
Corporate Environmental Reporting Practices in India - With special reference to NTPC

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ABSTRACT

The economic activities have a significant effect on world's natural resources and its impact is being felt on the environment also. The very survival of the mankind in the long run, to a larger extent, is dependent on protection and development of these resources. Industries, being the major pollutants, are under severe pressure from the government and non-governmental organizations and the society to ensure the protection of the natural resources and to report to the public all its activities. This paper examines in general the environmental reporting practices as part of corporate governance with specific reference to NTPC.

Introduction

Requirement of a healthy environment is the right of the society. But presently this society is being deprived of healthy environment because of very reckless use of natural and environmental resources mainly by the industrial organizations. Therefore the economic activity has a significant effect on the world's natural resources, the impact being felt on the environment, such as global warming, depletion of ozone layer, pollution of water, air and soil. These incidents, over the world have raised serious concern for the environmental protection and therefore have called for several measures and one such measure being environmental reporting. Environmental reporting can be defined as the provision of information about the environmental impact and operational performance of an entity that is useful to all stakeholders namely customers, employees, investors, vendor partners, government and society in assessing their relationship with the reporting entity. At present reporting on environmental matters all over the world, is voluntary on the part of business organization. No specific accounting standard has been issued for the accounting treatment of expenditure incurred on protection and development of natural resources. However guidelines regarding environmental reporting have been issued

by many organizations such as by Federation des Expert Compatibles Europeans (FEE), Financial Accounting Standards Board (FASB), Inter-Governmental Working on International Standards on Accounting and Reporting (IASR), Accounting Advisory forum (AAF) etc. But these guidelines are only advisory in nature and not mandatory. Moreover the disclosure aspects of environmental information has been voluntary and not mandatory.

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Corporate Governance - Environmental Reporting

The concept of corporate governance has brought in radical changes in the reporting practices followed by business entities. The underlying principles of corporate governance are the values, ethics and commitment to follow best business practices. Thus it rests upon the foundations of transparency, disclosures and fairness in dealing with its stakeholders. So this corporate accountability includes not just profit reporting but also reporting for many causes for which they are responsible. Environmental reporting on the other hand includes indetailed reporting of environmental disclosure variables such as compliance with environmental laws, environmental audit, capital & revenue environmental expenditure, accounting policy, general environmental disclosure variables like emissions to air, water and land, corporate environment policy, environment friendly technology adoption and its research etc.

Environmental Reporting - Significance

The benefits of environmental reporting have proved to be numerous and significant thus making it imperative to go for environmental reporting. Its significance can be gauged through the following :

- Better environmental cost management can improve the bottom line
- Meet the external regulatory requirements
- It reassures society of providing the best technology and product
- Gives greater reassurance to shareholders, results in higher share value

Present Trends of Reporting

Till date the disclosure of environmental information is not mandatory. Whatever little information is being disclosed is purely to meet the legal requirement of law of the land and it is voluntary to disclose additional information. Presently such information is disclosed either in the director's report or in the corporate governance report.

Review of literature

A number of studies provide a detailed insight about the trends of disclosure of environmental information overtime. Gray (1990) in his study on

corporate social and environmental disclosure reported a little or no social and environmental information in the annual reports beyond what was required under the law. Roberts (1991) formed a similar opinion from his study about environmental reporting.

Objectives of the study

The study focuses on the level of disclosure of voluntary environment information by corporates. It provides insight into qualitative aspects of current environmental disclosures. It is generally viewed that in most of the Public Sector Undertakings (PSUs), all the basic ingredients for good governance like clarity of responsibility, transparency, checks and balances, environmental compliance and thus accountability are missing. Keeping this in view the study intends to address the following issues :

- ✓ Study environmental disclosures of a PSU
- ✓ General environmental index disclosure status
- ✓ Category wise disclosure status
- ✓ Place of environmental disclosure.

Methodology

For the purpose of the study, NTPC being leading PSU in power sector was selected. It includes 20 of its power plants excluding subsidiaries spread across the length and breadth of India. It enjoys the status of a Navaratna over a long period. It was a recipient of 'Golden Peacock Global Award' for Excellence in Corporate Governance 2005 instituted by the "World Council for Corporate Governance."

To fulfill the stated objectives relevant data sources viz. annual reports, official website and other official material in circulation were contacted. The information pertaining to its activities which have a bearing either Positive or negative on the environmental resources, which meets the criteria for the study were gathered and content analysis method was applied.

Content analysis is a method of codifying the text or the content of a piece of writing into various groups or categories based on some selected criteria. It involves the selection of analytical categories with in the context of content material.

The information gathered was condensed into three main categories based on selected criteria. The Category I represents variables specifically related to regulatory factors i.e. compliance of various laws & regulations of the land. Category II represents variables

relating to environmental accounting information and Category III represents a general environmental disclosure variables. The selected category wise variables are presented in Table 1.

Table1: Category wise Disclosure of Environmental Variables

Category I <i>Regulatory Factors</i>	Category II <i>Environmental Accounting Information</i>	Category III <i>General Environmental Variables</i>
<ol style="list-style-type: none"> 1. Environmental audit 2. Compliances with laws 3. Environment management System 4. Environment performance Awards 5. ISO 14001 6. Penalties 	<ol style="list-style-type: none"> 1. Capital & Revenue Expenditure 2. Accounting policy 	<ol style="list-style-type: none"> 1. Environmental policy 2. Emissions to air, water and Land 3. Environment Research and Development 4. Afforestation 5. Waste Management 6. Environment Friendly Technology 7. Environment Impact Assessment 8. Environmental Review 9. On- Line Data Base Management 10. Training to Employees

Limitations

The following limitations have restricted the scope of the study to some extent

- Due to time constraint the study was confined to 20 power plants of NTPC
- No generalizations could be made as it confined to one leading PSU
- The content analysis was restricted to the specified environmental variables disclosed by NTPC.
- The content analysis carries no quantification of the results.

Corporate Environmental Reporting Practices in India

The growing concern for the protection of natural and environmental resources is also reflected in the government policy of our country. The 42nd Amendment

to the Indian constitution in 1976, added Article 48 A to the state policy; wherein it stated that the state shall endeavour to protect and improve the environment and safe guard the forests and wildlife of the country. The Directive Principles within Article 51A of the constitution of India requires that every citizen of India shall protect and improve the natural environment including forests, lakes, rivers and wildlife and to love living creatures. Further in 1991, Government of India stated that every company shall in the report of its Board of Directors disclose briefly the particulars of compliance with environmental laws, steps taken or proposed to be taken towards adoption of clean technologies for prevention of pollution, waste minimization, waste recycling, pollution control measures, water and other resource conservation. The Company Bill 1997 section 173 had proposed that every company should disclose through its Board of Directors report the measures taken for the protection of the environment.

As far as NTPC is concerned, which has a vision to be one of the worlds largest and best power utilities powering India's growth, carries out its mission through the establishment of number of thermal as well as

gas based power stations across India. Table 2 shows the region-wise establishment of power stations in India and their capacity.

Table 2: Region wise Establishment of Power Stations in India

Stations	Capacity (MW)	Gen.MU(Gross)
Northern Region	4780	33891
Singrauli	2000	15803
Rihand	1500	7989
Unchahar	840	6781
Tanda	440	3318
National Capital Region	3152	22353
Dadri(coal)	840	6831
Anita (gas)	413	2785
Auraiya(gas)	652	4118
Dadri(gas)	817	5457
Faridabad(gas)	430	3162
Western Region	5623	41724
Korba	2100	17049
Vindhyachal	2260	17821
Kawas(gas)	645	2822
Jhanor Gandhar(gas)	648	4032
Eastern Region	5900	35225
Farakka	1600	9701
Kahalgaon	840	6082
Talcher- Kaniha	3000	16246
Talcher- Thermal	460	3196
Southern Region	3950	25917
Ramagundam	2600	17172
Simhadri	1000	8123
Rajiv Gandhi ccp(gas)	350	622
Total :	23435	159110
Power Station Managed by NTPC		
Badarpur	705	5463

Source : 29th Annual Report of NTPC, 2004–2005, pg.14.

Content Analysis of Environmental Reporting in NTPC

The NTPC officials heading the environment group have stated that the organization has spent around Rs 240 crores at Simhadri power plant alone

towards meeting the environmental compliances under different regulatory agencies.

Category I: Regulatory Information

Table 3 presents the disclosure status of the regulatory environmental variables

Table 3 : Disclosure Status of Regulatory Environmental Variables

Regulatory Environmental Variable	Whether reported		Remarks (If reported, whether Satisfactory or not)
	Yes	No	
Environmental Audit		N	NR
Compliances with laws	Y		Satisfactory
Environment Management System	Y		Satisfactory
Environment Performance Awards	Y		Satisfactory
ISO 14001	Y		Satisfactory
Penalties		N	

@ N- NO Y- YES NR- NOT REPORTED

Environmental audit: It helps the organization to identify deficiencies, take relevant steps to correct identified deficiencies and also to reduce risk posed by the organizational activities to natural resources as well as human health and safety. The annual report of the NTPC made no reference to this aspect of environmental disclosure. However the officials of NTPC have stated that it is being carried out on a regular basis.

Compliance with laws: As stated earlier, the government of India has promulgated various legislations for the protection of natural resources. The company in study has briefly reported about environmental related matters in its directors as well as corporate governance report.

Environment Management System: Many industrial organizations have developed their own environment management system in minimizing environmental impact arising out of establishment of such industrial units. It was found that the NTPC has established Environment Management System (EMS) as per ISO14001 at its different establishments. The NTPC has brought out a comprehensive document and the details of which were maintained in its website as apart of environmental disclosure practice.

Environmental Performance Awards: The Company disclosed in its annual report the awards received for environment management under the caption Awards and Accolades. The NTPC won Green Tech Safety Award 2004 -05 for outstanding achievement in the field of "Safety and Environment Management".

ISO 14001: It is the standard imparted by the international standards organization to the environmental conscious and caring companies. In the study it was found that the NTPC reported about this item in directors' report as well as the corporate governance report.

Penalties: Penalties are levied under the environment protection acts for non-compliance of any law. From the study of annual report no specific disclosure about this variable was reported.

Category II : Environmental Accounting Information

Table 4 presents the disclosure status of the accounting variables.

Capital & Revenue Expenditure: The information

about capital and revenue environmental expenditure is neither stated in descriptive terms nor in monetary terms.

Environmental Accounting Policy: There was no mention of reporting of the accounting treatment of the environmental expenditure in the annual report.

Table 4 : Disclosure Status of Accounting Variables

Accounting Variable	Whether reported		Remarks (If reported, whether Satisfactory or not)
	Yes	No	
Capital & Revenue Expenditure		N	NR
Environment Accounting Policy		N	NR

NR= NOT REPORTED

Category III: General Environmental Variables

Table 5 presents disclosure status of the general environmental variables.

Environmental Policy: Every Company has its own environmental policy to deal with environmental problems. However no specific information about the policies has been reported in annual reports. The website provided in detail the NTPCs environmental policy.

Emissions to air, water and land: The information about the emissions to air, water and has been placed in the NTPC website. It stated that NTPC integrated many environmental provisions into the plant design to reduce emissions.

Environment Research and Development: The main objectives of carrying out an environment research and development by the industries are to make their process products environment friendly. Such research and development are of continuous nature and huge expenditure is incurred in such activities. It was found that a mention was made in the annual report on environment research activities and the benefits derived from it.

Afforestation: Afforestation activity is very important to check the further degradation of the environment and it is resorted to in a large scale by industrial concerns. NTPC reported its afforestation activity in and around of its power plants. In all NTPC projects

taken together more than 15 million trees have been planted till date.

Waste Management: NTPC is aiming at adopting the concept of "Near Zero Effluent Discharge" once-through ash disposal system wherein huge quantity of water is used for disposal of ash to the ash ponds. It was found that a mention was made in the annual report on ash management and its utilizations. Liquid waste management system was also developed and information pertaining to it is placed in the website.

Environment Friendly Technology: There is also an impact of use of technology on environmental and natural resources. With the massive expansion of power generation, there is also growing awareness among all concerned to keep the pollution under control. The NTPC in its annual report has disclosed about new technology adoption for some of its power stations, which has lower green house gas emissions.

In order to reduce the emissions, effluents and ambient air quality well with in the acceptable limits several devices and systems were developed and equipments were installed in its plants as well as township areas.

Centre for Power Efficiency and Environment Protection (CENPEEP) was established in association with USAID to implement Greenhouse Gas Pollution Project to reduce emissions of Greenhouse Gases per unit of energy generated while increasing energy productivity.

Environment Impact Assessment: The EIA studies of the areas in the vicinity of the power projects involve stage by stage evaluation of various parameters which effect the environment. They scientifically assess the likely impact of the pollutants on the sensitive flora and fauna in the surroundings, as also, to preventive and mitigate measures wherever required .A detailed post operational regional integrated EIA study was also conducted by NTPC through M/S Edf, France for the Singrauli Area. The above information is placed in the website.

Environmental Reviews: They are carried out at all operating stations and remedial measures have been taken where ever necessary. Extensive monitoring of the facilities carried out at all stations has helped in compliance of environmental norms and timely renewal of the air and water contents.

On- Line Database Management: A computerized programmer namely "Paryavaran Monitoring System"

could provide reliable storage, prompt and accurate flow of information on environmental performance.

Training to Employees: Some organizations conduct environmental awareness seminars and also provide training to their employees so that they can carry on their activities in a manner friendly to the environment. The study found no mention of training to its employees with specific reference to environmental aspects in its annual report.

Place of Disclosure of Voluntary Environmental Information: Towards fulfilling the objective of place of disclosure of voluntary environmental information, the study observed that it was disclosed in the annual reports. It indicates the degree of importance that item carries. In the study it was observed that the most favoured place for the disclosure of voluntary information was found to be Directors report. However information in a detailed way is posted in the NTPCs website also.

Table 5 : Disclosure Status of General Environmental Variables

General Environmental Variable	Whether reported		Remarks (If reported, whether Satisfactory or not)
	Yes	No	
Environmental Policy	Y		Satisfactory
Emissions to air, water and land	Y		Satisfactory
Environment Research and Development		N	NR
Afforestation	Y		Satisfactory
Waste Management	Y		Satisfactory
Environment friendly Technology	Y		Satisfactory
Environment Review	Y		Satisfactory
Environment Impact Assessment	Y		Satisfactory
On-line Data Base Management	Y		Satisfactory
Training to Employees		N	NR

NR= NOT REPORTED

Participation by NTPC in Global Compact: NTPC expresses its continued support for the Global Compact and its commitment to take action in this regard. The principles of GC are regularly communicated to all employees through in-house magazine ,internal training programmes and posters.

CONCLUSION: On the basis of the foregoing of environmental disclosure practices, the following conclusions can be drawn :

- * The compliance of variables under the three categories was satisfactory. However the information pertaining to environmental audit,

penalties, environmental accounting variables, environmental research and development and training to employees were not reported.

- * As far as, the status of disclosure of variables was concerned, compliance to environmental, emissions to air, water and land, waste management including ash and liquid waste management, afforestation activity, environment management systems etc. were found to be the most frequently reported variables.
- * The content analysis shows that the NTPC has disproved the general myth that PSUs don't comply to various environmental regulations.

On the whole it can be said that NTPC's efforts for environmental protection by initiating various environmental policies are really appreciable. The more the disclosure aspect with relation to environmental issues in the annual reports, the more informed the general public would be and this definitely, not only enhances the stake holders wealth but also the goodwill of the company.

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