QATAR UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

THE EVOLUTION IN THE SUSTAINABILITY REPORTING OF THE OIL AND GAS SECTOR IN QATAR

BY

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ABSTRACT

The commitments towards conserving the environment is a major concern worldwide. "Sensitive sectors", such as the oil and gas sectors, tend to report more on sustainability due to the impact of their work on the environment. Qatar's economy mainly depends on the oil and gas sector. The Qatari authority's main objective is to have a clean and sustainable environment which is stated clearly in their National Development Strategy and Vision 2030. Thus, since 2012, HSE regulations and Enforcement Directorate have pushed oil and gas companies to report on their environmental performance through sustainability reporting. Global Reporting Initiative (GRI) and IPIECA guidelines were to be used by the companies to disclose in three categories: environment, health and safety and social and economic. Thus, this study is to explore the evolution in the sustainability reporting in the oil and gas sector over the time period of 2012-2014. Online sustainability reports of eight companies operating in the oil and gas sector in Qatar will be examined through content analysis. The results showed a decrease in the overall reporting in all categories in all companies, though their reports are becoming more comprehensive and focused.

Keywords: sustainability reports, environmental disclosures, Global Reporting Initiative (GRI), IPIECA, environmental management, Qatar

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CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

This thesis is to explore the evolution process of sustainability reporting in the context of Qatar. This research purpose was motivated by the extensive calls from all the world poles to preserve the environment. These calls has been heard and nourished by the Annual Conference of Parties (COP21) that is known as 2015 Paris Climate Conference. Their main topic was the urge to resolve the phenomena of climate change (United Nations Conference on Climate Change 2015). In spite of that, their attempt to limit global warming is through propelling different nations to contribute and commit in lessening the emission of CO2.

In 2012, Qatar hosted the 18th Annual Conference of Parties. Hosting such a conference requires a demonstrated commitment and proactivity in achieving carbon neutrality (United Nations 2014). Thus, in 2011, and before hosting the COP 18, Qatar issued the National Development Strategy that included the Sustainable Development Industry Reporting (SDIR) Programme to show support and commitment towards climate change (HSE Regulations and Enforcement Directorate (DG) 2010). This strategy was aligned to Qatar's vision 2030.

Qatar authorities emphasized in their 2030 vision that their main objective is to reach advancement and quality management by wisely utilizing all of their resources. They are seeking to create a balance between the country's development and protecting the environment (General Secretariat For Development Planning (gsdp) 2008). They said they are fully committed to having a carbon-neutral FIFA World CUP 2022 (John 2014). Yet, Qatar is one of the major countries in the emission of greenhouse gases (United Nations Conference on Climate Change 2015).

In context, Qatar's economy depends on the oil and gas sector. However, this sector is the main contributor to the emission of CO2. Therefore, companies operating in this sector are urged to report on the environment to align with Qatar's vision 2030 and Qatar's commitment towards climate change (HSE Regulations and Enforcement Directorate (DG) 2010). To facilitate the process of environmental reporting, HSE Regulations and Enforcement Directory within Qatar Petroleum employed the 2010 Global Reporting Initiative (GRI) Framework and the 2010 International Petroleum Industry Environment Conservation Association (IPIECA) guidelines on voluntary reporting in the oil and gas sector for the companies in Qatar to follow.

Most companies in the aforementioned sector in Qatar initiated their first round of sustainability reporting in 2012. In the same year, an environmental report showed harmful environmental practices that cause air pollution and raised the concerns about the environment (Walker 2014). Nevertheless, a few companies have already been voluntarily reporting before that period. Consequently, on 2014, Qatar's air pollution

was the second highest in the world ranked by the World Health Organization (Walker 2014). In spite of that, the Qatari Government is committed towards sustaining the environment and is paying lots of efforts to manage the environmental challenges that are faced by them and develop their ambitious environmental management system (Hukoomi 2016). Over the time period of 2012-2014, sustainability reports were publicly available. Thus, the main objective of this study is to explore the evolution in sustainability reporting in the oil and gas sector in Qatar. It is to examine to what extent these companies are complying with the GRI framework and IPIECA guidelines. In addition, this study will explore what disclosures the oil and gas companies are reporting or not reporting on and which are inapplicable and interpreting the possible reasons behind it.

1.2. Problem Statement

In 2014, Qatar was among the highest polluted countries in the world. The World Health Organization (WHO) ranked it as second after Pakistan. The huge urban movement that Qatar is witnessing plays a big role in increasing pollution. The road congestion growth and air traffic are other major reasons (Al Arabiya News 2014, Walker 2014). As per Hukoomi, Qatar egovernment, Qatar has highlighted environmental sustainability as a key element in its National Development Strategy. Some of its main pressure points shaping its strategy are: air pollution, climate change and biodiversity. Thus, their environmental management strategy will concentrate on: long

term commitments, meeting specific environmental conservation targets, knowledge based investments and investing immensely in conservation plans due to its hydrocarbon industry (Hukoomi 2016).

1.3. Research Questions

- Are the oil and gas companies in Qatar committed towards sustainability reporting?
- To what extent companies are complying with GRI Framework and IPIECA guidelines?

1.4. Research objective

Most companies in the aforementioned sector in Qatar initiated their first round of sustainability reporting in 2012. However, few companies started their voluntary reporting before that period. They compiled their disclosures against the GRI Framework and tested their compliance through the GRI Level Check Application. Over the time period of 2012-2014, sustainability reports were publicly available. Thus, the main objectives of this study are

- To explore to what extent are companies committed towards sustainability reporting.
- To examine to what extent these companies are complying with the GRI framework and IPIECA guidelines.
- To compare the reporting disclosure amongst Oil and Gas companies in Qatar.

1.5. Scope of the study

This study is only tackling the sustainability reporting of the oil and gas companies in Qatar. The companies mentioned under this study are Rasgas, Shell, Qatar Gas, QAFAC, QAPCO, QAFCO, Maersk oil and Dolphin Energy.

1.6. Organization of the thesis

The study starts with Chapter one the introduction of the study, which examines the evolution in the sustainability reporting of the oil and gas sector in Qatar. It also explores the reporting disclosures, to what extent they are in compliance with the guidelines used and compare the results amongst the companies studied. Then, in Chapter Two we analyze the literature to continue in Chapter Three with the research design which consists of the research methodology, data collection method and data collection scheme. Then, Chapter Four encloses the results followed by the discussion and the conclusion that summarizes the study and discusses the limitations and future research in Chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

In this chapter, we will review previous research that relates to our study. The aim behind examining the empirical review is to have an overview of similar studies and their findings. Based on this chapter, we can then build our argument in the following chapters.

2.2. Oil and Gas Sector in Qatar

The oil and gas sector in Qatar has offered the country the world's highest income per capita. This sector played a role in evolving Qatar into a dynamic, fast growing economy (Qatar Petroleum 2015). However, the oil and gas sector is the main contributor to the emission of CO2 in Qatar. Thus, companies operating in this sector are urged to report on the environment to align with Qatar's vision 2030 and Qatar's commitment towards climate change. Qatar is one of the major countries in the emission of greenhouse gases (United Nations Conference on Climate Change 2015). According to the CIA Factbook, Qatar is ranked 41 in the world in the emission of CO2 due to the consumption of energy where 98.5% is the percentage of generating electricity from fossil fuel (CIA 2016). Thus, in 2011 Qatar issued its National Development Plan in order to urge companies to start reporting on sustainability.

2.3. Literature Review

Environmental protection concerns have been raised by different members of society, such as the government, environmentalists and the general population. It is considered that industry and business are the main reasons behind pollution. Therefore, due to all these pressures, companies are changing their behavior, searching to lessen their impacts on the environment in order to minimize conflicts with stakeholders and embrace their image. Hence, companies are resolving this issue through voluntarily reporting and disclosing their environmental actions in their accounting information system (Monteiro and Guzman 2010).

According to Monteiro and Guzman (2010), environmentally sensitive industries are considered to disclose more environmental information than industries with less environmental sensitivity. They assume that more environmental policies and regulations are imposed on these industries due to their high rate of pollution, Therefore, by facing all these pressures and to be viewed in a better manner by stakeholders, environmentally sensitive industries unveil more environmental disclosures.

2.3.1. Factors of Environmental Management Reporting

According to Wee and Quazi (2005), for a company to be proactive in environmental management, it has to consider six critical factors. One of these factors is an authorized person with good managerial skills to allocate sufficient resources to environmental management. Another factor is environmental policies

and strategies which reflects the company's environmental goals. Moreover, designing clear and measurable environmental goals is a must. Involving suppliers, employees and customers in environmental management is a way to maintain commitment towards these policies and strategies. In addition, employee training and educating programs are a critical factor. Finally, environmental performance, auditing, monitoring and reporting are crucial (Wee and Quazi 2005).

The article "Development and Validation of Critical Factors of Environmental Management" (2005) examined the previous literature for environmental Management best practices and identified some common practices. These practices were determined by seven critical factors: top management commitment, employee involvement, training, green processed or product design, supplier management, measurement of information. Furthermore, six environmental concepts were introduced and classified under two categories: rationale and process. The Rationale was broken down into two categories: economics, the importance of environmental management and the link between the environment and economics, and enforcement, how the degree of environmental performance increase as pressure increase. While on the other hand, the process was classified in four categories: empowerment, education, efficiency and excellence. Empowerment is achieving environmental excellence through leadership and corporate vision. It is to involve employees in environmental goal setting to attain the desired environmental corporate vision and create green teams to execute projects that engage with the environment. Education is to extend the environmental knowledge and practices to every constituent in the business from customers to suppliers, to employees, to stakeholders and regulators. Efficiency is the efficiency measurement's improvement. It is mainly concerned with: pollution prevention, waste reduction and energy saving. Lastly, excellence is to monitor, audit and report all the organization's activities. This step starts from aligning the organization's resources, capabilities and process with the vision to be implemented.

According to Montabon, Soufe and Narasimhan (2007), they have classified the environmental management practices (EMP's) into three categories: Operational, tactical and strategic. These classifications are to recognize the different scopes and impacts of the EMPs. They defined operational as the internal activities and referred to first level operations. Tactical practices are the middle point between operations and strategic practices. It represents both internal and external activities. Finally, strategic practices are the reflection of the business support of the environment to external players such as stakeholders and constituents. It is the set of objectives, plans and policies appointed by top management of the organization to cope with. Under these three categories different practices were identified. For instance, seven practices were categorized under operational practices; some of them are: recycling, waste reduction and money spent on the environment. In addition, tactical practices included eight practices such as early supplier involvement, environmental audits for suppliers, and environmental risk

analysis. Whereas five strategic practices were identified, such as environmental development, environmental policy, environmental mission and corporate policy (Montabon, Sroufe and Narasimhan 2007). Though these aforementioned three categories were identified, Montabon et al in their study recognized a wider range of practices and distributed them among four groups: Operational, tactical, strategic and environmental. Where environmental represents practices such as: cost saving, waste reduction, resource consumption and continuous improvement (Montabon, Sroufe and Narasimhan 2007).

2.3.2. Guidelines On Sustainability Reporting

The increase of awareness of the environmental degradation has increased the role of accounting and auditing professionals to conduct environmental auditing (Alazzani and Hussin 2013). Thus, different authors have tried to utilize different approaches and methods to study the extent of which sensitive environmental companies disclose environmental factors and publish sustainability reporting (Alazzani and Hussin 2013).) Agenda 21, chapter 30 specifically, encourages the communication of environmental reporting that includes also natural resources and energy usages. Moreover, it fosters businesses to implement a code of conduct promoting best practices on environmental practices (Perez and Sanchez 2009).

The campaign for disclosing environmental information has started since the 1970s. It later became a mandatory information to be provided to the public in a form of a report in a few countries. Then, in the late 1980's, the United Nations

started calling for more commitment from businesses toward the environment in its environment and development final report and conference. Consequently, and based on the demand of stakeholders, companies started to report voluntarily on their environmental performance. As a result, in the 1990's several guidelines on environmental reporting started to be published. Until, the international organization for standardization (ISO) established their family of ISO 14000 international standards for evaluating the environmental performance. Afterwards, the launching of Global Reporting Initiative was considered a crucial international reference in developing and implementing environmental practices using their guidelines (Perez and Sanchez 2009). The GRI framework has been recognized as the most-employed guidelines by organizations on sustainability reporting (Mori and Best 2014). It consist of three dimensions: environmental, social and economics (Alazzani and Hussin 2013). However, reporting should take into account the specifications and specialties of each economic sector (Perez and Sanchez 2009). In other words, the key specifications and priorities depends on the field that the organization operates in. For example, GRI has a specific framework for the mining sector that contains the ideal indicators that should be presented in the sustainability reports of its organizations (Perez and Sanchez 2009). In addition thereliability and credibility of sustainability reports were enhanced by some organizations through an external assurance as a voluntary practice (Mori and Best 2014). This assurance of the sustainability reports has

some reasons. Its main drivers are: quality improvement, credibility reinforcement and improving process of reporting (Mori and Best 2014).

In the study of Guthrie and Farneti (2008), the authors examined the sustainability reporting of the public sector in Australian companies. They chose companies that are reporting against the GRI guidelines since it can present the international developments of these companies. In addition, GRI declares that it is a standardized worldwide framework that can help companies report on sustainability and compare their reporting performance with different companies in the same sector. Moreover, according to the same study, Australian companies indicated some reasons of why they used the GRI framework. The companies emphasized on using this framework due to its international recognition and the ability of stakeholders to compare their performance with their peers. Furthermore, they have used it in order to show on what indicators they are focusing the most (Guthrie and Farneti 2008).

In the article Pressures for Sustainability Practices in an Oil and Gas Company: Evidence from Sudan (2015), it was stated that several factors affect sustainability practices. The major driving force was found to be laws and regulations. However, developed and developing countries differ, especially with the pressures to pursue sustainability reporting. Accordingly, in developing nations, the civil society plays the regulatory role to establish international pressure and make companies accountable.

In the article Corporate Governance and Environmental Reporting: An Australian Study (2007), the authors, Gibson and O'Donovan, studied the reports of 41 Australian companies in terms of quantity and categories of disclosures over a 21 year period of time. Their results have shown that the environmental disclosures volume has increased with some downward fluctuations over some particular years. Moreover, in their literature, they stated that an increase in the number of companies reporting on sustainability was shown after imposing the change in the Australian Corporations law (Gibson and O'Donovan 2007). Furthermore, previous research in the mining industry showed an evolution in the sustainability reporting over a time period. The reports were more sophisticated and comprehensive (Jenkins and Yakovleva 2006, Perez and Sanchez 2009). Different evolution in different categories was indicated. For example, the disclosures were the most in the social category (Perez and Sanchez 2009). For instance, it was stated that companies have their unique approach in disclosing information and that depends on the company's resources, expertise and stakeholders.

The study of AlNaimi, Hossain and Momin (2012) explored the existing status and to what extent the annual reports of the listed Qatari companies enclose corporate social responsibility (CSR) reporting. Their findings showed a low CSR reporting among Qatari companies. They suggested that the Qatari Government should force CSR reporting on its companies through clear guidelines. In addition, they recommended the use of the GRI guidelines as a way to standardize the disclosures among companies.

2.3.3. Environmental management frameworks

The Global Reporting Initiative known as GRI framework was developed by the non-profit organization Ceres and Tellus Institute in 1997 in Boston. Its main purpose was to develop worldwide standards for sustainability reporting (GRI 2016). On their application, they have more than 9000 registered organizations and more than 35000 registered reports. Accordingly, 82% of these reports base their reporting on the GRI standards (GRI 2016).

IPIECA. International Petroleum Industry Environment Conservation Association, is a global association for the oil and gas industry responsible for environmental and social issues. It was developed in 1974 after the launching of the United Nations Environemtal Progamme (UNEP). About half of the world's oil production is covered by its membership. Its main objective is meeting the expected environmental and social performance in society through improving the oil and gas industry operations and products (IPIECA 2016). IPIECA acts as a reference to the oil and gas industry for improving their environmental and social performance. They are the industry's spokesman in the United Nations (UN) (IPIECA 2016). Their main strategic themes are Climate and Energy, Environment and Social. Finally, The IPIECA has a liaison with GRI (IPIECA 2016).

GRI Guidelines are the most worldwide framework followed in sustainability reporting. A survey done by KPMG in 2011 indicated that around 80% and almost 70% of global Fortune 250 and N100, respectively, are following the framework provided by the GRI guidelines in their sustainability reporting. The mission of the GRI is to create standards for sustainability reporting with clear guidance and provision for organizations. Thus, organizations would be able to measure their environmental performance and report on it through the principles and indicators set by the GRI framework (English and Schooley 2014).

2.3.4. Institutional Theory

Institutional theory is the theory baseline that provides researchers with the insights to explore and examine the reasons behind adopting sustainability practices of organizations. Traditionally, institutional theory is mainly concerned with how organizations protect their spots and legality by complying with the institutional environmental rules and norms (Glovera, et al. 2014). In addition, this theory indicates how the adoption of legitimate practice strategies and decisions are influenced by external factors. It helps in studying the factors that affect sustainable practices and environmental management (Glovera, et al. 2014).

The institutional theory driving forces are three: coercive, cognitive and normative institutions. Coercive are the enforcement and pressures for organizations to abide by the rules or guidelines in reporting, collecting and interpreting information such as environmental protection policies (Qian, Burritt and Chen 2015). Cognitive is to behave in a way that is acceptable to the

members in the organization and its field (Qian, Burritt and Chen 2015). Finally, normative, is meeting the expectations and ensuring that the organization is follow the rules to be perceived in good manners (Glovera, et al. 2014, Qian, Burritt and Chen 2015). This institution plays an important role in encouraging sustainability reporting and the implementation of an environmental management system.

CHAPTER THREE

RESEARCH METHODS

3.1. Introduction

In this chapter, we examined the sustainability reports of the oil and gas companies in Qatar through content analysis. We used the GRI framework and IPIECA guidelines that the companies follow in order to check their compliance. Scores were given in order to distinguish between reporting, not reporting and not applicable. Finally, we used the coding and translated it to qualitative data and interpreted the results through graphs.

3.2. Research design

The aim of this study is to explore the evolution of sustainability reporting in the oil and gas companies operating within Qatar over time by which research design is shaped.

3.3. Data collection

Methods and process of data collection of this study are discussed in this subsection.

Both methods and processes of data collection are shaped by the research methodology outlined in the preceding subsection.

3.3.1. Research data sources

This project examined the sustainability reports published by companies operating in the oil and gas industry during the period of 2012-2014. This time period was chosen for the availability of the reports. Some of the oil and gas companies in Qatar started their voluntary sustainability reporting in 2011, however, for the sake of a fair comparison, we took the common years amongst all the companies. Initially, 9 companies were recognized as having sustainability reports available as a soft copy on their website and on the Global Reporting Initiative (GRI) website. Yet, one company has to be excluded due to the lack of availability of the 2012 and 2014 sustainability reports. Thus, only 8 companies were left as a final sample.

Table 0-1: Oil and Gas Companies Sustainability Reports

	RasGas	Shell	Qatar Gas	OAFAC	QAPCO	OAFCO	Dolphin Energy	Woqood
2009								1
2010								
2011								
2012								
2013								
2014								

3.3.2. Data collection method

Content analysis as a key method of data collection is utilized in this research project. It is a systematic technique used for identifying and inferring qualitative data, then codifying these data based on explicit rules and categorizing them into a reliable and well designed forms in order to obtain different meaningful quantitative measures through objectivity (Montabon, Sroufe and Narasimhan 2007, Monteiro and Guzman 2010, Alazzani and Hussin 2013). The content analysis technique has been widely used by other similar studies. According to previous researchers, content analysis is one of the most common and a dominant methodology in social reporting (Perez and Sanchez 2009). Moreover, this technique is used to measure the changing levels of information provided (Gibson and O'Donovan 2007). Consequently, sustainability reports mainly consist of environmental, social, economic and health and safety disclosures. Such reports are publicly available and easy to access.

3.3.3. Data collection scheme

Using content analysis, compliance of Qatari oil and gas companies to sustainability reports is measured by two instruments, namely; Global Reporting Initiative (GRI) and International Petroleum Industry Environment Conservation Association (IPIECA). First, the GRI is an international, self-governing organization established to help companies, governments and businesses apprehend and communicate their most critical sustainability concerns of their business and their impact. They provide guidelines that act as global standards and frameworks used for sustainability reporting to measure the environmental, health and safety, economic and social performance of an organization (Global reporting Initiative 2016). Second, IPIECA act as a reference guide for the oil and

gas industry. We examined the sustainability reports and the types of disclosures enclosed against the adopted guidelines of the Global Reporting Initiative (GRI) and the 2010 International Petroleum Industry Environment Conservation Association (IPIECA) indicators of the oil and gas industry guidance on voluntary sustainability reporting.

Different researchers have tried to utilize different approaches and methods to study the extent of which sensitive environmental companies disclose environmental factors and publish sustainability reports (Alazzani and Hussin 2013). As the basis of our content analysis, we have used the 2010 sustainability reporting guidelines issued by the HSE Regulations and Enforcement Directory (Qatar petroleum) as our framework checklist. They adopt the IPIECA, the American Petroleum Institute (API), the International Association of Oil and Gas Procedures (OGP) and the GRI sustainability reporting guidelines. The framework checklist consists of three categories Environemtal, Health and Safety and Social and Economic. Under each category there are several indicators that by themselves are divided into sub-indicators (see appendix). For example, the environmental indicator category consists of ten categories (E1- E10) and each one of these indicators has multiple indicators. To illustrate on the aforementioned point, E1, greenhouse emission, has four sub-indicators. A clear definition for each indicator is provided by the used guidelines which makes the assessment of the companies' performance easy, uncomplicated and precise.

The sustainability report related to each company and each year of the eight oil and gas companies operating in Qatar was examined against our checklist. Moreover, we used the GRI check of the Sustainability disclosure database on the GRI website¹. The aim behind examining these reports is to detect the presence, absence and not applicable information related to environmental management accounting disclosures included in the framework checklist and its progression. The disclosures then were studied and given a score of one, zero or n/a reliant on whether the listed information in the reports were present, absent or not applicable. Thus, a reliable and well-designed form was established to obtain different meaningful quantitative measures. Furthermore, on this report, we are only focusing on environmental management accounting indicators and we didn't go through the general reporting or management approach or governance.

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¹ http://database.globalreporting.org/search

CHAPTER FOUR

ANALYSIS AND RESULTS

4.1. Introduction

Qatari oil and gas compliance with global guidelines of sustainability reporting is analyzed in two ways. First, this compliance is examined across companies in the following subsection. By contrast, sustainability reporting compliance of Qatari oil and gas companies to global guidelines across categories is examined in the second subsection.

4.2. Compliance across categories

The GRI guidelines that the oil and gas companies in Qatar follows, consists of three categories: environmental, health and safety and social and economic. Thus, analyzing compliance of Qatari oil and gas compliance to global guidelines of sustainability reporting aims to understand the evolution process of this reporting over a period of 2012, 2013 and 2014.

4.2.1. RasGas

RasGas as per Figure 0-1 has a consistent reporting trend with few fluctuations. The environmental category disclosures have increased from 2012 to 2014 from 31 to a constant 34 in the last two years out of a maximum of 38. The health and safety indicator stayed persistent with no change over the previous mentioned

period. Finally, the social and economic disclosure descended from 41 in 2012 to 40 in 2013 and 39 in 2014 out of a possible 61. The non applicable indicators in this category is 12.

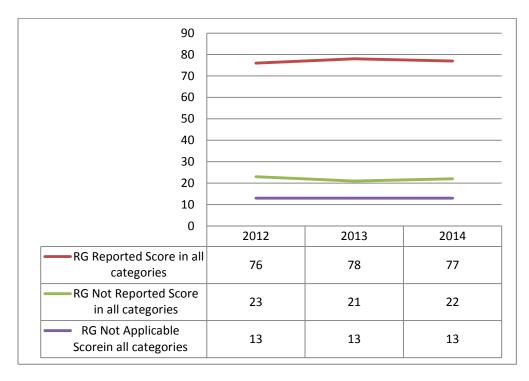


Figure 0-1: RasGas Overall Scores

4.2.2. Shell

Shell has consistent reporting in all three categories, as a total of disclosures. It has the same scores in all categories Figure 0-2. In spite of that, it is worth mentioning that in 2012 Shell did not report on EN9, Water sources significantly affected by withdrawal of water, and HR 11, Number of grievances related to

human rights field, addressed and resolved through formal grievance mechanisms. However, it disclosed these sub-indicators in 2013 and 2014 reports. Whereas, on the other hand, EN21, Total water discharge by quality and destination and LA10, Average hours of training per year per employee by gender, and by employee category, was only reported on in 2012.

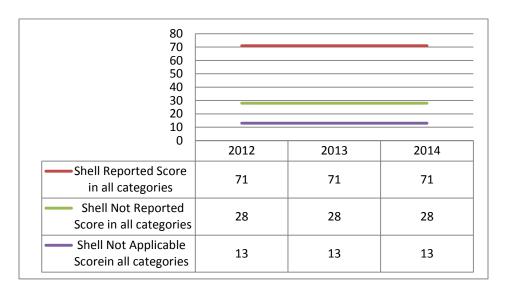


Figure 0-2: Shell Overall Scores

4.2.3. Qatar Gas

Figure Figure 0-3 shows the increasing trend in the reporting of Qatar Gas (QG) from 2012- 2014. We can notice that there were differences in the disclosure of the environmental category in the three consecutive years, 2012-2014. 2013 was the least in reporting and 2014 was the highest. Over three years none of the

indicators were inapplicable to Qatar. With further analysis, we noticed that in 2012 and 2013 QG did not report on the sub-indicators OG2, Total amount invested in renewable energy, and EN6, Initiatives to provide energy-efficient or renewable energy-based products and services and reductions in energy requirements as a result of these initiatives, respectively, in the E3 indicator, alternative energy source. In addition, in 2013 QG did not report on EN15, Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk, in the Biodiversity indicator, however, it has reported on it in 2012 and 2014. The health and safety category increased in disclosing on indicators over the years. In 2012, QG reported on 10 sub-indicators, 11 sub-indicators in 2013 to reach 12 in 2014 out of a possible 13. With respect to the social and economic category, it is shown that there was a decrease in disclosing information from 2012 to 2014. The number of reported information decreased to 49 in 2014 from 52 in 2013 and 51 in 2012 out of a possible 61 including 9 not applicable indicators. QG discarded reporting on EC4, SO5 and LA5.

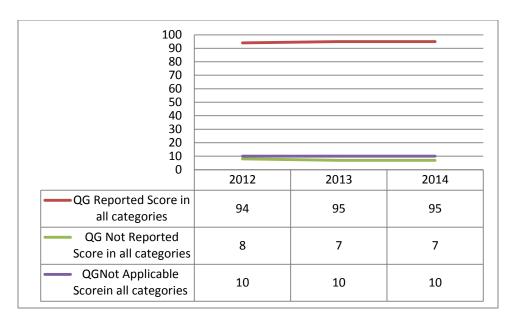


Figure 0-3: Qatar Gas Overall Scores

4.2.4. Qatar Fuel Additives Company (QAFAC)

Figure 0-4 shows the decreasing trend in QAFAC's sustainability report disclosures. The company witnessed a decrease in the environmental disclosure from 2012 to 2014. Out of a possible 38 sub-indicators, it reported on 27 in 2012, 24 in 2013 and 23 in 2014. Going through their disclosures, we can notice that no reporting on biodiversity, E5, was included in the 2013 and 2014 sustainability reports. Moving to the Health and Safety category, the sustainability reports of QAFAC showed a stable reporting in 2012 and 2014 with a score of 11 out of a maximum 13 while in 2013 their score was 9. Accordingly, in 2013, they dropped reporting on HS2, workforce health, and PR1, product stewardship life-cycle stages which also was discarded in 2014. However, in 2014, QAFAC started reporting on HS5, Process Safety. Thus, the scores remained stable with 2012.

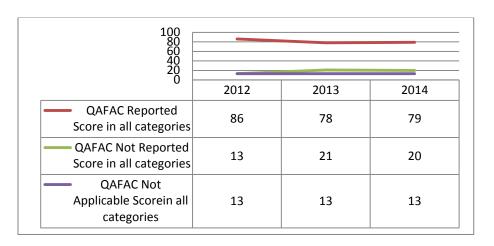


Figure 0-4: QAFAC Overall Scores

4.2.5. Qatar Petrochemical Company (QAPCO)

In its 2012 report, Qatar Petrochemical Company (QAPCO) disclosed 33 disclosures on its environmental performance out of 38. This number did not last in the following years and decreased to reach 23 in 2013 and 2014. The major drop was in the reporting on biodiversity, E5. Moreover, after reporting on 12 sub-indicators in the health and safety category in 2012 out of 13, three sub-indicators were dropped to reach a score of 9 in 2013 and 2014. The deteriorated disclosures were all in the product stewardship indicator, HS4,for both years. Even though the same score for not reported sub-indicators were designated in 2013 and 2014, a difference was spotted. PR4, product and service non compliance incidents, reported in 2013 while it was not in 2014 and PR7,

marketing communication compliance incidents reported in 2014 and was not reported in 2013. Lastly, for the social and economic category, QAPCO's score in 2012 out of 61 was 48, knowing that 12 sub-indicators were not applicable. The scores fall in 203 and 2014 to 33 and 31 respectively. Risk incidents, corruption and their corrective actions and grievances were the indicators that they dropped reporting on in the aforementioned years. As Figure 0-5 shows, a descending trend of reported information was clear.

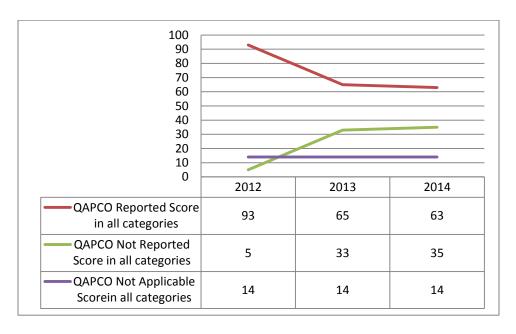


Figure 0-5: QAPCO Overall Scores

4.2.6. Qatar Fertilizer Company (QAFCO)

QAFCO's disclosures in the environmental category had almost a stable score. It increased to 33, from 32, in 2013 and then decreased to 31 in 2014. The two sub-

indicators that they declined to report on in 2014 were EN4, consumption of indirect energy from a primary source, and EN 23, significant spills number and volume. The health and safety category observed a double decrease in reporting every year from 2012-2014. The main dropped disclosures were in the product stewardship, HS4, and in 2014 process safety, HS5, was added to the non reported disclosures. QAFCO had a descending score started from 12 in 2012 to 10 in 2013 to reach 8 in 2014 out of a maximum 13. By going through the social and economic category, the company had a score of 47 in both years 2012 and 2013 whereas in 2014 the score has dropped to 44 out of 61 with a not applicable subindicators score of 13. The drop in the score was the result of not disclosing information on SE14, public policy, and LA5, minimum notice period. Thus, this was shown in the decreasing trend in Figure 0-6.

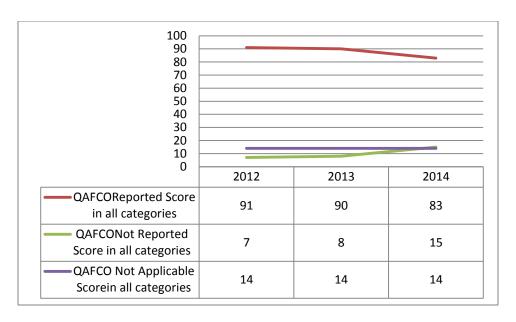


Figure 0-6: QAFCO Overall Scores

4.2.7. Maersk Oil

Maersk oil disclosures in both the environmental and health and safety category do not have much to mention. The reportings were stable with an increase or decrease of 1 or 2 indicators. The major decline was in the social and economic category. The reporting disclosures decreased approximately to half from 2012 to 2014; the scores were 41 in 2012, 36 in 2013 and 16 in 2014 out of a maximum of 61 with 13 not applicable disclosures. Mainly, SE11, preventing corruption, SE12, preventing corruption involving business, SE14, public advocacy and lobbying, and SE18, grievance system, were the left disclosures. Figure 0-7 shows the declining trend in Maersk oil reporting.

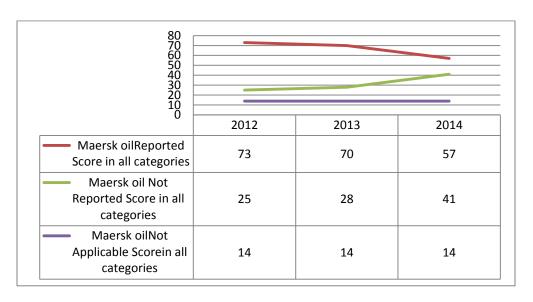


Figure 0-7: Maersk Oil Overall Scores

4.2.8. Dolphin Energy

Dolphin Energy showed a stable reporting in 2012 and 2013 with a score of 36 in the environmental category, out of 38 with 2 inapplicable indicators, 12 out of 13 with one inapplicable indicator in the heath and safety category and 46 out of 61 with 12 inapplicable indicators in the social and economic category. Whereas in 2014, all the scores descended. 5 indicators were dropped in the environmental category, 4 in the health and safety category and 8 in the social and economic category. Dolphin energy did not report on three sub-indicators in the alternative energy sources, E3, one sub-indicator on the other air emissions, E7, and one in water discharges, E9. Furthermore, the non-reporting in the product stewardship indicator, HS4, is what causes the score of the health and safety to decrease by 4.

Figure 0-8 shows the reporting trend of Dolphin Energy among the years of 2012-2014.

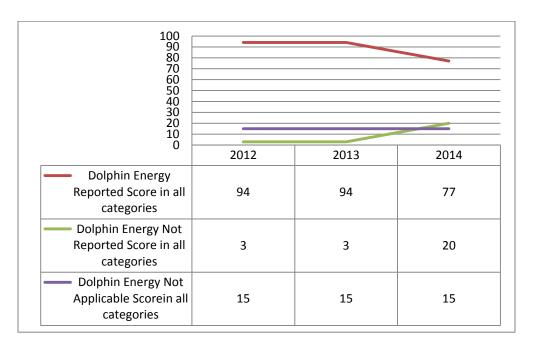


Figure 0-8: Dolphin Energy Overall Scores

4.3. Compliance across companies

In our assessment of the sustainability reports, of the eight oil and gas companies operating in Qatar, against the IPIECA guidelines and GRI Indicators, the companies' reported, not-reported and inapplicable disclosures in all the aspects were compared against each other. An indication of the highest and the lowest disclosing company was then identified.

4.3.1. Environmental indicator category

In our assessment of the sustainability reports, of the eight oil and gas companies operating in Qatar, against the IPIECA and GRI Indicators, their reported, nonreported and not applicable disclosures in all the aspects were scored between 71 and 95, 3 and 29 and 9 and 15 respectively out of a score of 112 in the year of 2012. The highest reported score in the environmental indicator was 36 and the lowest was 27, the highest non reported disclosure in the same category was 11 and the lowest was 4 while the non applicable disclosures was scored between 2 and 0 out of a maximum score of 38. The highest level of performance in this category was indicated by Dolphin Energy; the lowest by Maersk Oil and QAFAC. According to the numbers, these previous companies both did not report on EN5 and EN7. Maersk oil did not report on Fresh water (E5 sub-categories EN8, EN9 and EN10) and QAFAC did not report on Biodiversity (E5). One probable reason for the aforementioned company having the least score is that it mentioned having an environmental management system approach without mentioning specific numbers and approaches in some categories. For QAFAC the possible reason for not reporting about biodiversity and having a low score is stating on their report that their plant is located in a place not affecting any biodiversity and they are complying with regulations with respect to water discharges. To have a better picture in the environmental indicator we looked into the most and least common disclosures in all the companies in the environmental indicator. We found out that most of the companies (four companies or more) did not report on the following two sub-categories: OG7, Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal, and EN 15, Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk probably because these two requirements are either not applicable for them or they reported generally on some aspects without mentioning specific points required by the IPIECA guidelines to be considered as disclosed information.

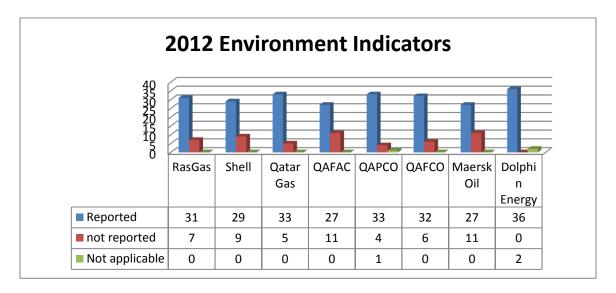


Figure 0-9: 2012 Environmental Indicators

By contrast, the environmental disclosures in 2013 were scored between 36 and 23 while the non-disclosures were scored between 14 and 4 whereas the not applicable disclosures stayed the same with no change in the scores. Accordingly, Dolphin Energy remained as the highest disclosing company while QAPCO scored as the least reporting company. The reason behind that possibly because

QAPCO did not want to repeat the same reported information in its 2013 sustainability reports as that of the 2012 report. This suggested possible reason is because the company's biodiversity category was dropped down after being reported in the 2012 report. With respect to all the companies, most of the companies disclosed more in the environmental category in the 2013 reporting and that's might be because they are more focused and committed towards environmental management.

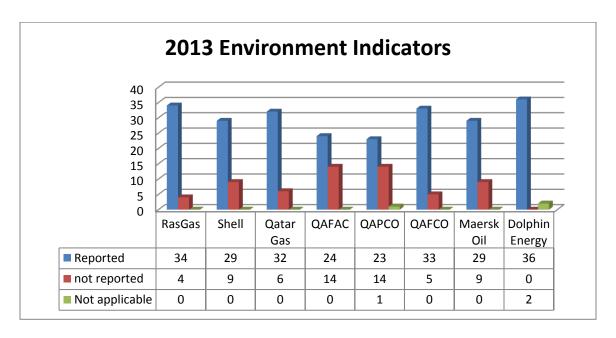


Figure 0-10: 2013 Environmental Indicators

In comparing 2014 with the previous two years, we detected a decrease in the environmental indicator category in all companies except for RasGas and Qatar

Gas with a highest score of 34; the lowest disclosing company remained QAPCO and joined by QAFAC with the score of 23. One likelihood for this dropdown in all the companies' disclosures in this indicator might be due to discovering that some sub-categories are not relevant to them or reporting on some aspects are not coming back with any benefits to the company.

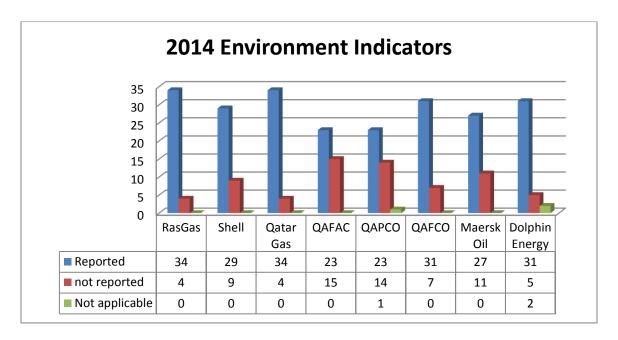


Figure 0-11: 2014 Environmental Indicators

4.3.2. Health and Safety indicator category

In the health and Safety indicator the reported disclosures scored between 12 and 14 out of a maximum score of 13 in the year 2012. The non-reported disclosures scored between 8 and 0 and the not applicable disclosures recorded a score of 1

among all the companies. The companies that recorded the highest were three companies: Dolphin Energy, QAFCO and QAPCO followed with a slightly less record of 11 for QAFAC and 10 for Qatar Gas. The lowest reporting company was Ras Gas followed by Maersk Oil with a score of 5. The common not reported category with all its sub-categories is product stewardship (HS4). Some of the possible reasons for not reporting in this category are: their type of work with the liquefied natural gas (LNG) does not have a life-cycle stages that impact health and safety; they have not experienced any non-compliance incidents thus, they neglected reporting on it; both companies do not market product information for the public. The common non applicable disclosure is LA9: Health and safety topics covered in formal agreements with trade unions since the governing laws of unions in Qatar are not applicable.

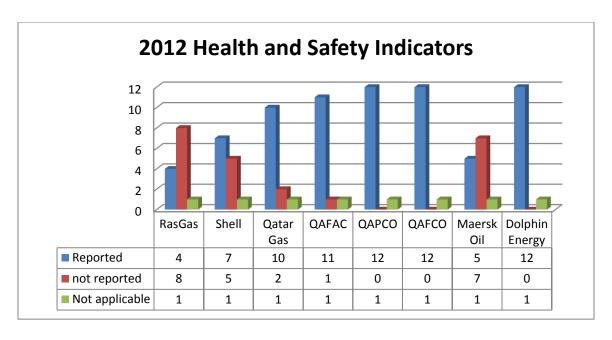


Figure 0-12: 2012 Health and Safety Indicators

In 2013, the scores were the same as that of 2012 in the health and safety category. While Dolphin Energy maintained its place as the highest reporting company and Ras Gas as the lowest, QAFCO and QAPCO dropped out reporting on some sub-disclosures and scored 10 and 9 respectively. The common categories of non reported information were PR6, Programmes for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship, and PR7, Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion and sponsorship by type of outcome. The reasons might be the repetitiveness of the same information from year to year and no incidents recorded to worth mentioning in the report.

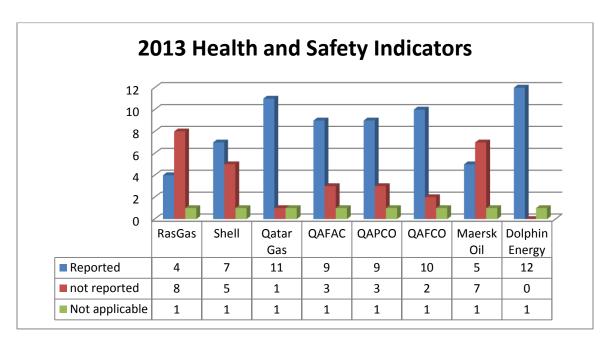


Figure 0-13: 2013 Health and Safety Indicators

By contrast, in 2014, the score of Dolphin Energy, in the same category, dropped down to 8 while that of Qatar Gas increased to 12 and QAFAC increased again to 11. On the other hand, Ras Gas remained as the lowest reporting company joined by Maersk oil. In addition, QAFCO dropped again some reporting information to score, a score of 8. The reason behind it might be the lack of some incidents or activities practiced by the company. Furthermore, one possible cause of the drop in the score of Dolphin Energy is that in 2014 they did not have an external assurance or GRI checking. Thus, they might have failed to report on some items in the checklist. Moreover, the mentioned reasons in the aforementioned

paragraph might fit the less reporting practice for all the applicable companies. In 2014, it is shown that Qatar Gas is committed towards sustainability reporting and environmental improvement.

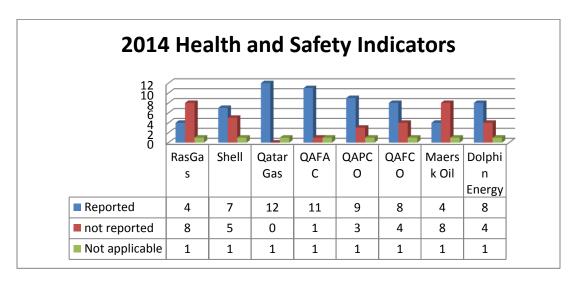


Figure 0-14: 2014 Health and Safety Indicators

4.3.3. Social and Economic indicator category

With Reference to the Social and Economic Indicators and out of a score of 61, Qatar Gas scored the highest reporting disclosures with a score of 51 with 0 non reporting information and 9 not applicable sub-categories. Shell scored the lowest with 35 reported information, 15 not reported and 11 not applicable indicators. Possibly, Shell did not report on all the indicators because they might be not applicable to it. In 2013, The activity of disclosing in most of the companies

stayed the same with the highest and the lowest reporting companies remained unchanged as the previous year. In comparison, all the companies faced a decrease in the reporting scores except for Shell where it stayed at 35. A huge drop in the score from 2012 to 2014 was in Maersk oil; from a score of 41 to a score of 26 to 22 not reported indicators and 12 not applicable. Most of the indicators that Maersk oil did not report on were corruption incidents, procedures or preventative actions. The company might have found that they are focusing on indicators that are already known by default in the work environment and are not worth spending time and efforts on. Some companies have less reported information since they might be reporting fully about some indicators in the previous years and started to report partially on them in the mentioned year. It is worth mentioning that the not applicable indicators vary from one company to another. Some companies have less and some have more where 9 is the least score and 13 is the highest. The reason might be that some indicators may apply to companies and others not. The common not applicable indicators that are inapplicable in Qatar are: trade unions, collective bargaining, involuntary resettlement, indigenous peoples, wage comparison to local minimum wage (LA9, LA4, OG10, OG12, OG9, HR9, EC5).

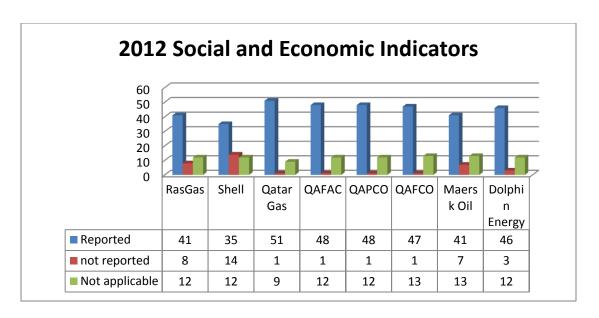


Figure 0-15: 2012 Social and Economic Indicators

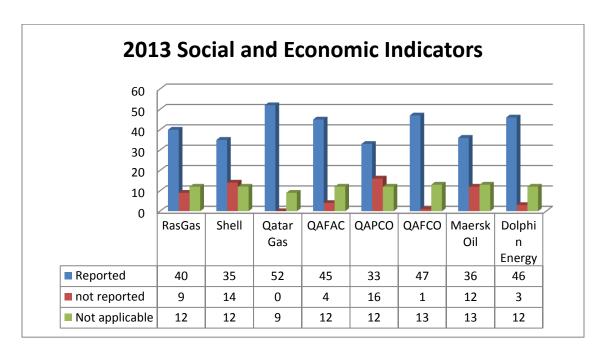


Figure 0-16: 2013 Social and Economic Indicators

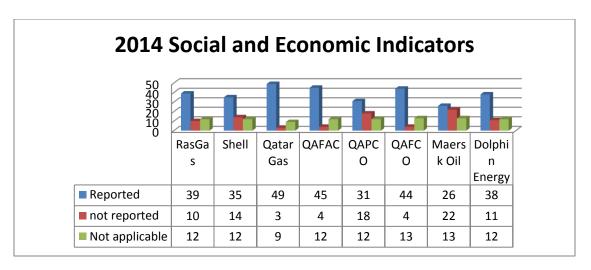


Figure 0-17: 2014 Social and Economic Indicators

Table 4-1, 4-2 and 4-3 demonstrates the best ranking company across categories in each year. The company with the minimum total (best rank) is considered to be the company with more compliance to the GRI framework and IPIECA guidelines. The results show that the benchmark company in 2012 is QAPCO, in 2013 is Dolphin Energy and in 2014, Qatar Gas. It is good to mention that over the first two years, 2012 and 2013, Qatar Gas had the second highest rank amongst all companies with one point difference in the first year and two points difference in the second year. Thus, we may consider Qatar Gas as a benchmark for companies to follow.

Table 4-1: 2012 Rank of Companies in Terms of Compliance

Rank of Companies in	Terms of Compliance
	2012

Company/Reporting Indicators	Environment Indicators	Health and Safety Indicators	Social and Economic Indicators	Total Rank
RasGas	4	6	5	15
Shell	5	4	6	15
Qatar Gas	2	3	1	6
QAFAC	6	2	2	10
QAPCO	2	1	2	5
QAFCO	3	1	3	7
Maersk Oil	6	5	5	16
Dolphin Energy	1	1	4	6

Table 0-2: 2013 Rank of Companies in Terms of Compliance

Rank of Companies in Terms of Compliance					
		2013			
Company/Reporting Indicators	Environment Indicators	Health and Safety Indicators	Social and Economic Indicators	Total Rank	
RasGas	2	7	5	14	
Shell	5	5	7	17	
Qatar Gas	4	2	1	7	
QAFAC	6	4	4	14	
QAPCO	7	4	8	19	
QAFCO	3	3	2	8	
Maersk Oil	5	6	6	17	
Dolphin Energy	1	1	3	5	

Table 4-3: 2014 Rank of Companies in Terms of Compliance

Rai	npliance			
Company/Reporting Indicators	Environment Indicators	Health and Safety Indicators	Social and Economic Indicators	Total Rank
RasGas	1	6	4	11
Shell	3	5	6	14
Qatar Gas	1	1	1	3
QAFAC	5	1	2	8
QAPCO	5	3	7	15
QAFCO	2	4	3	9
Maersk Oil	4	6	8	18
Dolphin Energy	2	4	5	11

4.3.4. Chapter Summary

Overall and after studying the compliance scores of the eight companies multiplied by the total score of 112 disclosures in all categories and indicators, we found that the overall score of the reporting indicators was cascading from the year 2012 to 2014. In 2012 the scores were 678 to reach 602 in 2014 out of a maximum of 896. After examining the reports we can infer that this fall was due to many possible reasons. One of the possibilities might be the lack of the GRI check by an external assurance that might have caused some companies to lose track or drop some reporting. Another likelihood is the inapplicability of some aspects to some companies that caused them to drop it and move on. Likewise, the changing themes recommended by HSE Regulations every year made these fluctuations since the companies were focusing on other important indicators.

Table 4-4: Overall Scores For All Companies in All Aspects

	2012	2013	2014
All Aspects Total	896	896	896
Oil & Gas Companies Reported Score			
in all categories	678	641	602
Oil & Gas Companies Not Reported			
Score in all categories	112	149	188
Oil & Gas Companies Not Applicable			
Score in all categories	106	106	106

RasGas was from the first companies that published their sustainability reports. Its first report was dated in 2009. It has followed the guidelines of the HSE Regulations and Enforcement Dictorate within Qatar Petroleum. Their reports were clear and can be used as guidelines for other companies to follow. In every year from the beginning of their consecutive reporting they emphasized on a particular theme as per the regulations. RasGas 2011 report was the module of all the following years. Very fine details were included in that year and then excluded in the following years. They had a high compliance with the GRI framework with an average of 77 out of 112 disclosures. Their 2011 and 2013 reports received an adherence level of A and A+ respectively.

Shell, being as a multinational company, it was anticipated for to find sustainability reports that may go back to several years. Shell, had a very consistent reporting throughout the three years studied. Their sustainability

reports were clear and organized. Moreover, we can notice that Shell is committed towards better sustainability reporting. Their studied reports gained an A+ adherence level with the GRI framework. Their average disclosures scored an average of 71 out of 112. We can conclude that Shell is trying to maximize its sustainability through customizing the indicators to better fit its company.

Qatar Gas published its first sustainability report in 2011. Its report has advanced throughout the years. Through the years of 2012-2014, the company disclosures in all aspects increased to become the leading company in reporting on environmental management in all categories. All its studied reports were in accordance with the GRI framework and in 2012 and 2013 they received an A adherence level.

Qatar Fuel Additive Company (QAFAC) started their sustainability reporting in 2012. Their report disclosed many indicators at the beginning and gained an A adherence level. Then, the company started fragmented reporting. Their average score was 81 out 112.

In its 2012 report, Qatar Petrochemical Company (QAPCO) disclosed its environmental performance based on three years from 2010 till 2012. The report was reporting wide coverage about QAPCO and limited coverage about Qatofin (QAPCO's subsidiary). Thus, they fully reported about many indicators and fulfilled the level A application of the GRI level application check. In 2013 and 2014, their disclosures started to decline. A descending trend of reported information was clear. In 2013 sustainability report, they discussed about QAPCO

and Qatofin together. In addition, in 2014 they introduced their first integrated report and it was their first experience in such reporting. Thus, it was a learning experience. As an average, they scored 74 out of 112.

QAFCO sustainability report in 2012 and 2013 gained an A+ from the GRI level check application. The A+ was given to them due to the external assurance audit that has been done to these reports. Their reporting was clear, organized and fully reporting in many categories and indicators. In 2014, the downside started. They have employed internal audits and did not do the GRI checklist application. Their sustainability report was not clear against the GRI checklist. Some aspects were placed under an unrelated aspect. They fully enclosed about some indicators, but in 2013 they partially enclosed about them (such as in: HR1, HR3, PR1). Their average score gained is 88 out of 112.

Maersk Oil issued its 3rd annual sustainability report in 2012. Their report was clear and organized throughout the studied years (2012-2014). A declining trend was observed in Maersk oil reporting. This decline is due to the structured process that Maersk oil has followed in determining the most important material and reporting on them, mentioned in their 2014 report. They were very focused on reporting only what matters.

Since 2009 and Dolphin Energy has issued Sustainability reports. The reports we studied were only related to Qatar and United Arab Emirates. Both sustainability reports of 2012 and 2013 were given an A from the GRI application level check.

Its 2014 report was not checked by the GRI application, however, Dolphin Energy assured its compliance with it.

Generally speaking, it has been observed that the percentage of the oil and gas companies in Qatar issuing sustainability reports are increasing, especially with some new companies starting their first round of reporting in 2014. However, there is a decrease or a stagnation in the sustainability report's assurance. Most of the company's are internally assuring their compliance, only.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1. Introduction

In this chapter's first subsection, we have discussed the results of our findings with respect to similar previous studies in the literature. In the second sub-section, we wrapped up the whole study in the conclusion. The limitations of this study and future research directions are also mentioned in this chapter.

5.2. Discussion

Results of Qatari oil and gas compliance to global regulation of sustainability reports are discussed in light of prior research.

COP 18 was a motive for the Qatari government to establish a law to preserve the environment and pressure the oil and gas companies to abide by it. The release of the oil and gas industry sustainability report served as the code of conduct of these companies to follow. Some of the companies in this sector were already publishing voluntary their sustainability reports before the release of the HSE Regulations and Enforcement Directory within Qatar Petroleum oil and gas sustainability report. However, in 2012 and after COP 18, more companies started their sustainability reporting. This finding was consistent with previous research that shows an increase

in reporting after imposing rules and regulations (Gibson and O'Donovan 2007, Abdalla and A.K 2015).

As the environmental concerns are rising the oil and gas sector in Qatar was under the sight. HSE Regulations and Enforcement Directry within Qatar Petroleum imposed sustainability reporting and initiated it through a consolidated report of all the companies in the oil and gas sector in Qatar. After that, some companies started their voluntary reporting to ensure its transparency and commitment. Employment of the GRI guidelines was presented by the HSE Regulations and Enforcement Directory for companies to follow probably their main reason behind it was the similar to that of previous studies that employed GRI to follow an international standard that can be later viewed and compared with different companies in the same sector (Guthrie and Farneti 2008, Perez and Sanchez 2009, Alazzani and Hussin 2013, Mori and Best 2014). To illustrate, using the GRI guidelines in Qatari companies was suggested by the AlNaimi et al. 2012. The motives behind suggesting this framework was to standardize the style of reporting. However, the GRI guidelines implemented by the oil and gas companies were specific to this sector. GRI has different frameworks, adjusted specifically, for different economic sectors (Perez and Sanchez 2009, Mori and Best 2014). As an example, the mining sector has different indicators than that of the oil and gas sector. A previous study showed that the main aspect that the mining sector concentrates on was the social aspect since their type of work mainly affects the communities and their social life (Jenkins and Yakovleva 2006, Perez and Sanchez 2009). Thus, the social aspect has the highest evolution among all the other aspects, environmental and Health and safety. Whilst based on our study, the results showed a higher percentage of disclosures in the environmental aspect than that of the social aspects put of the total disclosures in each category. Thus, we can infer that the environmental aspect is the oil and gas sector's priority. Thus, possibly, the difference in the GRI framework content leads to different priorities.

In our research it was observed that companies have set a clear goal towards sustainability reporting. They have recorded, reported, audited and monitored environmental performance through their sustainability reporting. Moreover, some companies were reporting about some aspects in their initial reports and they were dropping it on the following reports. Accordingly, this observation is consistent with previous research that assumed that the reason behind this lack of reporting was due to the absence of the presented topic in the previous year (Perez and Sanchez 2009). Moreover, the fact behind it might be the change in the strategy of reporting or the absence of a strategy or removed by stakeholders due to its irrelevance. Despite of that, the same study mentioned that any crucial variation covered in reporting should be explained and identified. Thus, companies in the oil and gas sector in Qatar should have explained their variations in their reports over the three year period.

Companies in the oil and gas sector in Qatar were focusing on different themes or indicators every year. This result was similar to a previous study that stated that companies used GRI framework in order to present the indicators that they focusing on (Guthrie and Farneti 2008). Therefore, we might assume that these companies

adapted to the GRI framework and the IPIECA not only because it was enforced by the government however to show their own performance.

Finally, the studied companies reports' assurance does not follow a specific standard. Most of the reports declare their compliance with the GRI framework and have partial assurance relative only to some indicators. The same conclusion was reached by that of Perez and Sanchez (2009) and in their turn they have used previous literature to suggest improvements in sustainability reporting through a third party assurance and involvement of stakeholders.

5.3. Conclusion

As a conclusion, the awareness of how important is to conserve the environment among these highly environmentally sensitive companies is there. They have committed through reporting and their reports cover all the important indicators in all aspects. The oil and gas companies in Qatar are willing to use the Environmental Management Accounting (EMA) tools and that is shown in their environmental management system approach. Though some aspects are not reported by some companies, they are trying to advance and improve in their sustainability reporting.

It can be concluded that the aforesaid companies' sustainability report disclosures is neither low nor high in the level and extent of the reporting. To elaborate, it wasn't a surprise to see that these companies have the highest disclosure in the environmental aspect due to the nature of their work followed by the social aspect. It is crucial for them to engage with communities to try to reduce the negative impact of their business. On the other hand, we can foresee the evolution in their reports even though the percentage of reporting is decreasing from year to year in all three categories.

The assessment of the evolvement is shown on their improvement in the report forms and graphics, depth of information and focus. Over years, companies were more focused on specific issues and aspects that benefit them and improve their non-financial disclosures performance. In addition, repetitiveness was excluded from year to year in order not to disperse their focus. Accordingly, we can find more details on specific aspects and less in others. It was also found that either the GRI level check application had some influence on the reporting or the companies internal audits, lack the necessary experience in checking their company sustainability reports. As a result, the 2014 sustainability reports in all companies failed to disclose on many indicators. Yet, the assessment of the disclosed information quality is beyond the scope of this study.

Despite all the evolvement, there is still a room for improvement. Companies can aspire advancement and seek best practices, especially now and after their initial stage of reporting is already done. Companies should be more accurate and transparent in reporting in the future in terms of accessibility of the information and assurance knowing that Qatar's Vision 2030 is one of the biggest motivations for the companies .

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5.3.1. Limitations

This study is subordinate to prospective limitations. The method used was proficient to investigate the content and coverage of the reports, however, a limitation may manifest from it. It is that companies reporting fully and detailed get the same score as the partial and general reporting companies. Another limitation, is that the study only covers the oil and gas companies in Qatar.

5.3.2. Future Research Directions

The significance of this study is centered in contributing to the literature by adding Qatar for environmental management researches. Its aim is to create a baseline for post researches to start from. This study contributes to the quantity of information disclosed in sustainability reports. Therefore, studies on the quality of the information disclosed might be another topic in the future. In addition, exploring the compliance of these reports with EMA is another topic to be addressed.

The result of this study can be the starting point for examining the oil and gas companies in Qatar environmental practices and their performance. Moreover, this study can be developed to include Gulf oil and gas companies' evolution in sustainability reporting in comparison with Qatar. In addition, future research might address the possibility of a mandatory regulation and its implications on sustainability

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APPENDIX

	IPIECA 2010 GRI 3.1 a		nd OGSS indicators	Voinnards
Code	Title	Code	Description	Keywords
Environr	Environmental indicators			
	Climate change	DMA EN	Disclosure on management approach – environment, energy	
Issue	and energy	EC2	Financial implications and other risks and opportunities for the organisation's activities due to climate change	environment and climate change
		EN16	Total direct and indirect greenhouse gas emissions by weight	greenhouse gas emissions
		EN17	Other relevant indirect greenhouse gas emissions by weight	greenhouse gas emissions
E1	Greenho use gas emission	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	greenhouse gas emissions; reducing flaring
	S	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce	energy use
		EN3	Direct energy consumption by primary energy source	energy use
E2	Energy	EN4	Indirect energy consumption by primary source	energy use
EZ	use	EN5	Energy saved due to conservation and efficiency improvements	energy use
		EN7	Initiatives to reduce indirect energy consumption and reductionsachieved	energy use
		OG2	Total amount invested in renewable energy	renewable energy
	Alternativ	OG3	Total amount of renewable energy generated by source	renewable energy by weight
E3	e energy sources	EN6	Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives	environment and climate change
		OG14	Volume of biofuels produced and purchased meeting sustainability criteria	
E4	Flared gas	OG6	Volume of flared and vented hydrocarbon	flaring
Issue	Ecosyste m services	DMA EN	Disclosure on management approach – environment – ecosystem services, including biodiversity	bodiversity
	Biodivers ity and	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	biodiversity
E5	ecosyste m services	EN12	Description of significant impacts of activities, products, and service on biodiversity in protected areas and areas of high biodiversity value outside protected areas	biodiversity

		EN13	Habitats protected or restored	biodiversity, environment projects
		EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	biodiversity
		OG4	Number and percentage of significant operating sites in which biodiversity risk has been assessed and monitored	biodiversity
		EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	protected species
		EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and run-off	water
		EN8	Total water withdrawal by source	water
E6	Fresh water	EN9	Water sources significantly affected by withdrawal of water	water
		EN10	Percentage and total volume of water recycled and reused	water
Issue	Local environm ental impact	DMA EN	Disclosure on management approach – environment, materials	environmental management (environment section)
E7	Other air emission	EN19	Emissions of ozone-depleting substances by weight	Emissions of ozone depleting substances
	S	EN20	NOx, SOx, and other significant air emissions by type and weight	other air emissions
	Spills to	EN23	Total number and volume of significant spills	spills
E8	the environm ent	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce	transporting products
		EN 21	Total water discharge by quality and destination	water discharges
E9	Discharg es to	OG5	Volume and disposal of formation or produced water	water discharges
	water	EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and run-off	water and biodiversity
		EN2	Percentage of materials used that are recycled input materials	recycled content materials
		EN22	Total waste by type and disposal method	waste management
E10	Waste	OG7	Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal	drill cutting or drill waste
		EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention, Annexes I, II, III, and VIII, and percentage of transported waste shipped internationally	waste management
Health ar	nd safety ind	licators		

Issue	Workforc e protectio n	DMA LA	Disclosure on management approach – labour practices and decent work, occupational health and safety	health and safety
HS1	Workforc e participati	LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programmes	health and safety committees
	OH	LA9	Health and safety topics covered in formal agreements with trade unions	trade unions agreements
HS2	Workforc e health	LA8	Education, training, counselling, prevention and risk- control programmes in place to assist workforce members, their families or community members regarding serious diseases	serious diseases education, training
HS3	Occupati onal injury and illness incidents	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region	Health and safety (performance data)
	Decelerat	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	mitigate environmental impacts
HS4	Product stewards hip	PR1	Life-cycle stages in which the health and safety impacts of products are assessed for improvement, and percentage of significant products and services categories subject to such procedures	life-cycle health and safety impacts.
		PR2	Total number of incidents of non- compliance with regulations and voluntary codes concerning health and safety impacts of products and services by type of outcome	non-compliance
		PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	
		PR4	Total number of incidents of non- compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcome	non-compliance
		PR6	Programmes for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship	marketing communications
		PR7	Total number of incidents of non- compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion and sponsorship by type of outcome	non-compliance
HS5	Process safety	OG13	Number of process safety events, by business activity	Safety and health: safety performance
Social ar	d economic	indicators		
	Incorpora ting financial data	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	financial performance or financial data
	auta	OG1	Volume and type of estimated proved reserves and production	Production capacity and performance, revenues,

				sales
		LA1	Total workforce by employment type, employment contract and region, broken down by gender	workforce composition
		LA2	Total number and rate of new employee hires and employee turnover by age group, gender and region	hiring
Issue	Communi ty and society	DMA SO	Disclosure on management approach – society, local communities	community engagement
	Local	SO1	Percentage of operations with implemented local community engagement, impact assessments and development programmes	community engagement
054	communi ty	SO9	Operations with significant potential or actual negative impacts on local communities	community engagement
SE1	impacts and engagem ent	SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities	community engagement
		OG10	Number and description of significant disputes with local communities and indigenous peoples	Indigenous rights
	Indigeno	HR9	Total number of incidents of violations involving rights of indigenous peoples and actions taken	Indigenous rights
SE2	us peoples	OG9	Operations where indigenous communities are present or affected by activities, and where specific engagement strategies are in place	Indigenous rights
	Involunta	OG10	Number and description of significant disputes with local communities and indigenous peoples	Indigenous rights
SE3	ry resettlem ent	OG12	Operations where involuntary resettlement took place, the number of households resettled in each and how their livelihoods were affected in the process	Involuntary resettlement
SE4	Social investme	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	financial performance or financial data
	nt	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or pro-bono engagement	infrastructure projects/ environment
Issue	Local content:	DMA EC	Disclosure on management approach – economic - market presence, including local content	economic, market presence, our product, customers, community engagement (supporting local customers)
SE5	Local content practices	EC6	Policy, practices, and proportion of spending on locally based suppliers at significant locations of operation	community engagement
SE6	Local hiring	EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	people/ Qatarization
	practices	EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	indirect economic impacts

SE7	Local procurem ent and supplier develop ment	EC6	Policy, practices, and proportion of spending on locally based suppliers at significant locations of operation	suppliers
		DMA HR	Disclosure on management approach – human rights – freedom of association and collective bargaining, child labour, prevention of forced and compulsory labour	human rights
		LA4	Percentage of employees covered by collective bargaining agreements	Collective bargaining
Issue	Human rights	HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	
		HR6	Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour	human rights
		HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	human rights
		LA4	Percentage of employees covered by collective bargaining agreements	-
		HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	human rights
		HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	training
		HR4	Total number of incidents of discrimination and corrective actions taken	discrimination
SE8	Human rights due diligence	HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	
		HR6	Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour	Business conduct policies, human rights/ Governance
		HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour	Business conduct policies, human rights/ Governance
		HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	Business conduct policies, human rights/ Governance
SE9	Human rights and suppliers	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	Business conduct policies, human rights/ Governance

		HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	
		HR6	Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour	human rights
SE10	Security and human rights	HR8	Percentage of security personnel trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations	Business conduct policies, human rights/ Governance
Issue	Business ethics and transpare ncy	DMA HR	Disclosure on management approach – economic – indirect economic impacts, corruption, public policy	business conduct policies /Governance
	Dravantia	SO2	Percentage and total number of business units analysed for risks related to corruption	business conduct policies /Governance
SE11	Preventin g corruptio n	SO3	Percentage of employees trained in organisation's anti-corruption policies and procedures	business conduct policies /Governance
	"	SO4	Actions taken in response to incidents of corruption	business conduct policies /Governance
05.40	Preventin g corruptio	SO2	Percentage and total number of business units analysed for risks related to corruption	business conduct policies /Governance
SE12	n involving business partners	SO4	Actions taken in response to incidents of corruption	business conduct policies /Governance
SE13	Transpar ency of payment s to host	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	financial performance or financial data
	governm ents	EC4	Significant financial assistance received from government	finanical assistance/ government
0544	Public advocacy	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	
SE14	and lobbying	SO5	Public policy position, and participation in public policy development and lobbying	business conduct policies /Governance
		SO6	Total value of financial and in-kind contributions to political parties, politicians and related institutions by country	business conduct policies /Governance
	Workforc	EC5	Range of ratios of standard entry-level wage by gender compared to local minimum wage at significant locations of operation	wage
SE15	e diversity and inclusion	LA1	Total workforce by employment type, employment contract and region, broken down by gender	workforce composition
	in cludion	LA2	Total number and rate of new employee hires and employee turnover by age group, gender and region	hiring

		LA13	Composition of governance bodies and breakdown of employees per category according to gender, age-group, minority group membership and other indicators of diversity	workforce composition and inclusion
		LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	salary
		LA4	Percentage of employees covered by collective bargaining agreements	
SE16	Workforc e engagem ent	LA5	Minimum notice periods regarding significant operational changes, including whether it is specified in collective agreements	notice periods
		LA9	Health and safety topics covered in formal agreements with trade unions	trade unions
		LA10	Average hours of training per year per employee by gender, and by employee category	learning and development
SE17	Workforc e training and develop	LA11	Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	our people
	ment	LA12	Percentage of employees receiving regular performance and career development reviews, by gender	our people
	Non- retaliatio	HR4	Total number of incidents of discrimination and actions taken	discrimination
SE18	n and grievanc e systems	HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms	