

## From HSE to Sustainability: CSR Disclosure by Oil Companies

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### ABSTRACT

The overall aims of this study are to investigate the factors that motivate oil companies to disclose their HSE and sustainability performance, the stakeholder groups engaging in disclosure, the HSE or corporate sustainability themes and topics that are disclosed in the main content of relevant annual reports, and the trends that can be observed in the existent CSR disclosure practices. Content analysis is used in this comparative study to investigate the HSE and sustainability annual reports publicly issued by two state-owned oil companies from different countries—SINOPEC from the oil-importing People's Republic of China and ADNOC from the oil-exporting United Arab Emirates. This study reaches a general conclusion that both oil companies have been establishing their legitimacy and social reputation by evolving their CSR disclosure from limited HSE information to full-length sustainability reports. Our conclusions can be elaborated in four respects: 1) legitimacy theory explains well the motivation for the oil companies to continuously improving their CSR disclosure; 2) certain key stakeholder groups engaged in the CSR disclosure are identified to develop a resource-based framework for stakeholder analysis; 3) the inclusion of ecological metrics has made the CSR disclosure more informational; and 4) the longitudinal content analysis on the two oil companies' CSR disclosure presents a trend that sustainability information disclosure is developing into a special social accounting system with increasing formalization, standardization, systematization, and quantification.

**Keywords:** HSE; sustainability report; oil companies; CSR disclosure

### 1. Introduction

Recognizing the awakening effects of two massive 2010 oil spill crises in North American waters, Spangler and Pompper (2011) point out the significance of establishing business skills guidance for CSR practices and communications in the oil industry. This advocacy has been echoed by recent resource policy research in the context of the oil industry (e.g., Hilson, 2012; Pegg, 2012). However, because business ethics studies do not adequately address widely recognized and systematically measured CSR constructs, only a limited portion of existent CSR literature takes steps to provide concrete concepts of CSR for the oil industry.

This study aims to investigate the factors that motivate oil companies to disclose CSR performance, the stakeholder groups that are engaged in CSR disclosure, the CSR themes and topics that are disclosed in the main content of relevant annual reports. Also, this longitudinal study intends to show the trends in existent CSR disclosure practices. This study adopts a content analysis approach to investigate the characteristics of annual CSR reports that have been publicly issued by two state-owned oil companies from China and the United Arab Emirates (UAE) respectively.

As a conclusion, we recognize that legitimacy theory explains well the motivation for the oil companies to continue improving their CSR disclosure, while the CSR disclosure also contributes to their good social reputation. We also conclude with a resource-based approach to analyzing the extensive stakeholders of CSR disclosure. We observe the fact that the inclusion of ecological metrics in CSR reports has made the CSR disclosure more informational. And a longitudinal view of the CSR disclosure practices lends great assistance to our observations on the trends of future CSR disclosure by the oil industry.

## 2. Literature Review and Research Questions

CSR research in the extractive industry has received substantial attention in recent academic publications (Schaltegger and Herzig, 2011; Campbell, 2012; Gilberthorpe and Banks, 2012; Pegg 2012). To facilitate case analysis in the following section, we review the CSR literature related to the practices and disclosure of HSE and sustainability in four respects: motivation for disclosure, stakeholder groups involved, the content of disclosure, and trends in disclosing HSE and sustainability information. Those four dimensions of CSR performance and disclosure reviewed herein, when applied to the investigation of CSR issues in the oil industry, can be narrowed down to four concrete HSE management practices and corporate sustainability concerns.

Firstly, concerning the motivation for HSE and sustainability disclosure, nearly all the existent CSR studies acknowledge the two aspects of goodwill exhibited by the HSE and sustainability practices performed and disclosed by oil companies: good social reputation and corporate legitimacy. Some investigations indicate that the HSE and sustainability-oriented CSR practices and disclosure represent bids to secure corporate social reputation (Azapagic, 2004; Hamann and Acutt, 2003; Spangler and Pompper, 2011). For a couple of recent research examples, Schaltegger (2011) summarizes the performance drivers of corporate sustainability activities like cost and risk, business profit, innovation, work satisfaction, and brand reputation; Spangler and Pompper (2011) conclude that companies integrate social responsibility in their business operations in order to benefit from enhanced corporate social reputation. Other scholars focus on using legitimacy theory to explain why CSR practices are performed and disclosed. Gilberthorpe and Banks (2012) find out that extractive industries intend to legitimate the sector after certain influential catastrophes relating to the environment and indigenous rights. Some recent research results prove that the HSE and sustainability-oriented CSR practices and disclosures of oil companies from emerging economies are actually motivated by the globalization of environmental responsibility (Zeng et al., 2010), and that fears of their negative impact on CSR in the resource extractive industries are misconceived and overblown (Pegg, 2012). However, Streimikiene et al. (2009) find out that there are some disincentives that exist in Baltic countries for energy companies to adopt CSR practices. Thus we raise the first research question as follows:

***RO-1: What motives do the oil companies pursue in their disclosure of CSR performance?***

Secondly, existent CSR literature reveals a marked focus on the role of stakeholders in the CSR discourse of the extractive industry (Azapagic, 2004; Gilberthorpe and Banks, 2012). Noting the significant differences between domestic companies and multinational companies in China, with regard to CSR practices and disclosure, Tang and Li (2009) conclude that these differences are specifically derived from the varied perceptions of primary stakeholders. Luning (2012) argues that large exploration companies initiate CSR activities in order to develop and enhance company-community relations, and the companies' contributions to local communities are observed in the industrial extraction operations that the companies carry out. Gilberthorpe and Banks (2012) also acknowledge that there currently is better stakeholder engagement in CSR practices and disclosure.

***RO-2: What stakeholder groups are connected to the existent CSR disclosure of oil companies?***

Thirdly, nearly all types of CSR disclosure are made publicly available through voluntary and unregulated documents. Examining management preferences in the disclosure of social and environmental performance, Jones (2011) finds out that management gives priority to issues such as air pollution, waste output, energy use, and workplace health and safety. Bouten et al. (2011) develop a content analysis framework for CSR reporting, highlighting the important aspect of social and environmental accountability. According to this framework, a comprehensive report of CSR performance includes corporate vision and goals for CSR, CSR management approach, and CSR performance indicators. Perks (2012) argues that human rights, socio-economic needs, and corporate responses to natural resource governance should be important elements of CSR reports.

***RO-3: What information has been disclosed in the existent CSR disclosure of oil companies?***

Lastly, existent CSR literature shows a number of trends in CSR practices and disclosure. One general trend identified in the existent CSR literature is that it is of the growing popularity to include social and environmental performance as the most important non-financial information in corporate financial reports

(Jenkins and Yakovleva, 2006; Weber, 2008). Schaltegger and Herzig (2011) conclude that in HSE management practices, sustainability accounting disclosure shapes the linkages between information on the financial, social and environmental aspects of corporate performance, and they even propose in their studies two branches, management accounting, and financial accounting, for future sustainability management. Also, companies tend to address sustainability concerns in order to secure a continued social license to operate (Azapagic, 2004). However, as Jones (2011) points out, companies are highly motivated to use bias in the selection of reported items, and typically intend to distort the information disclosure by presenting an overwhelming portrayal of good rather than bad news. Jones (2011) indicates that this is particularly true for high-impact sectors such as the extractive industry. Identifying yet another trend in CSR literature, Azapagic (2004) proposes that CSR and sustainability performance should be measured and assessed for continuous and long-term improvements.

**RO-4:** *What trends can be observed from the existent CSR disclosure of oil companies?*

### 3. Research Methodology

We adopt, in our comparative study, a content analysis approach to observing the qualitative and quantitative characteristics of the full-size annual CSR disclosure reported by the two case companies under our investigation. The content analysis serves well as a sufficient and appropriate method to draw conclusions about CSR reporting which provide answers to the above-mentioned four questions.

#### 3.1 Selection of Subjects

The criteria for choosing the case companies include location, ownership, scale, and nationality. Our screening of the oil companies in China and the Middle East based on these criteria resulted in the selection of Abu Dhabi National Oil Company (ADNOC) and Sinopec Corporation (SINOPEC). Both are large-scale, state-owned and operated internationally-expanding oil companies. A significant contrast lies in the fact that ADNOC is located in the United Arab Emirates, an important oil-exporting country whereas SINOPEC is located in China, an important oil-importing nation. Due to the availability of online reports, we selected the years from 2003 to 2011 as the time frame for this study, during which the complete and comparable CSR disclosure texts could be collected.

#### 3.2 Content Analysis: Integration of Qualitative and Quantitative Methods

Content analysis has been frequently used in the research on discretionary narrative disclosure. Such disclosure as CSR reporting can be analyzed as to the frequency of their presence in enterprises, their length of rules, title (names), physical presentation and the personnel they apply to, and where possible, international comparisons can be made (Smith and Taffler, 1999; Vourvachis and Woodward, 2015). In the coding process of this study, four competent and skillful bilingual postgraduate students majoring in financial reporting were divided into two 2-person coding groups, assigned with the same set of HSE and Sustainable Annual Reports.

The first coding work was done on the types of CSR disclosure, which fell into three groups: HSE disclosed as part of the Annual Report, stand-alone HSE Report, and stand-alone Sustainable Annual. The second coding job was on labeling of the stakeholders mentioned in the studied reports, the examples of which are 'shareholders', 'creditors', 'customers', 'government', etc. The last and subtlest coding was about the captioned sections and the metrics for each relevant captioned section presented in all studied disclosure texts

After each group's independent coding and summarization of coding results in tabular format, both groups were called in to compare their results, then discussed and reconciled the differences with the monitoring of the research team. The reconciled coding results were used in this paper.

## 4. A Comparative Investigation of CSR Reporting by SINOPEC and ADNOC

### 4.1 Company Profiles

This study is based on the publicly-available HSE and Sustainability reports for SINOPEC and ADNOC. SINOPEC (full title: China Petroleum and Chemical Corporation) is the largest oil company in the People's Republic of China and is an oil importer. ADNOC (full title: Abu Dhabi National Oil Company) is the largest oil company in the United Arab Emirates and is an oil exporter. Both companies are state-owned controlling companies, authorized by their respective central governments to control abundant financial, human, social, and natural resources. More importantly, these two companies are considered to be a benchmark for state-owned enterprises in each country, exemplifying a model image for the oil industry in both economic and CSR dimensions.

### 4.2 Summary and Comments on CSR Disclosure by SINOPEC and ADNOC

Though both SINOPEC and ADNOC are state-owned enterprises, and undoubtedly enjoy industrial and economic status as monopolies in their home countries, the differences in the region of origin and possession of natural resources lead to the development of different features in their CSR disclosures.

SINOPEC, for which operations originate in a country with severe pressures of demand for oil, has consistently endeavored to employ all opportunities for gaining access to natural resources within its home territory, and for extending its influence (or even control) to resources outside its national borders. Analysis of the HSE information disclosures and Sustainability reports by SINOPEC reveals that the CSR awakening period has been initiated, and is accompanied by its pace of globalization in international capital markets. Quite naturally, to match with the international markets of natural resources and financial capital, a modern conceptualization of CSR and pioneering key indicators rooted in ecological economics have been introduced into the CSR reporting of SINOPEC. Such progressive changes signal that the company is earning its social reputation and establishing its legitimacy by following internationally accepted and widely practiced standards and regulatory rules, such as OHS Standards and GRI Guidelines.

In contrast, ADNOC, as a world-class oil exporter based in an oil-rich region, has a history of taking great care in communicating its CSR performance in order to maintain its corporate image as one of the top socially responsible oil companies in the world. What ADNOC has achieved in the field of CSR performance and disclosure throughout the first decade of the twenty-first century is keeping pace with the international standardization of CSR behaviors and relevant disclosure, while integrating international influences such as GRI Guidelines into its corporate standards of HSE management and reporting, and into its Sustainability Charters. Observation of ADNOC's internationalization efforts in global capital markets provides evidence that the company's efforts to maintain its strong international social reputation as a major oil provider and exporter resulted on effective communication of its CSR performance.

### 4.3 Analysis of Motivation for CSR Disclosure

SINOPEC has experienced three stages of CSR disclosure as are realized in HSE and/or Sustainability reports. In the first stage, dating from 1997 to 2005, the company included only the one-page HSE information in its Annual Reports (bilingual versions available), with the year-by-year improvement of voluntary disclosure of CSR practices embedded in the corporate HSE management systems. During the first stage, the company mostly followed the guidelines for CSR disclosure that were stipulated by state authorities. In the second stage, covering the two years from 2006 to 2007, the company issued both the one-page HSE information in its Annual Reports (bilingual versions available) and separate full-length Sustainability reports (available only in Chinese-language versions). During this stage, dual disclosure of HSE information and Sustainability reports was practiced as a transitional period, moving toward CSR disclosure that is compliant with international trends and requirements. SINOPEC was selected as a model for CSR disclosure and is expected to serve as a good example for other state-owned enterprises in China. In the third stage, from 2008 to the present, SINOPEC has officially issued separate full-length Sustainability reports in both Chinese and English languages, excluding the CSR disclosure from the Annual Reports. For ADNOC, in contrast, HSE management practices and results have long been a focal point in CSR disclosure. The HSE Annual Reports integrate adopted international standards and Best Practices tailored to ADNOC requirements. As stated in the company's Health, Safety and Environment

Annual Report 2003, with the implementation of the revised ADNOC HSE Codes of Practice in 2003, the company has endeavored to meet their goal of being the world leaders for HSE performance. ADNOC had issued separate HSE Annual Reports until 2009 when a change was made to Sustainability reports for CSR disclosure. It is worth noting, in relation to CSR practices and disclosure, that in 2009 the company completed and approved its own Sustainability Charter, and starting from that same year ADNOC Sustainability Reports officially adopted GRI G3 guidelines for the Sustainable Annual Report.

For both oil companies, there are a couple of important steps further from the HSE disclosure embedded in financial reports to the stand-alone HSE report, then to the stand-alone Sustainable Annual Report dedicated to CSR disclosure in full length. Those step-forwards reflect the changes in motifs of CSR reporting firms. They placed such great effort into establishing and upgrading their CSR reports, largely because that the oil companies, so often situated in a whirl of blame and criticism for some natural and human disasters, can reasonably foresee the future trends and requirements for CSR performance and disclosure.

Based on the contrastive observation on the CSR disclosure practices of SINOPEC and ADNOC, we argue that legitimacy theory, explains plausibly why the oil companies have been making their efforts in improving their CSR disclosure. More specifically, the progressive development from reporting HSE information as part of financial annual reports to the stand-alone Sustainable Reports reflects first the change of the report titles and the compliance with requirements of legislative and/or regulatory rules, then the increasing awareness of the influence of full-length CSR disclosure on both corporate legitimacy and social reputation.

#### 4.4 Comparative Analysis on Content Disclosed in the HSE Annual Reports

To provide a contemporary comparison, our analysis of CSR disclosure content focuses on reports dated from 2003 to 2010, the period in which both companies had shifted from HSE disclosure to Sustainability reports. We find that without concrete metrics developed on the basis of CSR theories, narrative expressions such as “the safety of production achieved an overall steadiness and HSE management on environment protection made continuous progress,” “the Company organized HSE supervision, examination and assessment at different levels in order to continuously promote and improve the management system,” and “The Company strengthened occupational health management” were repeated many times in the annual HSE disclosures. We also notice that in the SINOPEC HSE reporting, only three environmental indicators were developed out of ecological economics: water consumption, COD in discharged waste, and sulfur content.

Table 1: Captioned sections in HSE disclosure used by ADNOC

Sections & Length of Each Section in ADNOC HSE Annual Reports	2003	2004	2005	2006	2007	2008	Av.	Percent
CEO Message	3	3	3	3	3	3	3	12%
Company Profile	0	0	0	1	4	1	1	4%
Responsible Operation (Education & Protection of Endangered Species)	0	0	0	2	1	1	0.67	3%
HSE Performance Data	6	10	12	7	11	11	9.5	37%
Climate Change	0	2	0	3	1	3	1.5	6%
HSE Management System	4	0	2	1	3	4	2.3	9%
HSE Codes of Practice	2	1	1	0	1	1	1	4%
HSE Impact Assessment	1	1	1	1	1	1	1	4%
Corporate HSE Initiatives	1	1	1	0	1	2	1	4%
Crisis Management	0	0	1	1	1	2	0.83	3%
HSE Awards	1	3	4	4	1	4	2.83	11%
Others	0	1	1	3	2	1	1.33	5%
Total	18	22	26	26	30	34	26	100%



Analysis of the report sections also indicates that the ecological CSR sections “Climate Change,” “Responsible Operations (Education and Protection of Endangered Species),” and “Crisis Management” received increased attention in HSE Annual Reports, even though they actually started in 2005 or 2006. This finding indicates that increasingly more practical concerns are being inspired by ecological economics.

Table 1 reviews all the main sections listed in the ADNOC HSE Annual Reports from 2003 to 2008. The largest portion of ADNOC’s HSE disclosure is “HSE Performance Data” (on average, 37% of the total length of the report main body). The two next largest parts are “CEO Message” and “HSE Awards.” This HSE orientation illustrates the strong motivation of ADNOC top management’s intent to demonstrate clear CSR awareness in the company’s strategic decisions and information disclosure. Other sections such as “HSE Management System,” “HSE Codes of Practices,” and “HSE Impact Assessment” had constantly been major concerns for ADNOC’s CSR disclosure.

#### 4.5 Comparative Analysis on Content Disclosed in the Sustainable Annual Reports

Table 2 describes the statistical features of SINOPEC Sustainability reports in terms of reported categories and their relative lengths. CSR issues are allocated to more corporate disclosure pages when SINOPEC makes the decision to disclose its CSR performance in separate reports. Traditional CSR dimensions of Employees (9%), Customer Service (11%), Society and Community (15%), and Continuing Energy Supply are retained, while considerable weight is given in the Sustainability reports to sections which apply to ecological economics, for instance, HSE/Safe and Green Operations (15%) and Climate Change (9%).

Table 2: Captioned sections and length in SINOPEC Sustainability Reports

Sections and Length of Each Section in SINOPEC Sustainability Reports	2008	2009	2010	2011	Average	Percentage
Company Profile	2	4	1	1	2	4%
Development Strategy/Vision	0	0	0	3	0.75	1%
Address from Chairman	2	2	2	2	2	4%
Corporate Performance	0	0	3	0	0.75	1%
CSR Practice	0	0	1	2	0.75	1%
Stakeholder	1	2	2	3	2	4%
Corporate Governance	5	4	2	4	3.75	7%
HSE/Safe and Green Operation	6	7	10	8	7.75	15%
Climate Change/Low Climate Development	0	3	5	10	4.5	9%
Continuing Energy Supply	0	0	7	8	3.75	7%
Customer Service	0	2	10	10	5.5	11%
Society and Community	8	6	10	8	8	15%
Employees	0	4	6	8	4.5	9%
Next Year Outlook	0	0	1	2	0.75	1%
Comment from Public	0	0	1	2	0.75	1%
CSR Initiative	0	0	2	0	0.5	1%
CSR Chronicles	0	0	2	1	0.75	1%
3 <sup>rd</sup> Party Assessment	0	2	1	1	1	2%
Other	3	3	1	2	2.25	4%
Total	27	39	67	75	52	100%

SINOPEC Sustainability reports tend to be more formalized by including general introductory sections such as “Company Profile,” “Development Strategy/Visions,” “Address from Chairman,” “Stakeholder,” “Corporate Governance,” and “CSR Practice.” The efforts in following the GRI G3 Guidelines can be followed in order to improve the company CSR disclosure.

Table 3 describes the statistical features of ADNOC Sustainability reports in terms of reported categories and their relative lengths. Consistent with the logic implied throughout its earlier HSE Annual Reports, ADNOC highlighted HSE-related topics in its Sustainability reports. According to the average page lengths for all major sections in Table 8, the company spends 32% of its CSR disclosure on Environmental Performance, 15% on Social Performance, and 7% on Health and Safety Performance.

Table 3: Captioned sections and length in ADNOC Sustainability Reports

Main section coverage and its length in Sustainability Reports	2009	2010	Average	Total
Message from CEO	1	1	1	1%
About ADNOC	1	3	2	3%
Key Project	0	3	1.5	2%
Stakeholders	0	2	1	1%
HSE Management Framework	0	1	0.5	1%
HSE Impact Assessments	0	1	0.5	1%
HSE Management Systems	0	1	0.5	1%
Environment Performance	24	20	22	32%
Social Performance	11	10	10.5	15%
Economic Performance	3	8	5.5	8%
Annual HSE Award	1	6	3.5	5%
Readers' Survey	1	1	1	1%
Others	10	9	9.5	14%
Product and Market	0	2	1	1%
Governance/Corporate Strategy	7	2	4.5	6%
Health and Safety Performance	0	10	5	7%
Total	52	80	69.5	100%

ADNOC Sustainability Reports also demonstrate their tendency to follow the GRI G3 Guidelines in order to improve the company’s CSR disclosure, by including general and introductory sections such as “About ADNOC,” “Key Projects,” “Stakeholders,” and “Message from CEO.” What is different about ADNOC, as compared to SINOPEC, is that ADNOC includes “HSE Management Framework,” “HSE Impact Assessment,” and “HSE Management Systems.” This is mostly due to ADNOC’s concentration on HSE topics in its CSR disclosure.

#### 4.6 Observations on Content of CSR Disclosure

SINOPEC and ADNOC’s shift from HSE reporting to Sustainability reports is a strongly positive observation, revealing that the companies have made great leaps forward in CSR disclosure. In early HSE reporting from the two oil companies, reported themes or issues were mainly restricted to statements on corporate policies and measures in terms of workplace safety, occupational health, and environment protection. Thus, the narrative and photographic description take the largest part of the reports, with very limited quantitative information for CSR performance disclosed. This is more apparent in HSE reporting by SINOPEC in its early stage of CSR disclosure. As a very strong contrast, in the recently adopted Sustainability reports of SINOPEC and ADNOC, both companies have formulated their own CSR conceptual frameworks for reporting the four well-defined dimensions of CSR performance, while referring to or adopting international guidelines for CSR disclosure (such as GRI Guidelines). More importantly, metrics for measurement of CSR performance pertaining to the economy, human resources, society, environment, and ecology have been widely applied in the main body of the Sustainability reports.

## 5. Summary and Conclusions

As a first issue, our investigation of CSR reporting discloses some shared motifs for these two oil companies to take care of reporting CSR performance in HSE and Sustainability reports. The most important impetus is to establish the legitimacy of the companies and the oil industry, especially when there is a well-known perception of the oil industry as one of the most distrusted industries (Gilberthorpe and Banks, 2012). One important supplementary motive is to build up a good social reputation, both in the domestic boundaries and in global markets. We conclude that legitimacy theory explains well the motivation for the oil companies to continue improving their CSR disclosure, while the CSR disclosure also contributes to their good social reputation.

As for consideration of stakeholders in CSR disclosure, we find that a framework based on the types of resource providers appropriate to each individual company has been developed in defining the key stakeholder groups engaged in CSR disclosure. In particular, ecological resources-related stakeholders, such as communities and environmental NGOs, are attracting increased attention in the CSR disclosure. This resource-based approach is different from that provided in Carroll (1991). We argue that this can act as a supplementary view of CSR disclosure because it offers a well-defined framework for both qualitative and quantitative reporting of CSR performance.

The third aspect of our conclusion is related to the content of CSR disclosure. Even though both HSE management and sustainable development consciousness are not yet mature in business strategy and operations, the oil industry has made great efforts in improving the CSR disclosure. Companies primarily have a focus on the environmental dimension of CSR performance. Then the increasing inclusions of theoretically supported CSR dimensions and metrics rooted in ecological economics have made the CSR narratives clearer and more convincing, in order to achieve a better understanding of, and stronger social reputation for, the disclosing companies.

The final but equally important conclusion drawn from our case analysis concerns trends in future CSR disclosure. Our longitudinal observations on the two oil companies' CSR disclosure reveal several trends in CSR disclosure of the oil industry: more full-length stand-alone sustainability disclosure, increased range and depth of CSR content, expanding the range of stakeholder groups, especially of ecological stakeholders, and more specialized presentation forms of CSR disclosure. In general, our conclusions on the intent, content, extent, and form of CSR disclosure help build up a theoretical framework of measurable CSR reporting and guide the corporate disclosure practices.

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