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Reputation Drivers in Oil and Gas Sector

How do oil and gas companies leverage on their sustainability reports to enhance their corporate reputation ?

A Qualitative content analysis for companies operating in oil and gas

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By

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Abstract

Purpose The purpose of this paper is to explore how do companies leverage on their sustainability reports for enhancing their reputation. Is the current reporting is consistent with what found in literature for the drivers that affect reputation.

Design/methodology/approach A literature of reputation is reviewed with the aim of determining the most relevant drivers that affect reputation. Afterwards these drivers are translated in to elements that can be investigated and used in the content analysis. A qualitative content analysis is applied to the sustainability reports of the top 13 companies in global fortune 500 list operating in the oil gas sector. The content analysis provides information on 32 elements which are constituting the reputational driver model which was developed. The content analysis framework will check the existence of the elements through a scorecard that was developed. The scorecard requires three types of information for each disclosed element. These areas are (i) vision and goals, (ii) management approach, and (iii) performance indicators .

Findings The content analysis reveals a low level of comprehensive reporting in the areas of “vision and aims” and “performance indicators”, while the “management approach” area is performing good enough among most of the companies explored. As expected, the companies achieved the highest score in reporting for the drivers of “Environment” and “Safety” . Still some drivers are not very well covered such as the “regulatory compliance” and “Delivering customer promise”. Within each driver , there are still some elements that are badly reported or not mentioned in the reports of some companies although their importance. The study revealed some differences which can be more investigated about differences in reporting between companies operating substantially outside their home location and companies operating substantially within their countries of origin.

Conclusion Companies should pay more attention for the comprehensiveness of their sustainability reports by disclosing focused and relevant information for their stakeholders on the 3 areas of disclosures defined in the content analysis. Stakeholders are increasingly demanding more information. Therefore, companies should increasingly engage with stakeholders to close the gaps that are raised which can result in negative consequences on their reputation.

Limitations 1)The reputation measurement models are still lacking consensus in literature. 2)Further future research is needed in order to operationalize these models and move form theory to practice. 3) Further companies in the content analysis might have shown more and different results. 4)This study was not showing the quality of the information disclosed which requires more in depth investigations and research.

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For any errors or inadequacies that may remain in this work, of course, the responsibility is entirely my own.

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1. Introduction

1.1Objective

Although companies are increasingly disclosing information about their sustainability performance in the sustainability reports they publish and with a leading performance for the oil and gas companies, it is highly questionable whether the current trends can contribute in meeting the stakeholders expectations and satisfying all their doubts and concerns that are affecting these companies reputations. In the literature there are doubts also whether the current annual, stand-alone CSR or social and environmental reports can satisfy the increasing demand for accountability (Adams, 2004; Milne & Gray, 2007).[26]

The aim of the work is to construct a model that can check the consistency between the factors they have to disclose to enhance their corporate reputation among stakeholders and what the companies in the oil and gas are reporting in their sustainability reports. In other words, the objective of this work to check whether companies are leveraging on their sustainability reports for better be perceived by stakeholders and hence improve their reputation.

The sustainability reports of the top 15 oil and gas companies listed in the global fortune 500 list will be used as the context through which we will test how companies are managing their corporate reputations.

The main research question that this study will try to answer is:

How do companies leverage on their sustainability publications for the favor of reputation?

A qualitative content analysis is made for that purpose for the publications of the top 15 oil and gas companies listed in the global fortune 500 list. For the top 15 companies, we found that only 12 companies of them are publishing their sustainability reports. We added one company more to the study, so that the total number of companies examined in this study is 13 companies. By studying the sustainability reports of the companies more deeply, we can have a better understanding on the degree of consistency and recommendations on how to enhance the publications of the company in a way that will lead to a better reputation advantage for them in the future. To achieve this, the work follows six related steps:

First, literature relating to reputation is reviewed in order to select the model; we are going to apply afterwards in the qualitative content analysis.

Second, after choosing the model, a further breakdown of the model was required in order to make the model applicable for extracting the information needed and performs the qualitative analysis. In other words to move from theory to practice.

Third, an evaluation criterion was set by reviewing the best practices in the literature for the content analysis. In the meantime, a search protocol was defined for each element in the model, after wards a score card was developed.

Fourth, a qualitative content analysis was performed on 13 companies representing the top 13 companies operating in the oil and gas sector which are listed in the global fortune 500 list.

Fifth, a thorough analysis was conducted to the results obtained and then presentation of the findings.

Sixth, a conclusion was drawn for the work performed and the most relevant findings that were observed.

Overview

Before going in to details for the literature review, it is important to explore the relationship between corporate social responsibility and Reputation.

Far from being distinct the two concepts are largely overlapping. In other words, when taking a stakeholder perspective, Corporate Reputation and CR are both expressed through similar and overlapping corporate behaviors and understood in terms of similar and overlapping stakeholder perceptions. In this way rather than viewing reputation and responsibility as two separate concepts, they may more usefully be thought of as two sides of the same coin. [27]

1.2 Research Motivation

Warren Buett (Chairman and CEO, Berkshire Hathaway) once said: "It takes 20 years to build a reputation and five minutes to ruin it [1]. Examining corporate reputation is becoming more important today than ever. This is due to many factors such as: increased public awareness about corporate actions and issues, increased requirement for transparency, higher expectations by multiple stakeholder groups, word-of-mouth and online communication, customer's personal experience with a company's products and services, effect of the influence of opinion leaders, growth in interest groups and increased attention from media have all contributed to the importance of assessing and actively managing a company's reputation.[19] Additionally, A growing body of research argues that good corporate reputations have strategic value for the firms that possess them (Dierickx and Cool, 1989;Rumelt, 1987; Weigelt and Camerer, 1988).[11]. Companies who manage well their reputation, will access lots of benefits. Enjoying a good reputation yields many rewards: not least the continuing trust and confidence of customers, investors, suppliers, regulators, employees and other stakeholders, the ability to differentiate the business and create competitive advantage, there is general agreement that corporate reputations contribute significantly to the long run competitive advantages of organizations and that their management is of critical importance to companies (Dowling, 2004; Rose and Thomsen, 2004; Fombrun,1996).[18] Employees stay longer and work harder for companies that are liked. Individuals prefer to work in firms having good reputations (Greening and Turban, 2000; Lievens and Highhouse, 2003; Lievens et al., 2001; Martin, 2009a, 2009b; Turban and Greening, 1997).[16] These advantages will lead to positive consequences for the business

1. Profitability
2. Access to capital
3. Long term business continuity
4. Charge premium prices
5. Attract and retain customers
6. Attract qualified employees
7. Supplier choice
8. Evaluation of new products
9. Suppliers loyalty
10. Community support
11. Product response

A bad reputation, conversely, can result in a loss of customers, unmotivated employees, shareholder dissatisfaction and ultimately the demise of the business itself.[1] For Oil and Gas companies, they are nowadays receiving a lot of attention and started to defend their positions and for them the issue of reputation and its consequences became of a great strategic value for them and the way they manage it will determine substantially their future. The sector is facing huge challenges and the biggest companies started to highlight these challenges, these include climate change, bribery and corruption, health and safety, environmental performance and community development.

2. Literature Review

2.1 What is reputation? (Definition of reputation)

According to the Compact Oxford English Dictionary, reputation is 'the beliefs or opinions that are generally held about someone or something'. Depending on the field of study, reputation may have different meanings [Gaultier-Gaillard, Louisot, 2006] but always constitutes an intangible asset [1]. the concept of corporate reputation has been of major interest in the academic literature from the 1950s onwards. Corporate reputation has been the focus of much of the academic research during the past two decades (Logsdon and Wood 2002).

In recent years, there has been increased emphasis on the value of the reputation by both scholars and practitioners (Fombrun and Van Riel 2004; Bromley 2002; Chun, 2005; Hillenbrand and Money, 2006; Helm, 2007; Chettamronchai, 2010). [19]There is general agreement among practitioners and scholars alike that the way in which the public perceives a company is crucial in determining its success (eg Brown, 1998; Fombrun, 1996).[6] Over the past 20 years, a growing body of studies has addressed the topic of corporate reputation. While the definition of corporate reputation is debatable, the one proposed by Gotsi and Wilson (2001, p. 29) is instructive: “A corporate reputation is a stakeholder’s overall evaluation of a company over time. This evaluation is based on the stakeholder’s direct experiences with the company, any form of communication and symbolism that provides information about the firm’s actions and/or a comparison with the actions of other leading rivals.” Another definition after following a review of the corporate reputation literature, Walker (2010) defines corporate reputation as “a relatively stable, issue specific aggregate perceptual representation of a company’s past actions and future prospects compared against some standard”[29]. Third definition recognizes it as a social phenomenon: It is socially complex and intangible, highly specific to each organization and part of a process of “social legitimization” of the organization (Martin de Castro et al 2006). There is also an historical aspect (Hall 1992; Yoon et al 1993; Murray and White 2004). It is perceptual (Fombrun 1996; Wartick 2002), emotive (Groenland 2002) and comprises affective and cognitive dimensions (Llewellyn 2002; Schwaiger 2004).[30] . Fombrun who did a very solid work considering corporate reputation (1996: 72) defines corporate reputation as “a perceptual representation of a company’s past actions and future prospects that describes the firm’s overall appeal to all of its key constituents when compared with other leading rivals.” [25] .Fombrun included only affective elements and he excluded cognitive elements. Alternatively, (Gray/Ballmer) define corporate reputation as a valuation of a company’s attributes, performed by the stakeholders, what would almost completely exclude affective components. “Hall” combines cognitive und affective components by formulating that a company’s reputation consists of the knowledge and the emotions held by individuals.[3] The definitions of Dowling, Argenti and Druckenmiller and Rindova indicate that reputation is a "collective representation" of images and perceptions, not merely a self-promotional message. It involves relationships with all stakeholders and is gained, maintained, enhanced or detracted from over time [30]. Fombrun and van Riel (2004) touch on predictability by proposing that reputation involves stakeholder judgments "about a company's ability to fulfill their expectations" but most definitions and descriptions consider that reputation is a collection of images and behaviors (cfArgenti and Druckenmiller 2004, Dowling 1994)[31].A functional definition of corporate reputation states Corporate reputations are intangible assets that provide firms with sustainable competitive advantage in the marketplace (Boyd et al. , 2010 ; Roberts and Dowling, 2002 ;Shamsie, 2003).Therefore, corporate reputation is a collective construct that describes aggregate perceptions of multiple stakeholders about a company's performance (Fombrun, 1996). It is a stakeholders overall evaluation of a company over time. This evaluation is based on the stakeholders' direct experience with the company, and any other form of communication and symbolism that provides information about the firm's action and/or comparison with the actions of other leading rivals (Gotsi& Wilson, 2001). It is a distribution of opinions (the overt expression of a collective image) about the person/entity, in a stakeholder or interest group (Bromley, 2001). Walker (2010) found five key attributes that are usually emphasized in corporate reputation definitions:

(1) Reputation is based on perceptions;
(2) it is the aggregate perception of all stakeholders;
(3) it is comparative;
(4) it can be positive or negative; and
(5) it is stable and enduring.[14]

Walker (2010) divided corporate reputation definitions into 5 groups:

(1) perceptual definitions which focus on defining corporate reputation as stakeholder's viewpoints about the overall perceptions regarding both internal and external aspects about an organization
(2) aggregate definitions forstakeholder perceptions about an organization
(3) comparative definitions which compares reputation to other competitors in the market
(4) positive or negative definitions which means that reputation can be either positive or negative
(5) temporal definitions which means that reputations are time-specific and can change over time (Gray and Balmer 1998, Mahon 2002, Rhee and Haunschild 2006).[19]

2.2Difference between Image, identity and reputation

Until the 90s, corporate image and reputation were often used synonymously (Gotsi& Wilson, 2001)· [14]. Up to the eighties, the attention was dedicated to corporate image; from the nineties a great importance is progressively attributed to corporate brand and to corporate reputation. Chun (2005) draws a distinction between image, identity, and desired identity. Image refers to "how others see us," identity is "how we see ourselves," and desired image is "how we want others to see ourselves." [20]

2.2.1 Corporate image

Corporate image represents how an organization is perceived by its stakeholders (WEI, 2002). Corporate image is not what a company presumes to be, but it is composed of the existing opinions (the feelings and the convictions) in the mind of the stakeholders (ABRATT and SHEE, 1989: 68; BERNSTEIN, 1984; ALESSANDRI, 2001).[8] It asks the question "What does the organization believe others think of the organization?" (Brown et al. 2006).[19] Some definitions for corporate image from the literature:

- View of the organization developed by its stakeholders; the outside world's overall impression of the company" (Hatch and Schultz 2003).
- Mental associations that organization members believe others outside the organization hold about the organization" (Brown, Dacin, Pratt and Whetton 2006).
- A short-term, or momentary, perspective of an organization at a particular point in time" (Bick, Jacobson, and Abratt 2003).[19]

2.2.2 Corporate Identity

Corporate identity has been defined as one of the attributes of a company that addresses the questions, what are we? 'Andwho are we? '(Balmer&Greyser, 2003). It's the internal stakeholders' perceptions about an organization (Albert and Whetten 1985). Organizational identity refers to the associations held by the organizational members about an organization. Identity asks the question "Who are we as an organization?" (Brown et al. 2006).This position allows affirming that the corporate identity is a presentation of the organization conceived at strategic level, with the purpose to develop a positive corporate image and corporate reputation (ALESSANDRI, 2001). [8]

Corporate identity results from assessments by insiders to an organization, though insiders can be aware of how outsiders perceive their organization and the attitudes outsiders hold towards it (Bartel et al., 2007; Bouchikhi and Kimberly,.2008; Deephouse and Carter, 2005).[15] Following are some of the various definitions of corporate identity that are prominent in the literature. :

- The construed external image of the firm. It's what a member believes outsiders think about the organization. (Dutton,Dukerich, and Harquail, 1994).
- What members perceive, feel and think about their organization: a collective, commonly-shared understanding of the organizations distinctive values and characteristics (Hatch and Schultz, 1997).
- The set of values and principles employees and managers associate with a company (Fombrun, 1996).
- What employees feel and think about their organization. It focuses on questions relating to organizational culture. It gives a business its distinctiveness"(Balmer, 2001).
- A strategic manifestation of corporate-level vision and mission, underpinned by the strategies which a corporation employs in its operation or production"(Melewar and Wooldridge, 2001).[19]

2.3 Origin of corporate reputation (Where do corporate reputations come from? On what are they based?

2.3.1 .Three schools of thought

There are at least three schools of thought on these questions (Davies, 2008):
1. There is a corporate character explanation. People value organizational personality traits such as trustworthiness and reliability.
2. Firms become similar over time, termed institutional isomorphism by organizational theorists. People value behaviors and actions that fit the cultural norms of an industry or society.
3. Firms develop reputations favorable or unfavorable based on benefits that the organization has recently provided to the individual.[16]

2.3.2 Reputation and HRM

A firm develops a positive/favorable corporate reputation based on internal HRM practices. These include the presence of sound and well-developed and articulated HRM strategies, initiatives to increase employee engagement, and efforts to attract, retain and develop talented employees (talent management. [16]

2.3.3 Sources of Corporate reputation

Reputations about companies can be based on a variety of sources. Some stakeholders may rely on direct experience they have with an organization in the form of a company's products and services, shops and employees. Others may rely on other indirect sources to form their perceptions about corporate reputation. Following are a list of different sources for corporate reputation formation:

1. The employees' behavior and communication;
2. Individuals' experiences with the company;
3. Company's self-presentations;
4. Media interpretations of the company;
5. Word of mouth;
6. Competitors;
7. Rumors (Caruana, 1997; Dowling 2001; Cravens, Oliver and Ramamoorti, 2003).[19]

Following a systematic approach, Fombrun (1996) has identified six inputs to building corporate reputation:

1. information from the organization;
2. audit data;
3. investment analysis;
4. journalistic insights;
5. hearsay/rumor;
6. Brand activities (customer image, community image, investor image, employee image).[19]

2.4 Corporate associations

In the previous point we identified how are reputation are built in the mind of customers and he have underlined before that what is being perceived is more important than what is actually existing. “Corporate associations” is a term refers to all the underlying information and perceptions one has toward a company (Brown and Dacin 1997). Brown and Dacin (1997) divided the corporate associations into two main dimensions: (1) corporate ability associations, which included items such as: leadership in industry, research and development capability and progressiveness of company; and (2) corporate social responsibility associations, which included items such as: concern for the environment, involvement in local communities, and corporate giving to worthy causes.

After, In his literature review, Berens (2004, p. 15) proposed that the majority of typologies of corporate associations reported in the literature can be assigned to one of three important clusters:
(1) corporate social roles: different expectations that stakeholders have regarding the behavior of companies in society, such as delivering good products, having a good financial performance and limiting environmental damage.

(2) Corporate personality: Describing organizations with the help of individual ‘personality’ traits. Personality can be defined as ‘those characteristics of the person or of people generally that account for consistent patterns of behavior’ (Pervin, 1989: 4). Thus, personality traits are constructs that are used to explain behavior. Unlike social expectations, personality traits are not always evaluative. Whether a certain personality trait is perceived as positive or negative seems to be determined in part by whether it ‘matches’ the personality of the perceiver in some way (Huston and Levinger, 1978). In contrast, social expectations refer to what people believe a person or company is supposed to do. Therefore, the fulfillment of an expectation is generally regarded as positive, while the failure to fulfill an expectation is generally regarded as negative.

(3) Trust: the degree of trust toward the company.[14] Berens and van Riel’s (2004) review clearly shows that there is no one definite set of associations, the social expectations concept is by far the most prominent one, which is also mirrored in a vast number of studies applying reputation measures related to stakeholders’ social expectations (e.g., Bartikowski& Walsh, 2011; Eberl, 2010; Raithel et al., 2010; Roberts & Dowling, 2002; Schwaiger et al., 2009; Walker, 2010; Walsh, Mitchell, et al., 2009). Since it lies in management’s very nature to wish to ascertain public perceptions of firm behaviors in a broad benchmark context, this type of approach seems most promising (Berens& van Riel, 2004).[32]

2.5 Measurement and drivers models

This section will be divided to 2 main points:

- Main measurement models and their components
- Comparison between the existing models

2.5.1 Reputation measurement models

Introduction

With corporate reputation's increasing importance, the sound measuring of reputation has become a critical issue in business research (Chun, 2005, Fombrun, 2007,Highhouse et al., 2009 and Walker, 2010).[36]A number of methodologies have been developed which attempted to measure reputation . The existing models found in literature were developed by both practitioners and academics. Practitioners were the first to propose ways to measure corporate reputation as they sought tools for evaluating perceptions about corporations. Practitioners presented several methods that assess individuals' perceptions about corporations.[19] . Hillenbrand and Money (2007:263) point out that the models differ from one another according to their underlying approach, the stakeholders they survey and what they measure. Thus, although there are numerous models to measure corporate reputation, it is important to consider when it is appropriate to use what measure.[15].In the following sections we are going to review the important models developed by both the practitioners and the academics.

2.5.2 Practitioners' measurement models

In this section we'll review the models developed by practitioners and see the motive behind putting effort in this area. The practitioners efforts stemmed from the need to differentiate companies in the very complex, highly competition environment and increased attention of stakeholders not only by what the companies are doing or producing but also with the procedures they follow, their treatment to their employees, how do they behave concerning regulations and there is emphasized attention to their practices toward the environment and the society. The models developed mainly were questionnaires based on predetermined dimensions being given to the experts and the customers and people familiar with the contexts the companies are operating within. Some of these measurements were characterized by halos especially financially halos. They were also criticized by not being representative and constituting the real image of these companies, they were accepted by globally since they were still the most reliable and appealing work done and the organizations developed them where recognized by their trustworthy and professionalism.

2.5.2.1 Fortune's magazine model

One of the first efforts to develop a reputation measurement model was done by Fortune's magazine. The model is considered one of the first models that addressed the issue of reputation and gained a great recognition which been developed by Fortune magazine. Fortune's popular study of the 'most admired companies', released annually by the magazine since 1982. The measure is based on ratings of companies obtained from invited managers and analysts. It therefore reflects the opinions of industry insiders and has a strong financial halo (Brown and Perry, 1994;Fryxell and Wang, 1994).[12]It is respected by both industry leaders and academics. But it surveys only three constituencies: senior executives, (outside) board members, and securities analysts. (Chapter 1/ reputation management).The model is based on nine key dimensions. (Sobot et al. 1992) didn't include the "Globalness" dimension. The nine dimensions are

1. Quality of management
2. Quality of products and services
3. Innovation
4. Long-term investment value
5. Financial soundness
6. Employee talent
7. Social responsibility
8. Use of corporate assets
9. Globalness.[7]

Limitations of the model

Fombrun and Shanley (1990), as well as Fryxell and Wang(1994) show that the index mainly captures a company's past financial success rather than its corporate reputation in terms of the stakeholders' overall evaluation. Specifically, the AMAC index does not take the expectations of other stakeholder groups such as customers, employees, and the general public into account (e.g.,Fombrun et al., 2000; Schwaiger et al., 2009). While the AMAC index marks the beginning of reputation research and offers the largest reputation database to date, most researchers agree that it is a rather narrowly focused measure of corporate reputation (e.g.,Eberl, 2010; Walker, 2010).[32]However, this survey format is still used to determine the ranking of Fortune's America's Most Admired Corporations.[19]. The criticism of the model was not in the items that the model is consisted but in the way the scores and the evaluations are done to produce the annual ranking.

2.5.2.2 Other models with slightly differences

Followed by the "American's most admired companies", Fortune WMAC Developed by Fortune in 1997 to extend AMAC (America's Most Admired Companies) to the rest of the world, and carried out in cooperation with the world's leading HR consultant Hay Group, the rating attempts to identify best practices and determines which ones are reputation drivers and useful tools. A similar survey is conducted by the UK's Management Today magazine (Britain's Most Admired Companies). 24 similar regional reputation surveys are carried out in Asia by Asian Business and the Far Eastern Economic Review. A global survey conducted by the UK newspaper the Financial Times , conducted annually since 1998, and involves 1,000 CEOs in 20 countries. It seeks to identify those companies and business leaders most respected by their peers and to establish the reasons for this. As well as being asked to nominate the three companies they respect most in the world and in their industry sector, and their top three business leaders, participants were asked for the first time in 2001 to name companies that delivered value in three separate areas:

- Value creation for customers
- Value creation for shareholders
- Best management of environmental resources.[7]

Conclusion of the AMAC model and its derivatives

As to conclude this model, we can claim that they all rooted from Fortune's magazine first model developed in 1982 and they are following the same procedures and steps with slightly differences between them. They can be put in one cluster.

2.5.2.3 Corporate personality scale

A second cluster or a fourth scale constructed by Davies et al., (2001), developed the corporate personality scale, which is a scale that would measure both internal (employee) and external (customer) perspectives about corporations. The corporate personality scale is a scale that could be used to characterize the personality of an organization. It is used as a way to "personify" the characteristic of an organization. The results of Davies et. al's (2001) study highlighted that there are seven dimensions for corporate personality, they are:

1. Agreeableness
2.Enterprise
3.Competence
4.Chic
5.Ruthlessness
6.Machismo
7.Informality [19]

Limitations of the model

That scale although it raises a very important point that personal factors should be taken in to consideration when analyzing but it is less measurable than the previous scale and there will be many difficulties in operationalizing this model afterwards due to its high subjectivity. It is considered as extension to the reputation quotient which is specifically tailored to service firm's end-user customers.

2.5.2.4 Customer based reputation

A third cluster scale is the CBR (Walsh and Beatty, 2007). Developed a 28-item and they named it customer-based reputation (CBR) measure. They defined CBR as 'the customer's overall evaluation of a firm based on his or her reactions to the firm's goods, services, communication activities, interactions with the firm and / or its representatives or constituencies (such as employees, management, or other customers) and / or known corporate activities' (2007: 129).Walsh et al. (2009) shortened their CBR scale from 28 to 15 items and validated it in the UK and Germany. Walsh and Beatty (2007) propose five interrelated dimensions of CBR:

1. Customer Orientation
2. Good Employer
3. Reliable and Financially Strong Company
4. Product and Service Quality
5. Social and Environmental Responsibility [33]

Limitations of the model

This measurement model is limited to only one stakeholder group which is customers. Also, Walsh and Beatty (2007) have not provided a perspective on the epistemic nature of their constructs and corresponding items, even though a number of researchers have long criticized the lack of explicit measurement specifications underlying most scale development efforts (e.g., Diamantopoulos &Winklhofer, 2001; Diamantopoulos et al., 2008; Jarvis, MacKenzie, &Podsakoff, 2003; MacKenzie, Podsakoff, &Podsakoff, 2011; Podsakoff, Shen, &Podsakoff, 2006).[32]

2.5.2.5 Brady model

The Brady model (Brady (2005) is designed to show an organization where its sources of reputation lie and was developed by Dr Arlo Brady. It identifies seven sources of reputation (knowledge and skills, emotional connections, leadership, vision and desire, quality, financial credibility, social credibility, and environmental credibility) for an organization, but is not designed to provide a basis for a ranking system and hence does not directly provide quantifications[4].

2.5.2.6 Honey (2009)

The Honey model was designed as a strategic planning tool for use in management decision making and action prioritization. It is based on only four attributes. It identifies several attributes of reputation across four categories (stewardship, sustainability, attention and association). It argues that different stakeholders will have different expectations of the company's behavior, and that measurement of reputation and of the related risk should be based on the gap between expectations and performance [4].

2.5.2.7 Limitations for the models developed by the practitioners

While the measures developed by practitioners are useful for assessing corporate reputation, they have a variety of drawbacks:

First, these measures assess corporate perceptions based on one group of stakeholders, mainly, financial analysts and investors. Thus, the results could be biased because the perspectives of other stakeholders are not adequately considered.

Second, some of the measures were not tested for validity and reliability. Given these drawbacks, scholars were motivated to identify better measures for corporate reputation [19].

2.5.3Academics measurement models

2.5.3.1 Introduction

There are two approaches scholars followed to measure reputation, the first one is single faceted generic measures of corporate reputation and[2] multi-faceted specific measures of corporate reputation. In the case of single-faceted generic measures, all stakeholders are asked generic questions regarding their perceptions about the overall reputation of a corporation. For example, Wang et al. (2006) presented a generic measure of corporate reputation by assessing: [1] overall perceptions of experience with a firm, [2] perceptions against other competitors, and [3] perceptions about the future of the firm. Gardberg and Hartwick (1990) assessed company reputation by examining perceptions. However, researchers realized that using a single-overall measure for corporate reputation did not incorporate the specific measures by which stakeholders form their overall perception of a corporations' reputation. Moreover, using single-item measurement limits the organization's ability to identify the specific elements of a corporation which bring about a positive reputation and which elements result in a negative reputation. Thus, a series of measures for corporate reputation have been proposed from a multi-specific approach.[19] which will be our interest to study .

2.5.3.2 The SPIRIT model

The SPIRIT model (MacMillan et al (2004)) is a tool designed to help improve relationships with different stakeholder groups (SPIRIT stands for "stakeholder performance indicator relationship improvement"). Developed from a literature review and focus groups with stakeholders (including customers, employees, shareholders, suppliers and the general public), followed by qualitative surveys. Reputation described in terms of stakeholder expectations in business relationships [34]. It examines sixteen attributes across four categories: experience, influence, behavior and emotional.

2.5.3.3 Reputation Quotient

A series of measures have been proposed that measure corporate reputation from a multi-faceted perspective. One of the popular measures for corporate reputation was that developed by Fombrun et al. (2000)[19].

Harris-Fombrun Reputation Quotient (by Harris Interactive in association with Charles Fombrun). It evaluates reputation among "multiple audiences," according to twenty attributes that are grouped into what are referred to as "dimensions of reputation":

products and services	•Stands behind its products and services • Develops innovative products and services •Offers high-quality products and services •Offers products and services that are good value for money
financial performance;	• Has a strong record of profitability • Looks like a low-risk investment • Looks like a company with strong prospects for future growth
Workplace environment;	•Reward employees fairly •Looks like a good company to work for • Looks like a company that would have good employees
emotional appeal.	•Have a good feeling about the company •Admire and respect the company •Trust the company a great deal
vision and leadership;	•Has excellent leadership •Has a clear vision for its future • Recognises and takes advantage of market opportunities
social responsibility;	•Supports good causes •Is an environmentally responsible company •Behaves responsibly towards the people in the communities where it operates

Table 2.1 : Reputation Quotient drivers

Wartick (2002) claims that the Reputation Quotient is a good measure for reputation as it is broad and generic enough that makes it applicable to most stakeholder groups and many cultural contexts. Groenland (2002) highlighted that the Reputation Quotient satisfies the psychometric properties, and the practical experience in many different commercial settings. This increases the confidence in the usefulness of the Reputation Quotient. The results of Groenland's (2002) qualitative study to validate the dimensions of the Reputation Quotient highlighted that all six dimensions of the Reputation Quotient were supported as relevant for measuring corporate reputation.[19] The results of that survey are widely covered by the press.

2.5.3.4 Helm model

Also, Helm (2005) developed a similar measure for corporate reputation that was composed of ten elements:

(1) quality of products
(2) commitment to protecting the environment
(3) corporate success,
(4) treatment of employees
(5) customer orientation
(6) commitment to charitable and social issues
(7) value for money of products
(8) financial performance
(9) qualification of management
(10) credibility of advertising claims.

This highlights the growing importance of measuring corporate reputation from a multi-faceted perspective as opposed to a single-faceted perspective.[19]

2.5.3.5 Rayner model

Rayner(2003) explores the risks to reputation – both threats and opportunities – arising from seven drivers of reputation :[7]

He determined those drivers starting from the key drivers of reputation as defined by several well respected reputation surveys around the world as they are likely to be the most fertile sources of reputational risk. He considered them distilled in to seven drivers:

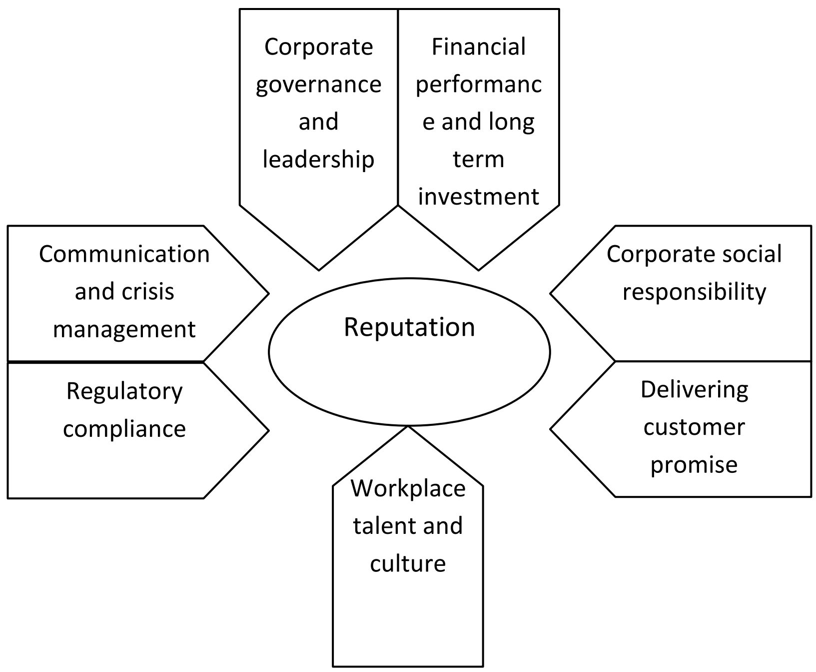

Fig. 2.1
Rayner Model

Drivers	Description
Financial performance and long term investment	Does the business have a solid financial track record? What are its future prospects? Will it prove a good investment in the longer term?
Corporate governance and leadership	Does the top team set an appropriate tone for the organization? Do its leaders have integrity? Does the business have a compelling but realistic vision for the future? Does it display good corporate governance?
Regulatory compliance	Does the business comply with relevant laws and regulations? Does it anticipate and keep pace with regulatory developments? Does it become embroiled in litigation?
Delivering customer promise	Does the business provide consistently good-quality products and services?How good is its customer service? Does it innovate and successfully launch new products and services? How responsible is its marketing? How does it handle complaints?
Workplace talent and culture	How well does the business treat its employees? Is it able to recruit, develop and retain high quality staff? What does it feel like to work there?
Corporate social responsibility (CSR)	Does the business understand its social, ethical and environmental impacts? Is it receptive to the requirements and expectations of its key stakeholders? How does it respond?
Communications and crisis management	Does the business provide meaningful and transparent information which allows stakeholders to understand its values, goals, performance and future prospects? How would it handle a crisis?

Table 2.2
Rayner Model elements
description

2.5.3.6 Reptrak pulse model

Ponzi proposed a short form of the reputation scale (RepTrak Pulse), an emotion based scale that differentiates between the drivers of corporate reputation and the construct itself. Through a series of some in-depth interviews. The data was cross-checked for validity and reliability and was deemed acceptable. This shorter form of the RepTrak Pulse is thought to facilitate cross-cultural research on reputation and will help simplify collecting survey-based data (Ponzi et al,2011).[19]

RepTrak is a tool developed by the Reputation Institute and utilized by Corporate Reputations to provide companies with a standardized frame work. It was developed with the aim of showing how strong the emotional bond is between the company and its stakeholders. The Pulse score is based on four statements: the esteem, good feeling, trust, and admiration that stakeholders feel towards a company. .Building on signaling theory and the resource-based view (RBV) of the firm, the model claims to conceptualize corporate reputation as beliefs about companies and disentangle the drivers of reputation from the construct itself.

In his paper Panzoni concluded that all the items they found in previous measurements can be underpinned under two factors:

- An overall measure of ‘emotional appeal
- Factors consisting of cognitive components of performance.

Reputation Institute’s research model indicates that reputation is built on 7 pillars from which a company can create a strategic platform for communicating with its stakeholders on the most relevant key performance indicators. These dimensions are:

1. Products/Services
2. Innovation
3. Workplace
4. Citizenship
5. Governance
6. Leadership
7. **Performance.** [12]

2.6 Comparing Reputation quotient, Rayner model and Reptrak pulse

The three models are representing the most promising work done and they constitute almost the same elements for measuring reputation and they are based on the previous models that have been mentioned in the literature review as have been shown. Rayner's model is the most detailed and comprehensive one explained in the literature.

Drivers	Reputation quotient	Reyner model	RepTrak pulse
Products/services	X	X	X
Innovation			X
Workplace	X	X	X
Citizenship	X	X	X
Governance		X	X
Leadership	X	X	X
Performance	X	X	X
Communications and crisis management		X	
Emotional appeal	X		

Table 2.3 :Comparison between three models

2.7 Model Selection

2.7.1 Drivers found in literature

In the literature we reviewed for the completion of this work, the drivers listed below where all the drivers that were highlighted.

1. Financial performance and long term investor value
2. Corporate governance and leadership
3. Regulatory compliance
4. Delivering customer promise
5. work place talent and culture
6. Corporate social responsibility
7. Communication and crisis management
8. Human capital
9. Vision and promise
10. Outreach
11. Operations
12. Sector profile
13. Familiarity / Favorability
14. Degree of innovativeness
15. Customer orientation
16. Influence
17. Size
18. Individual reputation(employee or customer)

2.7.2 Criteria for the model:

1. Citations according to the literature reviewed : In this step we found that the most used drivers where the drivers found in this table which comprises the models of reputation quotient, Reyner, and Reptrak pulse which are very similar to each other and the core drivers are the same despite the fact that they have different names for some drivers and extra one or two drivers for Reyner and Reptrak pulse
2. Congruent to oil and gas sector : Can be applicable for the oil and gas sector and not customized to measure the reputation in certain environment
3. Consider the specific area in which it will apply.

4. Can be able to address and include all the expectations of the stakeholders :to be able to verify this step we'll map the stakeholders found in the oil and gas sector and make sure that all their expectation are covered by the drivers of the model we chose.
5. This point is an extension to the previous. One of the most important activities in developing a reputation index will be to query key groups who interface with the organization to assess their opinions of corporate reputation. In most of the industries the most important key group will be obviously the customer (e.g., customer satisfaction, customer loyalty, customer prospects, etc.). In the oil and gas industry there will be differences concerning the stakeholders and customers will not be the most important one and the local communities will be in a leading importance position than them.[17]
6. Validated short-form measure of 'corporate reputation. This would help to address theoretical, methodological and practitioner concerns by reducing fatigue, demand effects, redundancy and non-responsiveness allowing inclusion of other constructs in the same measurement elements; providing pollsters and researchers with a rigorous and analytically grounded measure of corporate reputation [12]
7. Addressing what the oil companies are saying and mentioning in their sustainability reports and what they are actually doing in their operating business environments. In another words being capable of highlighting the indicators representing reputation drivers. The negative effects of choosing a non-representative measures for reputation can be mitigated by carefully considering indicators that are difficult to be manipulated and choosing the appropriate search protocol which can highlight both the intentions and the actual results achieved. This can be reached by ensuring that the model is complete and covering all the issues that are reflecting the stakeholders concerns in clear and appropriate way.

2.7.3 Reptrak pulse model and Reyner's model

We found that the three models we examined are the most complete and satisfying all criteria mentioned above. Especially, the Reptrak pulse model and Rayner's model. We made sure that the framework we chose will cover all the drivers and didn't miss any important determinant for reputation. We will perform some small modifications in the model to be appropriate for the context examined. A stakeholder mapping depending on the literature will be performed in order to make sure that all the expectations are covered within the chosen model. But understanding what drives the reputation of a specific organization requires deeper analysis and an exploration of the reputational threats and opportunities relevant to its unique circumstances. Future research can reveal other suitable model and add other drivers and eliminate some drivers according to the special context in which the model will be applied.

2.7.4Stakeholders mapping

2.7.4.1 Introduction

Identification of the dimensions that drive stakeholders' perceptions of the organization is integral to successful reputation management (Gabbioneta,Ravasi, and Mazzola, 2007)[34].

Finding innovative ways of exceeding expectations can actually enhance reputation by building trust and increasing stakeholder confidence. In theory it really is as simple as that. However, putting this into practice is both challenging and demanding as it requires both an 'inside out' and an 'outside in' approach: 'inside out' by ensuring that reputation is built on a solid foundation of core purpose, values and ways of working; 'outside in' by responding to the changing demands of the broader environment in which the business operates.[7]

2.7.4.2 Objective

A stakeholder can be defined as: "Any identifiable group or individual who can affect the achievement of an organization's objectives or who is affected by the achievement of an organization's objectives" (Freeman & Reed, 1983). The stakeholder approach highlights the need to examine the drivers that lead stakeholders to form attitudes about corporations which in turn lead to behavioral intentions and actual behavior [17].

But before this step to be performed, we need first to determine the main stakeholders groups who will be relevant to the scope of study and will have significant influence on reputation.

This step is important since reputation is rooted in the aggregated perceptions of the organization's stakeholders (Fombrun, Gardberg, and Sever, 2000)[20]. "A good reputation will be enjoyed by an organization that consistently meets or exceeds the requirements and expectations of its major stakeholder groups so that stakeholder experience matches expectation.
Thus, one of the crucial steps in identifying the working model we are going to use in our analysis is to determine the different stakeholders engaging with the organizations and analyzing their expectations and match them to the corresponding drivers of reputation. Stakeholder theory recognizes stakeholders may vary in their expectations of a company (Freeman, 1984).[36]In the same paper[36], the author distinguished stakeholders according to the level of involvement and experience with the company : Primary stakeholders interact with the organization on a regular basis and include shareholders, customers, employees' suppliers, investors and other business partners. Secondary stakeholders typically do not transact regularly with the firm and include government, the media, social pressure groups and competitors.

2.7.4.3 Reputation and expectations

The relationship between the Reputation and the expectations of the stakeholders can be simply clarified through the equation below

Reputation = experience – expectations

An organization will enjoy a good reputation when its behavior and performance consistently meet or exceed the expectations of its stakeholders. Reputation will diminish if an organization's words and deeds are perceived as failing to meet stakeholder expectations. [37]

2.7.4.4 Stakeholders in Oil and gas

The stakeholders influence and power for the oil and gas industry are somehow different form the other industries in terms of engagement and expectations. This is because the involvement of people from outside is larger and the impacts and consequences resulted from the oil and gas industry are subjected to multiple stakeholders groups and involving almost every one of us, we can refer to this as the globalized impacts of this controversial industry. IOCs (Investor owned companies) must travel farther and work harder to find and produce energy. Much of that work takes place in places where laws are few, governments are relatively corrupt or inefficient, and violent conflict is endemic. In these difficult environments, modern IOCs concerned about protecting their reputations must discern just exactly what governments, international NGOs, and local neighbors expect of them, and just how many of those expectations the company can meet.[38]Therefore, the risks associated with the industries are higher than any other industry. The most important stakeholder in the oil and gas industry is the local communities in which they operate upstream, therefore the oil companies must appear appealing for the local communities in order to sustain their business; the relationship could be very sensitive. For instance Community participation in the project development process is an essential practice in oil and gas industry operations. The industry recognizes that community concerns are not always satisfied by conventional risk assessment techniques, and that community dialogue is necessary to build consensus. Consultation with local communities' helps industry to understand and respect their social and cultural values, needs and wishes, and to use this local knowledge.[40]

2.7.4.5 Identification the stakeholder groups

A method for systematically identifying stakeholder groups should consider the scope of the engagement and may be guided by attributes of stakeholders such as the following:

- Dependency: groups or individuals who are directly or indirectly dependent on the organization's activities, products or services and associated performance, or on whom the organization is dependent in order to operate.
- Responsibility: groups or individuals to whom the organization has, or in the future may have, legal, commercial, operational or ethical/moral responsibilities.
- Tension: groups or individuals who need immediate attention from the organization with regard to financial, wider economic, social or environmental issues
- Influence: groups and individuals who can have impact on the organization's or a stakeholder's strategic or operational decision-making
- Diverse perspectives: groups and individuals whose different views can lead to a new understanding of the situation and the identification of opportunities for action that may not otherwise occur [41].

In the following section, we identified the stakeholders related to the oil and gas sector and we used a study done by Wen Feng (2009)[42] under the name of Stakeholder Value Network Analysis for Large Oil and Gas Projects. We further mapped the expectations for each of these stakeholder groups relying on what found in literature and the guidelines such as the GRI in which were developed after deep considerations for the needs of different stakeholder groups and the corresponding driver of reputation that can satisfy these expectations. In the GRI G3.1 guidelines for the oil and gas sector, they added one more stakeholder group that companies should put in to consideration when developing their sustainability reports which is the indigenous people in the places where they operate.

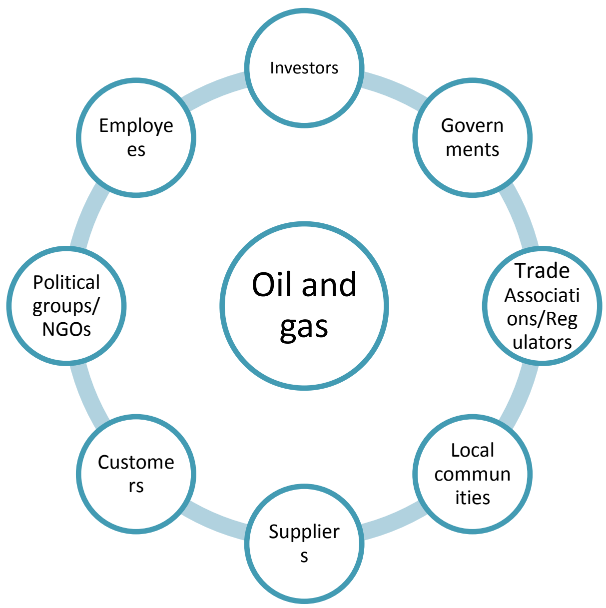

Fig. 2. 2
Stakeholders in Oil and gas

Now those five steps will be applied for the previously identified groups to see their relevance to our scope

We are going to add the Non governable organizations to the political group since they approximately share the same needs and replace and eliminate the trade associations group since they will not be relevant to our work and they will not add more needs.

Stakeholder group	Expectations
Investors / Shareholders	**Financial** Solid financial track record Clarity on value drivers and sources of future growth togenerate long-term shareholder value Corporate governance Compelling vision and mission. Avoids regulatory investigation and litigation. Embraces good practice that mitigates risks and boostsReputation. Value and dividends. **Regulatory compliance** Full compliance with laws and regulations Avoids regulatory investigation and litigation Embraces good practice that mitigates risks and boostsreputation **Workplace and talent** Right mix of skills and experience Able to recruit and retain high quality staff Appropriate incentives Empowering culture which supports risk management andinnovation **Safety** Internal and external SEE risks managed effectively **Citizenship** Internal and external SEE risks managed effectively Evidence of commitment to CSR and improving performance Shareholder CSR concerns addressed Meets criteria for sustainability/CSR league tables and relevantSRI funds **Environmental** Meets criteria for sustainability/CSR league tables and relevant SRI funds Delivering customer promise **Strong product and corporate brands** Effective marketing Secure customer base strong new product pipeline successful commercialization of new products and services

	growth potential **Innovativeness** Innovative: **Communication and crisis management** No surprises Equal treatment with other shareholders Accessibility and openness
Local communities	**Financial perspective** Seen as law-abiding and reputable employer Will stay in business contributing to local economy and providing jobs **Corporate governance** Considers social and economic impact on local community **Regulatory compliance** Seen as law-abiding and reputable employer **Workplace and talent** Competent staff able to comply with regulations, **Safety** keep staff and communities safe **Citizenship** SEE exposures managed well so local communities safe and jobs secure **Environmental** protect the environment Delivering customer promise Strong sales and secure customer base, assuring future jobs and purchases **Innovativeness** N/A **Communication and crisis management** N/A

Political groups and NGOs	**Financial perspective** N/A **Corporate governance** Appropriate policies in place for social, ethical and environmental impacts implemented and compliance monitored **Regulatory compliance** Goes beyond basic compliance to espouse relevant social, ethical and environmental issues **Workplace and talent** Competent staff able to comply with regulations Safety keep staff and communities safe **Citizenship** Comprehensive appraisal of material impacts and risks, backed up by policies, action plans, improvement targets, monitoring and reporting. **Environmental** protect the environment Comprehensive appraisal of material impacts and risks, backed up by policies, action plans, improvement targets, monitoring And reporting. **Delivering customer promise** Responsible marketing and innovation **Innovativeness** Responsible marketing and innovation **Communication and crisis management** N/A
Governments	**Financial perspective** Strong budget management No deficit Effective use of funds **Corporate governance** Relevant and effective board committees Comprehensive and cohesive risk management and internal control systems Robust oversight and assurance

	Full and transparent disclosure Availability and responsiveness **Regulatory compliance** Acts in the spirit of regulations **Workplace and talent** Competent staff able to comply with regulations **Safety** keep staff and communities safe **Citizenship** Comprehensive appraisal of material impacts and risks, backed up by policies, action plans, improvement targets, monitoring and reporting. **Environmental** protect the environment Comprehensive appraisal of material impacts and risks, backed up by policies, action plans, improvement targets, monitoring and reporting. **Delivering customer promise** Fairness in dealings with customers(keeping pricing levels constant) **Innovativeness** N/A **Communication and crisis management** N/A
Suppliers	**Financial perspective** Will stay in business and grow Financial position allows continuing honouringofcommitments **Corporate governance** Deliverable strategy that will keep the organisation in business Regulatory compliance Seen as law-abiding **Workplace and talent** Employees take pride in their work and in the business **Safety** N/A

	Citizenship Fair dealing SEE risks managed well so suppliers not exposed **Environmental** SEE risks managed well so suppliers not exposed **Delivering customer promise** Strong sales and secure customer base, assuring future jobs and Purchases **Innovativeness** N/A **Communication and crisis management** N/A
Customers	**Financial perspective** Continue to trade and honor commitments (business clients and consumers) Sustainable future (business clients) **Corporate governance** N/A **Regulatory compliance** Sufficient compliance to avoid any collateral reputational Impact **Workplace and talent** Competent, helpful employees **Safety** N/A **Citizenship** Responsible sales, marketing and innovation SEE risks managed well so customers not exposed **Environmental** SEE risks managed well so customers not exposed **Delivering customer promise** Quality and fair pricing of products and services Live up to brands Availability and security of products and services Responsiveness

	Innovative Responsible **Innovativeness** Availability and security of products and services Use innovativeness to mitigate risks **Communication and crisis management** N/A
Employees	**Financial perspective** Profitable going concern Unions Sustainable financial future so jobs safe Security of pension fund **Corporate governance** Compelling vision and strategy Inspiring and responsible leadership Concern for employee welfare as well as shareholder value have formal channels for dialogue with their employers to discuss and shape policies **Regulatory compliance** Goes beyond the statutory minimum in dealings with employees **Workplace and talent** Good pay and conditions Employees respected, valued and trusted Quality training and development Flexibility **Safety** Working in a clean and safe environment **Citizenship** Good employer: treats staff fairly and with respect Has reputation for being a responsible business **Environmental** Has reputation for being a responsible business **Delivering customer promise**

	Strong sales and secure customer base, assuring future jobs and purchases **Innovativeness** N/A **Communication and crisis management** N/A
Trade associations and regulators	**Financial perspective** N/A **Corporate governance** Appropriate remuneration and incentives **Regulatory compliance** Full compliance with relevant laws and regulations **Workplace and talent** Competent staff able to comply with regulations **Safety** keep staff and communities safe **Citizenship** Goes beyond basic legal compliance to embrace good practice **Environmental** protect the environment **Delivering customer promise** Fairness in dealings with customers **Innovativeness** N/A **Communication and crisis management** N/A

Table 2.4 : Stakeholders' expectations

2.7.4.6 Notes

- For the communication and crisis management driver, it is mentioned in the book of Rayner" managing reputation risk" [7] that the expectations of all stakeholders are:
    - Transparency
    - Honesty
    - Clarity and consistency
    - Accuracy and completeness
    - Timeliness
    - Responsiveness (to stakeholders and to crises)
- Those things are implicit inside the rest of the drivers and will be covered when dealing with the rest of the drivers, so it's no need to duplicate the work and include this in our work. We are going to eliminate it.
- Crisis management will be covered in the Environmental and safety drivers
- It should be noticed that all the stakeholders have interest in mostly all the drivers of the reputation. Each of the drivers is not concerned for only one group of stakeholders. However, some stakeholders are emphasizing a driver more than the other, but at the end all the drivers are important for each of the involved stakeholders but with different weights and importance. In the above table, we mentioned only the most important drivers for each group of the stakeholders.
- Also each stakeholder group is sharing some expectations concerning each driver.
- Each company should perform a stakeholder analysis to determine the specific needs for their stakeholders. As we'll see, companies should detail the procedures and the process for such process in order to be more transparent to their stakeholders and to prevent any misconception that can affect their reputation.
- Activists: The role of militant protesters has been increasingly affecting companies. As these people are more informed, more organized and connected to the world through the internet , their action can have huge consequences. The oil industry has been shaped by public relations fiasco such as Shell in 1995.

2.7.5Point of differences in oil and gas sector

When our cars run out of fuel, we will stop at the first available station, without worrying about a particular company or brand. The gas we buy in the first station will bear no significant difference from the gas available elsewhere and we know it. But if we have to purchase another product, say, a new smart phone, then things is very different. Many pre perceptions will already established in our minds about the different phones in the market and the companies that will influence our buying decision. Oil and gas are different than any other sector since the product and service they are providing is a main stream commodity and the quality of the oil is almost the same for each company, this was one of the first thing we put in mind when started working. Although the dimension of products and services plays a very important role in other industries due to the customers who are the main concern of any company, but in this context the customers will not have this great importance and the same will be the dimension related to delivering customer promise. However, , there is rising trend for customers who are willing to pay for a premium for greening the environment. Some Customers may be willing to pay a premium for "green" oil that comes from a relatively green oil company, and similarly, employees like to work for socially conscious companies, which may lead to improvements in employee productivity and better retention of good employees. If a company is perceived as a good corporate citizen, that may make customers and suppliers happier to work with the company, and employees happier to work for it. If the company treats its employees well, labor NGOs will be pleased with it. There will other more important concerns the company will have to address in order to improve their reputation. This difference will have implications on their communication to the different stakeholders and their targeting audiences.

Another point of difference about operating nature requires long-term investments in exploration and production that can span more than 30 years. Building a strong legacy and positive reputation with host governments, suppliers, the local workforce, the community "on the other side of the fence," and other key stakeholders is a critical part of doing business.[38][43]

In such a technically challenging industry, accidents will happen. Therefore, societies look to oil and gas companies to self-regulate: to do more to guard against risks to society than merely comply with the law. Perhaps more so than in any other industry, people demand corporate social responsibility (CSR) from oil and gas companies. [38]

2.7.6Brief description for the oil and gas sector

The oil industry is divided broadly into three parts: upstream, midstream, and downstream. In other classifications, it is divided in to two main functions, the upstream and the downstream. The upstream comprises exploration and production. The midstream is the distribution system, consisting of tankers and pipelines that carry crude oil to refineries. The downstream includes refining, marketing, and retail distribution, through gasoline stations and convenience stores, the upstream sector of the oil and gas industry is including activities such as reservoir studies, seismic, exploration, drilling, operations, installation of production platform, design and engineering, and assembly and installation of wellhead equipment's. Therefore, the upstream of the industry firms are mainly projected oriented while in the downstream are process oriented, the upstream sector of the industry has completely different nature and challenges in comparison with the downstream sector of the industry. For instance, the upstream sector of the industry is facing with some unique uncertainties at the begging of any project that calls for a careful management of the project for time, cost, and risk aspects. However, such firms often enjoy having high profitability in an unsaturated market. In contrast, the downstream sector of the industry including petrochemical sector is facing with a highly competitive market so that investment in that sector is considered often quite risky (Kwak and Laplace, 2005). As such, it is expected to have KSF in the upstream sector of the industry totally different from the downstream of the industry.[44]

Although oil companies have become interested in newer alternative sources of energy, oil and natural gas remains the foundation of most large, international oil companies. The industry of oil and gas is under state of monopoly in many areas where the different activities are taking place. Competition in the medium term will be between investments (made now) in new sources of oil and substitute fuels, and investments that reduce the use of oil by greater efficiency. Competition from outside the oil industry is a real and present threat to demand for oil. The merits of climate change mitigation policies, the effect of financial markets on the volatility of all prices, or government policies which tax the consumption of oil (or subsidize it) or promote alternatives on the basis of environmental or economic criteria which are not applied equally to all fuels. Dramatic changes in the structure of relationships within the industry, particularly in the balance of power between international oil companies (IOCs), national oil companies (NOCs) and service companies.[45]

2.7.7Risks of the oil and gas companies

Oil and gas producers tap into unseen, pressurized underground petroleum resources and try to extract those resources safely from the ground. Once extracted, the product is often transported long distances in pressurized pipelines or oceangoing tankers. It may be refined or transformed using any of a variety of complicated chemical processes at high temperatures and pressures. Each of these stages of the production process is managed by people and subject to human error.[35]

An example of the consequences of these highly complicated processes is climate change which is a particularly complex political issue that involves many players and stakeholders and need to be very well addressed and considered. Also, Consumers, due to the increasing ethical awareness and an abundance of supporting data(provided by the media, pressure groups and the Internet) are faced with a bewildering choice of products and services. They are in an ideal position to switch brands or boycott products if they have concerns about the reputation of the supplier.[7]

Therefore, a significant challenge for companies operating in the oil and gas is its unfavorable reputation, the oil and gas industry is ranked in the bottom of all the major surveys conducted for identifying favorable industries. It has also expanded its use of assessments and other activities to further address environmental, social and economic impacts and to enhance benefits delivered to local communities.[40]

The sector continually examines opportunities to meet growing energy demand around the world, while seeking to mitigate adverse impacts and address the potential risks of climate change [35].

2.7.7.1 Current challenges for the industry

The lists of hot issues in oil and gas sector that are defined in a report carried out to identify the key questions in the industry:

1. Legal and other agreements: must depend, at times, upon inefficient, unreliable or corrupt governments for their legal licenses to do business. IOCs often work in the

shadow of intractable social conflicts and/or their own legacy of insufficient attention to the needs and concerns of society.(Spence)

2. safety and security
3. consultation and information disclosure
4. compensation
5. resettlement
6. cultural properties
7. employment and labor actions (perceptions that it is male- dominated industry)
8. local economic development , housing and community effects
9. national infrastructure and utilities and health

These hot topics will be taken in to consideration while developing our working model since they are regularly discussed and addressed in media and across stakeholders.

2.7.8 Difficulties in choosing the model

These are the obstacles we faced when choosing the working model:

Unfortunately, because reputations are intangible they are difficult to measure. There has been extensive discussion about the importance of developing a robust measure of corporate reputation, and much has been written about it in both academic and media outlets. However, few researchers now operationalize corporate reputation in a manner consistent with their definitions. Thus it’s very difficult to find a model that has a consensus among scholars and practitioners.

Another issue is observer in the perspective of each company towards the sustainability and how they manage and communicate it in their sustainability and annual reports. In seeking to understand what the oil companies are saying and doing, we cannot generalize from one company’s data to the entire industry. Even though the fundamental business of each oil company is essentially the same, their perspectives on sustainability issues may in part be shaped by their different historical origins. Each company originated in a different country and has a long history of mergers, acquisitions, and other transformations. These differences likely shape the corporate structure, values, and sustainability strategies of each company. For example, although the company that is now referred to as ExxonMobil has undergone many transformations in the past 100 years, most recently a merger between Exxon and Mobil in 1999, it is a direct descendant of John D. Rockefeller’s Standard Oil company, founded in 1870 (Yergin, 2008).[46]

Any study that aims to validate reputation measures by means of business performance metrics would have to surmount the considerable challenges of data availability, which also hindered their inclusion in the current study.[32]

2.8 The proposed model

2.8.1 Justification for choosing the model

After reviewing all the different models and measurement s done for measuring the corporate reputation, and after analyzing the different stakeholders involving and engaging in the oil and gas sector. There were several observations that we found.

The main reason for existing different measurement models for reputation is due to the lack of consensus between scholars for a definite and precise definition for reputation.

All the models are so far relevant and overlapping in the majority of the dimensions covered.

Scholars and practitioners were taking in to consideration the previous work done and the new developed work is consistent and in the same tone with the previous ones,

There is no one model valid for all contexts. The differences rise from the divergence of the coverage area, the scope and the objective for measuring the reputation.

After analyzing the previous work found in the literature, 2 models were chosen for building our work on them. The rationale behind choosing 2 models is because the these models are the most complete and relevant to the context we will use it. Also, since the 2 models are completing each other and it will be better if we did an analogy between the 2 models and come up with a more complete model that will be more complete.

The 2 models satisfied the criteria described. They were validated by the literature review. For the Reptrak pulse model it was validated in the work done by Ponzi and Fombrun and demonstrated in their study the reliability, internal validity, nomological validity and cross-cultural validity of the RepTrak Pulse scale as a short-form measure of corporate reputation.

For Rayner model, it was the only study that discussed in details the drivers of the reputation and presented a comprehensive picture for each driver.

Then, we mapped all the relevant stakeholders for the oil and gas industry and their corresponding expectations from the companies operating within the oil and gas sector. We confirmed that all the expectations were covered by the dimensions constituting the two measurements. Then we checked that both the two models are validated and widely recognized among scholars and practitioners.

Although, the reputation quotient model is also an important measurement and was appraised by scholars in literature, but the drivers found in this model are the same of the other models we will rely. Additionally, the reputation quotient is based on six drivers and is missing explicitly the drivers of “innovativeness “and “communication and crisis management”.

2.8.2 Confusion in literature between corporate social responsibility and work place and environment

All the studies and the corporate websites for oil and gas companies are paying special attention for the corporate social responsibility issue, thus the chosen model should be clearly handling and addressing this issue.

The notion of CSR went beyond the environmental sustainability for the firms and started to care more about non-environmental issues such as practices regarding the employees, these new area of interest aroused some overlapping with another dimension mentioned in many measurement models for reputation. In a survey conducted by the Economist magazine, they subdivided the CSR in to three main categories:

The old one which is concerned with corporate philanthropy or the money given to the charitable causes to help the poor people

The second form of the CSR is the actions been taken by the company to overcome or reduce the legal and reputational risk.

The third form of CSR is the different kind of actions taken in order to be more appealing for the public such as adopting new technologies to reduce energy consumption, or reduce the emissions of greenhouse gases.

In the model we will be using, a precise definition should be put to both in order to avoid overlapping, confusion and redundancy of work. In the Reptrak pulse model, it cracked corporate social responsibility dimension in to two dimensions which are more rigorous and clear:

- Citizenship
- Governance

This division will overcome the problem of mixing up the corporate social responsibility practices with the practices related to workplace and environment. In the model we are proposing in order to be me more applicable and well-shaped to the oil and gas industry, we will separate the environment and will be put separately and standalone from citizenship, also the safety will be addressed separately since these areas are very sensitive and very crucial for analyzing the reputation in oil and gas and will make it easier allocating and choosing the right measures for each dimension.

Reptrak pulse model	Rayner Model	Final model
performance	Financial performance and long term investment value	Financial performance and long term investment value
Governance	Corporate governance	Corporate governance
	Regulatory Complicane	Regulatory compliance
Workplace	Workplace talent and culture	Workplace talent and culture
		Safety*
Citizenship	Corporate social responsibility	Citizenship
		Environment*
Products/Services	Delivering customer promise	Delivering customer promise
Innovativeness		Innovativeness
	Communication and crisis management	Communication and crisis management
Leadership		(Previously covered)

Table 2.5: Analogy between
Reptrak pulse and Rayner (2003)

<u>Note</u>: The Corporate social responsibility will be represented by the “citizenship” and “Environment “dimensions and any issues regarding the employees or workplace will be addressed in the “Workplace talent and culture”

2.9 Brief Description for each driver

1.Financial performance and long term investment

Does the business have a solid track record of financial performance with no surprises? What are its future prospects? Will it prove a good investment in the longer term? Could something throw the business on track and lead to a profits warning? Which stakeholders are most interested in the financial performance? How do they rate the business and what do they expect of it in the future? Are they provided with the information they need to maintain their trust? [1].

These are some question raised by the stakeholder concerning the financial performance of a company.

Most of the concerns are hold by the investors and the shareholders, since they are the most caring to see whether their contributions will have a profitable and a sustainable return in the present and the future or not. They are also interested at foreseeing all the risks the business is facing. Annual corporate reports primarily fulfill the immediate needs of shareholders and financial analysts but do not directly address what is important to stakeholders.[47]

According to the GRI g3.1 mentioned this indicator in full details. To satisfy this requirement, according to the GRI company should provide information about on three different areas:

i. Direct economic value generated
    a. Revenues
ii. Economic value distributed
    a. Operating costs Payments to suppliers, non-strategic investments, royalties, and facilitation payments
    b. Employee wages and benefits: Total monetary outflows for employees (current payments, not future commitments)
    c. Payments to providers of capital All financial payments made to the providers of the organization's capital.
    d. Payments to government (by country)
    e. Gross taxes
    f. Community investments
iii. Economic value retained

2.Corporate governance and leadership

In order for a company to exist, it has to be set up and registered with the appropriate company authority. Once registered, the company is regarded as a legal person, with legal rights and obligations. A company's existence and organization are continuously scrutinized through a well-established set of rules, laws, and policies that govern the way in which the company is run and controlled. This is known as corporate governance.[48]

Corporate governance is the framework which ensures accountability, fairness and transparency of the company.

Investors state that they still put corporate governance on a par with financial indicators when evaluating investment decisions.

Investors will often pay a premium for equity in companies with a good corporate reputation and robust governance because the risk is lower. McKinsey's 2002 global investor study found that, around the world, 73–78% of investors are prepared to pay a premium for companies exhibiting high governance standards.[7]

Stakeholders now expect total director remuneration, including stock options and performance assessment criteria, to be fully transparent so they can judge for themselves whether the performance of directors supposedly representing their interests and safeguarding their investment are doing a good job and merit their reward.[7]

3.Regulatory compliance

Going beyond minimal compliance, moving towards best practice in some areas by being an early adopter of new regulations or voluntary codes, can create competitive advantage and strengthen reputation. It can lead to being seen as a leader – not a laggard – in sector; Being regarded as an organization that doesn't wait to be forced into embracing emerging good practice building positive relationships with major regulators – who are, after all, key stakeholders; and this can be particularly valuable if you operate in a highly regulated sector.[7] There are demands that audit committees be composed entirely of independent non-executive directors, or at least a majority, who would select the external auditor and oversee its terms of engagement, thus ensuring that conflicts of interest are avoided.[7]

4.Workplace talent and culture

publish the summary findings of employee surveys; include data on staff turnover, training and development budgets and staff involvement in community projects. [7]

5.Safety (employees)

The oil and gas industry is having one of the highest injury rates between all industries. According to a report prepared by CDC (centers for disease control and prevention), between 2003 and 2010, the industry had the highest death rate in the United States, beating out all other industries for worker deaths. The majority of these deaths according to the U.S. Bureau of labor statistics are due to workers being struck by equipment, struck by vehicles, and occasionally a major catastrophic accident, like the BP refinery explosion in Texas in 2005, and the Deep-water Horizon oil rig explosion in2010.Therefore, it was better to split that driver from the "Work place talent and culture" driver. It is expected as well that the oil and gas companies will pay special attention to that issue and consider it one of the great challenges they have to handle.

6.Citizenship

Community engagement comes in many forms. It can include partnerships with global social organizations; construction and maintenance of infrastructure, such as roads, hospitals, and schools; training and educational efforts; or disaster relief. But whatever form it takes, the goal of these efforts for all natural-resources companies is the same: to make a lasting improvement in the quality of life of the communities in which they work.[43]

7.Environment

This driver is considered the most important among all the drivers, it involves also the higher risk to companies in case not managing properly. The boycott of ExxonMobil-owned service stations worldwide, masterminded by environmental pressure groups (including Green peace's Stop Esso campaign and Friends of the Earth), has rallied consumer opposition to the company's stance on global warming, its rejection of the Kyoto protocol on reducing greenhouse gas emissions and refusal to invest in renewable energy. The Greenpeace website offers free downloads of campaigning material such as stickers, placards and factsheets to help consumers to mobilize effectively. Although the campaign is not yet believed to have had a material impact on Exxon's revenues, the negative headlines it has generated in many territories have damaged the company's image in the eyes of the public and have resulted in the company being shunned by ethical investment funds. Demonized by campaigners as environmental enemy number one, Exxon stands in stark contrast to its rivals BP and Shell which both back Kyoto and are investing in renewable.[7]

8.Delivering customer promise

The final customers are the users of cars who purchase gas at the pump every week. I t is very hard to measure the sensitiveness of these customers to the reputation of an oil company. First, this is due to the fact that, at the pump station, one never really knows where gasoline comes from. Second, it is very hard to assess the extent to which people really care about the oil brand they buy, and sometimes the only triggers for purchase are convenience and location. [49]

9.Innovation

A joint research project involving Forbes magazine, Wharton and Ernst & Young found that innovation was the single most important driver in corporate value for durable manufacturing (Baum et al., 2000). They also found that customer satisfaction was tied to innovation rather than to market value [17].

Innovativeness is considered to be an important driver for reputation in some measures and part of this innovativeness comes from the products and services they provide, but in oil and gas sector, this will be different as innovativeness is considered to be the new processes the company adopt in order to decrease and enhance the environmental and social performance.

One of the advantages of Reptrak pulse model that it combines both formative and reflective measures, trust is very important in forming and shaping reputation but it is formed based on the fulfillment of other measures of the organization.

However, there are still significant shortcomings in the area of sustainable innovation. Most notable is that, while the scale of the aggregate commitment on new energy sources is impressive, its effectiveness is debatable. This is because none of the companies measures the impact of its efforts on new energy against the targets of the Intergovernmental Panel on Climate Change (IPCC). The challenge for the sector is to measure the impact of its innovations against the needs of society.[50]

10.Communications and crisis management

As the key to a good reputation is meeting stakeholder's expectations, it is vital to establish who the most significant stakeholders are, what expectations they have of the business and how they currently perceive the organization. Only then can gaps be on unearthed and work begins on correcting them. The starting point may be listing and prioritizing the business stakeholders, both internal (employers) and external (shareholders, investors, suppliers, customers, regulators, analysts, insurers, regulators, government etc.). The relative importance of stakeholders will vary between sectors. For example, in heavily regulated sectors such as financial services the regulator is likely to be a key stakeholder. It also is vital to consider a sufficiently broad range of stakeholders to ensure that no major interest group is neglected, as the sole omission may prove to be the source of an unidentified killer risk. Their expectations depend on the sum of their perceptions and their representations. As reputational risk is a social construct, their expectations on reputational risk-management are also a social construct. The main characteristics of the context for the stakeholders have been identified, the main focus should be on key players: those critical stakeholders with whom it is vital to maintain an active two- way dialogue so that what they are thinking about the business can be continuously tracked as well as what they expect of you, both now and in the future. Only in this way can a business truly identify not only its threats and also its opportunities to create competitive advantage. [1]

In a crisis the demand for information increases drastically and it is important for the company to handle the flow of information. They have to respond rapidly to the incident and regularly provide new and accurate information. Bad information, which may be insufficient or incorrect, can aggravate the crisis for a company Larsson.(2008) [a story of environment incident] .Oil and gas companies are always communicating to their companies nowadays to be responsible, social and conscious company and taking responsibilities concerning environment and social impact. In a time of crisis, those companies should show evidence on being responsible by not denying their responsibility and blaming others, they should also declare corrective actions concerning the negative consequences that would occur in the environment and at the same time should show to their stockholders their financial situation and keep control on the costs charged. The chief executive officer CEO role is also very obvious during crises times and very important to be a good role model for the company since the CEO's decisions affect the company's financial success.

3. Practical model

3.1 Introduction

In this section we'll review the mechanism we followed for developing the model elements we selected in order to perform the content analysis. Then , we'll move to the methodology used to perform the content analysis and will end with description of the model elements and illustrating in more details how did we perform the content analysis.

3.2 Selection of the model elements

Schomaker (1997)[51] suggests that indicators should be SMART: specific, measurable, achievable, relevant and time-bound. This implies that an indicator should be clearly and unambiguously defined, be measurable in qualitative or quantitative terms, be achievable in terms of the available resources, be relevant for the issue at hand and be sensitive to changes within policy time-frames.[52] OECD (2001, p. 203) [53] offers just three selection criteria: policy relevance, analytical soundness and measurability. While, Riley (2000)[54] suggests that indicators should ideally have the following properties: universality (applicable to many areas/situations and scales of measurement), portability (repeatability and reproducibility), sensitivity to change, operationally simple, inexpensive, already existing with historical comparative data, and have wide (international) use. For this reason guidelines were reviewed along with the literature to determine the most significant issues within each driver and then those sub drivers will be broke down in to elements that will constitute the search items within the reports.

It is important to mention that it is very difficult to include all the indicators that are relevant to companies since the amount of work will be widely expanded and this would be beyond our capabilities. But we'll figure out the most significant elements and assure their presence.

Key elements were determined for each area by reviewing relevant theories and the best practices suggestions such as the Global Reporting Initiative guidelines and the IPIECA. Below there is a description for the GRI and the IPIECA guidelines which we are from the main sources we rely on for developing the practical model we used in our Study

3.2.1 Global reporting initiative

The Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines (version 3.1) served as an appropriate starting point for the development of the coding structure because the GRI framework is global, has international acceptance (Farneti & Guthrie, 2009) [55], is considered a rigorous framework for the application of triple bottom line reporting (Lamberton, 2005)[56] and was drafted by a wide variety of experts after stakeholder consultation (Reynolds & Yuthas, 2008) [57]. Furthermore, the GRI guidelines are readily available on the GRI's website. These guidelines are intended for all types of companies,8 allowing for the derived coding structure to be used for different industries (Willis, 2003)[58]. Finally, the GRI guidelines provide a structured overview of the base content of CSR reporting. The base content is divided into six areas (economic, environment, human rights, labor practices and decent work, product responsibility, and society) and several other items.[60]

As mentioned by Morhardt et al. , the GRI Sustainability Reporting Guidelines 2000 “are the most detailed, comprehensive, and prescriptive guidelines to-date” and to follow them meticulously would be a tremendous performance by any company.[59]

3.2.2 IPIECA

IPIECA is the global oil and gas industry association for environmental and social issues. IPIECA was formed in 1974 following the launch of the (UNEP). IPIECA is the only global association involving both the upstream and downstream oil and gas industry on environmental and social issues. IPIECA’s membership covers over half of the world’s oil production. IPIECA is the industry’s principal channel of communication with the United Nations. IPIECA guidelines are intensively used along with GRI in reporting.

3.3 Variables

3.3.1 Introduction

The qualitative assessment does not cover the quality of the information included in terms of excellence and best practices but rather provide if the included information are comprehensive by their presence and giving an overall picture about a specific element. For each category there will be a score card based on a scale where a number will be given for each element determining the kind and the degree of disclosure. At the end there will be a score for each item of disclosure and also for each company. Needless to say that for some items it is not required to disclose the three type of information. For some other elements, they will have different search protocol which will be defined subsequently in the referred sections. Below there is a table by the 32 key elements that were eventually chosen for the purpose of the content analysis

3.3.2 Drivers

These are the 9 main drivers we identified in the literature review.

3.3.3 Sub-drivers

Each driver is cracked to sub-drivers that are covering the important issues within each driver. For example: the corporate governance and leadership driver will be represented by two main clusters, “Procedures and policies for sustainability” and “Stakeholder engagement “

3.3.4 Elements

The elements are the items we are going to look for inside the sustainability reports

3.3.5 Reference

This column will be for the reference we cited the elements of the model. There were several sources we depended on to finalize the model . Among those references , the most used were, Global Reporting Initiative g3.1 guidelines and the oil and gas supplement for the same guidelines, the global oil and gas industry association for environmental and social issues IPIECA guidelines .

No	Driver	No	Sub-driver	No	Element	Reference
1	Financial performance and long term investment value	1.1	Future growth	1	Future plans considering climate change	GRI G3.1 (EC2)
2	Corporate governance and leadership	2.1	Procedures and policies for sustainability	2	Sustainability management	GRI G3.1 guidelines, P.23
				3	Sustainability linkage with performance measurements	GRI G3.1 guidelines, P.23
		2.2	Stakeholder engagement	4	Approach used	GRI G3.1 guidelines. P.24
3	Regulatory compliance	3.1	Corruption	5	Mitigating risk	2010 Tomorrow’s Value Rating of the world’s largest oil and gas companies: Summary report, GRI and IPIECA
				6	Revenue transparency	GRI, EC2
				7	Commentary added to	GRI, OGSS-G3.1

					indicate submissions to EITI as source of documentation.	
		3.2	Approach for sustainability reporting	8	External audits , Third party sustainability evaluations and partnerships.	Rayner, managing reputation risk (2003) [7]
4	Workplace talent and culture	4.1	Employment	9	Workforce diversity and inclusion	IPIECA,SE15
				10	Employee benefits and programs	Rayner,managing reputation risk(2003) [7]
		4.2	Labor/management relations	11	workforce engagement	IPIECA
				12	performance review process	Rayner,managing reputation risk(2003) [7]
		4.3	Training and development	13	Training and development	Quantitative suggested measurement by the GRI, LA10
5	Safety	5.1	General safety topics	14	*Injuries and accidents*	GRI g3.1(LA7)
				15	Workforce health	IPIECA, HS2
		5.2	Risk mitigation	16	Education and training	GRI , g3.1 LA8
6	Citizenship	6.1	Human rights	17	Human rights due diligence	IPIECA, SE8
		6.2	Human capital	18	Health	(Carin Labuschagne et al.,2003) [61]
				19	Education	(Carin Labuschagne et al.,2003) [61]
		6.3	Productive capital	20	Infrastructure	(CarinLabuschagne et al.,2003)[61]
				21	Local business partners	GRI
7	Environment	7.1	Climate change	22	Reducing impact	IPIECA and GRI
				23	Efficient Energy use	GRI, G3.1, EN5
		7.2	Oil spills	24	Oil spills	GRI,OGSS g3.1
		7.3	Emergency preparedness	25	Emergency prevention programs	GRI OGSS-G3.1
		7.4	Wastes	26	Waste management	(GRI, IPIECA)
		7.5	Biodiversity	27	Fresh water management	IPIECA
				28	Biodiversity and ecosystem services	IPIECA
8	Delivering customer promise	8.1	Customer satisfaction levels	29	Pricing levels and customer saving	Reyner, managing reputation risk (2003)[7]
		8.2	Product stewardship	30	report actual improvements to fuel and products.	GRI G3.1(OGSS), EN26
				31	Volume of biofuels produced and purchased meeting	GRI G3.1(OGSS), OG14

					sustainability criteria	
9	Innovativeness	9.1	R&D	32	Innovation process	2010 Tomorrow's Value Rating of the world's largest oil and gas companies [50]

Table 3.1 Sub-drivers and Elements
of the model

3.4 Qualitative assessment

3.4.1 Content analysis

According to Mathews (1997, p. 504) these content analysis studies are "valuable as a record of the current state of organizational disclosure, and therefore, of the distance that remains to be travelled along the path to full accountability by economic actors." [39] . To date, many of the content analysis studies have focused on the identification of the disclosed CSR items (e.g., Al-Tuwaijri et al., 2004 [65] ; Branco & Rodrigues, 2008 [66] ; Jose & Lee, 2007 [67]) or on the measurement of the extent (number of words, sentences or pages) of CSR disclosure used to address the different CSR items (Campbell 2004 [68]). According to Beck et al. (2010)[63] ,these studies could be used to assess the completeness of reporting, i.e., the number of items disclosed.

There is a large and complete literature on corporate social, ethical and environmental reporting (Gray, Kouhy and Lavers, 1995 [64] ; Mathews, 1997) that uses content analysis as a method to gather data on disclosure in annual reports for twenty years (e.g., Guthrie and Mathews, 1985; Guthrie and Parker, 1990).[62]

Traditionally, content analysis has been used in the SER literature to evaluate the extent of disclosure of various items in annual reports of listed companies .This literature has tended to report the level of disclosure for the sustainability reports for companies operating in oil and gas.(e.g., energy usage, minority interests, labor practices, corporate governance, etc.).[62]

3.4.2 Selected methodology for content analysis

It is suggested in the literature that in order to have a more comprehensive picture that can meet the needs of the stakeholders, companies should report by providing information on their

(i) aims and intentions, (ii) actions and (iii) subsequent performance concerning different CSR issues. (Adams & Harte, 2000 [69] ; Adams, 2004[70]; Adams, Hill, & Roberts, 1995[71]; van Staden& Hooks, 2007[72]).[60]

Comprehensive reporting', as interpreted in (Lies Bouten et al., 2011) [60], requires companies to disclose three types of information for each disclosed CSR item: (i) vision and goals (VG), (ii) management approach (MA) and (iii) performance indicators (PI). These three information types are based on Robertson and Nicholson (1996) [73] and on Vuontisjarvi (2006) [74], and they refer to disclosures of (i) stated aims and values, (ii) specific actions and (iii) actual performance in a quantitative way. The developed content analysis structure gives a clearer indication of the extent to which an organization is accountable to its stakeholders (Mathews, 1997).

To converge the gap between reporting and actual performance, several prior studies have suggested a form of CSR reporting, which we will call comprehensive reporting. According to Robertson and Nicholson (1996), the 'ideal model' of CSR disclosure combines three hierarchical disclosure levels to close the gap between rhetoric and action. These disclosure levels are (i) 'General Rhetoric', which covers the corporate recognition of the value of CSR; (ii) 'Specific Endeavour', which consists of CSR activities (iii) 'Implementation and Monitoring' of CSR programs. Companies that publicly set targets and report on their progress made have reached this level.[60]

Overall, prior studies suggest that CSR reporting should not only provide statements of commitments but should also elaborate on the fulfillment of these commitments and the achieved outcomes. Such reporting furthers the discharging of social and environmental accountability because it enables stakeholders to gain an overall understanding of a company's social and environmental performance. (Lies Bouten et al, 2011)[60]. From all the previous, we concluded that in order to have a comprehensive reporting that will satisfy the needs of the different stakeholders groups, companies should report on three different set of information:

1. stated aims and values
2. the management approach they followed and
3. actual performance in a quantitative way

That framework will be used will depend on searching for information which satisfy any of the three information disclosure categories which have been previously defined as important to have a comprehensive reporting approach and to have a full picture about each and every element. Those three elements are:

1. Vision and aims
2. Management approach
3. Performance indicators

3.4.3 Coding structure

The qualitative analysis will be divided in to three main clusters. Inside each of the clusters, there will be a scale consisting of numbers. Each number will account for the degree that a certain element is described within the report. The scale will be applicable for the elements inside the model. For some elements, there will different scale for evaluation which will be stated.

3.4.3.1 Stated visions and aims

Vision and aims	
0	N/A
1	Generic (e.g. enhance sustainability, development of the work force, human rights protection)
2	Qualitative target (e.g. work on developing a human right policy,
3	Quantitative target (With time and value boundary)

Table 3.2 : Vision and aims general score card

3.4.3.2 Management approach

This can account for the policies, mechanism , procedures and actions the company is following for covering the element being discussed.

Management approach	
0	N/A
1	Generic (ex. Development of local people, Investment in education, Following safety procedures,etc)
2	Detailed+ Initiatives /For evidence of good practices, a good approach is to include different case studies within the sustainability reports or at least to refer to it, so people interested can find it which can demonstrate what they claim they do

Table 3.3 : Management approach general

3.4.3.3 Performance indicators

These are quantitative measures that measure the impact and the results that are achieved. Whenever it can be provided, is the most desirable and comprehensible.

Performance indicators	
0	N/A
1	Absolute numbers without any reference to compare
2	Benchmarked number among years (Trend)
3	Benchmarked with external reference

Table 3.4 : Performance indicators
general score card

3.5 Structure of the content analysis

Starting from the reputation drivers we have determined as a base for our evaluation model, we moved afterwards to the next step in which we had to break down the drivers in to smaller elements to be measured in the sustainability reports we are going to analyze. To arrive to this step we reviewed the best practices in the literature like the GRI g3.1 guide lines, which is followed by most of the oil and gas companies in their reporting. We reviewed also the guidelines for the oil and gas industry association for environmental and social issues (IPIECA) which is also used in reporting among oil and gas companies. Further, the selection of the model variables was influenced by best practices provided from literature and reports prepared by consultancy companies and other companies experienced in the sustainability issues.

In the next section, we are going to provide a description for the 32 elements that constitute the model. We are going to give a brief description for each element.

The search protocol will be also explained if it is different from the general approach.
Within each item to be measured, we'll disclose an example quoted from the analysis we did, so we can clarify more how did we picked up the related text from the document. Sometime, it is difficult to interpret some phrases in the documents being reviewed, in this cases we tried to relate it to the nearest element it can be attached to it.

3.6 Description of the elements

The formatting and the numbering in this section will follow the same order of the table describing and listing the elements

1. Financial performance and long term investment value

The majority of the financial concerns for a company are fully covered in the annual reports published by companies and therefore we have to focus on the items that are not well addressed by the companies and can be included in their sustainability reports.

Only one element we are going to include in this section which is related to the financial risks due to climate change and how the company can manage their growth strategies under the increasingly constraints and pressure found.

The idea why we chose this element is because this risk is the most promising risk the companies in oil and gas are currently facing. This issue is very important to the shareholders since the stakeholders wants to assure the growth of their business. Companies in oil and gas will not be able to operate in the same way they are operating nowadays since the constraints and regulations that are increasingly presented are concerned with the issue of climate change and suggesting that companies should decrease the level of emissions of green houses gases specially carbon dioxide. To apply these regulations the oil and gas companies will have the risk that they can't produce the amount of gas they produce now, therefore they have to find alternative ways for producing energy that have less emissions and consequently less impact on the environment. The future plans for growth of companies should take this in to consideration and carefully calculate these risks and their implications.

1.1. Risks due to climate change

1. Future plans and climate change risks

"Future plans to cope with the difficult economic times and the environmental constraints, financial implications and other risks and opportunities for the organization's activities due to climate change." [75]

As governments move to regulate activities that contribute to climate change, organizations that are directly or indirectly responsible for emissions face regulatory risk through increased costs or other factors impacting competitiveness. Limits on greenhouse gas emissions can also create opportunities for organizations as new technologies and markets are created. For this purpose it is important for the company to report about the opportunities and risks due to this and report how they foresee them, and finally to report if the management has quantitatively estimated the financial implications of the climate change.

The search protocol

Management approach: The actions taken to mitigate the risk

Performance indicators Report whether management has quantitatively estimated the financial implications (e.g., cost of insurance and carbon credits) of climate change for the organization. Where possible, quantification would be beneficial. If quantified, disclose financial implications and the tools used to quantify.

Score	Vision and aims	Management approach	Performance indicators
0	N/A	N/A	N/A
1	Report whether the organization's senior governance body considered climate change and the risks and opportunities it presents to the organization.	Provide general approach for mitigating and handling these risks	Indications for growth rates or improvements in climate change strategies
2	Stating the risks and opportunities in a qualitative way	Sources with lower level emissions such as natural gas, and technologies that prevent carbon dioxide from being emitted into the atmosphere (e.g., carbon capture and storage).	Provide a price for carbon used for economic assessments.(Impact of CO2 price (EUA/CER) on Project IRR
3	The quantitative targets to be achieved		The financial impacts of air quality and climate change regulations couldbe material. This is highly dependent on the company structure and on the outcome of potential legislation.

Table 3.5 : Score card for element 1

Shell	Statement	Evaluation
Vision and aims	Stating the risks and opportunities of the climate change in the CEO letter and other places inside the report	2
Management approach	We took the final investment decision in 2012 on two natural gas projects in Nigeria that will help to reduce flaring. We also decided to go ahead with the Quest CCS project in Canada that will reduce CO2 emissions from our oil sands operations.	2
Performance indicators	Setting a price for a carbon for assessing future investments	2

A practical example for coding

2. Corporate governance and leadership

Description

Concerning stakeholders, there is no a single group that has a monopoly interest in corporate governance, but each group wants to make sure about the "tone setting" of the organization to run the organization effectively, not only to maximize shareholder value, but also to embrace the legitimate expectations of employees, customers and other stakeholders such as local communities , governments. . Stakeholders want assurance that their stake in a business is in safe hands; they want to feel confident that the management is fully in control and can create value in a way that will not subsequently backfire and rebound on reputation; they want management to be held accountable if they fail or fall short of the mark. [7]

In the same book "Managing reputation risk" these requirements and expectations were highlighted concerning corporate governance and these points will be the main points we will care about in our analysis:

i. Responsible, accountable and dynamic leadership
ii. Full and transparent disclosure
iii. Availability and responsiveness
iv. Appropriate remuneration and policies

v. Appropriate policies in place for social, ethical and environmental impacts; implemented and compliance monitored.

The starting point for corporate governance as simply is setting the tone from the top. The first step is naturally to ensure that the board itself is operating effectively and contains the right people. Therefore, our first thing we will look for in this element will be information about the board members. In this era of intense stakeholder scrutiny, businesses would be well advised to ensure that their boardrooms represent the customers they serve and the other major groups they impact. They should deliberately set out to achieve the right blend of skills and experience, the right gender and ethnic mix blend, and the right combination of personalities among their executive and non-executive directors to optimize board performance. [7]. Also, the balance of power and respective roles and responsibilities of the directors; stakeholders want to understand the dynamics of the boardroom. The remuneration policies and the bonuses for the directors are among the things that reflect the accountability and transparency of the board.

Compulsory information

However, reporting on revenues, operating costs, employee compensation of members of the board of directors and the composition of the board is fully covered in the mandatory International Financial Reporting Standards (IFRS) and consequently cannot be considered as voluntary(Corporate social responsibility reporting) . The information concerning the board members and the remuneration policies are communicated through the annual reports, or stand alone reports and they only include brief description in their sustainability publications if they did.

Therefore, it will be out our scope of work since all the companies should include this kind of information

To give an example on how we will tackle this driver, all the companies are obliged to disclose information about remuneration policies, but what we'll check is the link between remuneration policies and the sustainability performance and if these links are explicit or not.

Afterwards, the stakeholders needs to see a compelling vision and strategy What we will focus in our analysis will be the business's long term strategy since lacking these information can lead to losing confidence, subjected to the risk of being perceived a s a short term profit oriented and this can be very dangerous for a company operating in the oil and gas field . "The board should disclose its policy and performance in connection with environmental and social responsibility and the impact of this policy and performance on the firm's sustainability. (Disclosure Guidelines on Socially Responsible Investment and the guidelines of the Global Reporting Initiative encourage disclosure of governance mechanisms in place to support improvement of social and environmental performance.)[77] . As we mentioned before that the corporate governance is a big topic that is addressed in separate or inside the annual reports of the companies which are obliged to disclose information about different aspects concerning the corporate governance.

To be relevant to the context of work, we'll cover two points under the corporate governance driver which we found important and relevant to the context of model.

2.1 Procedures and policies for sustainability

That sub-driver will be divided in to three elements:

2.Sustainability management

It is important to check that the concerns of stakeholders are included in the report and the procedures and policies that address the sustainability issues clear and implemented. A good approach for companies is through giving evidence and examples for their sustainability strategies.(e.g. internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation. Statements revealing the long term objectives concerning sustainability and how to achieve them)

Search protocol

The vision and aims will be represented by the general scale work previously determined

Score	Management approach
0	N/A
1	Check for the existence of committee for sustainability management and underline its role **or** existence of sustainability management systems and their implementation **or** policies in place concerning sustainability
2	Demonstration of the mechanism of operation by providing evidence and case

Table 3.6 : Score card for element 2

Performance indicators:

It is not expected that companies will disclose performance indicators related to that element, since still this element is diversified among companies and there is no general agreement on how to approach it. Anyway, quantitative measurements always give more credibility and show more accountability. Therefore, for this area the score will be either 0 or 1.

Example from the companies:

Gazprom	Statement	Evaluation
Vision and aims	Introducing ISO 14001-compliant environmental management system At 28 subsidiaries.	2
Management approach	The Board of Directors regularly considers sustainability-related issues, such as energy saving and energy efficiency, environmental protection, industrial safety, Group social programs, etc. Gazprom Group instructed the Management Committee to arrange for the introduction of energy savingtechnologies and equipment with a view to reducing specific consumption of fuel and energy resources. .In 2010, within the framework of implementing the Environmental Policy and introducing the EMS system,OAO Gazprom adopted the Comprehensive Environmental Program for 2011–2015.	2
Performance indicators	N/A	0

A practical example for coding

3.Sustainability linkage with performance measurements

This measure gives some direction and indication whether a certain company is taking the sustainability topic as serious as their reporting is showing or they are just managing it just for satisfying their stakeholders.

Search protocol

This element will be concerned with the performance indicators part.

Performance inidicators	
0	N/A
1	Linking the sustainability results with performance measurements
2	1+Quantitiative information

Table 3.7 : Score card for element
3

Shell	Statement	Evaluation
Performance indicators	In 2012, sustainable development continued to account for 20% of the company scorecard, which helps determine the annual bonus levels for all our employees, including members of the shell executive committee. For the EC in 2012, sustainable development measures were split evenly between shell's safety performance and targeted measures covering operational spills, energy efficiency and use of fresh water.	2

A practical example for coding

2.2. Stakeholder engagement

The other point we'll cover is related to stakeholders. The topic is very broad and usually the companies are giving attention to this point in their sustainability reports but the approach each company is following could be different. The GRI G3.1 guidelines define some aspects that should be clearly shown in the reporting process. We'll build on these items and develop the search protocol for that element. Our main theme will be the clarity of disclosing the information describing the stakeholder engagement.

4.Approaches to stakeholder engagement

In this element we'll investigate the procedures for engaging the stakeholders in the company activities and in preparing the sustainability report topics. This element will be concerned only with the management approach.

Search protocol
Management approach
the existence of any of these points will account for one point score

1. The tools used to communicate with the stakeholders
2. Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.(GRI)
3. The organization should indicate whether any of the engagement was undertaken specifically as part of the report preparation process.
4. The summary of the board meetings and results of these meetings and how they arrive to the final decisions.

Company	1	2	3	4	Score
Eni	X	0	X	0	2
BP	x	x	x	0	3
Shell	x	0	x	0	2
Exxon	x	0	x	x	3
Statoil	x	0	x	0	2
Total	0	x	0	0	1
Petrobras	x	x	x	x	4
Chevron	0	0	x	0	1
China petroleum	x	x	x	0	3
Petronas	0	0	x	0	1
Sinopec	x	x	x	0	3
Gazprom	x	x	x	X	4
Valero	0	0	0	0	0

Table 3.8 : Score card for element 4

3. Regulatory compliance

Description

Stakeholders requirements and expectations for this drivers are centered around being in full compliance with relevant laws and regulations, goes beyond the basic and minimum compliance and embraces good practices that mitigate risks and boosts reputation [7]

Is the business seen as law-abiding? Does it comply with the spirit? Not just the letter of relevant laws and regulations? Does it comply with its own internal standards, policies and procedures? [1]

Challenges

With most oil and gas produced in third-world countries, the industry is far more exposed to the risk of corruption than other kinds of business. To cite one example, Nigeria, Africa's biggest oil producer, and a place where western oil majors such as Shell, Total and ENI have been operating for decades, comes 143 out of 182 in Transparency International's 2011 corruption perception index. Angola, another big African crude exporter where BP has a number of big projects, is at 168. Many oil companies have instituted rigorous internal procedures to root out corruption. But Jonathan Middup, UK Head of Ernst & Young's anti-bribery and corruption team, said they often got their priorities wrong. "Companies spend a disproportionate amount of time and effort on compliance around corporate hospitality and facilitation payments," he said, "and not enough on the issue of third-party due diligence – what agents, intermediaries, introducers and joint-venture partners are doing in their name.[78]

Oil and gas companies contribute large sums of money to the fiscal revenue streams of host governments. Revenue transparency is a mechanism for disclosing information about revenue flows from oil and gas activities in resource-rich countries. The best-known effort aimed at promoting and standardizing revenue transparency is the Extractive Industries Transparency Initiative (EITI), under which: companies within a country report on their material payments to the host government; the host government reports what it receives; and a public report on company payments and government revenues is issued. Business can also have influence through participation in public policy debates and input to legislative developments. Engagement of this sort is both legitimate and necessary, but transparency of political engagement and financial contributions is an important part of maintaining trust with a variety of stakeholders [79]

This driver will focus mainly on four main sub-areas with paying substantial attention to the corruption and bribery risk and see if companies cover that risk in appropriate way. The GRI G3.1 and the IPIECA guidelines will be the main reference for this driver.

Four main points will be constituting this driver where the first three are considered among the hot issues of oil and gas that can have severe reputational damages if any of them were not managed properly and in a legislative way and the fourth point can be

3.1. Corruption

Description

How this risk is being managed (current status and future plans) Basic compliance to best practice (Guidelines used and where do they stand in each one of them) Stating that a company complies with voluntary guidelines and standards on CSR such as the Global Compact; the OECD Guidelines for Multi-national Enterprises; the Universal Declaration of Human Rights 193; the AA1000194 standard on social, and ethical accounting, auditing and reporting; SA8000 on work place conditions; the CERES principles on sustainability196; the Ethical Trading Initiative base code; the Good Corporation charter 198;the International Labor Organization (ILO) Conventions; or the Global Reporting Initiative will provide evidence to the stakeholders of the companies serious intent. [50]

5.Mitigating risk

Describe policies, programs and procedures to prevent bribery and corruption, and mechanisms to monitor compliance. Companies should refer to mechanisms to promote anticorruption policies and programs, including information, resources and tools for raising employee awareness. [50]

Search protocol

Performance indicators	
0	N/A
1	Absolute quantitative data (no. of people involved in anti-corruption trainings, No. of hours training on anti-corruption and the amount invested)
2	Bench marked with previous years
3	Fines charged due to non-compliance with laws and regulations (Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.) GRI EN28

Table 3.9 : Score card for element 5

Eni	Statement	Evaluation
Vision and aims	Co-presidency of the B20"transparency and anti-corruption" task force for the next B20-G20 in Russia	2
Management approach	Starting from the zero tolerance of corruption expressedin the Code of Ethics, in November 2009, the companyvoluntarily developed its own anti-corruption compliance program and adopted specific internal regulations.	2
Performance indicators	ANTI-CORRUPTION TRAININGIN THE THREE-YEAR PERIOD 2010-2012	1

A practical example for coding

6.Revenue transparency

The oil gas supplement GRI G3.1 added an item that is very important which is the paid money to the governments:

Report data on payments to government by country. In particular, report material benefit streams including:

1. Host government's production entitlements;
2. National state-owned company production entitlements;
3. Profits taxes (to all levels of government);
4. Royalties;
5. Dividends;
6. Bonuses (such as signature, discovery, production);
7. License fees, rental fees, entry fees and other considerations for licenses and/or concessions; and
8. Other significant benefits to host governments.

Report any restrictions by host governments in terms of detail and level of aggregation. [75]

Example from the companies:

Eni report the money they pay to local governments in countries which they operate detailed to each country and broke down to include Revenues, Royalties and taxes.

7.Commentary added to indicate submissions to EITI as source of documentation. Report countries of operation that are either candidate to or compliant with the Extractive Industries Transparency Initiative (EITI) , including full disclosure of the implementation process of the initiative and main actions when operating.

Search protocol

Score	Vision and aims	Management approach	Performance indicators
0	N/A	N/A	N/A
1	Available	Available	Report the countries already compatible with the initiative

Table 3.10 : Score card for element 7

3.2 Approach for sustainability reporting

This sub-driver will investigate whether the companies are providing external and third parties evaluations for their sustainability reports. The rationale behind choosing element is because this step is giving more reliability and increase the trust worthy of the company. Providing an external evaluator for sustainability reporting is an increasing trend across companies.

8. Method of sustainability reporting

Search protocol

The search protocol for this element will be different in terms of search criteria. The most important factor for stakeholders to consider is the verification of the report and the procedures followed to arrive to the final version are reliable reviewed by trustworthy committees.

We are going to give ranks to the reporting approach according to the method being implemented.

Performance indicators	
0	N/A
1	External Auditing firm without considerable feed back
2	External Auditing firm with considerable feed back Or external professionals paid by firms providing feedback
3	External auditing firm+ External panel
4	NGOs(AnsKolk, 2004)

Table 3.11 : Score card for element 8

4. Workplace talent and culture

Description

The objective of this driver is to ensure the safeguard and enhancing the reputation by treating employees well and creating a working environment that allows them to give of their best. To achieve this we consider the following issues which we found most important in the literature and the most practiced guidelines. The indicators covered by the GRI guidelines will be enough in this topic since the GRI is including on internationally recognized universal standards such as:

1. United Nations Universal Declaration of Human Rights;
2. United Nations Convention: International Covenant on Civil and Political Rights;
3. United Nations Convention: International Covenant on Economic, Social, and Cultural Rights;

4. Convention on the Elimination of all Forms of Discrimination against Women (CEDAW);
5. ILO Declaration on Fundamental Principles and Rights at Work (in particular the eight core Conventions of the ILO. [75]

To meet the expectations of the stakeholders, the driver will be subdivided to

4.1 Employment

9. Workforce diversity and inclusion

Ensuring that companies are following appropriate policies and taking actions for ensuring diversity and inclusion of their employees.

Check for existing of indicators like:

1. Staff turnover, total number and rate of new employee hires and employee turnover by age, group, gender, and region. (GRI, LA2)
2. Breakdown of workforce by :Race, gender, disability, geographic area. (GRI, LA1)

Search protocol

Performance indicators	
0	N/A
1	Absolute measures representing employees diversity
2	Trend across years
3	Employee turnover

Table 3.12 : Score card for element 9

Exxon Mobil	Statement	Evaluation
Vision and aims	Build a diverse workforce by ethnicity, gender and region	1
Management approach	ExxonMobil interns to assist them in completing their college degree. In 2012, we provided60 technical scholarships, an increase of 50 percent from 2009. From a U.S. recruiting perspective, our minority representation of management and professional new hires was 31 percentin 2012. Based on U.S. Equal Employment Opportunity Commission reporting, minorities made up	2

	approximately 24 percent of our U.S. workforce and about 16 percent of officials and managers in 2012.	
Performance indicators	e.g. 2012 Workforce by Geographic Region	2

A practical example for coding

10.Employee benefits and programs

This element will represent the employee welfare and the investigation of this element will focus on issues such as payouts, tangible benefits given to the employees and their siblings.

Search protocol

Performance indicators	
0	N/A
1	Absolute quantitative data for describing different programs and beneficiaries .
2	Compared to a bench mark (trend across years)
3	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.(GRI, EC5

Table 3.13 : Score card for element 10

Eni	Statement	Evaluation
Vision and aims	Our constant attention to our own people is also demonstrated by the welfare program, which aims to facilitate work-life balance.	1
Management approach	2012 saw a strengthening and expansion of the services offered to families through the summer initiatives designed to support them during the school holidays, and services to help with work life balance, such as the Company nursery which currently caters for 60 children in the crèche and 108 in the infants' school	2
Performance indicators	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.(GRI, EC5)	3

A practical example for coding

4.2 Labor/management relations

This sub-driver will be dismantled to two elements

11.Workforce engagement

Employee engagement is a workplace approach designed to ensure that employees are committed to their organization’s goals and values, motivated to contribute to organizational success, and are able at the same time to enhance their own sense of well-being.

Performance indicators	
0	N/A
1	Input for developing workforce engagement (e.g. investments)
2	Quantitative measurements for the output of these programs
3	Quantitative measurements covering employee satisfaction

Table 3.14 : Score card for element 11

Eni	Statement	Evaluation
Vision and aims	N/A	0
Management approach	The Cascade program, targeted at all Eni people with the aim of communicating the Company’s strategies by business area, was run for the sixth time in 2012. The level of general satisfaction with the initiative was high and growing compared to 2011 (up 1%).	2
Performance indicators	Indicators provided for “Involving people” (People involved in the cascade program” and their satisfaction percentage	3

A practical example for coding

12.performance review process

A performance appraisal is a systematic and periodic process that assesses an individual employee's job performance and productivity in relation to certain pre-established criteria and organizational objectives. Other aspects of individual employees are considered as well, such as accomplishments, potential for future improvement, strengths and weaknesses, etc. [80] [81]

Search protocol

Vision and aims		Performance indicators	
0	N/A	0	N/A
1	Disclose any information showing future plans or intentions	1	Quantitative information about the no of people involved, the frequency of evaluation

Table 3.15 : Score card for element 12

Eni	Statement	Evaluation
Vision and aims	with the aim of further extending the use of "Feedback 360° " in 2013.	1
Management approach	In 2012 further progress was made on implementation of the "Feedback 360" process, aimed at increasing participants'awareness of their own behavior, seeing it from the viewpoint of managers, peers/colleagues and partners. During 2012, thanks to the availability of multilingual material and support systems, personnel working abroad were also involved	2
Performance indicators	**Eni** extended performance assessment to 96% of directors and senior managers and 52% of managers/supervisors and young graduates, with an overall coverage of 55%.	1

A practical example for coding

4.3Training and development

13. Training and development

This element will be concerned with the trainings devoted to increase the work and technical skills for the employees and help in their development an excel in their career life.

This element can include performance indicators such as :

Average hours of training per year per employee by gender, and by employee category. (quantitative suggested measurement by the GRI, LA10)

Search protocol

General with a small change in the performance indicators area

Performance indicators	
0	N/A
1	Absolute quantitative data for describing different programs and beneficiaries.
2	Compared to a bench mark (trend across years)
3	Impact achieved by training (Increasing productivity of employees,etc)

Table 3.16 : Score card for element 13

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Total	Statement	Evaluation
Vision and aims	Goals for 2013: 3,000 days of training for operators. 4,000 days of technical training, including 2,500 in Dunkirk. More than 500 days of training with our local partners, in cooperation with the Chamber of Commerce and Industry.	3
Management approach	Total Refining and Petrochemical Company (SATORP) joint venture has hired 25 young Saudi engineers and provided them with classroom training at the IFP School in France as well as hands-on experience at Total refineries in Belgium, France, Germany and the Netherlands	2
Performance indicators	The OLEUM	1

	Training Center in Dunkirk Takes Off In 2012: 4,000 days of training provided. More than 5,000 room nights reserved in the region's hotels	

A practical example for coding

5.Safety (Employees)

The safety of employees could be addressed along with the concerns of the work place and culture but due to its importance in oil and gas but since the oil and gas industry is always subjected to high risk in terms of safety due to the hazardous operations especially in the upstream, it was better to be discussed separately.

The points below in nutshell will cover the vision and the goals of a company concerning the safety of the employees, the actions being taken and finally the performance indicators which demonstrate the effectiveness in handling this issue.

5.1General Safety topics

14.Injuries and accidents

The company should provide information on this aspects Report regional breakdown and total of injury, occupational diseases, lost days, and absentee rates. Report fatalities in the reporting period by gender, using an absolute number, not a rate. Break down fatalities by cause (e.g., road transport, helicopter transport, assault, construction activities) and explain the measures taken to avoid future fatalities.

Search protocol

Vision and aims :E.g. zero fatalities, reduce the no. of fatalities,

Management approach: Explain the measures taken to avoid future fatalities.

Performance indicators: Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.(GRI LA7)

BP	Statement	Evaluation
Vision and aims	In 2012, issues falling within the higher priority category included employee and contractor safety.	1
Management approach	Full description about their management of safety on page 29	2
Performance indicators	Figures about injuries and accidents benchmarked with external references	3

A practical example for coding

15. Workforce health

Health is the second corner stone that comes along with the safety of employees. Most of the oil and gas companies are operating in conditions and rural areas where the health conditions are below the average level. A consistent and regular check for employees health is crucial. In this element we'll depend on the guideline describe by the IPIECA in which we'll check for the processes and programs the company has established for identifying and addressing significant workforce health issues at the local, regional and global level, together with resulting outcomes and plans(IPIECA,HS2). [79]

Search protocol

Performance indicators	
0	N/A
1	Investments in health or any other absolute data
2	The health situation of employees across years
3	The impact of their activities for health or the health situation benchmarked with external references.

Table 3.17 : Score card for element 15

Exxon	Statement	Evaluation
Vision and aims	Wherever we operate, we uphold our commitment to building sustainable health capacity and infrastructure. At our Papua New Guinea liquefied natural gas project, we partnered with the Papua New Guinean	2

	government and key non-governmental organizations to provide new medical equipment to combat tuberculosis. This disease represents a health challenge in most developing countries.	
Management approach	Another example of a local wellness program can be found at our Singapore petrochemical expansion project. Since construction began in 2007, nearly 87,000 construction personnel from 40 countries have performed work at the site. Because of the site's remote location, the project team developed a fitness-to-work program that includes a full-service medical team on-site, a checklist to screen workers for illness or injury, training on illness recognition, routine health and hygiene inspections and return-to-work medical exams. This commitment to comprehensive health care is critical to managing the health and safety aspects of such a large workforce.	2
Performance indicators	We track employee and contractor incidences of malaria in eight countries. In 2012, 10 malaria cases were reported, compared with 10 in 2011, out of the thousands of non-immune workers located in or visiting endemic areas. Thus far, we estimate our workplace Malaria Control Program has averted 16 deaths and 1,739 cases of malaria among non-immune workers.	2

A practical example for coding

5.2 Risk Mitigation

16. Education and Training

In this element we'll be concerned with the education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases and accidents. This factor goes in consistent with the GRI g3.1 guidelines in the labor practices section. It is very important for the employees to be prepared in case of unusual events. The consequences and the results of such safety and health problem incidents are greatly influenced by the reaction and the preparedness of employees. Therefore, we will check whether the companies are considering this point and design the suitable steps and programs to successfully mitigate this risk along the other organizational procedures to avoid the accidents that could happen.

Performance indicators	
0	N/A
1	Investments intrainings and education in safety issues
2	Absolute numbers representing the output of the initiatives
3	The impact of these activities or the output number benchmarked

.

Table 3.18 : Score card for element 16

Sinopec	Statement	Evaluation
Vision and aims	Safety culture is the soul of all safety efforts. Sinopec Corp. endeavors to create a safe and healthy workplace for employees, and train employees to act in a mentally and physical healthy manner and ensure employees work safely and decently	1
Management approach	The company explored new ways to train employees in occupational safety, identified the safest workplaces and established and put into operation a center for safety education at Shengli Oilfield. **Show case**: Build a permanent classroom for employees safety education Shengli Oilfield built a center for safety training as a window to the safety culture of the oilfield, a classroom for employee safety training and a tool to study and prevent industrial accidents. Using real-life examples, easily understandable language and various tools, the center provides a venue where employees learn the importance of work safety and stay safety conscious.	2
Performance indicators	Sinopec Corp. Occupational Health Training Handbook prepared.	1

A practical example for coding

6.Citizenship

Investors are starting to look beyond the obvious risks to a business from activities within its own domain, to social, environmental and ethical risks in its supply chain and the risks run by the stakeholders for its services. For these risks too can adversely impact reputation and hence shareholder value.

One of the highlighted challenges in the literature is the local environmental performance which will be solely described directly after this driver. Also, financial transparency in developing nations and preservation of community rights are generally not discussed in a transparent way. Many companies use descriptions of management systems as a surrogate for reporting their specific impacts and responses. [50]

The Economist defined the most effective way for CSR activities as “Win-Win” situations. According to them, CSR as risk management, and” win-win” situations— may advance shareholder interests in the long-run and the short-run, respectively. Win-win investments save money now, while helping society.[38]

Spence in his paper went deeper and gave clearer picture for this type of successful Investments which address broader stakeholder concerns can pay off in important ways in today’s transparent, connected world. Investments that reduce adverse environmental and social impacts, and build productive relationships with external stakeholders, aim to reduce liability and other risks in the long run; they may also help the firm realize opportunities that they might otherwise have missed. [38] Thus, the company has to set that objective clear for their shareholders and provide evidence for it. This will be tested by searching for a link between the community investments and increasing the value of the business.

Social challenges include a range of issues, from providing fair wages and health, safe working conditions to respect for human rights and a commitment to community development. For oil and gas companies, acting responsibly also encompasses consideration of the broader economic benefit to society that can be achieved through improved employment, procurement and investment practices in developing countries.

6.1 Human rights

The oil and gas industry operates in some of the most challenging locations in the world, and can face complex human rights-related issues. Companies that operate in such challenging areas may report on the relevance of human rights to their operations.[79]
Performance Indicators require organizations to report on the extent to which processes have been implemented, on incidents of human rights violations and on changes in the stakeholders’ ability to enjoy and exercise their human rights, occurring during the reporting period.(GRI guidelines) , report on audits , implementation of guidelines.

The topic human rights is overlapped with other drivers and elements and there is no consensus about the topics that should be included within the human rights framework. We had to review the guidelines that included human rights issues and see how they define the issue of human rights. Afterwards, we reviewed the sustainability reports of some companies with the objective of overseeing the way they manage the human rights. Our objective in this step was to find the most appropriate and representative way to check the human rights and cover the emerged topics on the surface.

17.Human rights due diligence

This is the element that was selected for the human rights sub-driver. In the table below there will be an explanation for how we will search for this element in the sustainability reports.

Search protocol

The search protocol for this indicator will be slightly different:

Vision and aims

Will report about targets concerning human rights issues with the scale previously defined with the aims of checking for existence of the intentions and the vision and goals of companies concerning the human rights issue.

Note: If the company will report on only one aspect, then it will achieve only one point.

Score	Management approach	Performance indicators
0	N/A	N/A
1	Brief description about human rights	Report on trainings being implemented
2	Describe company policies, programs and/or procedures that support respect for human rights.	1+Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.HR11
3	2+ Descriptions of monitoring and auditing processes to track implementation of relevant policies, providing case studies.	2+assessments covered to the suppliers

Table 3.19: Score card for element
17

Shell	Statement	Evaluation
Vision and aims	We work to implement respect for human rights across four areas: community impacts, employee relations, procurement and security, shell has had a public commitment to respect human rights	1

	since 1997	
Management approach	Since their development in 2000, we have actively implemented the voluntary principles on security and human rights. We train our security staff and contractors on the VPSHR. + In 2012, we continued our community feedback pilot projects, based on the UN guiding principles in four countries.	3
Performance indicators	In 2012, we conducted 50 rigorous assessments of suppliers in Africa and the middle east,..to check their compliance in areas such as human rights+ Quantitative information on grievance procedures +Code of conduct violations +In 2012, we invested further in building the competency of our staff, training 272 more employees in our social performance requirement	3

A practical example for coding

6.2 Human capital:

This sub-driver will represent the company contribution to the local communities. In this sub-driver we'll cover the Health and education contributions and efforts. The next sub-driver will cover other two elements which are the infrastructure and the local business partners. The society dimension which is represented by the 4 elements education, health, infrastructure and local business partners are all found in (Carin Labuschagne et al., 2003) [61] paper.

18.Health

Health focuses on the additional strain or beneficiation of a company's activities on local medical facilities. One of the significant observations in the developing oil excess countries that there are serious health problems existing in these countries. The people in these areas are lacking from proper health care services. Also, in some places like Africa are suffering from high percentage of people infected with diseases such as' Malaria' or" HIV-AIDS". It is therefore important for companies to demonstrate their impacts concerning health.

Chevron	Statement	Evaluation
Vision and aims	to eliminate HIV infections among newborns by 2015 and keep their mothers alive	3
Management approach	In 2012, we announced an initiative to aggressively combat crisis-level mother-to-child transmission of	2

	HIV in Nigeria, Angola and South Africa by partnering with nongovernmental organizations (NGOs), such as the Business Leadership Council; Pact; mothers2mothers; and the Global Fund to Fight AIDS, Tuberculosis and Malaria. These partnerships are part of our $20 million commitment made in June 2011 at the United Nations High- Level Meeting on AIDS	
Performance indicators	Our company programs have made a remarkable impact. For eight years in Angola and 12 years in Nigeria, we have had no reports of mother-to-child transmission of HIV among our employees or their qualified dependents	3

A practical example for coding

19. Education

One of the efforts that companies are required to demonstrate their citizenship by participating in developing the children and the youth in the education area. Many of the places where oil and gas companies are operating are rural areas with high rate of poverty and illiteracy rate.

Petrobras	Statement	Evaluation
Vision and aims	We highlight our contribution to the Ministry of Education's plan to end illiteracy by 2020	3
Management approach	by supporting Mova- Brasil, developed in the ambit of the Petrobras Development & Citizenship Program. In 2012, the project was active in ten states and 204 municipalities; it involved approximately 41,500 people; 1,447 reading and writing teachers were trained and 2,990 partnerships agreed.	2
Performance indicators	From 2003 to 2012, over 195,000 people learned to read and write.	2

A practical example for coding

6.3 Productive capital

Productive capital entails the assets and infrastructure an individual needs in order to maintain a productive life. The following groups are addressed separately: housing; service infrastructure, which entails water and electricity supply as well as sewage and waste services; mobility infrastructure, which considers public transport and the quantity, quality and burden on transport networks, e.g. public roads; and regulatory and public services. Also we will focus on the contributions for the local suppliers and how they develop them. [61]

20.Infrastructure

Total	Statement	Evaluation
Vision and aims	“We’re aiming to sell one million solar lamps by 2015, which will improve the living standards of around five million people.”	3
Management approach	The Awango by Total lineup offers innovative, reliable solar solutions at affordable prices to make life easier for low income, off-grid households. The products, which can be used for lighting and to charge mobile phones, come with a one- to two-year warranty and customer service. The distribution networks are adapted to each country the solutions are being marketed through Total’s service station networks, young reseller networks, and agricultural cooperatives	2
Performance indicators	End-2011 : 48,000 solar lamps and kits sold End-2012 : 168,000 solar lamps and kits sold	2

A practical example for coding

21.Local business partners

China	Statement	Evaluation
Vision and aims	Alleviating Poverty through Industry Development	1
Management approach	Taiqian in Henan Province is a state-level poverty stricken county. Since 2007, we have taken various measures and invested a great deal to facilitate local development by fostering the county’s inherent capability for economic growth.	2
Performance indicators	Taiqian, creating more than 3,000 jobs for local farmers and increasing the local per capita annual income by RMB 5,000	3

A practical example for coding

6.4 Search protocol for the citizenship fur elements (Health, Education, Infrastructure and Local business partner)

A small modification will be put in place in the performance indicators section which is related to the concept being addressed below "community Impact".

Performance indicators	
0	N/A
1	Absolute values (e.g The total amount invested)
2	Trend across years (e.g The output of the initiatives)
3	The impact of these activities on the communities

Table 3.20 : Score card for element
18,19,20,21

Community impact (e.g. 10 % percent decrease in malaria infections, 2 %percent decrease in unemployment rate among women in specific area in Africa)

Takes into account the effect of an operational initiative on the local communities. Security (induced or increased crime); economic welfare (induced business opportunities, impacts on poverty) and social cohesion (networks, demographics and equity aspects). The evaluation of performance in the area of community capital is of utmost importance in evaluating the social sustainability of a project. [61]

7.Environmental

Description

Considered to be the most important driver affecting a reputation of a company operating in the oil and gas sector. Concern about environmental protection is growing all over the world, as a direct result of environmental disasters that have had negative impacts on ecosystems and health (Madsen, 2009) [82] . Environmental disasters affect the cash flow of companies responsible for them (Blanco et al., 2009) [86] , and have serious impacts on companies' reputations (Karpoff et al., 2005)[85] .The environmental agenda is very broad but is increasingly focusing on the debate around climate change, carbon and other green house gas emissions and energy efficiency. In addition following the spill in the gulf of Mexico, there is intense scrutiny around the environmental effects of offshore oil and gas drilling. and the ways companies use to handle the wastes generated from their operations.

7.1 Climate change

One of the issues that is highly debatable is the climate change. The rise of climate change as a major environmental issue has stimulated countless efforts by companies to reduce their "climate footprint," by reducing their emissions of greenhouse gases and/or promoting sequestration of carbon dioxide (underground or undersea) or carbon sinks (planting trees and the like) .

The climate change risk will be represented by 2 elements which are described below.

22.Reducing impact

There is a need for the industry to report on actions taken to reconcile the twin challenges of energy security and climate change. One notable example is greenhouse gas emissions. Greenhouse gases are generated by most petroleum industry operations and contribute to aggregate global atmospheric GHG concentrations. This indicator demonstrates how companies track and manage their GHG emissions. It will focus substantially on the carbon dioxide emissions and how the company are reporting and handling the climate change risk through focusing on their emission targets, their plans to achieve these targets and the emissions levels found within operation. We'll check whether the company is taking it seriously and developing strategies to cope with this challenge including the Initiatives to reduce greenhouse gas emissions and reductions achieved. This indicator is Core for the Oil and Gas Sector Supplement in the GRI guidelines and the IPIECA guidelines.

Search protocol

Performance indicators: the output which will be represented by the amount of emissions from GHG, and quantitative impacts of their efforts

Eni	Statement	Evaluation
Vision and aims	30 % reduction in the ghg emissions in 2016	3
Management approach	In order to evaluate the results of the flaring reduction programs (in Congo and Nigeria, as well as in Libya and Algeria) and energy efficiency programs, in 2012 a process was set up to define and validate an eni target for GHG reduction, based on the savings which will be achieved through the GHG reduction projects planned by the business units. The definition of a target, validated by an independent body, will contribute to reinforcing eni's international leadership in terms of activities to combat climate change	2
Performance indicators	10% reduction in the Co2 emissions from 2011+Different figures representing their emissions across several years	2

A practical example for coding

23.Energy efficiency

Another issue will be highlighted in the same topic will be the efficient energy use with the aim of reducing the emissions of the green house gases. This element will also include the Energy efficient plan and the strategies concerning alternative energy sources, , highlight a company research, plans or current initiatives related to renewable energy sources to meet growing global demand, a wide variety of energy sources, including low-carbon energy sources, will be needed all of these elements are encouraged by the GRI and IPIECA guide lines Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives

Search protocol

Vision and Aims: Targets concerning the future of energy

Management Approach: Energy efficient plans and strategies concerning alternative energy sources.

Performance indicators	
0	N/A
1	Total energy saved
2	monetized value of the saved energy
3	Impact of the total saved energy on the total energy used

Table 3.21 : Score card for element 23

China national petroleum	Statement	Evaluation
Vision and aims	Promoting new energy saving technologies	1
Management approach	In 2012, we strengthened the development of demonstration projects of energy saving technologies and intensified energy efficiency evaluation and standardization. We invested RMB 1.708 billion in 111 key energy saving projects. We improved the energy efficiency of heating furnaces in oil and gas fields and promoted the use of advanced processes, technologies and management expertise across the Company. One of our major energy-saving R&D programs aiming at optimizing the energy system of refining units resulted in 38 internationally leading simulation and optimization technologies	2
Performance indicators	We saved energy equivalent to 1.31 million tons of standard coal and water of 24.35 million cubic meters.	1

A practical example for coding

7.2 Oil spills

Accidental spills of chemicals, oils and fuels can have significant negative impacts on the environment, potentially affecting soil, water, air, biodiversity and human health.(C. Infante et al, 2013). For the oil spills, it is very important according to the IPIECA to check the companies preparedness for dealing with these issues and the description of company emergency preparedness and response programs, plans, organizational structures and affiliations for an effective response to spills and other emergencies, we'll check also if each company is giving an explanation for the occurred spills and classifying them [79]

24.Oil spills

Search protocol

Management approach will cover those elements which are addressed by the GRI and the IPIECA guidelines.

Management approach	
0	N/A
1	Brief information about spills
2	Detailed information about the spills. Report the cause of the spill,the volume recovered
3	The impacts to the environment and local community, and the effectiveness of the clean up measures.

Table 3.22 : Score card for element
24

The Performance Indicators should contain information about the spill levels by volume and number across years. The search protocol in this area will not differ from the general case we identified previously.

Statoil	Statement	Evaluation
Vision and aims	Statoil is working closely with industry peers on the prevention of major accidents and emergency preparedness through the following joint industry programmes: The Oil Spill Joint Industry Project (oilspillresponseproject.org) being led jointly by the oil and gas industry bodies IPIECA & OGP. The aim of this project is to develop appropriate strategies for oil spill preparedness and response	1
Management approach	The number of unintentional oil spills was 306 in 2012, compared to 376 in 2011. The volume of spills increased from 44 cubic metres in 2011 to 52 cubic metres in 2012. The major driver behind the recorded reduction in the number of spills in 2012 was the exclusion of data for Statoil Fuel and Retail (SFR) from 1 July 2012, due to the sale of this company (30 June 2012). SFR data accounted for a high frequency of low-volume spills. The main contributors to the overall volume for 2012 were two incidents in our Bakken operations, with a combined total recorded volume of 21 cubic metres.	2
Performance indicators	Figures describing oil spills across years	2

A practical example for coding

7.3 Emergency response preparedness

This element will can be an extension for the oil spills element. Reporting on the emergency prevention and response programs is becoming crucial for oil and gas companies after the latest accidents and the accidents that are currently non stopping from occurring. Companies are highly suggested to report on mechanisms used to involve local communities in the development of emergency plans for existing and new operations including risk communication, preparation, rehearsal, regular review and modification, arrangements for the management of crises and approaches to ensure disclosure of these plans in a timely and transparent manner.(GRI). They should describe emergency preparedness and response programs, plans, organizational structures and affiliations for an effective response to spills and other emergencies. [79]

25. Emergency prevention programs

Search protocol

The vision and aims part will not have any change.

Management approach		Performance indicators	
0	N/A	0	N/A
1	Brief description about emergency preparedness	1	1 investments in place for emergency response
2	Describe emergency preparedness and response programs, plans, organizational structures and affiliations for an effective response to spills and other emergencies.(IPIECA)	2	The output of the initiatives being carried (drillings, Frequency of trainings, the no of attendees, …etc)
3	2+Oil response programs	3	impact for the different programs being carried out

Table 3.23 : Score card for element 25

Exxon Mobil	Statement	Evaluation
Vision and aims	It is ExxonMobil's objective to respond rapidly and effectively to any type of incident.	1
Management approach	In 2012, we conducted comprehensive drills in Australia, Canada, Singapore, Romania, Russia and the United States. Each drill resulted in a list of good practices and potential improvement areas. ExxonMobil Production Company (EMPC) conducted a comprehensive drill during 2012 simulating a subsea release at one of our deepwater platforms in the Gulf of Mexico+Most recently, ExxonMobil, along with eight other companies, formed the International Oil and Gas Producers' Arctic Oil Spill Response Joint Industry Program.	3

Performance indicators	Training sessions began in 2009, and more than 400 employees have participated. In 2012, we expanded this program internationally.	2

A practical example for coding

7.4Wastes

According to the IPIECA guidelines, “effective waste management practices are important throughout operations to reduce the environmental, social or economic impacts. Waste is not defined consistently worldwide and its management often varies with local conditions. This indicator recognizes that an important way of reducing waste impacts is to minimize the generation of waste, and that effective waste management is an aspect of operational efficiency.”We will be concerned by the management of wastes and how a company is handling the issue.

26.Waste management

Search protocol

Chevron	Statement	Evaluation
Vision and aims	To minimize environmental impacts from offshore drilling fluids and cuttings (minerals and other materials removed from a borehole), associated-gas flaring and venting, air emissions, produced water, and waste.	1
Management approach	Manufacturing hazardous-waste generation decreased in 2012 due to the divestment of the Pembroke Refinery and reduced tank-sludge disposalat the Pascagoula Refinery. Upstream and Gas hazardous waste generation decreased due to fewer spills from Sumatra, Indonesia, operations	2
Performance indicators	In 2012, Chevron operations generated 931,000 metric tons of hazardous waste, a decrease from the 1.01 million metric tons reported for 2011	2

A practical example for coding

7.5 Biodiversity

The operations of the industry exploration, production, refining, marketing and transport of oil and gas can result in impacts on the local environment. Companies depend on, and affect, ecosystem services and the underlying biodiversity. Pressures such as climate change and population growth may cause sufficient degradation that some ecosystems may require conservation measures if their benefits are to continue. [79]

The Biodiversity sub-driver will be represented by 2 elements which will be described below.

27.Fresh water management

Fresh water management is important wherever fresh water resources are constrained due to limited supplies or extensive use. Water management can influence water availability for the local environment, socio-economic development and future demands. Companies are encouraged to disclose information about their water management practices and their efforts to mitigate that risk. [79]

Eni	Statement	Evaluation
Vision and aims	22 million cube reduction in fresh water consumption in the down-stream activities	3
Management approach	As part of its water management activities, eni ontinues to apply the Global Water Tool for Oil & Gas developed by the World Business Council for Sustainable Development in order to map the distribution of activities in so called "water stress" zones, where even a reduced consumption of fresh water could be in competition with primary needs.	2
Performance indicators	Quantitative information about the total water withdrawals by source	2

A practical example for coding

28.Biodiversity and eco system services

Oil and gas companies are directly subjected and accused of degrading the environment in which the activities are concentrated. One of the risks they are facing is damaging the biodiversity of the locations around their operations. For this reason oil and gas companies should prove and show actions that reflect their attention and caring for saving the eco-systems and maintain the bio-diversity life. This item has been highlighted in the GRI g3.1 guide lines and IPIECA and in several other literatures that have been reviewed.

Gazprom	Statement	Evaluation
Vision and aims	-We give top priori ty to environmental protection in every aspect of our work. -create an ideal habitat for rare birds such as red-crowned cranes.	1
Management approach	Jilin Momoge National Natural Reserve, one of	2

	natural reserves with the greatest variety of cranes in China, mainly protects red-crowned cranes and a wetland eco-environment. In 2012, Yingtai Oil Production Plant of Jilin Oilfield took measures such as planting sedge, deyeuxia langsdorffii and grasses to further improve the wetland eco-environment within the oil recovery zone	
Performance indicators	the plant had invested more than RMB 30 million in six phases of comprehensive treatment projects, restored 617,700 square meters of wetland vegetation and created 127,500 square meters of woodland. Compared with five years ago, the number of waterfowl increased by 15%-20%, in which white cranes increased from about 500 to 3,000, and the bird's species groups increased from 296 to over 320.	3

A practical example for coding

Search protocol

This table will have a summary for the performance indicators search protocol for the elements of Wastes, Fresh water management and Biodiversity and eco system services.

Performance indicators	
0	N/A
1	Investments dedicated
2	Output from the initiatives
3	Impact achieved

Table 3.24: Score card for element 26,27 &28

8.Delivering customer promise

Does the business provide consistently good quality and fairly priced products and services? [1]. as we said before, the oil is a commodity product. Usually the factor with major incidence for customers will be the price fluctuations for oil and the safety of the products or what called "product stewardship". Two sub-drivers will be included within the driver. For the measuring elements, three elements will be investigated.

8.1 Customer satisfaction

We'll measure the customer satisfaction by exploring how a company is reporting on the pricing levels for their products and how they working for saving value for their customers and satisfying them by providing a good customer service.

29.Pricing levels and customer saving

This element will be concerned with looking for information disclosed in the sustainability reports about customer savings and how they are working and developing their products and services for not only bringing environmental enhancements, but also for caring about the savings they can bring to their end customers. The element will take in to consideration also customers satisfaction.

The search protocol

Performance indicators	
0	N/A
1	Absolute numbers showing quantitative data concerning customer savings
2	Showing the improvements across years(Trend analysis)
3	Customer satisfaction survey measurement results across years or other indicators for customer stisfaction

Table 3.25 : Score card for element
29

Gazprom	Statement	Evaluation
Vision and aims	Gazprom's strategic goal is to make a transition to market-driven gas pricing on the domestic market. We need to achieve a level of regulated gas prices	1
Management approach	In 2008, to achieve fair prices for oil and oil products on the Russian market, Gazprom Group developed and launched Gazprom Neft's electronic trading platform. Electronic platform participants (c.750 companies) traded in Gazprom Neft oil products. Minimum document flow and easy trading ensured that the system was highly effective.	2
Performance indicators	Quantitative information about the average sale price for Gazprom gas in Russia and the far abroad in the years 2010 and 2011.	2

A practical example for coding

8.2 Product stewardship

The product stewardship will be represented by two elements which have been found important in literature such as GRI g3.1 guidelines.

30. Actual improvements to fuel and products.

One of the areas that is important for customers for demonstrating the stewardship is the continuous development for the fuels and products that are sold to the final market.

Search protocol

The only different area will be the performance indicators:

Performance indicators	
0	N/A
1	Absolute numbers for improvements (no. of products, Production volume)
2	Benchmarked values for improvements (% of carbon reduction, % of noise reduction for engines, …etc)

Table 3.26 : Score card for element 30

Total	Statement	Evaluation
Vision and aims	Total Ecosolutions 2015 objective: 50 labeled products and services	3
Management approach	Hutchinson: Safer, More Comfortable Transportation: The new flexible exhaust coupler is suitable for various vehicle models and delivers a smoother, quieter ride. Its acoustic properties eliminate the need for large, expensive mufflers. In addition, a new Total Ecosolutions-labeled high-temperature elastomer improves mechanical performance and offers better protection in the event of fire. And another plus, it requires smaller amounts of raw materials.	2
Performance indicators	A total of 37 products and services from our various activities had been awarded the label at end-2012 and their sale during the year offset 740,000 metric tons equivalent of carbon dioxide emissions across their life cycle	2

A practical example for coding

31. Volume of biofuels produced and purchased meeting sustainability criteria.

Some studies show that bio-fuels may have to play an important role in the future for putting more reductions on the carbon dioxide levels by reducing the reliance on the normal crude oil usually use for transportation. This element is found core on GRI g3.1 guideline oil and gas supplement sector . We will check its presence or absence in the sustainability reports

Search protocol

Performance indicators	
0	N/A
1	Available

Table 3.27 : Score card for element 31

9.Innovativeness

Description

Harsh competition for resources, challenges with conventional exploration, increasing government regulations, and stakeholders for sustainable development and energy efficiency have created enormous demand for innovative from the oil and gas industry.

Nonetheless, the oil and gas industry is one of the strongest in terms of innovation. It has long-standing commitments to improve its products and the methods used to find and extract petroleum, and to developing new technologies to mitigate impacts and provide new energy sources.

However, there are still significant shortcomings in the area of sustainable innovation. Most notable is that, while the scale of the aggregate commitment on new energy sources is impressive, its effectiveness is debatable. This is because none of the companies measures the impact of its efforts on new energy against the targets of the Intergovernmental Panel on Climate Change (IPCC). The challenge for the sector is to measure the impact of its innovations against the needs of society. [50]

There will be one element covering this driver, we tailored it to address most of the challenges propagated.

Research and development

9.1 R&D

32.Innovativeness process

Search protocol

The innovation topic is very broad for oil and gas companies and is overlapped with other elements in our model. Innovation is needed for reducing the climate change impact, develop solutions to reduce energy and apply energy efficient plans, developing products that are environmentally friendly, enhancing the methods for oil extracting, refining and transportation and several other topics that substantially need innovation as a core element.

Therefore, in this driver we'll be focusing on the quantitative data that express innovation. In specific we will focus on monetary values in order to avoid confusion. Our search protocol will be concerned only with performance indicators area and will have this score card which will deal with the aggregated innovation process inside the company:

Performance indicators	
0	N/A
1	Absolute values for investments in innovation
2	R&D expenditures across years
3	Tangible value generated from R&D activities

Table 3.28 : Score card for element 32

10.Communications and crisis management(Will not be covered by the model)

Description

A business may manage its risks supremely well, but if it fails to communicate what it is doing to its major stakeholders a gap can emerge between reality and their perception. Does the business provide meaningful and transparent information which allows stakeholders to understand its values, goals, and performance and future prospects? How good is it at handling crises? The Hill and Knowlton 2006 analyst survey6 also highlighted the importance of transparent disclosure and clear and consistent communication with key stakeholders. Effective communication is an integral part of reputation risk management. Establishing stakeholders' concerns, monitoring and reporting on them can convey a powerful message of responsibility and transparency which bolsters stakeholder trust and enhances business reputation [1]

Engaging with stakeholders on non-financial issues has become a major pillar of responsible business practice. It involves understanding the dependencies between stakeholder groups and the company, identifying the concerns of these groups, and responding to the key issues, typically through honest debate with stakeholders and demonstrable efforts to reduce negative impacts. [50]

We identified two major important points that can be addressed in the sustainability reports

1. Crisis management
2. Stakeholder engagement

But, these two points will be covered in other drivers, For instance the crisis management issue will be covered in the regulatory compliance, safety and environmental drivers, while the stakeholder engagement is discussed in the corporate governance, so to prevent duplicating the work, this driver will be removed from the model.

4.Qualitative content analysis

4.1 Introduction

We chose to investigate the top 15 companies found in global fortune 500 companies which are operating in the oil and gas sector. We chose according to the 2013 rankings.

It has been argued that large and multinational companies have so far been the main promoters of CSR (CEC, 2001b, 2002). The focus on the largest companies offers a better prospect of finding disclosures, since earlier research suggests that quality of corporate social disclosure is linked to firm size (see Gray et al., 1995).

Three companies which are “Philips 66”, “Pemex” and “PDVSA” didn’t provide sustainability reports. The total number of companies represented in this analysis is then 12, we added one more company which is Petronas.

The selected companies are diversified in many aspects. In terms of shareholders, some of them are state-owned companies and majority are multi-national companies. Some of them are operating within only there geographical boundaries and most of them are internationally spread. They represent the continents North and South America , Europe and Asia and with vast majority operating in Africa.

The top 15 companies are lying all within the first 50 companies in the “global fortune 500” list. Six of them are within the first 10 companies in the list.

In the next section we’ll provide a small introduction for each of these companies.

4.2 Profile of companies involved in the content analysis

4.2.1 Eni

Eni S.p.A. is an Italian multinational oil and gas company headquartered in Rome, It was founded on February 10, 1953 It is ,present in 79 countries, and currently Italy's largest industrial company with a market capitalization of 68 billion euros, as of August 14, 2013. as of August 14, 2013. The Italian government owns a 30.3% golden share in the company, 3.93% held through the state Treasury and 26.37% held through the Cassa depositi e prestiti. Another 2.29% of the shares are held by BNP Paribas .with revenues of €128.8 billion (2012) and no of employees of 77,838. It’s the 17th in global fortune 500 list

4.2.2 Shell

Shell is a global group of energy and petrochemicals companies. It was founded on 1907 with Headquarters in Netherlands and presented in more than 80 countries and territories, Shell helps to meet the world's growing demand for energy in economically, environmentally and socially responsible ways. We employ around 87,000 people in more than 70 countries and territories. produces around 3.1 million barrels of oil equivalent per day and has 44,000 service stations worldwide. The products of Petroleum, natural gas, and other petrochemicals. Total Revenues of US$ 481.7 billion (2013) and around 90,000 employees. It's the 1st in global fortune 500 list

4.2.3 Exxon

Exxon Mobil Corp., or ExxonMobil, is an American multinational oil and gas corporation headquartered in Irving, Texas, United States. It is a direct descendant of John D. Rockefeller's Standard Oil company and was formed on November 30, 1999, by the merger of Exxon and Mobil (formerly Standard Oil of New York and Standard Oil of New Jersey.) With 37 oil refineries in 21 countries constituting a combined daily refining capacity of 6.3 million barrels (1,000,000 m3). The company was ranked No. 5 globally in Forbes Global 2000 list in 2013. Products of Fuels, lubricants, petrochemicals and revenues of US$ 453.123 billion (2012) no of employees of 76,900 . It's the 3rd in global fortune 500 list

4.2.4 Bp

BP plc, sometimes referred to by its former name British Petroleum, is a British multinational oil and gas company headquartered in London, England, United Kingdom and was founded on 1909. It operates in all areas of the oil and gas industry, including exploration and production, refining, distribution and marketing, petrochemicals, power generation and trading. It also has renewable energy activities in biofuels and wind power.As of December 2012, BP had operations in over 80 countries, produced around 3.3 million barrels per day of oil equivalent Production output of 3.3 Mbbl/d (520×103 m3/d) of oil equivalent (2012). It has revenues of US$388.285 billion(2012) and no of Employees of 85,700. It's the 6th in global fortune 500 list

4.2.5 Chevron

Chevron is an American multinational energy corporation. Headquartered in San Ramon, California. It was founded in 1984 and active in more than 180 countries ,with it is engaged in every aspect of the oil, gas, and geothermal energy industries, including exploration and production; refining, marketing and transport; chemicals manufacturing and sales; and power generation. Chevron is one of the world's six "supermajor" oil companies; as of 2013, it ranked eleventh in the Fortune Global 500 list of the world's largest companies. The revenues of US$ 241.909 billion (2012) and no of employees of 62,000. It's the 11th in global fortune 500 list

4.2.6 Total

Total is a French multinational integrated oil and gas company and one of the six "Supe rmajor" oil companies in the world. The company has its head office in Paris. Its businesses cover the entire oil and gas chain, from crude oil and natural gas exploration and production to power generation, transportation, refining, petroleum product marketing, and international crude oil and product trading. Total is also a large-scale chemicals manufacturer. It has revenues of €182.299 billion (2012) and no of employees of 97,126. It's the 10^{th} in global fortune 500 list

4.2.7 PetroBras

Petrobras is a semi-public Brazilian multinational energy corporation headquartered in Rio de Janeiro, Brazil. It was founded on 1953. While the company ceased to be Brazil's legal monopolist in the oil industry in 1997, it remains a significant oil producer, with output of more than 2 million barrels (320,000 m3) of oil equivalent per day. The company owns oil refineries, oil tankers, and is a major distributor of oil products. Petrobras is a world leader in development of advanced technology from deep-water and ultra-deep water oil production. With revenue of US$ 144.1 billion (2012) and no of employees of 80,497.It's the 25^{th} in global fortune 500 list

4.2.8 PetroNas

PETRONAS, short for Petroliam Nasional Berhad, is a Malaysian oil and gas company that was founded on August 17, 1974. Wholly owned by the Government of Malaysia, the corporation is vested with the entire oil and gas resources in Malaysia and is entrusted with the responsibility of developing and adding value to these resources. PETRONAS is ranked among Fortune Global 500's largest corporations in the world. Since its incorporation, PETRONAS has grown to be an integrated international oil and gas company with business interests in 35 countries. With revenues of US$ 97.35 billion (2012) and no of employees of 39,236 . It's the 75th in global fortune 500 list

4.2.9 China national petroleum

CNPC is the government-owned parent company of public-listed PetroChina, a company created in 1999 as part of the restructuring of CNPC. It is a Chinese state-owned oil and gas corporation and the largest integrated energy company in the People's Republic of China. It has its headquarters in Dongcheng District, Beijing . CNPC is the parent of PetroChina, the second largest company in the world in terms of market capitalization as of June 2010. It has revenues of US$ 378.025 billion (2011)and no of employees of 1,668,072. It's the 5th in global fortune 500 list

4.2.10 Statoil

Statoil is a Norwegian multinational oil and gas company headquartered in Stavanger, Norway. It is a fully integrated petroleum company with operations in thirty-six countries.Statoil was formed by the 2007 merger of Statoil with the oil and gas division of Norsk Hydro. As of 2013, the Government of Norway is the largest shareholder in Statoil with 67% of the shares, while the rest is public stock. The ownership interest is managed by the Norwegian Ministry of Petroleum and Energy. And revenues of NOK 723.4 billion(11.8 billion $) (2012) and no of Employees of 23,000. It's the 39thin global fortune 500 list

4.2.11Gazprom

Gazprom is the largest extractor of natural gas and one of the largest companies in the world. Its headquarters are in Moscow. Its name is a contraction of Russian Gazprom was created in 1989 when the Ministry of Gas Industry of the Soviet Union transformed itself into a corporation, keeping all its assets intact. The company was later privatized in part, but currently the Russian government holds most of the control in its hands. In 2011, the company produced 513.2 billion cubic metres (18.12 trillion cubic feet) of natural gas, amounting to 17% of worldwide gas production. In addition, Gazprom produced 32.3 million tons of crude oil and 12.1 million tons of gas condensate. The major part of Gazprom's production fields are located around the Gulf of Ob in the in WesternSiberia, while the Yamal Peninsula is expected to become the company's main gas producing region in the future. It is operating with revenue of US$ 153.0 billion (2012) and no of employees of 393,000. It's the 21stin global fortune 500 list

4.2.12 Sinopec

Sinopec is a Chinese oil and gas company based in Beijing, China. It is listed in Hong Kong and also trades in Shanghai and New York. Sinopec is the world's fifth biggest company by revenue. Sinopec Limited's parent, Sinopec Group, is one of the major petroleum companies in China, headquartered in Chaoyang District, Beijing. It was founded in 2000. Sinopec's business includes oil and gas exploration, refining, and marketing; production and sales of petrochemicals, chemical fibers, chemical fertilizers, and other chemical products; storage and pipeline *transportation of crude oil and natural gas; import, export and import/export agency business of crude oil, natural gas, refined oil products, petrochemicals, and other chemicals. It has revenues CN¥ 2.786 trillion (457229962000.00 US Dollar) (2012) and no of employees of 376,201. It's the 4th in global fortune 500 list*

4.2.13 Valero

Valero Energy Corporation is a Fortune 500 international manufacturer and a marketer of transportation fuels, other petrochemical products, and power. It is based in San Antonio, Texas, United States. It was founded in 1980. The company owns and operates 16 refineries throughout the United States, Canada, United Kingdom, and the Caribbean with a combined throughput capacity of approximately 3 million barrels (480,000 m3) per day. Valero is also one of the United States' largest retail operators with approximately 6,800 retail and branded wholesale outlets in the United States, Canada, United Kingdom, and the Caribbean under the Valero, Diamond Shamrock, Shamrock, Ultramar, Beacon, and Texaco brands. It has revenues of $ 125.987 billion (2011) and no of employees 22,000-(2012). It's the 27th in global fortune 500 list.

4.3 Sustainability reports for the selected companies

We downloaded the sustainability reports in PDF format from the companies websites. We chose the 2012 versions since they are the most up to date and represent the best practices the companies follow to report on sustainability. Only for Gazprom, they didn't have the 2012 version since they are publishing a sustainability report for 2 successive years. Therefore we downloaded the 2010-2011 version which is the most updated one.

Companies	Country of origin	Report name	Length(no. of pages)
Eni	Italy	Eni for 2012	70
Shell	Nehterlands	Sustainability report	44
Exxon Mobil	U.S.A	Corporate citizenship report	67
BP	England	Sustainability review	52
Chevron	U.S.A	2012 Corporate Responsibility Report	48
Total	France	Society and environment	42

		report	
Petronas	Malaysia	Sustainability Report 2012	44
China national petroleum	China	2012 Corporate Social Responsibility Report	59
Statoil	Norway	Sustainability Report	58
Petrobras	Brasil	SUSTAIN BILITY REPORT 2012	190
Sinopec	China	Communication on progress for sustainability Development 2012	43
Gazprom	Russia	Gazprom Sustainability report 2010-2011	126
Valero	U.S.A	2012 Social Responsibility Report	36

Table 4.1: Info. About companies' sustainability reports

4.4 Overview of the analysis

In this section we are going to present the results of the content analysis we performed. The section will proceed as follows:

First , we are going to present 4 tables representing the most significant results we achieved

Table 4.2 The average score percentage for each driver in each area of disclosure

Table 4.3 The average score percentage for each element in each area of disclosure

Table 4.4 The ranking of the company with respect to the analysis

The ranking of companies table is helpful in terms of describing which companies are more attention to number of elements affecting their reputation but does not reveal the quality of these information disclosed nor the quality of the report itself. Another limitation for this table should be considered which is the importance of a driver more than the other. We didn't give weights for the drivers and we considered each one of them has the same importance in order to make the study less complex. Future research can focus on this area and determine which drivers are more emphasized than others.

Table 4.5 The performance of the companies regarding each driver : We'll highlight the best and the worst company performed for each element

Second, we will discuss the result obtained in details with respect to each driver and the elements constituting the drivers.

No	Driver	Average score for vision and aims for drivers	Average score for management approach for drivers	Average score for performance indicators for drivers	Overall average score for drivers
1	Financial perofrmance	48.7%	65.4%	33.3%	47.1%
2	Corporate governance	48.7%	77.9%	25.0%	45.9%
3	Regulatory compliance	19.2%	48.1%	33.7%	31.8%
4	Work place	29.7%	66.9%	38.5%	43.7%
5	Safety	40.2%	87.2%	45.3%	53.8%
6	Citizenship	31.2%	73.1%	37.9%	45.8%
7	Environment	40.7%	77.3%	45.4%	52.3%
8	Delivering customer promise	20.5%	51.9%	41.5%	36.9%
9	Innovation			23.1%	23.1%

Table 4.2

No.	Drivers	No.	Elements	Avg. Score vision	Avg. Score mana	Avg Score per	Avg. Score total
1	Financial performance	1	Future plans and growth opportunities due to climate change	48.7%	65.4%	33.3%	47.1%
2	Corporate governance	2	Sustainability management	48.7%	100.0%	30.8%	62.8%
		3	Sustainability linkage with performance measurements			19.2%	19.2%
		4	Approach used for stakeholder engagement		55.8%		55.8%
3	Regulatory compliance	5	Mitigating risk	30.8%	61.5%	53.8%	47.1%
		6	Revenue transparency			26.9%	26.9%
		7	Commentary added to indicate submissions to EITI as source of documentation. *	7.7%	53.8%	46.2%	35.9%
		8	External audits , Third party sustainability evaluations and partnerships. *			26.9%	26.9%
4	Work place	9	Workforce diversity and inclusion	43.6%	76.9%	69.2%	61.5%
		10	Employee benefits and programs	30.8%	73.1%	35.9%	43.3%
		11	workforce engagement	17.9%	73.1%	33.3%	37.5%
		12	performance review process	15.4%	38.5%	7.7%	25.0%
		13	Training and development	33.3%	73.1%	46.2%	48.1%
5	Safety	14	Injuries and accidents	43.6%	100.0%	71.8%	68.3%
		15	Workforce health	41.0%	88.5%	41.0%	52.9%
		16	Education and training	35.9%	73.1%	23.1%	40.4%
6	Citizenship	17	Human rights due diligence *	33.3%	53.8%	23.1%	36.8%
		18	Health *	30.8%	65.4%	38.5%	42.3%
		19	Education *	43.6%	84.6%	53.8%	57.7%
		20	Infrastructure *	33.3%	76.9%	30.8%	43.3%

		21	Local business partners *	30.8%	84.6%	43.6%	49.0%
7	Environment	22	Reducing impact	59.0%	76.9%	61.5%	64.4%
		23	Efficient Energy use	53.8%	76.9%	35.9%	52.9%
		24	Oil spills*	28.2%	46.2%	41.0%	38.5%
		25	emergency prevention programs *	25.6%	79.5%	38.5%	47.9%
		26	Waste management	41.0%	80.8%	46.2%	52.9%
		27	Fresh water management	41.0%	84.6%	56.4%	57.7%
		28	Biodiversity and ecosystem services	35.9%	96.2%	38.5%	51.9%
8	Delivering customer promise	29	Pricing levels and customer saving	15.4%	34.6%	28.2%	25.0%
		30	report actual improvements to fuel and products. *	25.6%	69.2%	57.7%	47.3%
		31	Volume of biofuels produced and purchased meeting sustainability criteria.*			38.5%	38.5%
9	Innovation	32	Innovation process			23.1%	23.1%

Table 4.3

No.	Company	Avg. Score vision	Avg. Score management	Avg Score per	Avg. Score total
1	Eni	64.9%	88.1%	63.2%	72.1%
2	Exxon	44.6%	88.1%	50.6%	61.1%
3	Petrobras	31.1%	79.7%	47.1%	52.6%
4	Shell	31.1%	76.3%	43.7%	50.3%
5	Total	58.1%	62.7%	35.6%	52.2%
6	BP	29.7%	81.4%	39.1%	50.1%
7	Statoil	35.1%	67.8%	43.7%	48.9%
8	Gazprom	35.1%	71.2%	37.9%	48.1%
9	China	31.1%	74.6%	33.3%	46.3%
10	Sinopec	29.7%	67.8%	26.4%	41.3%
11	Chevron	27.0%	49.2%	40.2%	38.8%
12	Valero	21.6%	52.5%	23.0%	32.4%
13	Petronas	24.3%	49.2%	14.9%	29.5%

Table 4.4

No.	Elements	Eni	SHELL	EXXON	BP	Chevron	Total	petronas	china	Statoil	petrobras	Sinopec	Gazprom	Valero
1	Future plans and growth opportunities due to climate change	38%	75%	75%	75%	0%	63%	13%	50%	75%	63%	25%	38%	25%
2	Sustainability management	67%	50%	83%	67%	50%	100 %	50%	67%	50%	50%	67%	67%	50%
3	Sustainability linkage with performance measurements	50%	100%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4	Approach used*	50%	50%	75%	75%	25%	25%	25%	75%	50%	100 %	75%	100%	0%
5	Mitigating risk	63%	25%	75%	63%	38%	38%	38%	0%	63%	63%	50%	75%	25%
6	Revenue trasparency	100%	100%	0%	50%	0%	0%	0%	0%	100 %	0%	0%	0%	0%
7	Commentary added to indicate submissions to EITI as source of documentation. *	60%	40%	40%	40%	0%	40%	0%	0%	40%	20%	0%	0%	0%
8	External audits , Third party sustainability evaluations and partnerships. *	25%	50%	75%	50%	25%	50%	0%	0%	25%	0%	50%	0%	0%
9	Workforce diversity and inclusion	88%	50%	63%	100 %	25%	88%	75%	50%	75%	75%	0%	63%	50%
10	Employee benefits and programmes	75%	0%	38%	50%	0%	75%	38%	50%	25%	50%	50%	50%	63%
11	workforce engagement	63%	25%	50%	63%	0%	0%	25%	50%	63%	75%	38%	38%	0%
12	perfromance review process	50%	0%	13%	25%	0%	13%	13%	25%	0%	0%	25%	0%	0%
13	Training and development	63%	50%	63%	13%	0%	75%	50%	50%	25%	50%	50%	75%	63%
14	Injuries and accidents	75%	63%	88%	75%	88%	63%	63%	63%	63%	75%	50%	63%	63%
15	Workforce health	75%	50%	75%	38%	75%	38%	25%	50%	63%	63%	50%	38%	50%
16	Education and training	88%	63%	38%	13%	50%	50%	38%	50%	25%	25%	50%	25%	13%
17	Human rights due diligence *	100%	78%	67%	44%	0%	33%	11%	22%	44%	67%	11%	0%	0%
18	Health *	75%	50%	88%	63%	100 %	0%	0%	50%	0%	0%	63%	25%	38%
19	Education *	88%	50%	63%	63%	63%	0%	75%	75%	63%	88%	50%	25%	50%

20	Infrastructure *	75%	38%	38%	25%	50%	88%	0%	63%	63%	38%	50%	38%	0%
21	Local business partners *	75%	50%	63%	50%	63%	63%	0%	75%	63%	63%	38%	25%	13%
22	Reducing impact	88%	63%	63%	63%	75%	75%	50%	63%	88%	63%	25%	75%	50%
23	Efficient Energy use	63%	63%	75%	25%	38%	75%	38%	50%	75%	63%	25%	63%	38%
24	Oil spills*	78%	67%	44%	67%	44%	33%	0%	11%	56%	22%	0%	44%	33%
25	emergency prevention programs *	56%	33%	67%	67%	78%	11%	33%	67%	33%	56%	22%	67%	33%
26	Waste management	88%	50%	63%	25%	63%	75%	25%	25%	50%	63%	50%	63%	50%
27	Fresh water management	88%	63%	63%	38%	63%	38%	50%	63%	88%	63%	50%	50%	38%
28	Biodiversity and ecosystem services	25%	50%	63%	38%	50%	50%	38%	75%	63%	63%	38%	63%	63%
29	Pricing levels and customer saving	75%	0%	25%	0%	0%	100 %	0%	0%	N/A	0%	63%	63%	0%
30	report actual improvements to fuel and products. *	50%	63%	63%	25%	0%	88%	0%	25%	N/A	63%	63%	63%	38%
31	Volume of biofuels produced and purchased meeting sustainability criteria.*	100%	100%	0%	100 %	0%	0%	0%	0%	N/A	100 %	100 %	0%	0%
32	Innovation process	100%	33%	0%	0%	33%	33%	0%	0%	0%	33%	0%	67%	0%

Table 4.5

4.5 Discussion and analysis

This section describes the results of the application of the content analysis to the 2012sustainability reports of the top 15 companies in global fortune 500 operating in the oil and gas sector. The developed framework is trying to answer the research question previously determined.

How do companies leverage on their sustainability publications for the favor of reputation?

4.5.1Financial performance and long term investment value

In this driver we had only one element to check which was the future plans for a company to mitigate the climate change risk .

More than 90% of companies are considering the risk as priority by being recognized by the highest governance body. The average score they achieved was 48.7% . They failed to report their quantitative targets they seek to achieve such as percentage of revenues from renewable and alternative energy sources. For the management approach they are reporting quiet good with an average score of 65% which is considered to be an acceptable value compared to the rest of the results in the analysis. 46% of the companies are reporting their management actions to master the climate change risk. The last area which is the performance indicators, as shown in table no. ( ), the average score for performance indicators disclosure is 33.3 %. All the companies failed to disclose information on the financial impacts of air quality and climate change regulations and how they used to quantify. Only 38 % of the companies are mentioning in their reports that they are considering carbon price when valuing new investments which will help them afterwards to cope with the new regulations and constraints.

4.5.2 Corporate governance and leadership

The driver is subdivided in to three main elements. The average scoring for the driver is 45.9 % which could be better if some points will be take in consideration. The management approach is well covered with average score of 77.9%. While the worst area covered was the performance indicator area with an average score of 25%. This is mainly because the bad reporting on the element of "the sustainability linkage with performance". For the remaining analysis of this driver, we are going to discuss the performance of each element within the driver.

4.5.2.1 Sustainability management

30 % of the companies disclosed qualitative targets concerning sustainability management. For more clarification Eni reported several targets to achieve in 2016 concerning sustainability management such as " Extension of the SA8000 audit program" and " Alignment of the internal

processes to the United Nations Guiding”. Total was the only company who achieved 100 % score for reporting on targets since they mentioned a quantitative target concerning sustainability management which was “All production sites4 certified by 2017 for ISO 14001 Management Systems”.

100% of the companies are disclosing management approach for their sustainability management according to the criteria described which was based on the presence of sustainability management and policies regarding their sustainability approach with the demonstration of their effectiveness by providing a real case example or evidence for their practicing. For performance indicators the average scoring was 47.1 % which means that almost half of the companies disclosed quantitative information about their management systems. Companies are obliged to disclose quantitative information about the corporate governance and the board of directors in their annual reports, therefore we set only a 2 points binary scale for this element in the performance indicators area.

4.5.2.2 Sustainability linkage with performance

We chose the element “linking compensation with sustainability performance” since it can give some indication about the degree of commitment for a company regarding the sustainability issues. Only 30 % mentioned this linkage in their reports. We based our scoring system on 3 points scale “0 or 1 or 2” . The average scoring was 19.2 % which is very low score and one of the areas that should be improved in future and companies must give more attention for this linkage and to be convinced by its importance for their future and growing and not just a need for stakeholders they are forced to fulfill. The only company who achieved 2 points was shell by mentioning “In 2012, sustainable development continued to account for 20% of the company scorecard, which helps determine the annual bonus for all our employees, including members of the Shell executive committee. For the committee in 2012, sustainable development measures were split between Shell’s safety performance and targeted measures covering operational spills, energy efficiency and use of fresh water.”

4.5.2.3 Stakeholder engagement

The other point we investigated is the clarity of the stakeholder engagement process since it is one of the important determinants for the success of a company corporate governance management as found in literature like “Managing reputation risk” by Rayner. Throughout the sustainability reports we reviewed, the companies were reporting in different locations examples for their stakeholder engagement with local communities and international organizations. In order to move from the theoretical concept to practical elements that can be easily measured for the purpose of evaluating the stakeholder engagement effectiveness, we developed a small score card consisting of four criteria points. For each company, we checked the existence of these elements and a one score point was given for each element existing. The average score for the companies was 55.8 %. The best companies operating were Petrobras which is the biggest oil and gas company in Brazil and the other company is Gazprom which is the biggest oil and gas company in Russia. The two companies are intersecting in a point in which both of them are focusing their production and areas of operation in the domestic market. So we can conclude that for state-owned companies who are substantially operating in their country of origin they have a better and clearer stakeholder engagement. For further understanding and more details of the elements include in the score card and the score of each company, you can refer to the description of the elements of the model section.

4.5.3 Regulatory compliance

In this driver we focused on the corruption-related issues and the best practices that reflect transparency of a company. There are four main elements constituting this driver. Before going through each one of them in further details, let's look on the performance of the companies regarding this driver. The average score percentage of this driver is considered to be one of the lowest when compared to the rest of drivers. The average score accounted for 34.2 %.. The lowest area of performance was the "vision and aims" part with 19.2%, which is also the lowest among the other drivers. But also the management approach part is considered low when compared to the management approach scores for other drivers in the model. The performance indicators part percentage score recorded the second lowest score with 38.5 %. This is mainly because of the performance of the companies regarding their revenue transparency towards the governments of the host countries in which they are operating.

4.5.3.1 Mitigating risk

For this element the average score percentage was 47.1 % which is the best score in the driver scorecard. Some observations are worth to be recorded, two companies of the thirteen didn't report on the "vision and aims" and the "management approach" areas which are "Chevron" which is a US company and China national petroleum which is the biggest company in China. For the "performance indicators" section, 30 % of the companies didn't disclose any performance indicators which we defined to be important. For the "vision and aims" part, none of the companies report any quantitative targets for mitigating the risk such as reducing the fines by a specific percentage or involve a precise number percentage of employees in an anti-corruption training. Only one company reportsa qualitative target which is Eni. The rest of the companies just referred for reducing the risk of corruption. In the "performance indicators "section, 46 % disclosed the fines they were charged for non-compliance with laws and regulations.

4.5.3.2 Revenue transparency

For revenue transparency only few countries are committed with disclosing the money they pay to the host governments for having the rights for operating in these countries. The average score percentage is 26.9 %. Eight companies (62%) are not mentioning any details about the issue. But it should be noticed that six of these companies are strongly depending on the domestic market of their origin countries for operating so they are not highly subjected for this risk. But two companies (Chevron and Exxon) although their operation in developing countries in which this risk is higher are not paying attention in their sustainability reports for that topic. Also, BP and Total can be included with them since they are mentioning only the total revenues paid but not disclosing details for the revenues they are paying for each country. The only companies that are performing good in this element are Eni, Shell and Statoil.

4.5.3.3 Commentary added to indicate submissions to EITI as source of documentation.

The extractive Industries transparency initiative (EITI) is a global coalition of governments, companies and civil society working together to improve openness and accountable management of revenues from natural resources. It has been suggested in the GRI g3.1 oil and gas supplement guidelines that companies refer to the initiative as source of documentation. The EITI coalition gained a lot of recognition in the recent years for its efforts in the field of revenue transparency. The overall average score for this element is 35.9 %. One company reported on the vision and aims part which is Eni. The companies that are operating mainly domestically such as Gazprom, Sinopec and Valero didn’t include any information considering this element. This is a kind of expected, but some other companies that are operating both such as Chevron, China national petroleum and Petronas also didn’t put any information for this element. This element is somehow related to the revenue transparency element but from a managerial perspective. A comparison between those two elements can let us conclude that companies started to be active in participating in this coalition but still lagging disclosing the revenues they pay to the host countries.

4.5.3.4 External audits, third party sustainability evaluations and partnerships.

Existing of an external party to review the procedures and the information within the sustainability reports strengths the credibility and the transparency of the report. The probability that the stakeholders will believe what is written inside these reports is higher when there is an external verifier for the report. In the criteria we defined four levels of external verifying which were suggested by one of the papers in the literature. None of the companies achieved the highest level in the criteria which recommended that the report is reported by an independent well known Ngo. The overall average score is 26.9% which is very low since 5 companies didn’t provide an external verifier for their sustainability reports. All of the five companies are national companies substantially operating domestically. The multinational companies are better than the national companies concerning this element. The best company in this element who reported was Exxon and the least companies were Eni, Chevron and Statoil.

4.5.4 Work place talent and culture

This driver deals with all the issues related to the employee welfare. We have included five elements to practically represent the driver in the sustainability reports. It can be shown that the average score percentage for the driver (43.3 %) is average between all the drivers. The worst element in reporting is the “performance review process for employees” while the best one is “Work place diversity and inclusion”. The performance indicators average score is considered to be relatively high with 37.4 % and was expected to be higher if the “performance review process” was appropriately reported. In the rest of our discussion to this driver , we will go through each element in the driver.

4.5.4.1 Workforce diversity and inclusion

All the companies did reporting on this element except only one company(Sinopec) which is one of the biggest oil and gas companies operating in China and focusing their activities locally.

3 companies reported quantitative targets to achieve which are representing 23% of the total companies. On the other hand, 3 companies also didn’t include any vision or aims for their workforce diversity and inclusion. The average score disclosure for “vision and aims” accounted for 43.6 % which is not relatively bad.

For the management approach, 69.2 % of the companies disclosed their management approach plans and actions meeting the criteria we put. The average score for disclosure is 76.9 % which is competent.

More than 90% disclosed quantitative information, where 3 companies disclosed information about employee turnover which we considered the most important indicator in this element.

The overall performance for this indicator is 61.5 % which is adequately covered and will need just slightly needed corrective actions.

4.5.4.2 Benefits and programs

For this element, we aimed to measure the employee remuneration and benefits in a practical way and to check whether companies are having promising benefits and programs meeting the needs of their employees.

The overall disclosure percentage for this element is 43.2 %. 2 companies didn’t report anything concerning this element which are Shell and Chevron. For the “vision and aims” area only one company has disclosed quantitative targets which is Total. The average reporting on the “vision and aims” is 30.8 %. Companies will be more appreciated if they disclosed more quantitative targets. For the management approach, 8 Companies with a percentage of 61.5 % of the total companies are fully reporting on the management approach according to the defined criteria. The programs and benefits found in the reports were diverse in terms of their content and their targets and they extended the employees to involve also their families. We didn’t focus on specific types of programs since this is out of the scope of our work, but future research about the quality of the content will be recommended. The average reporting percentage on this area for all companies is 73.1 %.

For the “performance indicators” area, the average reporting percentage score is 44.2 % Only 2 companies (Eni and petrobras) achieved 100% in for their performance indicator disclosure in the benefits and programs by reporting on the minimum wage they pay compared by the minimum wage paid in the locations they are operating.

4.5.4.3 Workforce engagement

This element deals with how the companies are involving their employees in the work environment for better productivity and satisfaction

The overall average score for this element is 37.5 % , which is the second lowest score in this in the current driver. 3 companies didn't include any information regarding the element with a percentage of 23 % from the total companies.

For the vision and aims part , The overall average score is 17.9 % . 46% of the companies didn't report any information regarding their vision and aims for workforce engagement activities. None of the companies reported any quantitative targets.

For the "management approach" part, the average score for reporting is 73.1 %, where 69.2 % of the companies are reporting their management approach with 100 % score.

For the "performance indicators" part, the average reporting score is 33.3. %,Only 3 companies (Eni, BP and Petrobras) are disclosing quantitative information showing the results of their employee satisfaction measuring. For instance, Eni reported quantitative information on their activities for involving people across years and the results of the employee feedback concerning these initiatives they started. More than 50 % of the companies didn't include any information.

4.5.4.4 Performance review process

For this element, it was not well reported by the companies. It is one of the areas that are mentioned in literature as relevant for the driver. The average scoring for reporting is 23.1 % which is one of the lowest scores not only within the elements of the drivers but across all the elements in the model. More than 50% of the companies didn't include any information for this element.

For the "vision and aims" part , the average reporting is 34.6 %, this is because only two companies reported something regarding it. Around 85 % of the companies didn't publish any information for that driver.

For the "management approach part", the average scoring was 38.5%. , where only 3 companies reported in enough details information for the performance review process.

For the "performance indicators" area, the average score is 7.7%, that is because Eni was the only company who reported quantitative information on the performance review process which was in terms of the output of the programs they are running for that purpose.

4.5.4.5 Training and education

This element is very important for reflecting how do the companies care for employee development through training organized to support their career development and education opportunities that they provide.

The average score percentage for this element is 48.1 %. Only one company didn’t report on that element (Chevron) .

For the “vision and aims” part, the average score for reporting is 33.3 %, Total was the only company in the “vision and aims” area to disclose quantitative targets for the future , while 2 companies didn’t include any indication for their vision and aims.

For the “management approach part”, the average scoring reporting is 73.1 % which is above average, 69.2 % of the companies reported their management approach in details, while 3 companies didn’t include any information.

For the ”performance indicators” area, the average score for reporting is 48.1 % which is slightly above average value.46% of the companies are reporting quantitative information about their training and education activities across years

Overall we can assume that companies are performing good in reporting this element.

4.5.5 Safety

As was expected , safety driver achieved the highest average score in reporting with an overall scoring of 53.8%

4.5.5.1 Injuries and accidents

One of the most indicators that is highly regarded by the companies. This importance is stemming from the perceptions about the industry as one of the most dangerous industries with the higher risks for injuries and accidents with greater consequences. The overall average scoring is one of the highest among all the elements with 68.3 %. All the companies are reporting on this element. Let’s zoom in more to further understand how the company are reporting and to see if there is any recommendations or suggestions in future.

For the “vision and aims” part, the average scoring for performance is 43.6 %. All the companies are reporting but none of them set any quantitative targets for future. Some Companies mentioned that their targets is to have zero injuries and accidents for their employees but this target can’t be considered quantitative since it is not bounded to a time limit and it is also somehow generic. Quantitative targets would be highly appreciated in such drivers to reveal a company commitment regarding mitigating that risk.

For the “management approach part”, the average scoring is 100% which shows how the all the companies are paying attention to the driver and to that element specially.

For the ”performance indicators” part, the average scoring is 71.8 % which is quiet high and acceptable. Only one observation can be taken out that only 23% are reporting performance indicators that are benchmarked with external references. It is important for the stakeholders to see how their company is performing with respect to others to better evaluate and appreciate the efforts done.

4.5.5.2 Workforce health

The average reporting score for this element is less than the Injuries and accidents elements, and this can be expected since the risks growing from the Injuries are more periodic and severe. The average scoring is 52.8 % which is still acceptable.

For the “vision and aims” part, the average score for reporting is 41%, the same observation is valid here also like the previous element. Companies need to set quantitative targets to increase their reporting credibility.

For the “management approach part”, the average scoring is 88.5%, 10 companies or 77% of the companies are reporting their management approach in details. The rest of the companies are mentioning the topic as part of their strategies.

For the ”performance indicators” area, the average scoring is 41% , Only one company(Chevron) met the criteria put for comprehensive reporting in the performance indicators area by mentioning in its report the impact achieved for their health efforts. Oil and gas companies should be careful about this point and try to assess their impacts and report it in their reports.

4.5.5.3 Education and training

This is the last element we are going to discuss in this driver. Its importance emerges from the fact that accidents, injuries and diseases can be mitigated if the employees awareness is raised through knowledge and better preparedness. The overall average scoring for this element is 40.4 % which is the least among the other 2 elements in the driver.

For the “vision and aims” part, the average score for reporting is 33.3 %, 3 companies are not reporting on this element. Only one company which is Total mentioned a quantitative target for future. We can see from this element and the most of the elements we examined till this moment that companies are lacking disclosing quantitative targets for the future which is very weak point revealed by this research

For the “management approach part”, the average score for reporting is 73.1 %. Although the importance of this element, it achieved the least average score percentage reporting among the other elements constituting the driver. 54% of the companies reported fully on the management approach while 38% referred to the topic briefly . 1 company which is BP didn't mention any thing in the management approach.

For the "performance indicators" part, the average score for reporting is 23.1 % , This is mainly because 46 % of the companies didn't report any performance indicators for that element. This is one of the area of improvements that companies should consider in order to enhance their reporting. Only 15% of the companies are considering the output of their efforts .

4.5.6 Citizenship

One of the most important drivers that is increasingly gaining importance since companies are regarding over performing in this area nowadays a commitment that should be fulfilled towards the societies and the local communities in which they are operating. In the past demonstrating good citizenship from companies was requiring some philanthropic activities, but now the rule of the game has changed and companies are required to support the development in different areas such as education, health, increasing welfare of the people of the local communities in which they are operating. The overall average reporting of this driver is 45.8 %, which is considered above average but still companies should pay more attention in the sense of demonstrating their impacts on the societies.

4.5.6.1 Human rights

One of the areas that needs improvement and more attention by companies, although some companies are performing good at it but still there is no consensus about the best ways to handle that topic. The average performance score for human rights is 36.8 %. 3 companies didn't provide any information in their reports (Chevron, Gazprom and Valero)., while other 2 companies (Petronas and Sinopec) just referred to it in the "vision ad aims" part without any details or explanations.

For the "vision and aims" part, the average score for reporting is 33.3%. Eni was the only company to report for a quantitative target in this area, 3 companies didn't provide information, while the rest of the companies just mentioned very broad goals stating their intentions to develop human rights within their companies. Companies should move forward and improve their reporting in this area and provide more specific targets and goals .

For the "management approach part", the average score for reporting is 53.8%, this is considered to be a relatively low score performance. The main reason is because 38 % of the companies didn't provide any information regarding human rights issues. Only 46% of the companies scored 100% for reporting in this area.

For the "performance indicators" part, the average score for reporting is 23.1%, 9 companies didn't include any information in this area representing 69 % of the companies examined. Eni and shell are the only companies who provided complete information in this area.

One of the observations we noticed, that the International companies (Eni, Shell,…ect) are more caring for highlighting this element than the national companies (Gazprom, China Petrolueum,..etc) .

4.5.6.2 Health

One of the four areas we considered important in the citizenship in addition to human rights. The average scoring percentage is 42.3 % which is the lowest among the other 3 elements. 4 companies didn't include any information regarding the health issues for locals.

For the "vision and aims" part, the average score for reporting is 30.8 %, Chevron was the only company to provide a quantitative target for developing health conditions for local communities in which they operate. 2 companies provide qualitative targets, 5 companies didn't include any information in this area.

For the "management approach part", the average score for reporting is 65.4 %. Again the score is below average since 4 companies didn't provide any information. 8 companies (61.5 %) provided their management approach completely.

For the "performance indicators" part, the average score for reporting is 38.5 % . 2 companies (Exxon and Shell) provided the impact achieved as a result of their efforts, while three companies reported the output of their initiatives. 5 companies didn't provide any quantitative information. Companies should move forward in assessing the impact achieved to demonstrate their effectiveness in handling the citizenship issues.

4.5.6.3 Education

The area that acquired the highest scoring performance average in this drive with 57.7 %. All the companies except one which is Total disclosed information about this element.

For the "vision and aims" part, the average score for reporting is 43.6 %. 2 companies (Eni and Petrobras) only reported quantitative targets. One company didn't include any information regarding this element.

For the "management approach part", the average score for reporting is 84.6 % . 10 companies reported their management approach in details which gives a sign that most of the companies realized its importance. The reporting in this area is quiet satisfying.

For the "performance indicators" area, the average score for reporting is 53.8 %. The score is above average but still there is a problem in reporting the impact achieved due to this efforts.

4.5.6.4 Infrastructure

Developing the infrastructure of the local communities is one of the things that stakeholders are expecting from oil and gas companies by means of providing electricity and clean water and building bridges and enhancing the infrastructure in the rural area in which they are operating.

The average scoring for this element is 43.3 % . 2 companies (Petronas and Valero) didn't include any information regarding this element.

For the "vision and aims" part, the average score for reporting is 33.3%. Only one company (Total) provided a quantitative target, while 3 companies didn't disclose their vision and aims.

For the "management approach part",the average score for reporting is 76.9% which is around average. 69.2 % of the companies disclose their management approach in enough details.

For the "performance indicators" part, the average score for reporting is 30.8 % . 46 % of the companies didn't include any quantitative numbers. Companies should be more alerted for the impact they do in communities they operate in order to justify their investments.

4.5.6.5 Local business partners

Developing local business partners is one of the expectations of local communities which is required to be fulfilled by the oil and gas companies. The average score for reporting for this element is 48.1 % . Only one company didn't report on that element which is Petronas. One observation was noticed that the companies operating nationally are less reporting on that element, may be this because of the fact that the pressure regarding this topic is less to them, so they put as a low priority. On the other hands the multinational companies seem to be more conscious and responding to that topic.

For the "vision and aims" part, the average score for reporting is 30.8%. None of the companies (Total) provided a quantitative target.

For the "management approach part",the average score for reporting is 84.6% which is above average. 77 % of the companies disclose their management approach in enough details.

For the "performance indicators" part, the average score for reporting is 41 % . 30 % of the companies didn't include any quantitative numbers. Only one company reported the impact they did for the local communities which is China national petroleum. They announced the benefits brought for one of their business partners and how these benefits created a lot of jobs and increased the annual income per capita for the people living in this area.

4.5.7 Environment

One -if not- the most important driver for the oil and gas industry. The negative consequences accompanied with the activities and processes of the industry is one of the reasons that brought that importance for this driver. It was not surprisingly that the driver will achieve the 2nd highest overall average score percentage for reporting just after the safety . Although being one the best driver covered by the companies, still there are some points the companies has to consider in order to close or mitigate the doubts and concerns the stakeholder has towards the industry.

Climate change risk

One of the greatest risk the industry is facing is the climate change risk, we discussed a part of this risk which is related to the shareholders and the financial performance and the future growth aspects of the industry. In this driver we considered two elements which we found can address and cover this risk . The first one which is related to the reduction of the impact by emissions of carbon dioxide and the green houses gases. The second element will cover the efficient use of energy.

4.5.7.1 Reducing Impact

For the "vision and aims" part, the average score for reporting is 59%. 38.4 % of the companies declared quantitative targets concerning the reduction of the carbon dioxide and green houses gases emissions. The rest of the companies gave a hint about their aims to reduce the climate change risk but in a generic way. Still, the reporting on this part is the best among all the element in the model.

For the "management approach part", the average score for reporting is 76.9% which is above average. 54 % of the companies which are representing half the companies we examined disclose their management approach in enough details. Although the average score reporting is considered above average but companies are requires to pay more attention and disclose more details about their plans due to the importance of this topic in the industry.

For the "performance indicators" part, the average score for reporting is 61.5% . Reporting in this area achieved good results. The only suggestion we can draw in this element for the companies is to consider in the future to benchmark their emissions with external references .

4.5.7.2 Efficient Energy use

This is the second element we considered in the climate change topic. The average reporting percentage for this element is less than the first element but still acceptable with 52.9 %. This is mainly because companies are lagging a bit in the performance indicators part.

For the "vision and aims" part, the average score for reporting is 53.8%. 30.8 % provided a quantitative target for their future levels of energy efficiency. All companies should consider this issue in the future.

For the "management approach part",the average score for reporting is 76.9% which is above average. 53.8 % of the companies disclose their management approach in enough details. That means that 6 companies covered the topic although its importance very briefly.

For the ”performance indicators” part, the average score for reporting is 35.9 %. Only 3 companies or 23 % of the companies provided monetized value for their energy savings. None of the companies provided the impact of this energy savings on the total energy used by each company.

4.5.7.3 Oil spills

One of the elements that gained great importance recently , due to the disastrous consequences they can have on environment and the well-being of the people settled near the location of spills. The element became one of the top priorities specially after the oil spill in 2010 by BP which is known as “Gulf of Mexico oil spill” which still BP is suffering from the negative consequences on its reputation.

The overall average score for this element is 38.5 % which is very low if we considered also its importance. The management approach reporting is showing a very low scoring.

For the “vision and aims” part, the average score for reporting is 28.2%. Eni is the only company to disclose quantitative targets for decreasing their oil spills level. 4 companies are not reporting in this area.

For the “management approach part”, the average score for reporting is 46.2 % which is very low for this area. 3 companies disclose their management approach in enough details satisfying 100% of the criteria we put. The rest of the companies failed to report on the impacts to the environment and local community, and the effectiveness of the clean up measures. Companies should take this in to consideration in their future reporting.

For the ”performance indicators” part, the average score for reporting is 41 %. 4 companies didn’t report any measures on this area. The only suggestion that can be drawn is that companies should compare their spill levels with an external reference to give them more credibility.

4.5.7.4 Emergency prevention programs

The average reporting score for this element is better than the oil spills 47.9 % but due to increasing importance, we are assuming that reporting on these elements should gain more attention.

For the “vision and aims” part, the average score for reporting is 25.6 %. None of the companies provided a quantitative or qualitative targets.

For the “management approach part”, the average score for reporting is 79.5% which is above average. 46 % of the companies provided a management approach disclosure satisfying 100% of the criteria we put. All the companies are reporting on this element in the management approach area.

For the ”performance indicators” part, the average score for reporting is 38.5 %. 2 companies (Chevron and Gazprom) disclosed the impact of emergency prevention programs on the performance of the company. 6 companies with a percentage of 46 % of the companies didn’t provide any quantitative information for their programs.

4.5.7.(5,6,7) Waste management, Freshwater management and Biodiversity and ecosystem services

We are going to discuss these three elements together since their scores are very close to each other in all the three areas. A conclusion can be drawn from their convergence that oil and gas companies realized the risks growing from those risks and took a good approach for mitigating them.

The average score for each one of them is 52.9 %, 57.7 % and 51.9 % respectively. Their management approach disclosure is quiet satisfactory with scores of 80.8 % , 84.6% amd 96.2 % respectively. The same as the citizenship driver, companies are performing quiet good on management approach .

Area of improvement

The areas of improvement for them will be the “vision and aims” and the “performance indicators” areas in which they need to declare Quantitative targets regarding their future efforts for these three elements. Eni and Total were the only companies who published quantitative targets in their Reports. Eni for instance declared a target for 2016 of “22 million meter cube reduction in fresh water consumption in the downstream activities “ regarding fresh water management while Total set a quantitative target concerning waste management which is “Reduce the hydrocarbon content (expressed in tons) of our onshore and inshore discharges by 40% between 2011 and 2017”

For the performance indicators, the average reporting score is.46.2 %, 56.4 % and 38.5 % respectively. Still companies are little lacking disclosing further details on the impact to the communities and environment.
It’s good to mention that Eni announced one of the future goals is to start a system for monitoring and evaluating social investments in Congo.

4.5.8 Delivering customer promise

We have previously discussed that in some other industries than the oil and gas industry, this driver could be more important and relevant for stakeholders. But there are still some needs required to be satisfied and reported. The overall average scoring for this driver is below average with 36.9 % . The companies are paying more attention to other drivers rather than this driver. In other industries this driver can arrive first with respect to how it is emphasized by companies. But as we mentioned in the literature that oil as a product is a commodity and companies usually pay more attention for other drivers in the industry such as environment and safety.

4.5.8.1 Pricing levels and customer saving

Few companies are disclosing information satisfying the need for their customers about the price fluctuations of oil prices and the need for producing fuels, products and services that will have a monetary saving value for the customers. Only 42 % of the companies disclose information concerning this topic. Companies need to reconsider this topic and see its relevance with their stakeholders.

product stewardship

This sub-driver was represented by two elements covering that topic.

4.5.8.2 Report actual improvements to fuel and products

The average score for reporting on this element is 47.3 % .

For the "vision and aims" part, the average score for reporting is 25.6 %. Total was the only company that provided a quantitative targets.

For the "management approach part",the average score for reporting is 69.2% which is slightly below average. 66 % of the companies provided a management approach disclosure satisfying 100% of the criteria we put. All the companies except 2 are reporting on this element in the management approach area.

For the "performance indicators" part, the average score for reporting is 57.7%. The reporting in this area is quiet good. 33 % of the companies didn't report in this area.

4.5.8.3 Volume of bio-fuels produced and purchased meeting sustainability criteria

The other element which is considered a core element in the GRI oil and gas supplement gas sector guidelines about the biofuels that are meeting sustainability criteria. Only 23% of the companies mentioned that reporting element in their reports.

4.5.9 Innovativeness

Since the topic is broad, we tried to be focused simple at the same time, we decided to focus only on the research and development function and to highlight its role in the sustainability reports. We are going to focus mainly on quantitative performance indicators.

The management approach for innovation is described as part of other elements such as “energy efficiency” , “reducing climate change impact” . It will important for a company to aggregate their research and development efforts beside the presence of innovation solutions throughout the report.

The average score percentage for the driver is 23.1 % which is considered to be the lowest score between all the drivers. 6 companies out of 13 didn’t disclose any specific information about their aggregated R&D efforts. Eni was the only company to disclose information satisfying all the criteria.

Area of improvement

Companies should give consideration for the way they are presenting their innovation processes and activities. As we said before that almost all the companies have pointed out for innovation but as a part of another section or chapter in the report. A more appealing and simpler way that shows a complete and assembled picture is required so that their stakeholders will have a more complete and comprehensive view for the efforts and impact concerning innovation and R&D.

5.Conclusion

5.1 Introduction

After this discussion, we are about to complete this work. But before the end, it is necessary to give a final conclusion on the work presented.

It's needless to speak about the importance of reputation for any company. We discussed this in details in the literature review part, but we can emphasize again that for any company, reputation acts a s the license to operate which is influenced by many factors such as acceptability, trust and desirability of the company's activities and products.

There are 2 important points about reputation that should be kept on mind, first one that the main factor that drives reputation is the stakeholders expectation, the other point is that reputation is transmittable and stakeholders can be easily influenced by other opinions or perceptions which means that by this massive growth of media over the past century and especially in the past decade, stakeholders have been given easy access to vast amounts of information that affects their assessment of an organization's reputation. Stakeholders assess that reputation using the metrics most applicable to their 'stake', such as financial performance, quality of offering, customer service, price, brand, social responsibility and sustainability amongst others. The growth of NGOs acting as public watchdogs has added a further imperative for organizations to perform above perceived minimum social standards.[84]

Therefore sustainability reports can be a very effective tool to leverage the company's reputation in the eye's of their stakeholders since better reporting leads to better expectations, as visibility and review allow stakeholders to test their expectations against what they found in the sustainability reports. The existing of any gaps can lead to negative consequences, since stakeholders will seek the missing information through other channels which may provide a negative picture about the company and can lead to undesired consequences for the companies.

We had started this work with the aim of investigating how do companies leverage on their sustainability reports for enhancing their corporate reputation.

For fulfilling this objective, a first step in our work was to determine the drivers or the components that constitute corporate reputation. We reviewed the measurement model for reputation found in the literature then we came up by a set of drivers that can best address the corporate reputation and help to complete this work.

A last step for constructing the model that will be used in the content analysis was to operationalize the model .In other words to move from theory to practice by selecting measurement variable elements that represent each driver. Those variables will be the core unit for our work. The analysis model incorporates 32 variables which are based on relevant theories and best practice suggestions.

In order to investigate the content of the sustainability reports of the oil and gas companies we selected , we had to determine the methodology to perform the content analysis. We have found in literature that to report comprehensively , companies should disclose information on three different areas: 1)Vision and goals;2)management approach;3)Performance indicators.

For each element in the model we looked in the report for the disclosure on these 3 different areas and we created a small score card so that we can assess the performance of each company for disclosing information on the elements we have.

We analyzed the results of the content analysis in the previous section ,but there are few observations and take outs that can be observed.

5.2 Reflections on the three areas of disclosure

All of the 13 companies feature an extensive amount of information. The information which is being communicated by companies has been extended from obligatory financial disclosure to a broader and more extensive, transparent, and socially responsible disclosure which are focusing mainly on reporting on the triple bottom line elements constituting the sustainability which are the social, environmental and economic aspects of the company. Oil and gas sector is leading the other industries in publishing well-constructed and rigorous sustainability reports.

The conducted content analysis of the sustainability reports has revealed that for the three areas of disclosures we defined for each element, it was obvious in most of the elements, usually companies are very good in reporting the management approach and actions they follow.

Instead, companies are lacking in the “vision and aims” part disclosing quantitative targets for future implications regarding the different measurement variables. Stakeholders expect to see clear goals, as well as processes and timetables for improvement and reporting against progress. The only companies who managed the “vision and aims” part successfully were “Eni” and “Total” . For “Eni” in every section in the report, they dedicated a small space for reporting their 2016 target goals and the main results achieved in 2012. For “Total”, they did something similar but in a separate section in the report under the name “main objectives” where they listed the ongoing objectives , the current status for each objective, comments for the progress and finally the new objectives that were approved by the executive committee. In the “vision and aims” part, the average score reporting performance for “Eni” and “Total” was 62.3 % and 55.8% respectively which are the best scores in this part among all the companies. It is clear from the results that although the good approach from “Eni” and “Total” but they didn’t report their quantitative and qualitative targets for all the elements successfully.

As for the "performance indicators" part, the only observations we noticed that still companies need to put more effort in this part. Stakeholders require more relevant and focused information to be disclosed and reported. For instance in the performance indicators covering the environment, companies need to provide quantitative data that are benchmarked with external companies. Although some companies started to do this but the main stream of companies are still lagging behind. Another example from the "citizenship" elements such as the "Education" and "Health" which are companies are also lacking to report about the impact of their efforts in this part. and the demonstration of the effectiveness of their efforts to the communities where they are operating. Still concerns about the benefits they are bringing to the oil production developing countries in which they are operating.

5.3 Reflections on the drivers and their corresponding elements

For the future financial risks due to climate change. Almost all the countries are considering the risks that will be emerging in the coming years due to the increase of energy demand and the increased regulations and constraints on the emissions of the Carbon dioxide. But the degree of reporting needs to be enhanced and improved and include more robust studies. This finding is consistent with what found in the report of "Best practices in climate change" which stated that companies should use more robust financial analysis tools to better allocate capital and make strategic business decisions, including how to mitigate the risks of future climate regulations. Ideally, these should factor in other air quality regulations and proposals to assess a company's entire approach to emissions reductions. Companies and regulators should also consider the benefits of low and zero carbon options in hedging against fossil fuel price volatility and increasing costs of reducing carbon emissions.[83]

Corporate governance has become a key focus for companies to be addressed in the sustainability reports. All the companies reported very well on how they manage sustainability .

Still some issues are not enough covered although most of the companies are mentioning their importance. One of these issues was the "linkage of sustainability results with performance". Around 70% of the companies didn't mention any thing concerning that point, although it was mentioned in the GRI guidelines where most of the companies are following for their reporting.

Revenue transparency is also one of these issues. This can strengthen the claims that are spread by public and activists about the corruption that is spread between the companies and the host governments where this companies are operating. In our analysis only 3 companies out of the 13 companies disclosed the detailed payments they pay to the host governments in which they operate.

In the "External audits for reporting process" , it was noticed that 38 % of the companies didn't provide any external evaluations from third parties for assurance of the reliability of the reporting process. Most of the companies which didn't report are national companies operating mainly within their countries of origin.

For the Work place and talent driver, all the companies reported on this driver, companies need to report more quantitative targets to be more appealing and serious concerning the employees. Also, for the "performance review process" element, very few companies are reporting on the processes and activities they follow to assess the performance of their employees.

As has been expected one of the drivers that is highly expressed is the safety. Oil and gas industry is still regarded by public as one of the most dangerous industries with severe consequences. Companies are well doing with respect to the safety performance .More companies are suggested to report their injuries and accidents indicators benchmarked with external references to give a more comprehensive picture for their stakeholders. In our analysis only 23% companies managed to do this. Companies are suggested also to give more attention to report on employees health status not just the safety from accidents .

For the citizenship driver performance, this driver is gaining an increasing importance through time. Companies are becoming more aware of their role and commitment towards local people. The reporting in this area is quiet comprehensive and detailed. Companies just need to more evaluate and demonstrate the effectiveness of their initiatives to the local communities. We observed that companies started to consider this issue. For instance Eni announced in their report that they established a partnership with a NGO for evaluating the impact of their social projects. Last remark was observed that multinational companies operating substantially abroad (Eni, Shell, Exxon,..etc) are more caring for disclosing issues in human rights than companies operating substantially domestically (Gazprom, China national petroleum, Petronas, ..etc) .

For the "environment" driver , as expected companies are paying special attention for it. It was not surprisingly to be the second driver mostly covered. Still there are some recommendations for companies for better and complete reporting. For the climate change and oil spills topics. Companies need to consider setting and reporting their future quantitative targets to their stakeholders. For the oil spills topic, since it is very hot nowadays, companies are recommended to disclose more information on their spills and their implications for the surrounding environment . Another suggestion is to move forward to benchmark the air emissions and their spills which will allow the stakeholders to measure each company's risk exposure, uncover trends in the industry and better assessment and judging the position of each company which will result in a more precise and unbiased perceptions. Companies are well performing in the areas of waste and biodiversity management .

"Delivering customer promise" and "Innovativeness" are from the worst drivers covered in the sustainability reports of the companies. It's important to emphasize again that for the innovativeness driver we mean the aggregated efforts and a dedicated section for reporting the indicators such as "R&D" investments and the tangible value generated due to R&D activities.

It has been also observed that the state-owned and the companies operating within their companies of origin are disclosing relatively long sustainability reports in terms of its length such as Petrobras, Gazprom and China national petroleum .

At the end of this analysis and conclusion part, it is important to stress that the findings of this thesis should not be considered a final results . There may be more differences if more empirical data was included, which could be investigated in continuance of this thesis. We selected the top companies in the industry which by the way are publishing their sustainability reports which are the most comprehensive in the industry. Nevertheless, may be more and different results could be revealed by including more companies to the content analysis. Another limitation to this study that the measurement models for reputation are still well developed and there is no consensus between the practitioners and the academics on the drivers that affect the reputation. Moreover, another area that will need more future research is the operatioalization of the reputation measurement and drivers models to a tangible measurements that can be easily benchmarked and compared with other data.

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Sustainability reports of the proposed companies

1. **Eni**

http://www.eni.com/it_IT/attachments/sostenibilita/pdf/eni-for-2012.pdf

2. **Shell**

http://reports.shell.com/sustainability-report/2012/servicepages/downloads/files/entire_shell_sr12.pdf

3. **Exxon Mobil**

https://www.google.it/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CC8QFjAA&url=http%3A%2F%2Fwww.exxonmobil.com%2FCorporate%2FFiles%2Fnews_pub_ccr2012.pdf&ei=RDmfUpmRJMGp7Abx7oCYBg&usg=AFQjCNF8SVdj2xIH_KDDV-N7IsbGkaJ6SQ&sig2=rFRNJ_90ZEKERm8eCco43g&bvm=bv.57155469,d.ZGU&cad=rja

4. **BP**

http://www.bp.com/content/dam/bp/pdf/sustainability/group-reports/BP_Sustainability_Review_2012.pdf

5. **Chevron**

http://www.chevron.com/documents/pdf/corporateresponsibility/chevron_cr_report_2012.pdf

6. **Total**

http://total.com/en/total-society-and-environment-report-2012

7. **Petronas**

https://www.google.it/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CEAQFjAC&url=http%3A%2F%2Fwww.petronas.com.my%2Fsustainability%2FDocuments%2Fsustainability-report%2FSustainabilityReport2012.pdf&ei=-

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8. **China national petroleum**

http://www.cnpc.com.cn/csr/PageAssets/Reports/CSRReport2012.pdf

9. **Petrobras**

http://www.petrobras.com.br/rs2012/downloads/Petrobras_Sustainability_Report_2012.pdf

10. **Statoil**

http://www.statoil.com/annualreport2012/en/Download%20Center%20Files/01%20Key%20downloads/20%20Sustainability%20Report%202012/Sustainability.pdf

11. **Gazprom**

http://www.gazprom.com/f/posts/51/402390/sustainability-report-2011-en.pdf

12. **Sinopec**

http://www.sinopecgroup.com/english/Pages/SustainReport2012.pdf

13. **Valero**

http://media.valero.com/flash/socialreport/report.html#/Social Responsibility Report 2012 page/2-3

7-Appendix

Evaluation Model

Score per element

Maximum score					
No.	Element	Vision	Management approach	Performance indicators	Total
1	Future plans and growth opportunities due to climate change	3	2	3	8
2	Sustainability management	3	2	1	6
3	Sustainability linkage with performance measurements	N/A		2	2
4	Approach used	N/A	4	N/A	4
5	Mitigating risk	3	2	3	8
6	Revenue trasparency	N/A	N/A	2	2
7	Commentary added to indicate submissions to EITI as source of documentation. *	1	2	2	5
8	External audits , Third party sustainability evaluations and partnerships. *	N/A	N/A	4	4
9	Workforce diversity and inclusion	3	2	3	8
10	Employee benefits and programmes	3	2	3	8
11	workforce engagement	3	2	3	8
12	perfromance review process	1	2	3	8
13	Training and development	3	2	3	8
14	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.	3	2	3	8
15	Workforce health	3	2	3	8
16	Education and training	3	2	3	8

17	Human rights due diligence *	3	3	3	9
18	Health *	3	2	3	8
19	Education *	3	2	3	8
20	Infrastructure *	3	2	3	8
21	Local business partners	3	2	3	8
22	Reducing impact	3	2	3	8
23	Efficient Energy use	3	2	3	8
24	Oil spills	3	3	3	9
25	emergency prevention programs	3	3	3	9
26	Waste management	3	2	3	8
27	Fresh water management	3	2	3	8
28	Biodiversity and ecosystem services	3	2	3	8
29	Pricing levels and customer saving	3	2	3	8
30	report actual improvements to fuel and products. *	3	2	3	8
31	Volume of biofuels produced and purchased meeting sustainability criteria.*	N/A	N/A	1	1
32	Innovation process	N/A	N/A	3	3
	Total	74	59	87	222

Table: Score per element

Operatioalization model for reputatioal drivers

Driver variables						Qualitative assessment																																						
No.	Driver	No.	Sub-driver	No.	Elements	Vision and aims													Management approach														Performance indicators (Quantitative)													
						Eni	SHELL	EXXON	BP	Chevron	Total	petronas	china	Statoil	petrobras	Sinopec	Gazprom	Valero	Eni	SHELL	EXXON	BP	Chevron	Total	petronas	china	Statoil	petrobras	Sinopec	Gazprom	Valero	Eni	SHELL	EXXON	BP	Chevron	Total	petronas	china	Statoil	Petrobras	sinopec	Gazprom	Valero
1	Financial performance and long term investment value	1.2	Future growth	1	Future plans and growth opportunities due to climate change	1	2	2	2	0	2	1	1	2	2	1	2	1	1	2	2	2	0	1	0	2	2	2	1	1	1	1	2	2	2	0	2	0	1	2	1	0	0	0
2	Corporate governance and leadership	2.1	Procedures and policies for sustainability	2	Sustainability management	2	1	2	1	1	3	1	1	1	1	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	1	1	0	1	0	1	0	0	0	0	0
				3	Sustainability linkage with performance measurements																											1	2	1	1	0	0	0	0	0	0	0	0	0
			Stakeholder engagement	4	Approach used														2	2	3	3	1	1	1	3	2	4	3	4	0													
3	Regulatory compliance	3.1	Corruption	5	Mitigating risk	2	1	1	1	0	1	1	0	1	1	1	1	1	2	1	2	1	0	1	2	0	1	1	2	2	1	1	0	3	3	3	1	0	0	3	3	1	3	0
				6	Revenue trasparency																											2	2	0	1	0	0	0	0	2	0	0	0	0
				7	Commentary added to indicate submissions to EITI as source of documentation. *	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	1	0	0	1	0	0	0	0
		3.2	Approach for sustainability reporting	8	External audits , Third party sustainability evaluations and partnerships. *																											1	2	3	2	1	2	0	0	1	0	2	0	0
4	Work place talent and culture	4.1	Employment	9	Workforce diversity and inclusion	3	1	1	3	0	3	2	1	1	1	0	0	1	2	1	2	2	0	2	2	2	2	2	0	2	1	2	2	2	3	2	2	2	1	3	3	0	3	2
				10	Employee benefits and programmes	1	0	1	1	0	3	1	1	1	0	1	1	1	2	0	2	2	0	1	2	2	1	1	2	2	2	3	0	0	1	0	2	0	1	0	3	1	1	2
		4.2	Labor/management relations	11	workforce engagement	0	1	1	0	0	0	0	1	1	1	1	1	0	2	1	2	2	0	0	2	2	2	2	2	2	0	3	0	1	3	0	0	0	1	2	3	0	0	0
				12	perfromance review process	1	0	0	0	0	0	0	1	0	0	0	0	0	2	0	1	2	0	1	1	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		4.3	Training and development	13	Training and development	1	1	1	0	0	3	1	1	0	1	1	2	1	2	2	2	0	0	2	1	2	0	2	2	2	2	2	1	2	1	0	1	2	1	2	1	1	2	2
5	Safety	5.1	Genral safety topics	14	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.	2	1	2	1	2	1	1	1	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2	1	2	2
				15	Workforce health	2	1	2	1	1	2	1	1	1	1	1	1	1	2	1	2	2	2	1	1	2	2	2	2	2	2	2	2	2	0	3	0	0	1	2	2	1	0	1
		5.3	Risk mitigation	16	Education and training	3	1	1	1	1	3	1	1	0	1	1	0	0	2	2	2	0	2	1	2	2	1	1	2	1	1	2	2	0	0	1	0	0	1	1	0	1	1	0
	citizenship	6.2	Human rights	17	Human rights due diligence *	3	1	2	1	0	1	1	1	1	1	1	0	0	3	3	3	3	0	2	0	1	3	3	0	0	0	3	3	1	0	0	0	0	0	0	2	0	0	0
		6.4	Human Capital	18	Health *	2	1	2	1	3	0	0	1	0	0	1	1	0	2	2	2	2	2	0	0	2	0	0	2	1	2	2	1	3	2	3	0	0	1	0	0	2	0	1
				19	Education *	3	1	2	1	1	0	1	1	1	3	1	1	1	2	2	2	2	2	0	2	2	2	2	1	1	2	2	1	1	2	2	0	3	3	2	2	2	0	1
		6.5	Productive capital	20	Infrastructure *	2	1	1	0	1	3	0	1	1	1	1	1	0	2	2	1	2	2	2	0	2	2	2	1	2	0	2	0	1	0	1	2	0	2	2	0	2	0	0
				21	Local business partners *	1	1	2	1	1	1	0	1	1	1	1	1	0	2	2	2	2	2	2	0	2	2	2	2	1	1	3	1	1	1	2	2	0	3	2	2	0	0	0
		7.1	Climate change	22	Reducing impact	3	1	1	1	3	3	1	1	3	1	1	3	1	2	2	2	2	1	1	1	2	2	2	1	1	1	2	2	2	2	2	2	2	2	2	2	0	2	2
				23	Efficient Energy use	3	1	3	1	1	3	1	1	3	1	1	1	1	1	2	2	1	1	2	1	2	2	2	1	2	1	1	2	1	0	1	1	1	1	1	2	0	2	1

	Environment	7.2	Oil spills	24	Oil spills	3	1	1	1	1	0	0	1	1	0	0	1	1	2	3	1	3	1	3	0	0	2	1	0	1	1	2	2	2	2	2	0	0	0	2	1	0	2	1
		7.3	Emergency preparedeness	25	emergency prevention programs	1	1	1	1	1	0	1	1	1	0	0	1	1	3	2	3	3	3	1	2	3	2	3	2	2	2	1	0	2	2	3	0	0	2	0	2	0	3	0
		7.4	Wastes	26	Waste management	3	1	1	0	1	3	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	2	1	2	2	2	1	2	0	2	2	0	0	2	2	2	2	1
		7.5	Biodiversity	27	Fresh water management	3	1	1	1	1	0	1	1	3	1	1	1	1	2	2	2	2	2	1	2	2	2	2	1	1	1	2	2	2	0	2	2	1	2	2	2	2	2	1
				28	Biodiversity and ecosystem services	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	0	1	2	0	1	0	0	3	2	2	0	2	2
	Delivering customer promise		Customer satisfaction levels	29	Pricing levels and customer saving	1	0	0	0	0	3	0	0	N/A	0	1	1	0	2	0	1	0	0	2	0	0	N/A	0	2	2	0	3	0	1	0	0	3	0	0	N/A	0	2	2	0
		8.2	Product stewardship	30	report actual improvements to fuel and products. *	0	1	1	1	0	3	0	1	N/A	1	1	1	0	2	2	2	1	0	2	0	1	N/A	2	2	2	2	2	2	2	0	0	2	0	0	N/A	2	2	2	1
				31	Volume of biofuels produced and purchased meeting sustainability criteria.*																											1	1	0	1	0	0	0	0	N/A	1	1	0	0
9	Innovativeness	9.1	R&D	32	Innovation process																											3	1	0	0	1	1	0	0	0	1	0	2	0