

# Onexamining the Sustainability Reporting Practices of An Energy Company Using the Global Reporting Initiative Standards

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## ABSTRACT

A GRI report was collected from a company website from 2016–17 to 2020–21 for the five companies. A content analysis was conducted to assess the extent of environmental disclosure. A disclosure index was created, a check list was created, and percentages were calculated to quantify adherence. Column charts are used for data visualization. The study aims to know how many energy companies disclosed their environmental practices and align with internationally recognized reporting standards.

**KEYWORDS:** Global Reporting Initiative (GRI), Environment Disclosure Index, Content analysis, Environmental reporting.

## INTRODUCTION

Sustainability report: A sustainability report indicate an organization's social, environmental, and economic performance.

- 1. Introduction:** The report opens up with a banner announcing the firm's dedication to sustainability and placing out your purpose from the document
- 2. Company Profile:** The company's background information is presented in this section, explaining its goals and objectives, standard operating procedures and key stakeholders.
- 3. Long-Term Goals:** Examine the company's Sustainability strategy and articulate their long-term goals as outlined in artifacts. It might shed light on how sustainability fits into the overall business plan of an organization.
- 4. Initiatives and Projects:** Includes the report's focus on sustainability efforts that are specific to your organization. Ideals, how they execute and the result.
- 5. Stakeholder Engagement:** It exceeds to approach, capacity interact with staff members, clients or customers and supply chain partners that collect feedback.
- 6. Supply Chain Management:** The report may also discuss the organization's efforts at sustainability throughout its supply chain, if relevant. This could include supplier engagement programs, ethical procurement strategies or responsible sourcing.
- 7. challenges:** The report knows its challenges but also celebrates the best opportunities in reaching that vision for sustainability. He cited examples of the manifestation as hazard produced through resource

shortages, climate change, regulatory revisions or external stakeholders expectations.

- 8. Outlook:** The report wraps up by summarising the future sustainability objectives and tactics of the institution to indicate their commitment towards consistent improvement. It is important to remember that the content and format of a specific sustainability report can vary depending on the company, sector, or reporting standards used (e.g., SASB — Sustainability Accounting requirements Board; GRI- Global Reporting Initiative).

## LITERATURE REVIEW

**Shilpa S. Motwani and Dr. Hemal B. Pandya et al. (2016)** A study on the sustainable disclosure policies of Indian corporations..The methodology used was one way ANOVA to see if the disclosure practices of companies among industries differ significantly from each other. The findings and conclusions were that Indian companies have recognized the importance of sustainability reporting, more companies have started using the latest version of GRI, an increase in the the percentage of businesses in both the GRI and Indian Businesses reveal information in their sustainability reports without much thought given to the peculiarities of their own businesses.

**Abhishek Nanjundaswamy and Divyashree M S. et al. (2018)** and The study found that there is a significant difference in environmental disclosure made by the selected companies and GRI-G4 guidelines, that mandatory sector wise disclosure elements were highly revealed by each of the chosen businesses, and Tata Power and Reliance Power both provide a lot of environmental disclosure. The study concluded that reporting as per GRI framework is voluntary in India, and that companies should take care of voluntary items to be disclosed and combine both financial The integration of financial and non-financial data in yearly reports is promoted for integrated reporting.

**porchelvi et al. (2019)** examine Environmental Reporting Practices: An Analysis Of Indian Companies The article discusses the analysis of environmental reporting practices of Indian companies. It uses the Environmental Disclosure Index (EDI) to measure environmental disclosure practices. Industry type is an important factor that affects environmental reporting practices, and Indian companies have started to present their environmental concerns to the public through sustainability activities. The EDI has been assigned a score either 0 or 1, and the total represents the score attained by a given annual report.

**Ms. Farida Rusi Mandviwala et al. (2019)** conducted a study on environmental disclosure practices among Indian companies, focusing on Global Reporting Initiative (Gri) guidelines. The sample of the study was 50 companies belonging to Eighteen different subsectors. The primary aim of the research was to investigate whether there are any notable variations in the level of environmental disclosure procedures between the chosen Indian companies. The study used content analysis and environmental disclosure index (EDI) technique to measure dependent variables, industry type, firm size, foreign ownership, profitability, government ownership and financial leverage. The finding of the study indicated that industry type influencing more to environmental disclosure & Stakeholders Theory Government Ownership influencing more to environmental disclosure in India.

**Mahendra Kumar Mishra et al. (2020)** analyzed data was collected from Ace Knowledge Research Portal and included sectors like cement, coal & mining, oil & natural gas, steel, aluminium, and IT. The findings suggest that few Indian companies consistently compete with global standards in sustainability performance, suggesting that companies should focus on sustainable value creation instead of profitability.

**Dr. Ramesh et al. (2021)** studies Global Reporting Initiative (GRI) and Corporate Social Responsibility (CSR) practices of Selected Companies in India. aims to analyze the variation in the practice of Global

Reporting Initiative (GRI) variables among selected industries and examine the type of information disclosed by service companies in India. Data collection and analysis was conducted using a checklist prepared based on GRI and other environmental variables. Secondary data was collected from corporate websites, annual reports, and sustainability reports.

**OBJECTIVE OF THE STUDY :-**

1. To examine variation in practice of Global Reporting Initiative (GRI) variables in selected industries.
2. To examine type of information disclosed by selected companies in india.

**RESEARCH METHODOLOGY:-**

**SAMPLE SIZE :-** The sample size for the research includes five companies from the energy sector.

**DATA COLLECTION :-**

For this research work secondary data will be collected by using sustainability report and annual report of the companies. Articals and papers published in different business journals, magazines, newspapers, wesites of the companies and other data available on internet and other source of data will also been used.

**DURATION OF STUDY :-**

five years from 2016-17 to 2020-21 taken for the study.

**TOOLS FOR ANALYSIS :-**

For achieving the above objective Percentage, average used.

**RESEARCH METHODOLOGY :-**

Content analysis is used for the study. The different aspects are taken as per the GRI Guidelines. Checklist and environment disclosure score has been prepared for analysis the data.

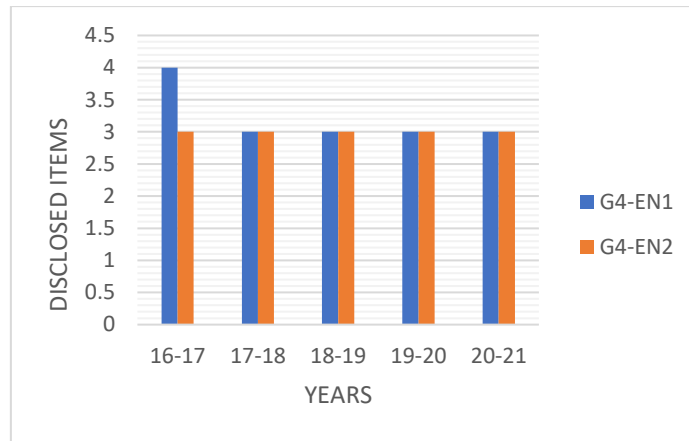
The scoring was done as follows. The checklist of 34 items prepare for each year. Score given on the basis total items disclosed dividing total 5 company and than multiply with 100 for seven different Aspect. The data analysis shown different companies who disclosed environmental related information.

|                |          |
|----------------|----------|
| Nature         | Score    |
| Reported       | 1        |
| Not Reported   | 0        |
| Not Material   | 0        |
| Not Applicable | Excluded |

**Table:-1 Disclosure on Material (Aspect-1)**

| Aspect | YEAR  |       |       |       |       | %     |       |       |       |       |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN1 | 4     | 3     | 3     | 3     | 3     | 80    | 60    | 60    | 60    | 60    |
| G4-EN2 | 3     | 3     | 3     | 3     | 3     | 60    | 60    | 60    | 60    | 60    |

**Source : Compiled by researcher**

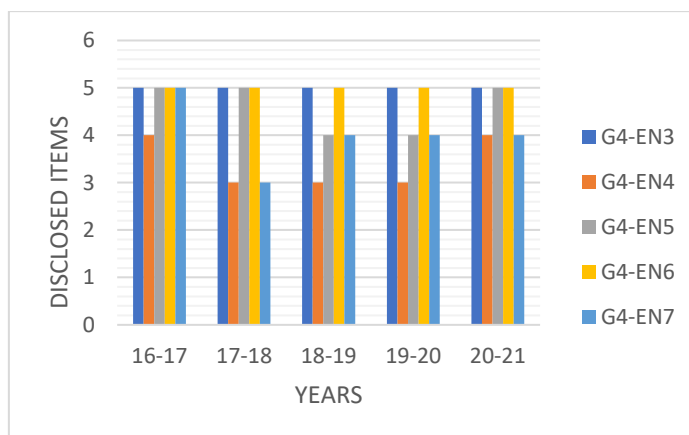


As per the data derived from the first aspect in the year 2016–17, G4-EN1 was disclosed by four companies out of the five. The result changed in subsequent years; only three companies disclosed G4-EN1 aspects. G4-EN2 aspect disclosed by 3 companies in all years.

**Table :- 2 Disclosure on Energy (Aspect-2)**

| Aspect | YEAR  |       |       |       |       | %     |       |       |       |       |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN3 | 5     | 5     | 5     | 5     | 5     | 100   | 100   | 100   | 100   | 100   |
| G4-EN4 | 4     | 3     | 3     | 3     | 4     | 80    | 60    | 60    | 60    | 80    |
| G4-EN5 | 5     | 5     | 4     | 4     | 5     | 100   | 100   | 80    | 80    | 100   |
| G4-EN6 | 5     | 5     | 5     | 5     | 5     | 100   | 100   | 100   | 100   | 100   |
| G4-EN7 | 5     | 3     | 4     | 4     | 4     | 100   | 60    | 80    | 80    | 80    |

Source : Compiled by researcher

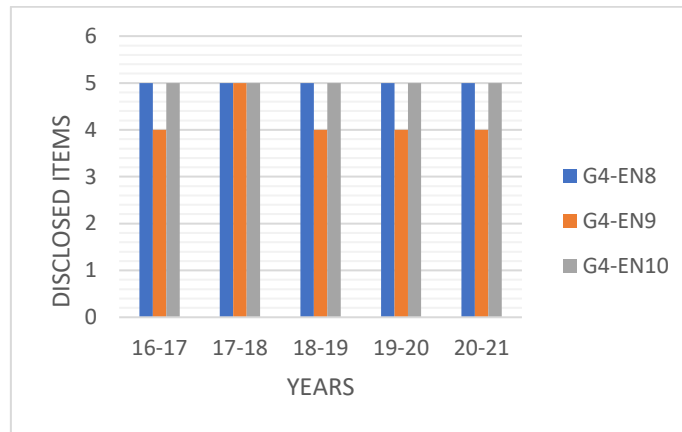


The second aspect is based on energy. G4-EN3 and G4-EN6 aspects have been disclosed by all companies for the past five years. However, GN-EN4 aspect disclosed in the three year 60% and remaining 2 years disclosed by 80%. In the years 2016–17, 2017–18, and 2020–21. All 5 companies disclosed energy, and the remaining 2 companies disclosed 80% of the G4–EN5 aspect. The five companies disclosed G4-EN5 aspect satisfactory level. But the G4-EN7 aspect was disclosed by 100% in the 2016–17 remaining year, not 100% achieved by all the companies.

**Table :- 3 Disclosure on Water (Aspect-3)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN8  | 5     | 5     | 5     | 5     | 5     | 100   | 100   | 100   | 100   | 100   |
| G4-EN9  | 4     | 5     | 4     | 4     | 4     | 80    | 100   | 80    | 80    | 80    |
| G4-EN10 | 5     | 5     | 5     | 5     | 5     | 100   | 100   | 100   | 100   | 100   |

Source : Compiled by researcher

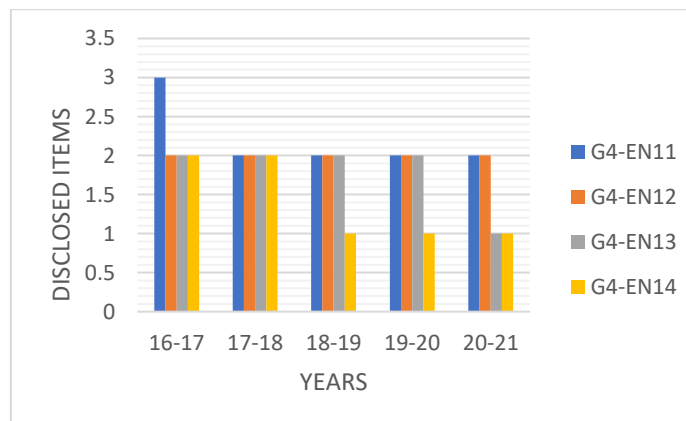


The third aspect is based on water. 5 companies (100%) have given disclosures on the G4-EN8 aspect. In 2017-18, all companies (100%) and the remaining four companies (80%) provided disclosures on the G4-EN9 aspect. All selected companies (100%) have disclosed information on the G4-EN10 aspect.

**Table :- 4 Disclosure on Biodiversity (Aspect-4)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN11 | 3     | 2     | 2     | 2     | 2     | 60    | 40    | 40    | 40    | 40    |
| G4-EN12 | 2     | 2     | 2     | 2     | 2     | 40    | 40    | 40    | 40    | 40    |
| G4-EN13 | 2     | 2     | 2     | 2     | 1     | 40    | 40    | 40    | 40    | 20    |
| G4-EN14 | 2     | 2     | 1     | 1     | 1     | 40    | 40    | 20    | 20    | 20    |

Source : Compiled by researcher



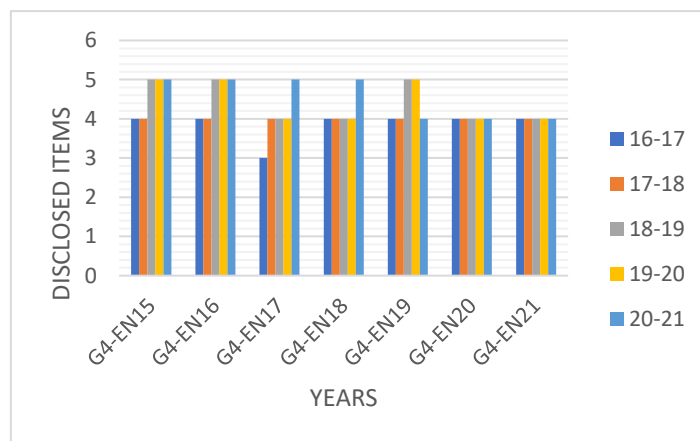
The data derived from four aspects is based on biodiversity. For the G4-EN11 aspect, there were three

companies (60%) in 2016–17, and for the subsequent years, the result was not satisfactory as only two companies disclosed information. For the aspect G4-EN12, the results were constant, as in the in the above aspect, no improvement was shown. For the next aspect, G4-EN13 and G4-EN14 results were constant and declined in the last couple of years.

**Table :- 5 Disclosure on Emissions (Aspect-5)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN15 | 4     | 4     | 5     | 5     | 5     | 80    | 80    | 100   | 100   | 100   |
| G4-EN16 | 4     | 4     | 5     | 5     | 5     | 80    | 80    | 100   | 100   | 100   |
| G4-EN17 | 3     | 4     | 4     | 4     | 5     | 60    | 80    | 80    | 80    | 100   |
| G4-EN18 | 4     | 4     | 4     | 4     | 5     | 80    | 80    | 80    | 80    | 100   |
| G4-EN19 | 4     | 4     | 5     | 5     | 4     | 80    | 80    | 100   | 100   | 80    |
| G4-EN20 | 4     | 4     | 4     | 4     | 4     | 80    | 80    | 80    | 80    | 80    |
| G4-EN21 | 4     | 4     | 4     | 4     | 4     | 80    | 80    | 80    | 80    | 80    |

**Source : Compiled by researcher**

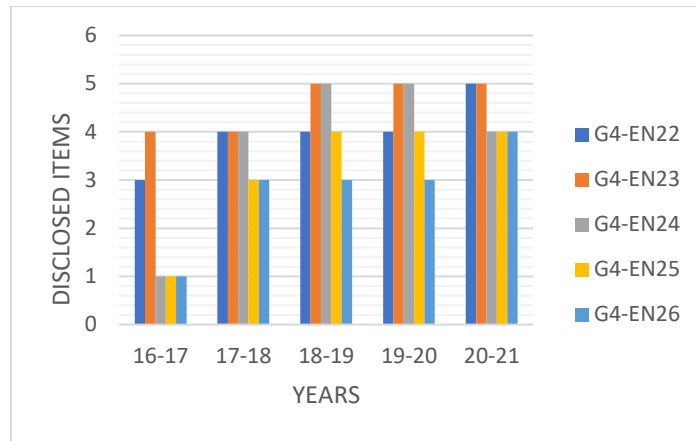


On the basis of the data derived, all aspects of emissions satisfactory disclosure by all the companies. But in the years 2016–17, three companies disclosed the GN-EN17 aspect.

**Table :- 6 Disclosure on Effluents and Waste (Aspect-6)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN22 | 3     | 4     | 4     | 4     | 5     | 60    | 80    | 80    | 80    | 100   |
| G4-EN23 | 4     | 4     | 5     | 5     | 5     | 80    | 80    | 100   | 100   | 100   |
| G4-EN24 | 1     | 4     | 5     | 5     | 4     | 20    | 80    | 100   | 100   | 80    |
| G4-EN25 | 1     | 3     | 4     | 4     | 4     | 20    | 60    | 80    | 80    | 80    |
| G4-EN26 | 1     | 3     | 3     | 3     | 4     | 20    | 60    | 60    | 60    | 80    |

**Source : Compiled by researcher**

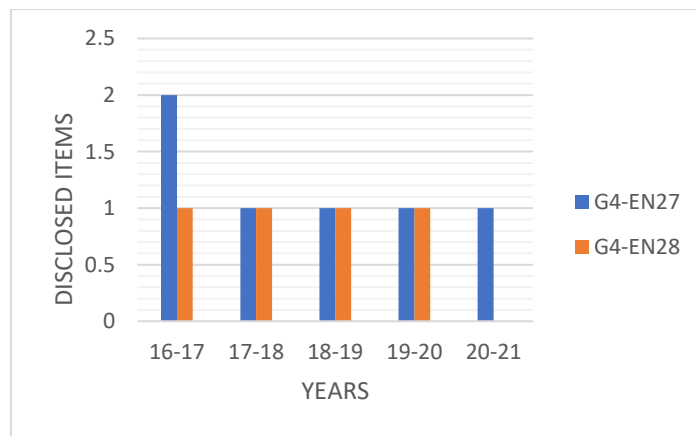


The six aspects are based on effluents and waste. For the aspects G4-EN22 and G4-EN23, satisfactory results were achieved, but for the next three aspects in the year 2016–17, satisfactory results were not achieved.

**Table :-7 Disclosure of Product and Services (Aspect-7)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN27 | 2     | 1     | 1     | 1     | 1     | 40    | 20    | 20    | 20    | 20    |
| G4-EN28 | 1     | 1     | 1     | 1     | 0     | 20    | 20    | 20    | 20    | 0     |

Source : Compiled by researcher

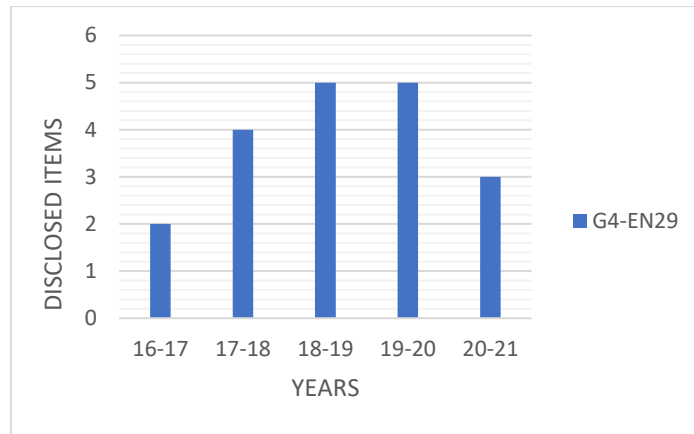


The seven aspects are based on products and services. 2 companies (40%) in 2016–17 and in the remaining years, 1 company (20%) has made disclosures on the G4-EN27 aspect. There is no improvement in the G4-EN28 aspect, and in 2020–21, no companies disclosed the information.

**Table :- 8 Disclosure on Compliance (Aspect-8)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN29 | 2     | 4     | 5     | 5     | 3     | 40    | 80    | 100   | 100   | 60    |

Source : Compiled by researcher

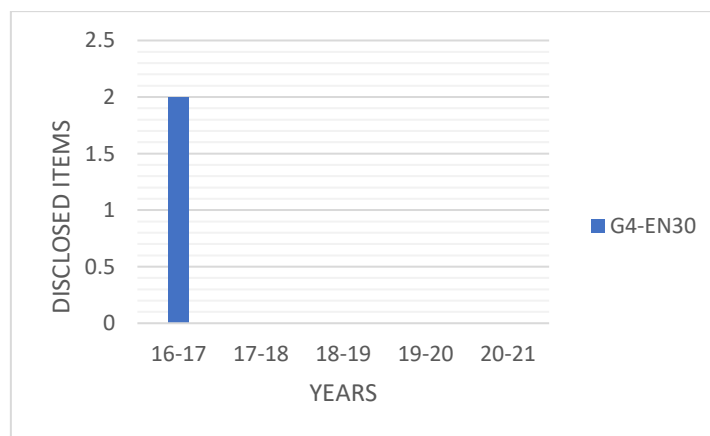


From the above data, in 2016–17, two companies; in 2017–18, four companies; in 2018–19 and 2019–20, five companies; and in 2020–21, three companies disclosed compliance level G4-EN29 aspects.

**Table :- 9 Disclosure on Transport (Aspect-9)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN30 | 2     | 0     | 0     | 0     | 0     | 40    | 0     | 0     | 0     | 0     |

Source : Compiled by researcher



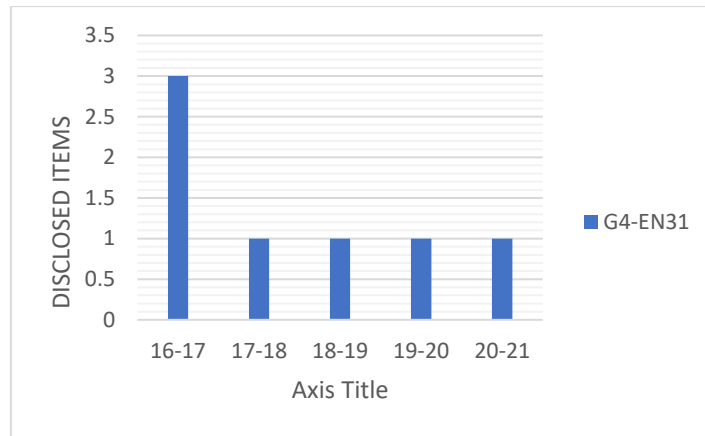
The nine aspects are based on transport, with two companies (40%) and, for the following subsequent year, no disclosure by all companies in aspect G4-EN30.

**Table :- 10 Disclosure on Overall (Aspect-10)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN31 | 3     | 1     | 1     | 1     | 1     | 60    | 20    | 20    | 20    | 20    |

Source : Compiled by researcher



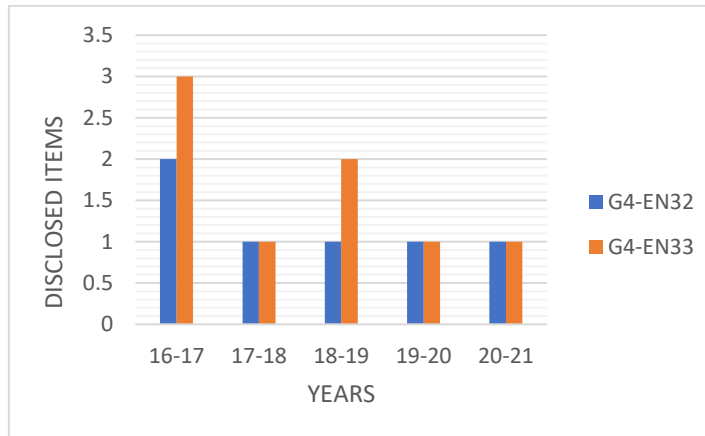


The ten aspects are based on overall Three companies (60%), and for the remaining year, only one company has done the disclosure on the G4-EN31 aspect.

**Table :- 11 Disclosure on Supplier Environmental Assessment (Aspect-11)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN32 | 2     | 1     | 1     | 1     | 1     | 40    | 20    | 20    | 20    | 20    |
| G4-EN33 | 3     | 1     | 2     | 1     | 1     | 60    | 20    | 40    | 20    | 20    |

Source : Compiled by researcher

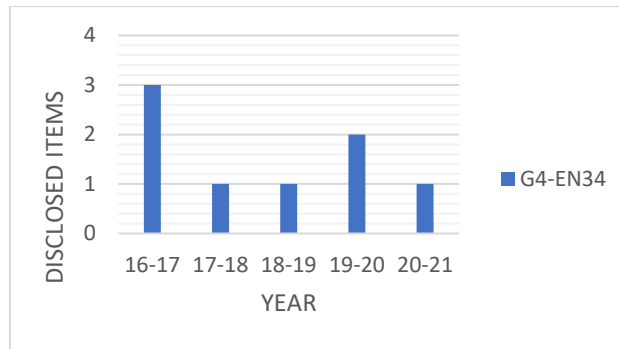


The eleventh aspect is based on supplier environmental assessment. The satisfactory result was not gained in the aspect GR-EN32, in which in the years 2016–17, two companies and one remaining company disclosed the information. The result improved in the year 2016-17 three companies, 2018-19 two companies and remaining year one companies disclosed the information.

**Table :- 12 Disclosure on Environmental Grievance Mechanisms (Aspect-12)**

| Aspect  | YEAR  |       |       |       |       | %     |       |       |       |       |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| G4-EN34 | 3     | 1     | 1     | 2     | 1     | 60    | 20    | 20    | 40    | 20    |

Source : Compiled by researcher



The twelve aspect is based on Environmental Grievance Mechanisms. Satisfactory result was not gain in the last aspect of G4-EN34.

**FINDING AND CONCLUSION**

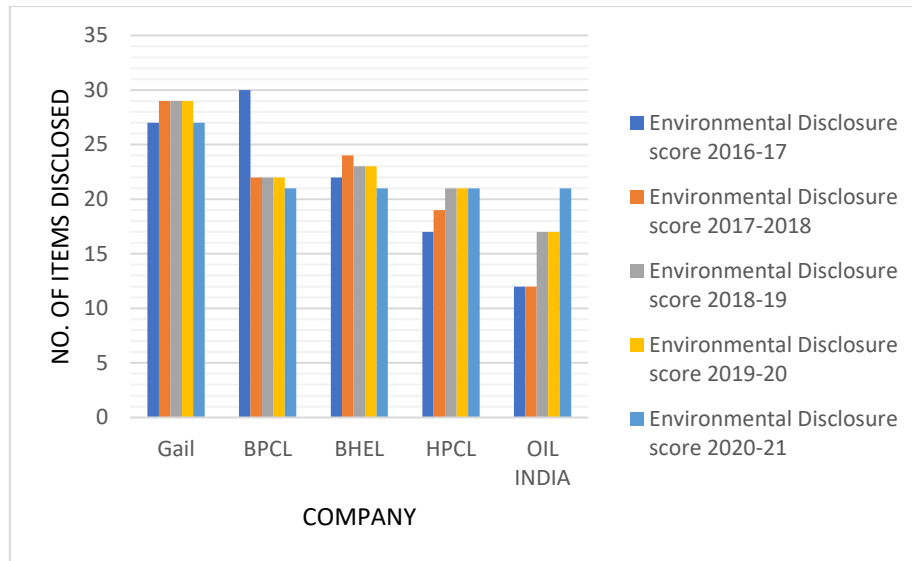
**Table :- 13 Environment Disclosure Score – Company Wise**

| Sr. No. | Company Name (Energy Sector) | Total Score (out of 34 items) |       |       |       |       | %     |       |       |       |       | Market Capitalisa-tion |
|---------|------------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------------------|
|         |                              | 16-17                         | 17-18 | 18-19 | 19-20 | 20-21 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |                        |
| 1       | Gail                         | 27                            | 29    | 29    | 29    | 29    | 79    | 85    | 85    | 85    | 85    | 78,190                 |
| 2       | BPCL                         | 30                            | 22    | 22    | 22    | 21    | 88    | 65    | 65    | 65    | 62    | 69,794                 |
| 3       | BHEL                         | 22                            | 24    | 23    | 23    | 21    | 65    | 71    | 68    | 68    | 62    | 36,208                 |
| 4       | HPCL                         | 17                            | 19    | 21    | 21    | 21    | 50    | 56    | 62    | 62    | 62    | 29,219                 |
| 5       | OIL INDIA                    | 12                            | 12    | 17    | 17    | 21    | 35    | 35    | 50    | 50    | 62    | 27,699                 |

**Source : Compiled by researcher**

The above table shows the environment disclosure score, company-wise. GAIL disclosure score in 2016–17 was 27 (79%) and in the remaining years was 29 (85%). BPCL disclosure score was 30 (88%) in 2016–17, in the next three years, 22 (65%), and in the last year, 21 (62%). BHEL disclosure score in 2016–17 was 22 (65%), 2017–18 was 24 (71%), and the next two years were 23 (68%) and last year 21 (65%). HPCL disclosure score in first year 17 (50%), second year 19 (56%), and remaining years 21 (62%). Oil India disclosure score in the first two years was 12 (35%), in the next two years was 17 (50%), and in the last year was 21 (62%).

So from the above table, we can say that GAIL disclosed more information about environmental accounting. Oil India disclosed less information about environmental accounting than the other selected companies.



**LIMITATIONS:**

1. The study depends on the secondary data obtained from the sustainability report of selected companies.
2. The study is based on the analysis of five years of data only.
3. The tools and techniques that will be used for the study have their limitation.
4. This research study is limited to five listed companies in India.

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