SUSTAINABILITY INITIATIVES AND THE STAKE-HOLDERS INVOLVED – A CASE STUDY OF THE GOLDEN PROJECT AND THE ELECTRIC UTILITY IN-DUSTRY

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Abstract

This piece of research focuses primarily on which are the main types of sustainability initiatives within the electric utility sector with direct attention on five companies being Eletrobras, Rheinisch-Westfälisches Elektrizitätswerk AG, Fortum, Copel and Edison. Additionally this research looks at the primary stakeholders who are both the drivers and recipients of these specific set of sustainability initiatives.

In order to obtain results to these questions, I examined the sustainability reports of the five aforementioned companies for years 2008 and 2014 from the GOLDEN Project database. I used qualitative content analysis as my method to establish which initiatives and stakeholders were most prevalent in the six year span. Out of the 14 possible primary initiatives both donation & funding as well as communication were the main two with the company being the main driver behind these initiatives and local communities and society being the most recorded recipient.

Having used the qualitative method of content analysis I was able to determine the primary initiatives as well the stakeholders who were the dominant factors in relation to driving the initiatives and being the main recipients. When looking at the content of the initiatives it could be argued that well researched theories in the field of Corporate Social Responsibility and sustainability reporting such as legitimacy and stakeholder theory could potentially be the factors behind initiatives such as communication and donation & funding being the primary cited forms in companies' sustainability reports.

Keywords: Corporate social responsibility, sustainability reporting, legitimacy, stakeholders, content analysis, social reporting, environmental reporting

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1 INTRODUCTION

1.1 Introduction

As sustainability is becoming a more scrutinised factor within companies in the 21st century, sustainability reporting offers ways in which a company can portray their non-financial activities to the wider public. This research focuses on the primary types of sustainability initiatives disclosed from a selection of companies in the electric utility sector with reference to the GOLDEN Project database as the main source of these disclosures ranging from 2008 to 2014. We look to previously contested theories such as stakeholder and legitimacy theory to establish the possible reasoning behind these primary initiatives for the selected companies.

1.2 Motivation behind the research

As I have previously studied a bachelors in Accounting in my home country of New Zealand, I feel that the best possible way in which I could combine my skills learnt during both these studies as well as what I have accomplished during my Masters in Corporate Environmental Management at the University of Jyvaskyla was to conduct research which relates to each field. With this being the case I felt that researching a topic in relation to sustainability reporting was best fit. Obviously as part of my research I had to narrow down the parameters from which I would study, this is where an opportunity to work with the GOLDEN Project came to my attention. I was lucky enough to be given a comprehensive data set containing a vast number of pre-coded sustainability reports. Prior to this I worked with the training team and became familiar with the GOLDEN Project and what their purpose was. In addition, I also carried out some of my own coding activities on companies in different sectors, especially however the electric utility sector, the full dataset is a makeup of many people contributing to the database. It was at this time I began to notice trends in the coded items and found this to be rather interesting hence, why I wanted to have a more in depth look at this. In order to make this a feasible study and yet still be comprehensive I will only be considering companies that the GOLDEN Project has coded and are within the electric utility sector, so the sector which produces both electricity and heat. Although I could follow trends found in other industries as well, I feel that it is important to narrow it down to just companies in the electric utility sector found within the GOLDEN Project database for a more comprehensive study and more refined results. Furthermore the electric utility industry is one which interests me personally over and above other potential areas due the exposure to the industry in my studies. The following sub-chapter will discuss the purpose of this research as well as the questions which are intended to be answered in this

study. An introduction and overview of the GOLDEN project will be discussed in a separate section of this thesis.

1.3 Purpose of this research

In this piece of research the primary focus will be on the electric utility industry looking at a total of five multinational companies from both various demographic and geographical settings. The five companies which are to be included for the purposes of this research are Fortum (Finland), Rheinisch-Westfälisches Elektrizitätswerk AG (Germany), Eletrobras (Brazil), Edison (Italy) and Copel (Brazil) all five of whom are considered substantial contributors in the electric utility industry in their respective areas.

The aim of this research is to analyse the coded data obtained from the GOLDEN Project database from two years 2008 and 2014 and assess the following questions:

Main question:

1. What are the primary initiatives in the electric utility sector as per the coded reports studied and what changes in content can be seen in these initiatives when comparing 2008 and 2014?

Sub question

1. Which stakeholder group(s) are the driving forces and the main recipients behind these primary initiatives as per the coded reports studied?

1.4 Thesis structure

The thesis has five primary sections associated to it as well as an aforementioned abstract in addition to references which can be located at the end of the report. In chapter one we give an introduction and establish both the aim and motivation behind this thesis with a look at both the main questions and sub questions to be researched. In the second chapter we look to the theoretical framework from which this thesis will be based on including sections on sustainability reporting, corporate social responsibility, stakeholder theory, legitimacy theory, the electric utility industry and Global Reporting Initiative (hereafter GRI) as well as prior research on sustainability indicators using the content analysis method. Chapter three provides an introduction of the GOLDEN Project, the electric utility industry as well as the five companies used to research. In addition, chapter three looks into the concept of qualitative content analysis which provides the basis from which the data from the GOLDEN Project is analysed as well as the data elements

used as provided by the GOLDEN Project database. Chapter four will present the findings from the data and will focus on answering both the main and sub questions. Finally, the fifth chapter will consist of conclusions, discussions on various factors, limitations faced when conducting the research of this thesis and areas where the GOLDEN projects database can be utilised for future research.

2 THEORETICAL FRAMEWORK

The following chapter will be focusing on the theoretical framework from which the research is based on. In this section there will be five sub-sections for corporate social responsibility, an overview on content analysis with regards to sustainability, stakeholder theory, legitimacy theory and a briefing of the electric utility industry and GRI. Combined with the data provided by the GOLDEN project this section of the research will allow me to competently answer both the main and sub questions which is presented in the discussion section of this paper. For this, the theoretical basis of the thesis, I used a number of sources namely two different academic databases those being EBSCO and The Web of Science by Thomas Reuters.

Concepts: Sustainability reporting, integrated reporting, environmental reporting, CSR, sustainability within the energy sector, corporate responsibility, content analysis, stakeholder theory, legitimacy theory.

2.1 Corporate Social Responsibility

In this sub section of chapter two I will look at the notion of Corporate Social Responsibility (here after CSR). Research publications will provide the means for a general consensus on the notion of CSR and in turn difficultly associated with a clear definition.

2.1.1 Defining CSR and the associated difficulties

The definition of CSR is challenging and not as black and white as it may seem. Over the past decades there have been numerous definitions cited however, the lack of one formal notion is perplexing. Although not explicitly CSR, one of the first worldly noted definitions of sustainable development dates back to 1987 established by the United Nations in their report known as *Our Common Future – The World Commission on Environment and Development* also commonly referred to as simply *The Brundtland Report*. In this report sustainable development was defined as:

"the development that is sustainable when it meets the needs of present without compromising the development of future generations".

Okoye (2009) discusses the complication of trying to find a common ground in one singular definition of CSR, although does agree that having misunderstandings of definitions in social sciences is not particularly uncommon. With the support of Gaille's (1956) thoughts on essentially contested concepts (ECC), Okoye

(2009) suggests CSR is a clear example of ECC and this is why there are several misunderstandings and definitions of the concept. Van Marrewijk (2003) continues by proposing that the problems with defining CSR maybe a correlation to which industry an entity maybe apart of and hence could be reasoning behind why CSR has so many broad definitions and is not uniform. Furthermore, Van Marrewijk (2003) believes that the definition of CSR may be skewed due to different interests that companies have depending on their environment and argues that the thought of having a singular definition which fits various organizations and their corresponding goals is not feasible. Turker (2009) expresses concern that even though as CSR has developed with an ever expanding amount of literature on the topic it is still difficult to ascertain 'one commonly accepted definition'.

Despite the difficulties associated to a single coherent definition of CSR found in literature (Turker, 2009; Clarkson, 1995). For the purposes of this research we look outside of never ending scholarly debate to the European Commission's 2011 report entitled *A renewed EU strategy 2011–2014 for Corporate Social Responsibility*:

"*the responsibility of enterprises for their impacts on society.*" The report then follows to say "*To fully meet their corporate social responsibility, enterprises should have in place a process to integrate social, environmental, ethical and human rights concerns into their business operations and core strategy in close collaboration with their stakeholders.*"

Although there is an abundance of literature on the difficulties defining CSR there have been some proposed solutions as well. When closely examining the above communication from the European Commission it highlights how the notion of CSR to some extent mirrors Windsor's (2006) discussion on defining CSR as having three key fundamental theories associated to being ethical responsibility theory, corporate citizenship theory and economic responsibility theory. When looking into other studies on which factors need to be considered in defining CSR we come to Garriga and Mele's (2004) discussion on how 'mapping the territory' can reduce the complexity of the notion and provide additional clarity. Garriga and Mele (2004) suggest that by combining the main CSR theories being (1) instrumental theories, (2) political theories, (3) integrative theories and (4) ethical theories it could make for a new avenue of defining the concept.

2.2 Sustainability reporting

Sustainability reporting helps to relay information regarding often publicly scrutinized issues such as human rights, climate change, waste management strategies and reporting on pollution levels which are not contained within a traditional set of financial reports found within the annual report. In addition, sustainability reporting allows for presentation to the public of an organizations

short and long term CSR strategies, contributions to both local and global communities in the form of donations or volunteering and even the types of materials used in production (GRI 2012–13, GRI 2013–14, GRI 2014–15, EY 2013).

The most recently published KPMG Survey (2015) on sustainability reporting suggests that 73% of N100 companies (the 100 largest companies in the world) and 92% of Global Fortune 250 companies report on corporate responsibility issues. This compared to 1999 which suggests only 35% of Global Fortune 250 companies and a mere 24% of N100 companies reported on such issues. Even in such a short time period of 14 years shows a huge increase in compliance. The KPMG Survey (2015) continues to show that main increase in corporate responsible reporting is due to legislative requirements becoming ever increasing and tight for the reporting of non-financial information. Another noteworthy trend which was ascertained from the KPMG Survey (2015) is that there has been a highlighted increase in less developed countries publishing sustainability reports. The idea that sustainability reporting has seen increasing participation is also supported in literature. Even in Kolk (2004) changes in the volume of companies who were reporting was seeing greater coverage when comparing with companies in the 1990's, with *"greater tendency towards the inclusion of societal, and sometimes financial issues"*.

2.2.1 Previous content analysis of indicators

As content analysis is used to analyse the data from the GOLDEN Project's coded database of sustainability reports and the categories of sustainability initiatives, I felt it was important to look at previous literature done in this area with the same technique utilized. Content analysis of a company's sustainability reports is by no means a new area of research and has been examined in-depth in the 21st century, although in this instance the particulars of the using content analysis to ascertain results from the GOLDEN Project database is a first. Prime examples of literature who have employed content analysis to develop findings on specific indicators within sustainability reports include:

- *An analysis of indicators disclosed in corporate sustainability reports (Roca & Searcy, 2012),* with the purpose of establishing the types indicators that are disclosed within sustainability reports across Canada (Multi-industry study) and established that 31 out of the 94 reports analyzed included indicators that were identified specially as GRI indicators.

- *Communicating Sustainability: A Web Content Analysis of North American, European and Asian Firms* (Gill, Dickinson & Scharl, 2008) this literature focuses on using automated web content technology to identify triple bottom line disclosures across North America, Asian and European oil and gas firms. This literature established a number of important elements including the importance of disclosures regardless of geographical context indicators *"largely focused on environmental indicators followed by economic*

and then social". In addition out of the geographical areas studied the sustainability disclosures were relatively evenly spread with *"North America being the most prevalent discloser and Asia lagging behind"* however the regional areas studied did have *"variation in reporting within environmental, economic and social indicators"*. This piece of literature also discovered patterns that indicators from organizations tend to focus more so on the internal stakeholders such as employees and shareholders as opposed to external ones like community, society and the government.

2.3 Stakeholder's and sustainability reporting

In 1984 a book titled "*Strategic Management: A Stakeholder approach*" was published by R. Edward Freeman. In this book the notion of stakeholder theory was defined as being *"any group or individual who can affect or is affected by the achievement of the organizations objectives"* (Freeman, 1984). This unique piece of literature on stakeholder theory has given lead for future researchers on the topic including the connections with stakeholder theory and sustainability reporting.

The links with sustainability reporting and stakeholder theory have seen coverage over recent decades. Gray's (2001), article titled *"Thirty years of social accounting, reporting and auditing: What (if anything) have we learnt?* discusses how the stakeholder model can assist in allowing an organization/company to be in a position where they are able to *"identify, report and discharge its social accountability"* in this sense the identifying, reporting and discharging or social accountability refers to social accounting reports, known more commonly today as sustainability reports. Wheeler and Sillanpää (1997) support Freeman's (1984) opinion in that the stakeholder engagement should be combined into all areas of strategic management. Interestingly they argue that companies who take into consideration purely the short term interests of only shareholders and not the full spectrum of stakeholders are likely to be less sustainable over the long run (Referenced from Freeman et al. 2010).

1962 was an extremely important year in relation to the capitalist's approach of how a business should work. Milton Friedman's article titled *Capitalism and freedom* expresses the idea that a business's purpose is *"to use resources and engage in activities designed to increase its profit"* he continues by saying that actions performed by companies to the community are wrongfully titled as responsible as they are actions which are only performed by the company due to self-interest. (Friedman, 1962 referenced from Freeman et al. 2010). The notion from Friedman in 1962 has the view that business's interests should align to pure profit maximisation and that any social or environmental activities which do not directly increase the bottom line should be disregarded.

In more recent years however, other academics have contested that the idea which Friedman presents being the sole purpose is to maximise shareholders wealth and dividends is not necessarily the correct approach. One of the more notable pieces arguing this traditional point comes from Clarkson's (1995) article titled *"A stakeholder framework for analysing and evaluating corporate social performance"*. Clarkson (1995) protests that ultimately the purpose of an organization should not be focused purely on the wealth generation of a shareholder but equally distributed value amongst all of a company's primary stakeholders without being more favourable to some and less to others i.e. equality. In the eyes of Clarkson (1995) a primary stakeholder is a group or entity who contributes to the functionality of a business's coherence. Such groups of primary stakeholders as expressed by Clarkson (1995) include investors, employees, customer, suppliers and the public group of stakeholders for example the environment and its conservation and local communities and its society.

2.4 The electric utility industry and sustainability reporting factors

As the basis of this research is reliant on five companies within the electric utility industry, it is important to give an overview of what topics are relevant in terms of sustainability reporting. The latest GRI G4 sector disclosure on the electric utility industry sets out the following economic, environmental and social factors as well as other issues which are important to consider within the electric utility industry in relation to the information to be included in sustainability reports:

- **Economic factors –** The following require an extensive amount of financial resource, investment, R&D and maintenance of equipment's that assist in sustainable electricity development. Additionally stakeholders expect electricity supply to be top quality for future needs and provide them and shareholders with information regarding their financial plans as well information to be able to make a transparent decision (GRI G4 Electric Utility sector disclosures, 2013).

- **Environmental factors –** Ultimately stakeholders are concerned with electric utility companies minimising the negative effect on the environment due to their operation of electricity generation. Using energy mixes (renewable/non-renewable), as well as necessary measures put into place whilst utilising resources which have negative effects on the climate such as fossil fuels are vital in order to help prevent widespread environmental concerns such as climate change and human health issues (GRI G4 Electric Utility sector disclosures, 2013).

- **Social factors** – Organizations within this sector have customers which expect electricity supplies to be available and reliable. In addition due to

the number of projects which are conducted in order to find new means of producing electricity, some of them have negative effects on surrounding communities. The organization within the industry who is undertaking these types of projects are expected to take into consideration these communities and their livelihoods (See Eletrobras and the dam production). In addition to concerns involving local communities, the wellbeing of employees is also required to be taken in to high regard, as some of the working environments within the electric utility industry are rather hazardous, hence safety being top priority (GRI G4 Electric Utility sector disclosures, 2013).

- **Electric utility sector regulatory and market structure** – The electric utility industry is under heavy regulation. Because of this factor, sustainability reporting from organizations in this environment should provide clear, transparent information in relation to their situation. Clarity on issues such as governmental requirements, market structure, tariffs and implications of privatization should all be documented within the sustainability report which is published, although this does differ depending of the geographical location of the reporting firm (GRI G4 Electric Utility sector disclosures, 2013).

- **Stakeholder engagement** – All facets that an organization may disclose within their sustainability report including economic, social and environmental awareness of stakeholder engagement is vitally important. It is expected that all activities which may involve a particular group of stakeholders should be entitled to the necessary information. Areas which require particular attention include identification of the stakeholder group, ways of engagement/communication between the company and stakeholders encompassed and the ability for stakeholders to have influence in the decision making process (GRI G4, Electric Utility sector disclosures, 2013).

- **Contracting and supply chain practices** – Companies within the electric utility sector should feel the need to disclose their supply chain practices with such activities including workplace safety, waste disposal and human rights protection (GRI G4, Electric Utility sector disclosures, 2013).

In the discussion section of this research we will be looking back at some of these types of categories when considering the findings from the coded reports of 2008 and 2014 and look to see which of the primary initiative type addresses these issues. Despite the fact that this document covers only the GRI G4 sustainability reporting framework for the electric utility industry which was not publicly available until 2013.

The GRI is an organization that gives assistance to entities such as governments, business's and other organizations to help both comprehend and portray the impact their entity has on sustainability area such as climate change, human rights and corruption. The GRI provides a framework of standards from which an entity can work from when producing their sustainability reports (GRI, 2017).

When considering the five companies which are being analysed in this research all of them in 2014 utilised the GRI framework for their sustainability report, as for 2008 this was not as transparent with the following table giving a summary of the principles utilized:

Table 1.1 Sustainability report frameworks

	Fortum	**RWE**	**Eletrobras**	**Edison**	**Copel**
2008	Integrated with annual report – No GRI	Integrated with annual report– No GRI	Standalone report Reference to GRI G3, IBASE Model, NBCT 15.	Standalone report – GRI G3 integrated with the Electric Utilities Supplement 2007	Integrated with annual report – GRI G3
2014	Integrated with annual report - GRI G4	Standalone report - GRI G4, UN Global Impact.	Integrated with annual report- GRI 3.1	Standalone report - s (ISO 26000, GRI-G4 and otherprinciples)	Integrated with annual GRI-G4 and indicators of the electricity supply sector

Although in 2014 Eletrobras was still using an older version of the GRI framework that being 3.1. GRI G4 was not introduced until 2013 and only required a full transition over from 3.1 to G4 by the end of 2015 (GRI G4 FAQ, 2015). Interestingly for both RWE and Fortum in 2008 GRI was not selected as the framework for preparation of their sustainability disclosures however by 2014 both saw the transition over to the G4. When considering the format of the reports for each company as published online Fortum chose to have an integrated approach with their annual report in both 2008 and 2014. Considering RWE 2008 began with an

integrated report and by 2014 had moved to a standalone report, whereas in contrast Eletrobras went from a standalone sustainability report in 2008 to an integrated report in 2014. Both Edison and Copel on the contrary used a form of GRI in both their 2008 (GRI G3) and 2014 (GRI G4) reports despite Edison employing a standalone report for both periods and Copel having an integrated approach.

2.5 Why companies choose to disclose non-financial information through sustainability reports, the notion of legitimisation.

With the idea of an ethically and socially aware business becoming more of the norm in the 21st century due to a shift in perception as seen for example by the contrasting views of Friedman (1962) and Clarkson (1995). The volumes of publication and preparation of sustainability reports have also followed suit. According to Wheeler and Elkington (2001) sustainability reports were once a niche action which were only really prepared by business's who were truly socially and environmentally concerned, however the publication of these reports have gradually increased to become more widespread and has become a part of many large organizations regular regime. This thought from Wheeler and Elkington (2001) still holds relevance in the present as evidenced by the KPMG Survey (2015) outlined earlier. With confirmation associated to the increase in participation from firms when producing sustainability reports, we now briefly look to other literature to see the motives behind sustainability reporting.

The disclosure of non-financial information and how motivations behind it may be the purpose of legitimising the image of a firm is one area which has been widely reviewed and researched in the past and to some extent *"an explanation for the decision to disclose environmental information in the annual report"* (O'Donovan, 2002). With this being the case I will be reviewing the notion of legitimacy theory in the discussion section and see whether or not the primary sustainability initiatives which are established have direct links to the theory and if so which category of legitimisation strategy as suggested by Suchman (1995) can be considered. Firstly, the idea of legitimacy which is defined by Suchmann (1995) is a generally accepted definition of the concept and is described as being:

A generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions and sustainability reporting have direct links to one another (Suchmann, 1995)

Suchmann (1995) iconic article on legitimacy theory takes on a number of elements none of which is more important than the challenges associated to an organization and legitimacy. Suchmann (1995) outlines three areas of legitimacy strategy which a company may come across and need to implement and thus provide a basis and need for non-financial disclosures. The three tiers of legitimacy strategy suggested include gaining, maintaining and repairing legitimacy.

Firstly, the idea of gaining legitimacy is described by Suchmann (1995) into three different components and thus potential strategies being firstly, to conform to both the environment the organisation is in and existing audience, secondly to select the environment and audience which will accept the organisations operations and thirdly to manipulate the environment to ascertain new audiences and gain legitimacy that way.

The second strategy of organisational legitimacy by Suchmann (1995) is maintaining of legitimacy. Maintaining of legitimacy according to Suchmann (1995) is a much easier task than that of gaining or repairing legitimacy, O'Donovan (2002) also comes to a similar conclusion. The strategies in relation to the maintenance of legitimacy falls under one of two categories being either perceiving future changes or the protection of past accomplishments (Suchmann, 1995).

The third and final category of legitimacy strategy as suggested by Suchmann (1995) is in relation to the repairing of an organisation legitimacy. In result of an organisational crisis which has a negative effect on the external societies who have associations to a company, the disclosures of an organisation may be as a result to repair legitimacy before the crisis had incurred. Suchmann (1995) suggests three areas of strategies which should be employed by managers if an organisational crisis does happen, these being firstly to give explanations or justification behind the crisis, secondly restructuring of the company and finally not to panic. These three legitimisation strategies can be summed up in the following table

Table 1.2 Legitimisation strategies Suchmann (1995)

STRATEGY	COURSE OF ACTION
GAIN	Conform, Selection of new surroundings, Manipulation.
MAINTAIN	Perceiving future changes, Protection of achievements.
REPAIR	Justification, Restructuring, Not to panic.

O'Donovan (2002) provides an investigation into legitimacy theory and its association with non-financial disclosures. In this research O'Donovan (2002) interviews six managers from three Australian companies within the mining, paper and pulp and chemical industries. The purpose of his research is relevant to the aforementioned legitimacy strategies by Suchmann (1995) by the fact that O'Donovan (2002) proposes a variation of hypothetical environmental questions to the six managers in attempts to establish their reaction to the situation i.e. gain, maintain or repair legitimacy. O'Donovan (2002) ascertains a number of results including that if an environmental event was not considered significant the use of both disclosure and in turn legitimisation strategy would not be practiced and that

disclosure and action was related to the companies stance on environmental issues, for example a company with highly invested interests in these areas were more likely to respond as they had built their organisation on such foundations. However converse to this opinion Deegan and Rankin (1996) come to the conclusion that companies will predominately report on environmental concepts which are positive to their image as opposed to addressing the consequences of their negative actions which is in line with the notion of reporting non-financial disclosures purely for a clean image amongst society.

The notion of legitimacy and non-financial disclosures used to repair or cover up an organisational crisis which has negative effects on either society or the environment is by no means a new research area. A number of research articles have come to similar conclusions being that an increased number of non-financial disclosures are being reported on in reports when public scrutiny becomes a factor from the likes of the media and society (Deegan, Rankin & Tobin, 2002; Samkin, Allen & Wallace, 2010; O'Donovan, 2002). Deegan et al. (2002) continue by stating that their results are *"consistent with a view that greater media attention stimulates greater corporate disclosure"*. Additionally, such activities are even seen in the public sector as demonstrated by Samkin et al. (2010) by the New Zealand Police Department where both non-financial disclosures and image repair were used to recover lost legitimacy in time of media scrutiny as a result of activities which damaged their reputation. This particular thought of sustainability initiatives as prescribed from the reports in this study used as a potential form of legitimisation to cover up potential wrongdoings from a company will be looked at in more detail in the discussion section of this thesis.

Although no research is concrete and more generalised, generally speaking the idea legitimacy appears to be one of the more widely researched areas in relation to why some companies choose to publish sustainability reports. In addition however there are other reasons as to why companies may choose to disclose such information. Another reason behind reporting is to ensure reputation risk management, we look to a recent study within the past decade as it provides a more relevant perspective. Bebbington, Larrinaga and Moneva (2008) provides findings which explores the concept of reputation risk management and how it can help with the understanding of CSR reporting. Bebbington et al. (2008) argues in context with Shells 2002 report that reputation risk management could play an integral role in the reasoning behind companies publishing sustainability reports, although mentions that this should not be a generalised. Additionally Bebbington et al. (2008) concludes that sustainability reports are not a tool which are used to make an organization appear good but in fact a way in which can be used to show the impact of a firms non-financial actions.

Deegan (2002) also ascertains that capital distributors such as banks require as part of their risk management policies companies to disclose their social and environmental activities, when considering this it could be argued that non-financial disclosures are borne as a result of fulfilling loan requirements. Furthermore,

Deegan (2002) mentions that organisations may disclose this information to obtain further investment funding, with ethical investments becoming more sought after in the 21st century.

3 DATA AND RESEARCH METHODS

In this section I present the data that I used for my research as well as the chosen research methods. First, I introduce the GOLDEN project and the sections of data that I chose to use and the reasons behind my choices. Secondly, I introduce the research method which I will be employing for this thesis being qualitative content analysis. This is the main research method that I used to gain answers for my research questions.

3.1 Data

The data that I used in my research is obtained from the GOLDEN Project. The sustainability reports of the companies were individually analysed and placed into different categories, including such aspects as Type of initiative, Stakeholder Recipient and Stakeholder Vehicle in addition to an array of other coded categories. However, for this research only the three aforementioned categories will be utilized when analysing the data as they are the three best suited for answering both the main and sub-questions. The coding was conducted by students of Corporate Environmental Management, and I took part in the coding process. Coders received appropriate training which ensured the congruence of the coding process.

The database which I had access to include over 40 companies however, a lot of these companies found in the database had incomplete sets of data for the purposes of this research and hence why I chose five. The companies that I chose were FORTUM, RWE, Eletrobras, Edison and Copel. When narrowing down the selection process there were four elements taken into consideration and thus were based on these criteria:

1. The electric utility company chosen had a comprehensive set of coded sustainability reports with three or less incomplete coded initiatives.
2. The electric utility company chosen had sustainability reports from both 2008 and 2014 that were coded.
3. The electric utility company has a reputation as a leader in providing clean energy to their customers.
4. The electric utility company chosen had these sustainability reports available for public display on the internet.

As the main aim of this thesis is to investigate the primary initiatives as established in the GOLDEN Project database , I chose to use this data as it allows me to study the content of the initiatives in depth. The longitudinal

research design also allows me compare the content of the year 2008 and 2014. The data also allows me to define which seem to be the key initiatives in the sustainability reports of the chosen companies, and which stakeholder groups are the recipients and driving vehicles of these initiatives. Although there were still some indiscrepancies in the data, the following table outlines the number of incomplete initiatives in relation to the three key coded categories used in this research.

Table 1.3 Incomplete initiatives as per the coded database

Company	Initiative Type	Stakeholder Recipient	Stakeholder Vehicle
FORTUM '08	**0**	**0**	**0**
FORTUM '14	**0**	**0**	**0**
RWE '08	**2**	**2**	**3**
RWE '14	**0**	**0**	**0**
Eletrobras '08	**0**	**0**	**1**
Eletrobras '14	**0**	**0**	**0**
Copel '08	**0**	**0**	**0**
Copel '14	**0**	**0**	**0**
Edison '08	**0**	**0**	**0**
Edison '14	**0**	**0**	**0**
Total	**2**	**2**	**4***

Table1.3 Incomplete initiatives as per the coded database
Source: The GOLDEN Project electric utility database
**For the purposes of this study only fully coded initiatives will be considered in the research section*

3.2 The electric utility industry and the companies chosen

The electric utility industry was chosen as the primary industry for the research of this thesis. The reasoning behind the selection of this industry had two prevalent features being:

- The electric utility industry has a comprehensive dataset in relation to the collaboration with the GOLDEN Project.
- In terms of other industries which could have been researched companies who are a part of the electric utility sector were the ones which I was most familiar with and thus more comfortable. Other industries which could have been an option include the paper and pulp industry.

In relation to the companies which were chosen there were five which from looking at the GOLDEN Project database suited my interests and in addition had coded sustainability reports from both 2008 and 2014 respectively. All five of the companies are clean energy electricity suppliers who have shown great leadership in sustainability on both a national and international level as well as being from different areas of the world thus proving ideal for the purposes of this research. According to the GRI G4 disclosures for the electric utility industry organisations in this area are primarily concerned with generation, transmission and distribution of retail electricity (GRI G4, 2013). In the preceding part a brief description of each of these companies will be given as provided by their websites/annual reports:

Fortum (Finland):

Fortum is a leading clean-energy company that provides its customers with electricity, heating and cooling as well as smart solutions to improve resource efficiency. We want to engage our customers and society to join the change for a cleaner world. We employ some 8,000 professionals in the Nordic and Baltic countries, Russia, Poland and India, and 62% of our electricity generation is CO_2 free. Fortum's share is listed on Nasdaq Helsinki (FORTUM, 2017).

Eletrobras (Brazil):

Founded in 1962, Centrais Elétricas Brasileiras S/A – Eletrobras controls 13 subsidiaries in electric power generation, transmission, and distribution, a research center (Eletrobras Cepel), a holding company (Eletrobras Eletropar), and half of the capital stock of Itaipu Binacional … With a total installed capacity for generation of 44,156 MW, Eletrobras is the largest power generation company in Brazil and has a share of 33% of the total installed capacity in the country. Approximately 91% of this installed capacity comes from sources with low GHG emissions, which makes Eletrobras one of the largest clean and

renewable energy generation companies in the world and largely responsible for the Brazilian energy matrix being considered the second cleanest and most renewable in the world (Eletrobas Annual Report, 2016) (Eletrobras about us 2017).

Rheinisch-Westfälisches Elektrizitätswerk AG (Germany):

RWE Generation is currently one of the leading power generation companies in Europe and is a top performer and centre of competence for conventional power generation within the RWE Group. The company currently has a power generation capacity of over 40,000 Megawatt and a workforce of around 14,000 people at 79 locations … RWE Supply & Trading is a leading European energy trading house and an active player on the global wholesale markets for energy and energy-related raw materials in both their physical and/or derivative forms. This includes power, gas, coal, freight, oil, weather derivatives, biomass, emissions certificates and renewable energies (RWE, 2017).

Copel (Brazil)

Founded in 1954, Copel - Companhia Paranaense de Energia is the largest company of the State of Paraná, located in Brazil. The Company directly serves 4,478,767 consuming units, across 395 cities and 1,113 locations (districts, villages and settlements), located in the State of Paraná. This network consists of 3.5 million homes, 82 thousand plants, 382 thousand commercial establishments and 360 thousand rural properties. The staff is composed of 8,531 employees (Copel, 2017).

Edison (Italy)

With over 130 years of history, Edison is the leading provider of energy based in Italy. The company employs over 5000 people with operations in ten different countries around the world. Edison supply a number of different energy related services inclusive of focus on thermoelectric, renewables, hydrocarbons, regulated gas activities and trading of environmental securities through both physical contracts and financial instruments (Edison, 2017).

The following table shows a graphical summary of the companies place of origin, their primary distribution channels as well as the primary energy sources.

Table 1.4 Companies origin, electricity source and distribution

Company	Place of origin	Electricity distribution	Primary Energy sources
		Finland, Sweden, Norway, Russia, Poland, Lithuania,	Natural gas, coal, biomass fuels, water-derived fuels,

FORTUM	Finland	Latvia, Estonia, India and Denmark (FORTUM Annual Report, 2016).	HorsePower, Peat, oil, bio-oil, uranium (FORTUM Annual report, 2016).
RWE RWE (Continued…)	Germany Germany	Germany, Netherlnds, Belgium, United Kingdom, Czech Republic, Hungary, Poland, Slovakia, Croatia, Slovenia, Romania, Spain and Italy (RWE CSR Report, 2016).	Lignite, hard coal, nuclear power, gas, biomass, hydropower and wind power (RWE Energy Mix, 2016).
Eletrobras	Brazil	Brazil + Other Latin American countries such as Paraguay, Uruguay, Argentina, Venezuela (Eletrobras Annual Report, 2106).	Hydro, uranium, oil, coal, natural gas, wind and solar (Eletrobras Annual Report, 2106).
Copel	Brazil	Primary distribution in the State of Paraná located in Brazil (Copel, 2017).	Wind, Hydroelectric and coal plants with full ownership in some and shares in others (Copel Annual report, 2016).
Edison	Italy	Italy and parts of Northern Europe, 10 countries in total (Edison, 2017).	Wind, Hydroelectric, Solar, Biomass, thermoelectric, hydrocarbon reserves, natural gas (Edison, 2017).

Furthermore, the following table represents the number of pages per report used for each of the companies in this thesis. The total number of pages equates to 1721.

Table 1.5 – Total page count of 2008 & 2014 reports of all companies

Company	**2008 Report**	**2014 Report**
Fortum (Finland)	188 pages	343 pages

Eletrobras (Brazil)	116 pages	119 pages
RWE (Germany)	242 pages	224 pages
Copel (Brazil)	198 pages	88 pages
Edison (Italy)	47 pages + 70 pages (Sustainability + Operations report)	86 pages

3.3 The GOLDEN Project overview

As mentioned previously, the data for this research is provided from the database of the GOLDEN project. The GOLDEN Projects purpose can be summarised in the following extract from their most recent coding manual:

"Within GOLDEN, the overarching goal of analyzing archival data is to get a general understanding of the nature of a company's involvement in sustainability.
The methodology … focuses on the analysis of sustainability reports.

The aim of this protocol is to explain how the analysis of a sustainability report should be performed. The purpose of this analysis is to identify, analyze and codify firms' sustainability initiatives and describe how these actions may affect society and the firms themselves. The unit of analysis for the activity of coding is the ***sustainability initiative****, which is defined as a practical activity or set of related activities that the firm is performing in order to tackle a societal issue."* (G.O.L.D.E.N. for sustainability Observatory Codebook version 2.3, 2016).

The sustainability initiatives which are defined from the sustainability reports are then divided into categories based on the following generic questions

- **What** the firm actually does in performing this initiative?
- **Why** is the firm doing it?
- **How** is the firm performing it?
- **Where** is the firm doing it?
- **When –** is it a new or an ongoing initiative?
- Is the initiative **quantified?**
- Which **SDG** (Sustainable Development Goals) is the initiative related to**?**

The main aspects as well as correlating categories of the coding framework for the GOLDEN Project are shown in the below Table 1.6. In the research and findings section of this thesis the three categories of 'Type of Initiative', 'Stakeholder Recipient' and 'Stakeholder Vehicles' will be analyzed in-depth.

Table 1.6 Sustainability initiative categorization

Source: (G.O.L.D.E.N. for sustainability Observatory Codebook version 2.3, 2016)

What		Why			How		Where	
Type of Initiave	Societal Issue	Stakeholder Recipient	Representative Body	Change in the operating activity	Stakeholder Vehicles	Level of change	Area of impact
Communication	Fair competition	Shareholders	Nothing	Nothing	Employees	Corporate	Global
Association	Wealth Distribution	Employees	NGOs & Interest Groups	Process	Customers	Subsidiary	Europe
Donation & Funding	Environment	Customers	Institutions	Product	Business Partners & Suppliers		Asia
Volunteerism	Self-ownership	Suppliers	Media		Nothing		Africa
Adoption of Standards and Rules	Economic Security	Local Communities and Society					North-America
Modification of Procedures	Individual Equality						South-America
Assessment and Measurement	Health						Oceania
Training	Education						
Organizational Structuring	Self Realization						
Pricing	Generic CSR						
Incentives							
R&D Investments							
New Products							
Asset Modification							

Another important aspect which must be defined in this section is what culminates an initiative and what types of statements in a sustainability report do not.

Table 1.7 shows a briefing on example types of statements from companies sustainability reports which do not make for the purposes of an initiative description as defined per the codebook.

Table 1.7 What makes up a sustainability initiative

(G.O.L.D.E.N. for sustainability Observatory Codebook version 2.3, 2016)

What does not culminate an initiative as per the GOLDEN Project
A declaration of intent or commitment: is not an initiative since no single action is described to understand how the firm tackles this objective.
Objective definitions: The identification of an objective to be achieved (reaching 10% CO2 reduction by 2020) is not an initiative since it does not imply any action.
Achievement of goals or quality certification: descriptions that mention the achievement of an objective (in 2008 we reduced by 10% CO2 emission) or the obtainment of a certification are not initiatives since they do not describe any specific actions
Awards received: descriptions of prizes, awards or recognitions are similar to achieved goals: they do not imply any specific activity, and therefore are not initiatives.
Descriptions of duties and responsibilities : statement of presence or description of duties and responsibility of a company's organizational body such as election of members of a committee, reporting of firm duties, decision making power e
General declarations of dialogues or interactions/collaborations that are not specifically aimed at any action or goal: as declarations of intent, these statements are too vague to be coded as initiatives.

Table 1.8 gives definitions on the types of initiatives once categorized.

Table 1.8 - Initiative definitions

Source: (G.O.L.D.E.N. for sustainability Observatory Codebook version 2.3, 2016)

Initiative type	Initiative definition
Communication	Activities that bring specific information or knowledge from the firm to a certain interlocutor, to generate awareness, engage stakeholders, communicating policies, meetings and conferences, marketing campaigns and information about products, even through web communication.
Donation & Funding	Philanthropic activities through which companies donate money, goods or services as gifts. Includes supporting or sponsoring external sustainability related organizations, initiatives or programs. In addition, it includes employee benefits, such as healthcare plans. (The donation comes from the corporate itself, not from its stakeholders.)
Volunteerism	Activities that stimulate and promote volunteerism, fundraising and personal donations from individuals within or outside the firm. (i.e. employees, costumers, community volunteerism)
Adoption of standards & rules	Activities involving the underwriting, adoption or comply with externally sourced policies, guidelines, procedures, or standards.
Modification of procedures	Activities that modify the procedures adopted by the firm in order to perform a specific activity (e.g. HR selection processes and supply chain activities)
Assessment & measurement	Activities with which the firm collect information from inside or outside. Including retrieval, research, survey, data collection, studies and measurement.
Organizational strucutre	Activities that involve a structural change in the organizational structure of the firm. Including the modification or establishment of new divisions, functions, roles (e.g. management positions), committees, teams or bodies.
Training	Teaching activities aimed at improving knowledge, skills, and competencies.
Pricing	Marketplace activities by which the firm sets up or modifies pricing structures and tariffs
Incentives	Activities involving the devolvement of benefits, privileges, or rewards toward a particular stakeholder in order to gratify or stimulate an action.
R&D Investments	Activities that encompass **an investment** aimed at introducing a technological novelty in a product, service or process. They include structural investments in prototyping, trial and researching.
New product	Launch (make it available to the market) of a new product or service. It includes new product's technical specification, the inclusion of new components or features into an existing product or service, as well as packaging; price is not included.
Asset modification	Activities that build, expand or modify the physical assets owned and used by the Company to run their activities. This may include production assets, commercial assets and distribution assets (e.g. machines, devices, vehicles, buildings or facilities).

3.4 METHOD

I am conducting my research as a qualitative research. The main aim of qualitative research is to reach a deeper understanding of the topic that is being studied (Denzin & Lincoln, 2011, p.4). When conducting qualitative research, one can utilize different strategies and methods, for example, discourse, narratives, or content analysis. Qualitative research is widely used in various disciplines (Denzin & Lincoln, 2011, p.6).

Qualitative research studies meanings and processes, whereas quantitative is more so focused on defining causal relationships that can be objectively measured and analyzed (Denzin & Lincoln, 2011, p.8). Qualitative researchers often aim at a more detailed and richer description of the subject matter than quantitative researchers. They also study the content of everyday life, often in restricted cases (Denzin & Lincoln, 2011, p.9).

Content analysis is one of the many methods that qualitative researchers use. I chose to use content analysis as my main research method because it suited my research questions. Content analysis is a research method that aims at helping researchers in achieving a better understanding of a specific phenomenon (Krippendorff, 2004, p.18). Content analysis can be used to analyse various types of data sources, for instance, official documents or web pages. The method includes systematic reading of the source and analysing such aspects as meanings, symbolic qualities, and expressive contents (p.3, p.44).

According to Krippendorff (2004, p.49) one typical use of content analysis is to describe trends by comparing the content of the same source at different time points, which can help in describing change. In my research, I aim at describing the change that has happened in the contents of sustainability initiatives and to a lesser extent the stakeholder drivers and recipients of these. This helps in describing the changes that are occurring in sustainability reporting practices, and sustainability reports' place in today's business world.

Using content analysis as my method, I am able to study and compare the content of the sustainability initiatives and what messages the companies are aiming at conveying through them. Content analysis is often used in corporate environmental responsibility research (Gray, Kouhy & Lavers, 1995) and as mentioned in the literature section there have been examples of content analysis used in describing sustainability indicators within sustainability reports (Roca & Searcy, 2012; Gill et al. 2008)

For the main research question, I first studied the numbers of different sustainability initiative types present in the reports and compared years 2008 and 2014 to see if the number of initiative types had grown within this period of time. Having

established the numbers of initiatives, I then looked to the two primary initiatives. After this, I used content analysis as my method to study the changes that had occurred in the content of these two primary initiatives in the six-year interval. This was conducted by thoroughly searching the central elements that were mentioned in them, and comparing the content in the two years. After this, I studied the content of these most often named initiatives so that I could define the central elements of the key initiatives. For the second research question, I studied who were the main the Stakeholder Recipients as well as the Stakeholder Vehicles that were included in the reports for the two primary initiatives.

4 RESEARCH FINDINGS

4.1 General findings

Of the five companies and 10 sustainability reports coded from the years 2008 and 2014 all showed progress in the amount of sustainability initiatives reported and thus coded into the GOLDEN Project databases. Eletrobras had increases under 200% in the number of initiatives reported when comparing 2008 to 2014 with an increase of 129 sustainability initiatives to 259 (100.78% increase), the same with Copel who went from 72 to 131 initiatives (81.94% increase). Fortum RWE and Edison showed drastic increases in the amount of coded initiatives with 248.08%, 298.21% and 257.37% increases respectively. The following section looks to the coded data of the sustainability reports from FORTUM, RWE, Eletrobras, Edison & Copel dating 2008 and 2014. The purpose of this section is to look at the two primary initiatives as defined by the GOLDEN Project coding manual See table 1.8. In this section I will present the findings in relation to the two most popular categories of initiative types and establish how they changed, what contents have been added or if some aspects have been left out. Tables 1.9-1.13 shows an in depth summary of the initiative changes for each company between the six year period and also establishes the two primary initiatives.

4.2 Communication Initiatives

Communication initiatives were one of the most often employed type of sustainability initiative in total when looking at the five companies analysed with a total of 199.

4.2.1 Fortum communication initiatives 2008 v 2014

FORTUM committed to five types of communication sustainability initiatives in 2008. When comparing this to their communication initiatives in 2014 this number increased to eight in total resulting in a 60% increase. When looking to the content of the 2008 communication initiatives examples include the introduction of ecolabels for Swedish and Finnish customers in electricity which is provided with completely renewable energies, energy help programmes which advise customers in relation to energy saving techniques and campaigns providing information on renewable energies and the associated benefits.

Moving to 2014, although as aforementioned there was only a slight increase in communication initiatives, differences still arose in the types. Examples of com-

munication initiatives in 2014 include Fortum joining the caring for climate initiative (CCP), various meetings to between employer and the employee representatives to discuss work safety and fair salaries as well as grievance mechanisms to allow stakeholders a means of communication in relation to misconduct.

4.2.2 RWE communication initiatives 2008 v 2014

In 2008 RWE had a total of seven communication sustainability initiatives. Six years later in 2014, the GOLDEN Project had coded a total of 42 communication initiatives. The increase in total communication initiatives reported resulted in a change of 500%. When looking at the content of the 2008 communication initiatives, RWE appears to focus on aspects such as health awareness amongst employees in the workplace, having career workshops for future generations as well as external campaigns on health issues such as cancer.

In contrast, 2014 shows further advancement in communication with commitment to various different types of stakeholder dialogue including forums and conferences with local communities, governmental bodies, customers and suppliers to name a few. In relation to the topics of focus some examples of the content of 2014 communication initiatives include The RWE roundtable which operates at a national level and gives the opportunity for citizens to become informed about the latest topics in the energy sector. The customer council which met twice during 2014 to debate about issues such as decentralized energy supply, energy efficiency and the future of the industry. Conversations regarding coal supply and the local mining conditions attached to them, resulting in greater transparency on the procurement of coal to stakeholders. Also in 2014, RWE converted their CSR strategy into ten different areas as a result from stakeholder dialogue. Findings also point to RWE having sustained to commitment to future generations by operating under the slogan of *"Education with Energy"*. This particular communication initiative in 2014 resulted in 315 experiment kits loaned to 70 schools as well as RWE employees sent to schools as ambassadors to educate on energy issues. Further findings in 2014 also show that RWE has continued to value customer's knowledge on energy. 9,800 residential energy individual advice sessions were held for German residents from their consultants. Further findings in 2014 also show RWEs acknowledgement in communication of health and safety amongst employees including the application of meetings with over 300 top level management personnel in 2014 identifying areas of improvement.

4.2.3 Eletrobras communication initiatives 2008 v 2014

2008 for Eletrobras resulted in a total of 25 communication sustainability initiatives coded. When comparing 2008 with 2014 this number increased to 55 resulting in a 120% increase.

In 2008, Eletrobras communication initiatives are concerned primarily with the internal public of their operation (employees). Such examples include awareness through email of important dates for social days such as Day for black awareness (race/colour), National deaf person day and International Women's day. Other findings suggesting employee awareness through communication include Eletrobras's stance on the 3R's (Reuse, recycle and reduce) by distribution of material in relation to this. Eletrobras is a main figure in the plans and development of the Belo Monte dam at the Xingu river. The construction and development of this dam has been heavily criticised by some members of public due to the social and environmental implications the dam will have. In 2008, Eletrobras has tried to combat this scrutiny with a number of communication initiatives including an attempt at giving transparent information on their website to the public about the project and having meetings with different types of population groups who are directly affected by the construction of the dam to explain the purpose of the project. More importantly, findings from 2008 coded reports show Eletrobras has also taken into consideration the indigenous Indians living in the area whose area was both indirectly or directly affected had anthropologists visit the areas to listen to their concerns and record the results in order for future compensations.

In comparison to 2008, communication initiative findings in 2014 are much more specific with greater attention to detail in relation to the involved target groups which is expected with an increase from 25 to 55 communication initiatives. When considering the content of the 2014 communication initiatives of Eletrobras it is firstly important to note that during 2014 Eletrobras in partnership mapped plans for two new hydroelectric plants (Binational Garabi & Panambi) on the Uruguay River, which borders between Argentina and the state of Rio Grande do Sul. As a result of this, 162 meetings were held on the Brazilian side involving over 4000 participants. On top of this in terms of communication initiatives relating to these projects for social and economic registry, 24 meetings were held involving roughly 530 participants which included the likes of trade unions and representative governments of the areas. When considering the local citizens in the area of which were to be affected by the Binational Garabi project 51 informational meetings were held whereby information from these meetings were published by media outlets to allow for greater transparency. Regarding future hydroelectric projects such as the Belo Monte dam on the Xingu river, in 2014 Eletrobras developed a project entitled *"Tapajós Dialogue"* which allows for greater transparency and communication for future communities potentially affected. Campaigns such as the *"Light of Knowledge project"* are also communication initiatives which were ascertained as a finding in relation to communication initiatives. This project in particular seeks to educate public schools regarding the reduction of waste and safe electricity use. Findings in 2014 also suggest that there was further progress regarding employee wellbeing with various channels of communication being developed such as new internal intranet features, suggestion boxes and codebooks regarding fundamental workplace issues such as anti-corruption and ethics. In addition seminars such as in October 2014 titled *"Current Outlook and Proposals for the future"* which was organized by the board

representing employees was held to ensure proactive communication between one another.

4.2.4 Copel communication initiatives 2008 v 2014

As seen in table 1.13, out of all five of the companies analysed Copel's communication initiatives in 2008 were actually higher than that of 2014, with a decrease from 17 in 2008 to a minor six in 2014 (-64.71%).

When assessing the content of the communication initiatives of 2008 for Copel, we see a number of initiatives which focus on safety awareness and widespread community wellbeing and education. Safety awareness communication initiatives seemed to be prevalent in 2008, take for example, information on the use on electric energy to preserve lives by means of radio communication through partnership, transmitting eight safety and educational messages a day. Another communication initiative implemented during this time period related to safety awareness, was the distribution of school kits to prevent accidents related to electricity throughout schools, this initiative resulted in over 200,000 kits being distributed to 1321 schools in 2008. Furthermore, Copel commit to the promotion of environmental education through the Environmental Education Center of the Faxinal do Céu Greenhouse, which promoted in 2008 environmental education activities attended by 11,946 people.

In contrast to 2008, 2014 resulted in less communication initiatives with a decrease from 17 to six. Despite this however, the communication initiatives were still condensed enough to be relevant. As seen previously, the majority of Copels 2008 communication initiatives focused primarily on safety awareness and widespread community wellbeing & education. When analysing the 2014 batch of communication initiatives a number of them follow suit, however also cover other communication issues not touched on in the previous year, despite the sample size being much smaller. One of the newer established communication initiatives is that Copel publishes it's annual inventory of its greenhouse gas emissions and it's management practices to front climate change in the form of both the Greenhouse Gas Protocol and Carbon Disclosure Project. This is obviously great for transparency and widespread communication to all stakeholders. In 2014, Copel recorded nine fatal accidents involving the community and the electric network. For continued work at prevention of such accidents, Copel invested into areas such as lectures and meetings at schools and businesses in 2014. On top of these, Copel in 2014 showed further commitment to safety with participation in the national Safety week promoted by the Brazilian Association of Electricity Distributors (Abradee), in order to prevent accidents involving electric shock in Brazil.

4.2.5 Edison communication initiatives 2008 v 2014

Table 1.10 indicates that like the majority of the companies studied in this thesis there was an increased number of communication initiatives when comparing the 2008 (15) with 2014 (19) a 26.67% increase.

For 2008, a number of the communication initiatives were directed related to the wellbeing of the internal operators of the business, similar to the majority of the other companies studied for 2008. Examples of these include the launch of the "Ri-evoluzione" project, which is an internal communication campaign which acts as an opportunity for reflection, discussion and dialog about issues that are important for the Company's businesses, such as energy conservation and sustainability. To help strengthen employee relationships among one another, the company in 2008 organized a number sporting and squad building activities. April, 2008 saw the launch of Edison per te program. This program once again was designed to help employees, with the intention of helping them reconcile their personal needs with their professional obligations by providing services in four different support areas: Health and Wellness, Family, Personal Time, and Savings Opportunities. Although primary concerns according to the coded communication initiatives are employee welfare in 2008, there a few instances where these initiatives have a broader spectrum. One example of this includes in October 2008, where efforts to broaden stakeholder dialogue were undertaken. Some representatives of the main stakeholder groups were brought together to discuss the companies sustainability report and the strengths and weaknesses of the report to help better prepare for future reports.

As expected communication initiatives took a much broader approach in 2014, with a much vaster number of stakeholders considered. Awareness campaigns such as WAME and Expo2015 aims to raise global awareness over issues such as the lack of access to modern forms of energy. Exhibitions running such as ENERGY! look to educate the younger the generations in the form of interactive games by teaching them about important topics in the world of electricity. The interactive games consisted of five different installations including; electricity, hydroelectric power plant, you are energy, electric circuit and underground sources. One unique addition to the communication initiative profile for Edison in 2014 was that a permanent table was set up to discuss with consumer associations the issues which negatively affect the efficient functionality of a free market between the seller and distributors and the main concerns in the relationship between the seller and end users. As a result of such discussions a detailed document was released on the previously mentioned issues.

4.3 Donation and funding initiatives

Donation and funding initiatives amongst the five companies reviewed for this thesis were the highest scoring with a total of 234 initiatives throughout the 10 reports during years 2008 and 2014.

4.3.1 Fortum donation and funding initiatives 2008 v 2014

In 2008 Fortum had a total of 14 donation and funding initiatives when comparing that to the results as coded by the GOLDEN Project to 2014 the number of these specific initiatives increased to 23 resulting in a 64.29% increase.

2008 for Fortum in relation to donation and funding initiatives resulted in activities which can be vaguely categorized into educational and environmental. Firstly in relation to educational donation and funding initiatives in 2008 Fortum assisted in for example to the Fortum foundation where they made a 2 million Euro donation of which 700,000 of these Euros are annually granted for scholarships and postgraduate studies related to the energy industry. In addition to this, Fortum also made cultural support donations of instruments to the Finnish Sibelius Academy. There were numerous other examples found within the 2008 coded reports of Fortum suggesting support to future generations and their education. When considering environmental donation and funding initiatives Fortum contributed in collaboration with WWF Finland and Finnish Energy Industries to install protective roosts for seagulls to prevent electric shocks. Findings from 2008 also suggest Fortum contributed 400,000 Euros to the John Nurimen foundation which sets to protect the biodiversity of the Baltic Sea.

Findings from 2014 suggest that Fortum's donation and funding initiatives had branched out to contribute to both international and national campaigns. Participating in two international climate funds (Prototype Carbon Fund & Testing Ground Facility) is an example of this. In 2014, Fortum received 227,047 emission reduction units from these climate funds. Fortum employees from countries such as Russia, Poland and Norway had their pension schemes revaluated with payments made to the state pension's fund. Employees were also included in a number of funding schemes for Fortum including a 992,000 Euro contribution to leisure and sporting activities to the largest Fortum organizations throughout the world. During 2014, the city of Imatra built an urban brook bypassing the Imatra hydropower plant with the purpose of the brook to act as a substitute for habitat, a negative ramification of the hydropower plants was in particular the decrease of trout population in the Vuoksi river. Fortum contributed to this by dedicating funding in accordance to their habitat restoration model by restoring portions of the trout population. As a result of hydropower plants effect on the fish industry Fortum released around 260,000 salmon sea trout smolts and approximately 360,000 whitefish smolts throughout Finland. In addition to the repopulation of

fish in Finland, Fortum also studied areas within Sweden such as the Gullspång river and Rottan river where opportunities were identified. Interestingly Fortums donation and funding initiatives seemed to revolve around fish repopulation and employees. Due to this there were no coded initiatives relating to donation and funding directly attributing education and future generations which differs from the findings of 2008.

4.3.2 RWE donation and funding initiatives 2008 v 2014

2008 for RWE had 13 donation and funding initiatives coded for the GOLDEN Project. In contrast the findings for 2014 RWE only had 8 donation and funding initiatives, resulting in a 53.85% decrease.

As coded in the 2008 report, findings for RWE show attention on a number of areas including future generations, employees as well as aspects outside of Europe. In total for 2008 RWE had donated in excess of 20 Million Euros related to sponsorship and charitable contributions. RWE provided financial support for students in various fields such as engineering as well as internships in areas including power plant construction and opencast mining. Keeping with the theme of education and career opportunities RWE also contributed to a training programme entitled *"Training Formula 1 Grand Prix"* which allowed 150 school leavers find suitable work, RWE help fund this programme which is external to the organization by offering over 120,000 Euros over a two year period. Also in August 2008 RWE launched an energy efficiency campaign from which schools can submit up to three project and potentially receive funding. Looking at other areas of funding for 2008, RWE also looked outside of Europe where they introduced to their employees in both Egypt and Libya social benefit packages well outside the regulations of the countries. Looking at environmental contributions, RWE had replaced over 26,000 sets of streetlights which annually results in more than four million kWh of electricity as well as approximately 2,200 tonnes of CO2 saved.

As stated earlier, 2014 resulted in less coded donating and funding initiatives for RWE. Looking at the coded report for 2014 the findings of these types initiatives which were coded suggest they less specific. 2014 saw RWE donate over 5.4 million Euros as well as the RWE foundation sponsoring projects with around 1 Million Euros. Furthermore, RWE also supports the development of future technologies providing the necessary capital to finance companies in the growth stages and is a private investor involved with the construction of Gwynt y Môr wind farm located off the Welsh coast, which had been scheduled as the second largest offshore windfarm to be fully functional by the end of 2015 with a capacity of 576 MW. Other international contributions coded in 2014 show participation by RWE to the UK in a campaign titled *"Health through warmth"* which is assistance to people who suffer from bronchial diseases.

4.3.3 Eletrobras donation and funding initiatives 2008 v 2014

Following suit with RWE, in 2008 Eletrobras had more donation and funding initiatives coded when comparing results with 2014. 2008 resulted in 41 donation and funding initiatives coded comparing that with 2014 only a mere 31 being a decrease by 24.39%.

The content of the 2008 donation and funding initiatives covered a vast number of categories namely employees health and wellbeing, equality amongst the wider community and preservation of the environment. Looking into the data from the GOLDEN Projects coded report for 2008 Eletrobras pays a great attention to detail in relation to employees when considering donation and funding initiatives, similarly to what was established in the prior section of communication initiatives. Inclusive of these funding programmes which are set up for employees as recorded in 2008 include support for retirement, scholarships to employees which saw in 2008 an investment of R$ 256,356 and in addition offering partial funding for employees who only completed high school to pursue further education, partial expense coverage of healthcare (90% company coverage), maternity and educational child aid which is 2008 saw R$ 675,776 for preschool aid and R$ 305,792 for children between the ages of 7–14. In reference to other findings from the 2008 coded report Eletrobras environmental concern was a feature which included acts such as taking part in studies on key environmental themes in partnership with universities and research centres with a number of projects still underway and developing. 2008 also saw the company contribute to programs which contemplate recovery and preservation to the environment including landscaping and ecological plants, monitoring of water fauna and monitoring of birds and native animals. In addition findings from the coded in 2008 data also suggest that Eletrobras was a part of numerous arrangements which positively affected local communities. Such projects which Eletrobras assisted with in funding include the manufacturing and distribution of 200 pieces of furniture to libraries in the program and the Áreas das Letras, Educando para a vida PB which involved the development of social-educational activities in are in which children and teenagers are social vulnerable.

2014 although there was a 24.39% decrease in donation and funding initiatives, a much more balanced focus was ascertained and in addition a number of the employee donation and funding initiatives were condensed into one singular initiative as defined by the GOLDEN Project. Findings in 2014 suggested that Eletrobras had truly branched out including continuous investments into education, training, counselling and risk control programmes for its employees, family member and the wider community. Examples of such programmes include Chemical addiction treatment, financial literacy programs and health promotion and disease prevention programs. When looking at the amount of funding directed towards employees there were many benefits inclusive of health insurance, maternity leave, meal vouchers, public transportation vouchers and higher level

education assistance to note a few. Observations in relation to specific investments found during the 2014 year also show commitment on the behalf of Eletrobras. $R 117,560 was contributed to the Green Line Project during 2014 which purpose was to foster training, awareness, income and employment in designated municipalities within Brazil. Through partnership, Eletrobras during 2014 also funded employment and income generation amongst women offering a total of $R172,000 to a total of 74 entrepreneurs. Eletrobras also considered environmental funding with two initiatives in particular being support of 66 protected areas (53 conservation areas and 13 indigenous territories within Brazil) in total Eletrobras companies funded $R80.1 million which covered 74,938 km2. The other huge funding project Eletrobras contributed to during 2014 was SubProject3 which main purpose was the replacement of obsolete energy meters, this project in 2014 saw energy savings of 84,087 MWH which converts to R$28.8 million. 2008 also saw the implementation of the Program Joint Selective Collection which estimates the collection of recyclable wastes and their donation to associations.

4.3.4 Copel donation and funding initiatives 2008 v 2014

Copel had significant increases in the number of donation and funding initiatives recorded with a slight 11 in 2008 compared to 55 in 2014 (400% increase). Out of the five companies assessed Copel has the largest increase in donation and funding initiatives when comparing the two years.

The content of these initiatives in 2008, once again contrasted some of the themes of other companies in this thesis. As opposed to focusing on internal funding which was seen in 2008 by all of the other companies i.e. grants and scholarships for employees, a number of the donation and funding initiatives for Copel in 2008 had a broader audience. In 2008 Copel donated a total of R$1.3 million to a number of various projects. These projects include the Program for the Support of Innovation and Humane Hospital Care at the Pequeno Príncipe Children's Hospital and the Mission Children: Sowing the Future Program by the Pequeno Cotolengo Institution. 2008 also saw Copel transfer title to the land occupied by 77 families who were resettled as a part of the construction of Governor Ney Aminthas de Barros Braga Hydroelectric Power Plant, which took place years earlier. Copel within this area set up a range of communal infrastructure to ensure normal living such as houses, churches, a school and medical services to name a few.

As mentioned 2014 resulted in a mass increase of 400% with 55 total donation and funding initiatives. The initiatives during this year which were reported covered as imaginable various elements inclusive of both employee and the benefits of the wider community. Looking firstly at the funding provided to the internal entities of the organization we see a number of aspects. Copel offers a Pre-Retirement Program, which includes lectures and activities for employees eligible to

retire and their partners. Reimbursement of school fees of employees up to a limit of R$700, in 2014,the program benefited 1,091 employees, with funding for this reaching R$4.39 million. Another example of continued effort towards employees through means of funding can be seen by the campaign entitled Nossa Energia. This program links new career opportunities, remuneration and personal development with performance, sponsoring job promotions and scholarships for post-graduation and foreign languages course as well as other things. Furthermore Copel ensures top priority to their employees by offering funding over and above the standard requirement of law in areas such as food allowances, snack allowances, nursery allowances, extended maternity leave, educational allowances, vacation advances, vacation allowances and supplementary sick pay to name a few.

Looking at wider spread donation and funding activities, in 2014 the company gave access to electricity for 105 families of rural communities in the city of Adrianópolis, in the same period Copel also delivered energy supply to the Areia Branca community, near the city of Adrianópolis to about 21 residencies receiving. The main donation and funding projects for Copel during 2014 consisted of their fifth edition 'Best Social and Environmental Practices Seminar' which presented lectures to an open audience about themes on eco-efficiency, smart grids and reverse logistics. The company is a sponsor of the Paraná Olympic Talent program, in 2014 the investment for this reached up to R$1 million. The Luz para Todos, program which aims to promote electricity for free in rural areas, reached out to 1,231 service entries in 2014. In 2014 totalling approximately R$15.9 million was contributed to 18 projects associated to things such as public buildings, improved energy efficiency in low income areas and educational projects. On top of this the company also invested R$44.9 million in civil projects namely the Iguaçu Regional Museum and the faxinal do Céu Botanical Garden amongst others. In addition the company also invests R$1.7 million for the preservation of 10,000 hectares of rainforest per year which in 2014 resulted in work on the Guaricana National Park. As well as investments and funding into the aforementioned projects, Copel contributes to this initiative in other means as well. Take for example in 2014, they started their flora and fauna rescue program which resulted in rescuing of 363 species of plants, 1,821 animals of over 100 species and the collection of seeds resulting in the production of 13,746 seedlings. In conclusion, Copel is one of the more active companies within this study when it came to donation and funding initiatives, the above are only a few examples, many more can be found within their 2014 reports.

4.3.5 Edison donation and funding initiatives 2008 v 2014

As outlined in table 1.10, Edison's commitment to donation and funding initiatives in 2008 (7 donation and funding initiatives) is a mere comparison to what was achieved in 2014 (33 donation and funding initiatives) with a 371.43% increase.

Firstly looking at 2008, the initiatives were vague, although interestingly focused primarily on areas such as distributions to charitable organizations and sponsorships. Examples include support of sports initiatives both locally and nationally such as partnership of the Italian volleyball association and both men's and women's national Rugby teams. Furthermore a campaigns entitled "Minute Like a Champion" and "Whole new energy contest" raised over 65,000 euros. 2008 also saw the support of the Missone Sogni charitable organisation which aims to help children between the ages of 5–18 who suffer from diseases and illnesses to help them fulfil their dreams. On the international scale in 2008, Edison assisted the AMREF project in Kenya with the building of four water wells in 2008.

Moving to 2014, which saw 33 donation and funding initiatives recorded, Edison had varying initiatives catering to different stakeholder groups. Employee focus was one area with donation and funding initiatives on things such as the "Festival of working parents" which gave the opportunity for employees children to see their parents workplace. Another employee initiative included the 130th annual celebrations in December entitled "Futureisnow event", this allowed for interaction amongst employees, during this event a preview for the previously mentioned "ENERGY!" event was exhibited. In addition, Edison also continuously fund and sponsor musical and sporting partnerships for employees, these are known as "Living Sponsorships" as well as many more such as support systems inplace for extra curricular education funding and support for tax and legal issues. Looking beyond the scope of internal donation and funding activities carried out in 2014, Edison also turned their attention to other pressing issues such as the donation of almost 6,500 portions of food in 2014 to the less fortunate. For 2014, Edison contributed over 3 million euros to the wider community focusing mainly on culture and sport, on top of this a further 1 million euros in 2014 was contributed to sector and association categories. Examples of investments into these areas are inclusive of supporting the new musical festival of contemporary music organised by Sentieri Selvaggi. Assistance with the illumination of La Scala with energy produced from renewable sources from its hydroelectric power plants resulting in reduced emissions and saving 64 tons of CO2. Cultural sponsorship of exhibitions such as "The birth of humanist devotional painting" and "Living like Ponti - Experiments in domestic life and architecture for living and working". Continued sponsorship of Rugby such as AS Milano Rugby club and new interests in cycling with support towards the Dynamo Bike Challenge designed to help children.

Table 1.9 Total initiatives + primary initiatives Fortum

Company	Fortum 2008	Fortum 2014	Fortum % change
Type of initiative			
Communication	5	8	60.00%
Donation & Funding	14	23	64.29%
Association	9	13	44.44%
Volunteerism	0	2	Infinetly increase
Adoption of standards and rules	4	19	375.00%
Modification of procedures	1	22	2100.00%
Assessment and Measurement	1	46	4500.00%
Training	3	15	400.00%
Organizational strucuture	1	0	Infinetly Decrease
Pricing	0	0	0.00%
Incentives	5	10	100.00%
R&D Investments	6	7	16.67%
New Products	1	1	0.00%
Asset modification	2	15	650.00%
Total number of initiatives / %	**52**	**181**	**248.08%**
Two primary initaitves recorded			

Table 1.10 Total initiatives + primary initiatives Edison

Company	Edison 2008	Edison 2014	Edison % change
Type of initiative			
Communication	15	19	26.67%
Donation & Funding	7	33	371.43%
Association	5	12	140.00%
Volunteerism	1	2	100.00%
Adoption of standards and rules	0	7	Infinetly increase
Modification of procedures	1	15	1400.00%
Assessment and Measurement	5	16	220.00%
Training	3	17	466.67%
Organizational strucuture	0	3	Infinetly increase
Pricing	1	1	0.00%
Incentives	1	8	700.00%
R&D Investments	1	7	600.00%
New Products	4	6	50.00%
Asset modification	2	23	1050.00%
Total number of initiatives / %	**46**	**169**	**267.39%**
Two primary initaitves recorded			

Table 1.11 Total initiatives + primary initiatives RWE

Company	RWE 2008	RWE 2014	RWE % change
Type of initiative			
Communication	7	42	500.00%
Donation & Funding	13	6	-53.85%
Association	3	17	466.67%
Volunteerism	2	3	50.00%
Adoption of standards and rules	2	4	100.00%
Modification of procedures	3	35	1066.67%
Assessment and Measurement	3	22	633.33%
Training	4	8	100.00%
Organizational strucuture	3	8	166.67%
Pricing	0	1	Infinetly increase
Incentives	0	4	Infinetly increase
R&D Investments	7	21	200.00%
New Products	2	16	700.00%
Asset modification	7	36	414.29%
Total number of initiatives / %	**56**	**223**	**298.21%**
	3 Incomplete		
	ID 17, 29 & 43		
	Two primary initaitves recorded		

Table 1.12 Total initiatives + primary initiatives Electrobras

Company	Electrobas 2008	Electrobas 2014	Electrobras % change
Type of initiative			
Communication	25	55	120.00%
Donation & Funding	41	31	-24.39%
Association	3	17	466.67%
Volunteerism	1	1	0.00%
Adoption of standards and rules	1	15	1400.00%
Modification of procedures	16	47	193.75%
Assessment and Measurement	12	25	108.33%
Training	12	16	33.33%
Organizational strucuture	5	10	100.00%
Pricing	0	1	Infinetly increase
Incentives	5	1	-80.00%
R&D Investments	3	17	466.67%
New Products	0	2	Infinetly increase
Asset modification	5	21	320.00%
Total number of initiatives / %	**129**	**259**	**100.78%**
	1 Incomplete		
	ID 2		
	Two primary initaitves recorded		

Table 1.13 Total initiatives + primary initiatives Copel

Company	Copel 2008	Copel 2014	Copel % change
Type of initiative			
Communication	17	6	-64.71%
Donation & Funding	11	55	400.00%
Association	2	3	50.00%
Volunteerism	1	1	0.00%
Adoption of standards and rules	0	1	Infinetly increase
Modification of procedures	5	11	120.00%
Assessment and Measurement	6	18	200.00%
Training	12	8	-33.33%
Organizational strucuture	0	5	Infinetly increase
Pricing	5	3	0.00%
Incentives	3	2	-33.33%
R&D Investments	7	3	-57.14%
New Products	1	0	Infinetly decrease
Asset modification	2	15	650.00%
Total number of initiatives / %	**72**	**131**	**81.94%**
Two primary initaitves recorded			

Table 1.14 Total of all initiatives from all companies

	Total of specific initiatives
Type of initiative	
Communication	199
Donation & Funding	234
Association	84
Volunteerism	14
Adoption of standards and rules	53
Modification of procedures	156
Assessment and Measurement	154
Training	98
Organizational strucuture	35
Pricing	12
Incentives	39
R&D Investments	79
New Products	33
Asset modification	128
Total number of initiatives / %	**1318**

4.4 Stakeholder recipients and vehicles

Moving away from the type of initiatives, this section looks to briefly ascertain who both the main recipients and vehicles of the two primary initiatives were. Firstly table 1.13 and 1.14 show the total number of recipients and vehicles respectively based on all 1318 coded initiatives from the GOLDEN Project. Tables 1.15 and 1.16 show a breakdown of the communication initiatives and who the recipients and drivers were between both 2008 and 2014. Additionally, tables 1.17 and 1.18 show the breakdown of donation and funding initiatives and who were the main vehicles and recipients between both 2008 and 2014.

The GOLDEN Project codebook based on Freemans (1984) definition of a stakeholder sets out the recipients as being shareholders, customers, suppliers, local communities & society and employees. Stakeholder recipients are the ones who are subject to the benefit of the initiative. A stakeholder vehicle is the driving force behind any single initiative and portrays the entity or group who is powering the effect of the action not the one who is subject to the end benefit.

Both tables 1.15 and 1.16 help illustrate on a broader spectrum of the total unique drivers and recipients respectively for all 1318 coded initiatives from all five companies during the six year time frame.

Table 1.15 Total stakeholder vehicles for all initiatives 2008–2014

Company	Fortum 2008	Fortum 2014	RWE 2008	RWE 2014	Electrobas 2008	Electrobas 2014
Stakeholder vehicle						
Nothing (Company driven)	33	158	49	181	114	248
Customers	4	0	1	22	0	0
Business partners & suppliers	14	14	4	12	4	4
Employees	1	9	2	8	11	7
Total	**52**	**181**	**56**	**223**	**129**	**259**
			3 Incomplete		1 Incomplete	
			ID 17, 29, 43		ID 2	

Copel 2008	Copel 2014	Edison 2008	Edison 2014
69	117	39	148
1	0	0	4
1	11	0	14
1	3	7	3
72	**131**	**46**	**169**

Table 1.16 Total stakeholder recipients for all initiatives 2008–2014

Company	Fortum 2008	Fortum 2014	RWE 2008	RWE 2014	Eletrobas 2008	Eletrobas 2014
Stakeholder recipients						
Shareholders	0	0	0	0	0	3
Employees	8	43	12	24	41	30
Customers	0	0	4	3	0	7
Suppliers	0	1	0	8	0	9
Local communities	44	137	40	188	88	210
Total	**52**	**181**	**56**	**223**	**129**	**259**
			2 Incomplete		1 Incomplete	
			ID 17, 29 & 43		ID 2	

Copel 2008	Copel 2014	Edison 2008	Edison 2014
0	0	1	1
11	38	6	37
7	3	1	7
0	0	0	1
54	90	38	122
72	131	46	168

Both tables 1.17 and 1.18 focus on specifically who the recipients of the two primary initiatives are being communication and donation funding. The main point which was established in these findings was that local communities and society were the predominate recipient stakeholder group for both of the primary initiatives. The content of the types of initiatives which involved local communities and society included meetings with the public to discuss future projects and the effects on the community, sponsorship of higher learning and education opportunities funding of programs which helped disadvantaged people of communities to name a few. When referring to the next counted for recipient for the two primary initiatives it is the employees with these initiatives focusing on areas such as health safety within the work place, internal career advancement and transparency in communication between top level management and other employees. It is clear however that the initiatives have branched out to cater for a broader range of stakeholder recipients within the six year period which will be looked at in more detail in the discussion section.

Table 1.17 Stakeholder recipients for communication 2008–2014

Company	Fortum 2008	Fortum 2014	RWE 2008	RWE 2014	Electrobas 2008	Electrobas 2014
Recipient (Communication)						
Shareholders	0	0	0	0	0	3
Employees	2	5	1	7	2	6
Customers	0	0	1	0	0	6
Suppliers	0	0	0	0	0	2
Local communities	3	3	5	35	23	38
Total	**5**	**8**	**7**	**42**	**25**	**55**
			2 Incomplete		1 Incomplete	
			ID 17, 29 & 43		ID 2	

Copel 2008	Copel 2014	Edison 2008	Edison 2014
0	0	0	0
1	0	1	6
0	0	0	0
0	0	0	0
16	6	14	13
17	**6**	**15**	**19**

Table 1.18 Stakeholder recipients for donation & funding 2008–2014

Company	Fortum 2008	Fortum 2014	RWE 2008	RWE 2014	Electrobas 2008	Electrobas 2014
Recipient (Donation & Funding)						
Shareholders	0	0	0	0	0	0
Employees	1	11	3	0	13	2
Customers	0	0	1	0	0	0
Suppliers	0	0	0	0	0	1
Local communities	13	12	9	6	28	28
Total	**14**	**23**	**13**	**6**	**41**	**31**
			2 Incomplete		1 Incomplete	
			ID 17, 29 & 43		ID 2	

Copel 2014	Copel 2014	Edison 2008	Edison 2014
0	0	0	0
0	24	0	13
0	2	0	1
0	0	0	0
11	29	7	19
11	**55**	**7**	**33**

Moving away from the specific recipients and looking towards the driver of the communication and donation & funding initiatives tables 1.19 and 1.20 give an outline of this. The findings discovered from the coded project shows little to no evidence that the primary drivers and thus the principle factor behind the initiatives are none other than the company itself.

Table 1.19 Stakeholder vehicles for communication 2008–2014

Company	Fortum 2008	Fortum 2014	RWE 2008	RWE 2014	Electrobas 2008	Electrobas 2014
Stakeholder vehicle (Communication)						
Nothing (Company driven)	3	7	5	36	22	51
Customers	0	0	0	4	0	2
Business partners & suppliers	2	1	1	0	0	2
Employees	0	0	1	2	3	0
Total	**5**	**8**	**7**	**42**	**25**	**55**
			3 Incomplete		1 Incomplete	
			ID 17, 29, 43		ID 2	

Copel 2008	Copel 2014	Edison 2008	Edison 2014
17	6	13	17
0	0	0	0
0	0	0	2
0	0	2	0
17	**6**	**15**	**19**

Table 1.20 Stakeholder vehicles for donation & funding 2008–2014

Company	Fortum 2008	Fortum 2014	RWE 2008	RWE 2014	Electrobas 2008	Electrobas 2014
Stakeholder vehicle (Donation & Funding)						
Nothing (Company driven)	10	23	10	4	40	31
Customers	0	0	0	0	0	0
Business partners & suppliers	4	0	2	2	0	0
Employees	0	0	1	0	1	0
Total	**14**	**23**	**13**	**6**	**41**	**31**
			3 Incomplete		1 Incomplete	
			ID 17, 29, 43		ID 2	

Copel 2008	Copel 2014	Edison 2008	Edison 2014
11	48	7	25
0	0	0	0
0	6	0	6
0	1	0	2
11	**55**	**7**	**33**

5 DISCUSSIONS, LIMITATIONS AND CONCLUSIONS

5.1 Overview

Evidences from the companies studied point towards both communication and donation and funding initiatives being the most highly recorded with local communities being the prime stakeholder recipients and the company being the driver behind them. When breaking down these particular initiatives stakeholder theory and legitimacy theory can be directly linked to these especially in the cases of communication and donation and funding initiatives in addition prior literature can also help in the justification process. In this section I will look to revisit the two proposed questions and provide discussion and thoughts with links to the aforementioned findings and literature.

As established in the first section of this thesis the questions which will be answered in this section include:

What are the primary initiatives in the electric utility sector as per the coded reports studied and what changes in content can be seen in these initiatives when comparing 2008 and 2014?

And;

Which stakeholder group(s) are the driving forces and the main recipients behind these primary initiatives as per the coded reports studied?

To answer these questions briefly, as established in the findings section, the two primary types of initiatives were communication and donation and funding making up a total of 433 initiatives out of the 1318 (32.85%) coded initiatives throughout the ten reports of the five companies. Looking at why these three particular initiatives were the most commonly coded out of the 14 potential requires speculation, theoretical links as well a breakdown of the findings.

5.2 Communication initiatives and stakeholder theory

Firstly, as defined by table 1.8 (a direct source of the GOLDEN Project codebook manual) a communication initiative are "*Activities that bring specific information or knowledge from the firm to a certain interlocutor, to generate awareness, engage stakeholders, communicating policies, meetings and conferences, marketing campaigns and*

information about products, even through web communication". When zoning in at the communication initiatives presented by the five companies a number of them are directly related to the internal stakeholders with most of the companies holding high regard to areas such as health and safety, future career opportunities, higher education, retirement planning as well as regular seminars and presentations allowing for direct communication between employees and top management this was especially the case in 2008 where internal communication seemed to take priority. Similar findings from in literature also found these types of commonalities in relation to internal stakeholders taking precedent over and above external stakeholder when it comes to organizational information such as the community (Gill et al. 2008). This proves to be the case in the majority of cases with Copel being the exception, although there is still focus on the internal wellbeing of the employees, Copel appears to branch out to the wider community in 2008 and thus earlier on the in proceedings than the other four companies.

However, in conflict to the findings from Gill et al. (2008) when looking at the content of the communication findings of companies in 2014, there are clear examples of the context of the initiative taking a much more concise and broad approach. One interesting finding from the communication section however, is that Fortum in both 2008 and 2014 only had a small sample size of communication initiatives when comparing them to the other companies and in addition Copel saw a decrease in the number of communication initiatives when transitioning from 2008 to 2014, although more concise. This particular reasoning is why the findings in relation to the context of the initiatives were brief. For both Fortum and Copel, it is difficult to say with certainty that their communication initiatives have taken a broader scope due the changes being so minimal. Although, this is definitely true for RWE, Eletrobras and Edison. Take for example Eletrobras who had a total of 25 communication initiatives in 2008 and 55 in 2014. The content of these initiatives show development of attention to their employees as well as increased attention to local communities. This can been recognized in the drastic increases in meetings regarding future projects such as the construction of the hydroelectric dams of Garabi and Panambi which takes into consideration the communities opinions. Themes of increased meetings to consider the wider external stakeholders is also seen in the changes from RWE who shared a similar transition of communication initiatives during 2008–2014 and a particular example of wider external stakeholder recognition from RWE is how as a result of stakeholder dialogue RWE's CSR strategy was formed.

Looking at communication initiatives at face value the notion of stakeholder theory can directly be linked as defined by Freeman (1984) as communication initiatives appear to take in to consideration the effects of other types of external entities apart from one's self in the achievement of the organizations objectives. Stakeholder theory also has directs links to sustainability reporting with an array of literature on the topic which was ascertained from the likes of Clarkson (1995) and Wheeler and Sillanpää (1997) so it comes to as no surprise that communica-

tion initiatives are one of the most recorded initiatives when it comes to the sustainability reports analysed for this research. Despite the fact the numbers from the data were consistently at their highest for local communities and society as the stakeholder recipient for communication initiatives during both 2008 and 2014 (as demonstrated by table 1.9) for all five companies the drastic shift and increase in initiatives through the six year time span show continued support of this stakeholder group and in turn help to portray that the company does not just wish to have communication initiatives which benefit potential customers, suppliers and shareholders. In general it is safe to say that, the findings from the communication initiatives recipient (as demonstrated by table 1.9) also show a slight shift towards a broader spectrum of beneficiaries of the initiative with all categories seeing an increase in numbers.

5.3 Legitimacy and the primary initiatives

When reviewing these findings in light of legitimacy theory and the content of the initiatives some interesting results can be found. As we already know all five of these electric utility companies are considered leaders of sustainability in their respective areas and as established by O'Donovan (2002) companies in such positions like to take any negative externality into consideration through means of disclosure. Looking at Eletrobras, Fortum and Copel it appears they are under some form of public scrutiny as a result of projects governed under their companies.

Firstly looking at Eletrobras' actions with particular interest in the large scale projects of the Belo Monte dam at the Xingu river in 2008 and the mapped partnership of two new hydroelectric plants (Binational Garabi & Panambi). In 2008 the announcement of the plans of Belo Monte dam at the Xingu river was a cause for concern to a number of residents and native Indians within the vicinity of the new project. As a result of this outrage from these members of society it was apparent from the coded reports that there were a number of non-financial disclosures addressing this issue such as the potential of compensation to those affected and numerous communication campaigns directed at an explanation of the project. Six years later in 2014 this is followed up with further attention to the issue by having an ongoing communication forum called Tapajós Dialogue which give the opportunity for communication between the company and communities affected.

In addition although not as evident in relation to the scrutiny faced, the actions performed by Fortum as a result of the construction of the hydropower plant in the city of Imatra also so further evidences of covering their actions which had a negative effect on the environment. With the construction of the hydroelectric power plant a significant decrease of trout population in the Vuoksi river was seen. To contribute to the resolution of this problem Fortum dedicated funding

towards restoring portions of the trout population. As a result of hydropower plants effect on the fish industry Fortum released around 260,000 salmon sea trout smolts and approximately 360,000 whitefish smolts throughout Finland. Taking this a step further, Fortum also contributed to other areas outside of Finland with studies conducted in Sweden where potential repopulation activities could occur.

Continuing the theme of communal rectification because of prior actions, the development of Governor Ney Aminthas de Barros Braga Hydroelectric Power Plant in the case of Copel is another example. Although the scrutiny is not on the same level that Electrobras faced due to projects of the Belo Monte dam at the Xingu river in 2008 and the mapped partnership of two new hydroelectric plants (Binational Garabi & Panambi), it is still interesting to note the extent large scale firms will go to ensure the communities are satisfied having carried out projects which effect the everyday lives of the people and the environment.

As mentioned by Suchmann (1995) the action of justification is vital in repairing legitimacy, which these actions from both Eletrobras and Fortum are clear examples of. It can be argued that due to such large social pressures from this project, especially in the case of Eletrobras these particulars have taken this on board and have openly been willing to expand their communication initiatives in reports which can been seen from the increase of 25 to 55 and thus could a factor in explaining why both communication donation and funding are the top initiatives out of all 14 in the GOLDEN Project database.

In addition, Eletrobras's donation and funding initiatives seem to cater to a large proportion of local communities and society as the primary stakeholder, the explanation behind this being the case could be a direct result of deflecting the negatives associated to the Belo Monte dam. This notion could also be fundamental in explaining the enormous increase in donation and funding initiatives for both Copel and Edison who saw increases in over 400% over the periods of 2008–2014. Although it is impossible to directly link the idea of greater non-financial disclosure and action due to media and social scrutiny which is consistent with findings from Deegan et. al. (2002), Samkin et al. (2010) and O'Donovan, (2002) it could be further evidence why the likes of some of these companies have seen their donation and funding initiatives increase at relatively high rates, despite seeing a decreases in 2014 for two of the companies.

5.4 GRI G4, further research and limitations.

When looking at the coded reports from a holistic point of view and taking into consideration the necessary issues which are required from the GRI G4 electric

utility disclosure document to be reported on, it does appear that the majority of the primary initiatives cover these especially communication. Communication initiatives tend to cover a large spread of issues mentioned in the GRI G4 disclosure document including stakeholder engagement, social factors, environmental factors and contracting and supply chain practices. However other initiative types not analysed in this research tend to cover other areas of the issues mentioned in the GRI G4 disclosure with asset modification, organizational structure, adoption of standards and rules, assessment and measurement addressing the economic factors and the regulatory and market structure of the electric utility industry. It is not possible to say with certainty that the reports studied in this research disclose all of the necessary issues as only the reports from RWE, Edison, Copel and Fortum follow these guidelines with Eletrobras 2014 still using GRI 3.1 and the others from 2008 have no mentioned frameworks apart from Eletrobras, Copel and Edison who uses GRI 3 in 2008. However it does illustrate further reasoning as to why communication initiatives are one of the most highly recorded out of all 14 types of initiatives within the GOLDEN Project. This area would be interesting to take in to consideration in future research for students in collaboration with the GOLDEN Project to determine whether or not the coding for the reports under specific GRI guidelines follow the paths of these frameworks and in turn address issues as mentioned in the GRI G4 disclosure document in relation to the electric utility industry. For the reports that had been coded for all five of RWE, Eletrobras and Fortum, Copel and Edison have chosen a unique direction when considering the use of either a standalone report or an integrated report. For 2008 RWE compiled a combined report and in 2014 chose to use a standalone report. Eletrobras had chosen the reverse method having a standalone report for 2008 and an integrated report for 2014 whereas Fortum and Copel continued to utilise a combined format for both 2008 and 2014. On the other hand Edison chose to have standalone reports for both periods. Having considered this, another area of future research which could be undertaken from students apart of the GOLDEN Project is to test whether or not the initiatives are more predominate in one form of report as opposed to another.

It is also relative to briefly discuss how the number of initiatives in 2008 compared to 2014 have drastically increased. Justification to the fact that sustainability initiatives are firmly on the increase is indicated by the overall total number of initiatives when comparing 2008's findings (237 initiatives) with 2014's (663 initiatives). Although this type of proposal moves well beyond the scope of this study as only an analysis of five companies and ten reports within the electric utility industry during the years of 2008 & 2014 was conducted, it still an area which could be researched more in depth in the future for students who wish to utilize the GOLDEN Projects database of coded reports.

Another noteworthy point which I feel is an interesting discussion point is from what has been gathered from the GOLDEN Project Database leading organisations in South America such as Eletrobras have shown that they to also show great consistency and growth when considering sustainability. It would have

also been interesting to look at organisations from an Asian context to further contest findings from prior researchers on the area sustainability as for example when looking at the 2015 KPMG survey there is evidence that countries within these regions have shown exponential growth over recent years. However due to the limitations of this study they were not considered and could lead to an interesting research topic in the future.

As we established in this research, legitimacy and stakeholder theory were the two most used ideas of describing why the primary initiatives existed. Outside of legitimacy and stakeholder theory, other possible reasoning behind sustainability reports being published are established by Deegan (2002) and Bebbington et al. (2008). Both discuss the notion of risk management and Deegan (2002) also discusses ethical investments being reasoning behind companies publishing sustainability reports. Future research could look to other such reasonings and try to distinguish new links to other initiatives and other motives behind disclosure.

Although a number of elements were discussed in this research there are always going to be limitations. Considering the fact that the data was coded from a number of different students is one such limitation. As coding is a subjective practice, the way this limits the results is that everyone has different interpretations to what may or may not be an initiative and as people were allocated different companies and different reports this is one limitation which must be considered. If say for example one person coded the entirety of the database the types of initiatives would be likely to differ as to what they are recorded at in the database now. Another limitation associated to this study is obviously the timeframe selected being years 2008 & 2014. The GOLDEN Project database only has the timeframe spanning from 2008 to 2014, if there was an option to look at even older reports and compare them to more recent reports the results of what the primary initiatives were and the stakeholders associated to these may differ.

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