the company's overall sales grew to 16% in Financial Year 2016 from 12% in Financial Year 2015.

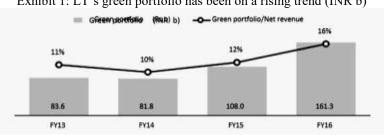


Exhibit 1: LT's green portfolio has been on a rising trend (INR b)

Source: Company, MOSL

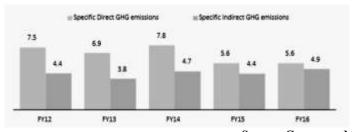
# Opportunities in clean technology

'Opportunities in clean technology' is a KPI encompassing which LT has undertaken several green projects some of which are: (i) hydel power projects with aggregate capacity of 870 MW (ii) mass rapid transit systems that provide enhanced connectivity and reduce the number of cars on the road, (iii) 49.1msf of completed green building space, and (iv) water and wastewater distribution networks that extend across 50,000km.

#### **Gases Emission levels**

LT is a combination of several business [including production] and thus emissions of gases is a significant factor for green accounting. The year-wise trend of the same has been shown in the following figures:

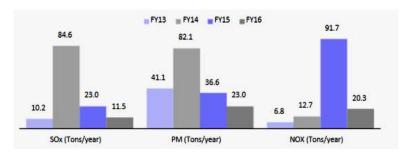
Exhibit 2: GHG emission levels have been on a declining trend (tons/employee)



Source: Company, MOSL

The emissions of Greenhouse Gases [GHG] and toxic emissions by LT have been declining. However, the emissions of NOX rose steeply.

Exhibit 3: NOX emissions rise steeply in FY15 (tons/year)



Source: Company, MOSL

#### B. Essar Oil and Gas

The financial statement of FY 2016-17 of Essar throws light on the following facts and figures:

#### The hazardous wastes of used oil

The hazardous wastes of used oil has decreased from 18400 litres during the FY 2015-16 to 9870 litres during the FY 2016-17 which were disposed by sale to authorised recycler. On the other hand, the oil contaminated waste has increased from 2.97 MT during FY 2015-16 to 4.47 MT during FY 2016-17.

# The solid waste of waste mud and drill cutting during drilling

These wastes have witnessed an increase from 6150 MT during the previous financial year to 7650 MT during the current financial year. The drill cuttings have been disposed in HDPE lined pit after carrying out chemical analysis.

The cost of control and natural resources conservation have been impacted by the pollution control measures taken by the company, the same has been discussed as below:

- The treated produced water is reused in drilling, hydro fracturing and dust suppression;
- Total 84 Diesel Generator sets converted to Gas based Generator Sets once production is started at well sites.
- Installation RO (5100 KLD) for the treatment of Produced water generated from CBM wells

#### Other environment investment proposals

Some other investment proposals and additional proposals that have been adopted by the company in relation to protection of environment are as follows: Regular environmental monitoring through CPCB/NABL approved laboratory for Ambient Air and Noise Quality monitoring and DG set Stack emission monitoring; for the segregation of waste generated at source the 'Three colour bin waste management system' has been developed; and there has been a plantation campaign of more than 1000 samplings at different sites during the last financial year.

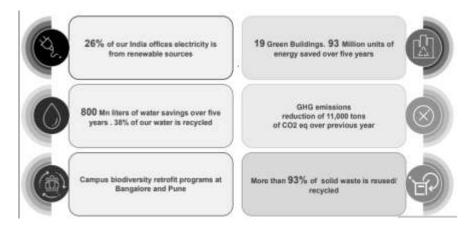
#### C. Wipro

**Energy And Gas-** The main aim of the company is to reduce the GHG emissions to 94 Kg per sq.mt by the year 2020 considering a baseline metric of Kg in 2014-15, translating into a net reduction of 35000 MT.

**Water-** The main objective of the company is to achieve a year on year reduction of 5% in fresh water consumption per employee in the coming years and as of now the consumption is 20% between financial year 2016 and 2021.

**Waste Management-**They are targeting to keep the limit up to 5% of total waste generated in terms of weight through their internal operations. The company is also planning to continue with their existing management of handling the organic waste in which it is managed wholly through internal methods.

**Biodiversity-** Their former goal of converting existing companies into bio-diversities is going to be redesigned and implemented in the upcoming years.



The Ecological Footprint

Source: Sustainability report of Wipro, 2017

# **D.** Tata Consultancy Services

#### **Environment**

TCS plays a very important role in growth and development of environment through various conscious measures and contributions. It has an Environment Management System which has key delivery locations at 114 locations across the world are certified to IS) 14001:2004.

# **Environment Management at TCS Includes:**

- 1. Resource efficiency
- 2. Green building infrastructure

- 3. "Beyond compliance 'focus
- 4. Climate change mitigation
- 5. Green procurement
- 6. Supply chain focus
- 7. Green IT
- 8. Employee engagement
- 9. Supply chain management

Environment performance has also been remarkably well as far as the company is concerned. TCS also follows all the applicable environment regulations. It is remarkable they have not been charged any fine through non compliance till now.

Table 1: Targets and objectives

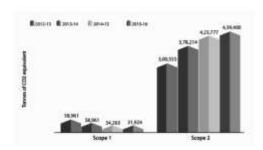
Objective	Target Date	Status
Carbon footprint* (per capita) reduction by 50% over baseline 2007-08*(Scope 1 + Scope 2)	2020	On track
1.65 (weighted average) PUE	2018	Target year extended
20% renewable energy procurement	2020	On track
Water neutrality	2020	On track
Zero* solid waste disposal to landfill (*<5%)	2020	Target year extended
Inclusion of vendor sustainability requirements in contract and performance of assessments	2017	On track

Source: Corporate Sustainability Report of TCS, 2015-2016

# **Energy efficiency and GHG mitigation**

Although there are a lot of events like change of temperature, altered rainfall patterns and so on which are affecting the climate change and extreme weather, TCS has come up with a proactive energy and carbon management plan which aims at reducing the carbon foot print by 50% by 2020.

Exhibit 4: Energy efficiency and GHG mitigation



Source: Corporate Sustainability Report of TCS, 2015-2016

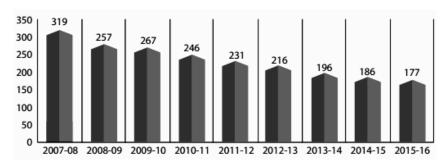
# **Carbon foot print of TCS**

Scope 1, which is diesel operated generator sets, company owned vehicles, cooking gases, fuel combustion for space heating, has decreased in an orderly way from 2012-13 to 2015-16. Scope 2, which is purchased electricity, has increased systematically from 2012-13 to 2015-16.

# **Renewable Energy**

Most looked upon source as it is environment friendly and ensures delivery of energy services in changing climatic conditions. The company is planning to acquire the same from third parties and targets to achieve a target of 20% renewable component by 2020. It has reduced its specific carbon and energy footprint and reduced energy consumption by 5 %.

Exhibit 5: Renewable Energy



Source: Corporate Sustainability Report of TCS, 2015-2016

There is a reduction in the per year electricity consumption observed from 2007-08 to 2015-2016 due to their efficient operations.

# **Ozone depleting substances**

TCS makes use of HVAC systems in refrigerators such as R-22 which is actually ozone depleting substances. All of these are going to be replaced by Ozone Depleting Potential (ODP) as per the Montreal Protocol. It is actually inculcated in the new system as per TCS.

Table 2: Other emissions

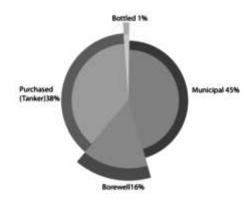
Emissions	Quantity (tonnes)
SOx	3.3
NOx	413

Source: Corporate Sustainability Report of TCS, 2015-2016

# Water sustainability

According to their water project they are aiming to achieve water neutrality by 2020. For the same, it has initiated 100% treatment and recycling of sewage and rainwater harvesting in their work places. There is a reduction in the water consumption by 15%, 478,626 cum of rainwater harvesting potential was created and 5.5 million kl of water recycled.

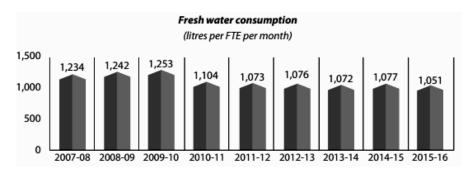
Exhibit 6: Sources of consumption of water



Source: Corporate Sustainability Report of TCS, 2015-2016

The pie chart depicts the fresh water consumption in the year 2016 which included 1% of bottled water, Municipal water of 45%, bore well water of 16%, and purchased (tanker) water of 38%.

Exhibit 7: Fresh water consumption



Source: Corporate Sustainability Report of TCS, 2015-2016

There is a decrease in per capita fresh water consumption from 2007-08 to 2015-16 even though not drastically from year to year.

20.00,000 15.00,000 5.00,000 0 2007-08 2008-09 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15 2015-16

Exhibit 8: Reused water (KL)

Source: Corporate Sustainability Report of TCS, 2015-2016

There is an increase in the reused water level capacity from 2007 to 2015.

# Waste management

TCS being a consulting entity contributes minimum towards and emissions and wastes. Municipal solid waste is the predominant one. It is also responsible for the generation of electronic and electrical waste which is relatively less hazardous

Sent to scrap
dealers or
municipal disposed

Mixed
dry waste

Food
master
or sent to piggeries
as feed

Food
master

Garden
waste

Ventei-composting

Waste Management

Sent for recycling

Paper
waste

Hazardoun
A e-waste

Some
Carrier
S toner
cartridges

Sent tack to the
manufacturer

Ventei-composting

The methods mentioned below are followed by TCS for waste generation

Source: Corporate Sustainability Report of TCS, 2015-2016

# Paper management

It is actually a part of waste management hierarchy and this approach concentrates on paper consumption reduction.

Paper consumption (Reams/1000 FTE/month) 231 250 200 133 150 100 72 65 55 51 50 2011-12 2012-13 2013-14 2014-15 2007-08 2008-09 2009-10 2010-11 2015-16

Exhibit 9: Paper consumption

Source: Corporate Sustainability Report of TCS, 2015-2016

There is a significant reduction in paper consumption from 2007 to 2015.

#### E. Tech Mahindra

# Renewing natural capital

In the words of Shivanand Raja, Sr. Vice President (Commercial & CS), "Tech Mahindra Ltd strives to reduce the ecological footprint of its activities while ensuring business growth"

The conservation of natural capital in Tech Mahindra is done by focussing on the following: 1.energy management; 2.carbon neutrality; 3.water resources management and; 4. waste management

# **Energy management**

Various initiatives to reduce power consumption have been undertaken by the company such as - ozone friendly gases being used in the refrigerators used for HVAC equipments; utilizing natural cooling techniques for offshore development centres; chillers de-scaling; etc.

G4 EN 3 - Total Energy Consumption within the organization otal Energy Consumption Indirect 457037.03 126954.73 474375.00 131770.83 524344.5 145651.24 Total 603383.75 167606.60 558875.00 155243.06 160405.96 G4 EN5 - Energy Intensity 2014-15 2015-16 2016-17 **Energy Intensity** Specific Direct Energy 2.44 1.31 0.72 Specific Indirect Energy 7.37 7.11 73702 Denominator (No of 64356 Energy Intensity was arrived at by using No of employees as the denominator

Table 3: Energy consumption

Source: Integrated report, 2016-17

The above tables show the total energy consumption within the organization over three financial years. It can be observed that the intensity of specific direct energy consumption has decreased significantly from 2.44 in FY 2014-15 to 0.72 in FY 2016-17 and the intensity of specific indirect energy consumption has reduced slightly from 7.62 in FY 2014-15 to 7.11 in FY 2016-17.

#### **Carbon neutrality**

The initiative towards low carbon growth is a voluntary aim taken up by the company. Carbon Reduction Commitment (CRC) is an energy efficient scheme that is paving the way for energy efficiency of the

company's operations. Carbon pricing is one tool adopted by the company for a transition toward slow carbon in the business operations.

The company has been reducing GHG emissions through energy efficiency and transitioning towards renewable energy (installing solar plants and power purchase agreements). The company has taken targets in its roadmap for reducing our energy intensity and GHG emissions. It is using energy efficient systems like Motion Sensors, LEDs and Natural Cooling Systems for Data centres to reduce use of electricity and GHG emissions. The quantification of GHG emissions has been graphically shown as below:

G4 EN 15 and G4 EN 16 - Direct and Indirect Green House Gas Emissions (Scope 1 and Scope 2)

MTCO2 FY 2014-15 FY 2015-16 FY 2016-17

Scope 1 10839 6257 3263

Scope 2 104103 108052 119434-02

G4 EN 15& G4 EN 16-SCOPE 1, SCOPE 2

Exhibit 10: GHG Emission

Source: Integrated report, 2016-17

FF 2016-17

The scope 1, which represents the emissions due to diesel consumed in generator sets, has decreased over the three financial years while scope 2, which represents the emissions from electricity purchased from the grid, has shown increase over the three financial years.

EV 2015-16

FY 2018-15

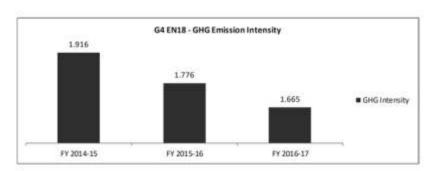


Exhibit 11: GHG Emission

Source: Integrated report, 2016-17

The GHG emission intensity was arrived at by using the number of employees as the denominator and it can be observed from the above diagram that the GHG emission intensity has dropped over the years.

#### Water resource management

The company installed water sensors to reduce water consumption. It carries out greater due diligence - pollution checks for incoming water supply to avoid disruption. Tech Mahindra along with the Mahindra group has supported the development of the India Water Tool 2.0(IWT). The company recycle water and carry out rain water harvesting to reduce dependence on fresh water. It is aiming to set up 6 rainwater harvesting units in their own premises by 2020-21 which will help in reducing their fresh water requirement.

G4 EN10 - Total volume of water recycled

FY 2014-15 FY 2015-16 FY 2016-17

346054.916 405139.2 420949.02

(KI)

Table 4: water recycled

Source: Integrated report, 2016-17

As represented in the above table, the total volume of water recycled by the organization has increased over the years and in the FY 2016-17 it has recycled and reused 420949.02 KI of water from 11 locations.

#### Waste management

The company is working under the policy of ensuring zero waste to landfill and ensuring that all the waste generated during company operations are disposed off in a responsible manner. The total waste disposal by category is shown below:

Table 5: Waste disposal

G4 EN 23 - Total weight of waste by type and disposal method FY 2014-15 FY 2015-16 FY 2016-17 E-Waste (MT) Hazardous Solid (MT) 166 130.48 Solid (Nos.) 1007.07 6430 4017 Liquid (KL)\* 9.315 Non Hazardous Solid (MT) 715.9 532 olid (Nos.) are UPS Batteries

Source: Integrated report, 2016-17

It can be deduced from the above table that one significant transition is that of the solid waste increasing from 532 MT in FY 2014-15 to 715.9 MT in FY 2016-17.

# 10. Comparison among the 5 companies

The general reporting parameters identified through literature reviews are:

"Environmental policy, health safety and environment, energy conservation, corporate sustainability/environmental initiatives, sustainability reporting, waste management, water management, wind/renewable energy sources, environmental information system, environmental disclosure practices, environmental targets, environmental reporting indicators, environmental cost and benefits, environmental liabilities and environmental assets." (MC & KG, 2014)

Out of these the following are being complied by each company-

Practises by the company	Larsen and Toubro	Essar Oil and Gas	Wipro	Tata Consultancy Services	Tech Mahindra
Opportunities in clean technology	✓				
Decrease in Green House Gas (GHG) emission	✓	<b>~</b>		✓	✓
Waste management/ treatment	$\checkmark$	V		$\checkmark$	$\checkmark$
Water treatment/ sustainability	$\checkmark$	<b>~</b>		$\checkmark$	$\checkmark$
Finding the carbon footprint				$\checkmark$	$\checkmark$
Paper management				✓	

# 

The green accounting practise and disclosure followed by all these eminent companies of India that made their names into CDP (Carbon Disclosure Project) are reduction in green house gas emission, waste management and water sustainability. Next in the list of practise followed by most of these companies are finding exactly the carbon footprint. Other practises like energy management, paper management, building biodiversity buildings, installation of clean technology machines etc are also on their go.

# 11. Findings & Suggestions

Based on the analysis and comparison of the 5 companies, a basic model to start off with green accounting can be a basic disclosure, if not a quantifiable data disclosure, with respect to the following:

- 1. Companies' contribution towards reduction in green house gases at least by a way of a basic disclosure of the machinery installed for reduction in emission of gases.
- 2. Waste management: 3R- Reduce, Recycle and Recover, at least up to which extent the company could follow the above.
- 3. Water management, it can be anything from reuse of water, recycling and treatment of waste water and rain water harvesting etc.

Effectiveness of following green accounting:

- In L&T in the Financial Year 2016, LT witnessed a growth of 49% to INR 161.3b in its green products and services portfolio and the contribution of the same to the company's overall sales grew to 16% in Financial Year 2016 from 12% in Financial Year 2015.
- In Essar and Gas the hazardous wastes of used oil has decreased from 18400 litres during the FY 2015-16 to 9870 litres during the FY 2016-17 which were disposed by sale to authorised recycler.
- In Wipro there has been reduction in GHG emission by 11,000 tons of CO2 eq, 93% of solid waste reused and recycled and 800 Million litters of water savings over 5 years out of which 38% of water is recycled.
- In TCS they have not been charged any fine through non compliance till now. There is a reduction in the water consumption by 15%, 478,626 cum of rainwater harvesting potential was created and 5.5 million kl of water recycled.
  - In Tech Mahindra, the total volume of water recycled by the organization has increased over the years and in the FY 2016-17 it has recycled and reused 420949.02 KI of water from 11 locations.

#### 12. Conclusion

Green accounting is definitely a practise that can help save the environmental degradation to a considerable extent. Though this study was restricted to 5 eminent companies of India we could find that there has been a reason for these companies to be called eminent. Practises and disclosure of Green accounting increases the corporate image of the company. High cost of incorporating green accounts into financial statements or lack of knowledge of the benefits of following them or unavailability of data for adequate disclosure might be the reasons for not following green accounting. Moreover there is no specific set of rules and guidelines to follow green accounting. This study was restricted to the voluntary disclosure by these 5 companies and the analysis for the same to generalise the results to an extent.

#### References

1. Dr. Minimol M.C and Dr. Makesh K.G (February 2014)- Asian Pacific Journal of Research, Green accounting and reporting practises among Indian corporates

2. Dr.R.K.Tailor (July-Sept., 2017)- Journal of Commerce, Economics & Computer Science (JCECS), The impact of green accounting on sustainable development

www.ijrar.org (E-ISSN 2348-1269, P- ISSN 2349-5138)

- 3. Ramesh.L (December 2013)- Kuvempu University, A study of environmental accounting practises in selected Indian companies
- 4. Dr.Preeti Malik and Dr. Alka Mittal (December 2015)-Maharaja Surajmal Institute- International Journal of Commerce, Business and Management (IJCBM), A Study of Green Accounting Practices in India
- 5. International journal for applied research, Green Accounting and practices
- 6. Sai Om Publications (May, 2014), Green Accounting- A way to sustainable development
- 7. N Anil Kumar, T Sai Pranitha and N Kiran Kumar; Published by- IOSR Journal of Business and Management (IOSR-JBM)
- 8. Published by- The Journal of Industrial Statistics (2017); Author- Maniparna SyamRoy, Ashutosh College, Kolkata, India
- 9. Sherine Farouk, Jacob Cherian & Jolly Jacob; Published by- IOSR Journal of Business and Management (IOSR-JBM)