Corporate Social Responsibility Reporting in Emerging Economies: A Case Study of the Petroleum Refining Industry

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TABLE OF CONTENTS

I. Introduction 4
1.1 Introduction 4
1.2 Structure of Analysis 4
II. History and Current State of Corporate Social Responsibility Reporting 4
2.1 Definition of CSR 4
2.2 History of CSR Reporting 5
2.3 CSR Reporting Today 7
III. Corporate Social Responsibility and Emerging Markets 10
3.1 Definition of Emerging Markets 10
3.2 CSR Reporting in Emerging Economies 11
3.3 Six Country Studies of CSR in Emerging Economies 13
3.3.1 Brazil 13
3.3.2 China 15
3.3.3 India 17
3.3.4 Mexico 19
3.3.5 Russia 20
3.3.6 Thailand 22
IV. Research Design 23
4.1 Outline of Project Analysis 23
4.2 History of CSR Reporting in the Petroleum Refining Sector 26
V. Hypotheses 27
VI. Methods 30
6.1 Company Selection 30
6.1.1 Company Background 31
6.1.1.2 China National Petroleum (CNPC) 31
6.1.1.3 Reliance Industries 31
6.1.1.4 PEMEX 32
6.1.1.6 PTT 33
6.2 Benchmarking CSR Reports 33
6.2.1 Background on Benchmarking Methodology 33
6.2.2 Benchmark CSR Reports using the SustainAbility/UNEP Benchmarking Methodology 35
VII. Results 37
7.1 Summary Table of Results 37
VIII. Discussion 40
8.1 Overview of Final Results 40
8.2 Stakeholder Engagement Analysis 49
8.3 Analysis of Coverage of Social and Environmental Performance 51
IX. Conclusions 52
X. References 54
Appendix A 58

LIST OF ACRONYMS

CSR- Corporate Social Responsibility
NGO- Non-Governmental Organization
UNEP- United Nations Environment Programme
GRI- Global Reporting Initiative
CCP- Chinese Communist Party
PRI- Institutional Revolutionary Party
SOE- State Owned Enterprise
CNPC- China National Petroleum Corporation

I. Introduction

1.1 Introduction

A majority of the literature on corporate social responsibility (CSR) reporting focuses on efforts made by companies headquartered in North America and Europe (Frynas 2006, 16). Nevertheless, many profitable companies from countries with emerging economies are beginning to report on their social and environmental performance. However, the quality of these CSR reports is relatively unknown. Therefore, the purpose of this project is to benchmark six different company's sustainability reports in order to determine the quality of reporting that exists for companies based in emerging economies. Based on the project's findings, it will be determined whether or not the initial hypotheses concerning the quality of these companies' sustainability reports were correct.

1.2 Structure of Analysis

Sections II and IV of this report are meant to provide the reader with valuable background information about the past history and current state of corporate social responsibility reporting. In particular, Section IV looks at CSR reporting in emerging economies with an emphasis on the six countries in which the final companies were chosen for this analysis. In order to fully understand why the following analysis done is important, the project's research design is illustrated in Section III. Section V provides a list of the initial hypotheses that were developed as a result of extensive research. Section VI outlines the methodology used to assess the quality of each of the six company's sustainability reports. Also included in this section is a description of each of the six companies that were chosen for this project. The final sections, Section VII, VIII, and IX will include the final results of the analysis as well as the conclusions that can be drawn from this study.

II. History and Current State of Corporate Social Responsibility Reporting

2.1 Definition of CSR

The World Business Council for Sustainable Development defines corporate social responsibility as "the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large" (Balachandran and Krishnan 2004, 4). The European Commission notes that "being socially responsible means not only fulfilling legal obligations, but also going beyond compliance and investing more into human capital, the environment and relations with stakeholders" (Balachandran and Krishnan 2004, 4). Therefore, the concept of CSR encourages firms to diverge from the goal of maximizing profits and to place more importance on improving the economic and social standards of the communities in which they operate. In conclusion, CSR can be simply defined as the additional commitment by businesses to improve the social and economic status of various stakeholders involved while complying with all legal and economic requirements.

2.2 History of CSR Reporting

Reporting related to the social and environmental aspects of business first received considerable interest in the 1970s. Considerable debate existed over whether business was responsible for providing those services that were not being supplied by government institutions. At this time, a plethora of companies in the United States and Europe adopted practices of social reporting and accounting, defined at the time as "the identification, measurement, monitoring, and reporting of the social and economic effects of an institution on society" (Kolk 2006, 35). In the U.S., Ernst & Ernst surveys tracked developments from 1970-1978; by 1978, 90% of the Fortune 500 companies reported on social performance in their annual reports (Kolk 2006, 36). In Europe, social reporting occurred most frequently in Germany, the Netherlands, and France. In comparison to the United States, European reports focused more on employee matters and less on local community and environmental impacts; these reports also contained more quantitative information than those in the U.S (Kolk 2006, 36). Nevertheless, social reporting lost its momentum in the 1980s as a result of shifting interest toward various economic matters such as unemployment and recession.

In the late 1980s, corporate social responsibility reporting re-emerged with a focus on environmental issues; most reports' attention focused on external, accountability dimensions, influenced by pressure from non-governmental organizations (NGOs) (Kolk 2006, 38). Environmental reporting increased as a result of a government focus on heavy polluting industries and the introduction of compulsory registration of materials and inventory of toxic releases (KPMG and UNEP 2005, 6). Also, the development of new environmental management standards such as the European Eco-Management and Audit Scheme encouraged reporting on environmental performance.[1] The practice of producing an environmental report has grown substantially since that time, particularly in the form of separate (stand-alone) reports. Nevertheless, CSR reports focused almost exclusively on environmental issues well into the 1990s.

In 1997, the United Nations Environment Program (UNEP) and the Coalition for Environmentally Responsible Economies launched the Global Reporting Initiative (GRI) process to develop guidelines for reporting on economic, environmental, and social performance. Their goal was to elevate sustainability reporting to the same level and rigor as annual financial reporting. The GRI describes itself as a "multi-stakeholder process and independent institution with the mission to develop and disseminate globally applicable sustainability reporting guidelines" (KPMG and UNEP 2005, 16). Today, the GRI is the most widely recognized global standard with its framework for sustainability reporting. Currently, there are no mandatory guidelines for CSR reporting; therefore, following the GRI reporting framework is completely voluntary. Recently, the third revised or G3 version of the guidelines was released; these guidelines are complemented by sector-specific supplements that provide sustainability indicators specific to the needs of sectors (KPMG and UNEP 2005, 17). It should be noted that companies that use the GRI guidelines in producing their CSR report typically rank high in global benchmarking studies.

[1] The European Eco-Management and Audit Scheme is a management tool for companies and other organizations, requiring them to evaluate, report, and improve their environmental performance. The scheme has been available for voluntary participation since 1995.

A steady increase in worldwide corporate reporting was observed, from 13% in 1993 to 41% in 2005 (KPMG and UNEP 2005, 7).[2] However, since 2002, environmental reporting has broadened to include both social and financial issues. Reports that include all three dimensions are often called sustainability, or triple bottom line, reports. By 2005, the percentage of 'pure' environmental reports produced by the largest 250 multinationals declined to 13%; over 54% decided to publish sustainability reports instead (Palenberg, Reinicke, and Witte 2006, 10). The trend toward sustainable business practice, against a backdrop of recent corporate governance scandals, has increased company awareness of the need to be accountable to a wider audience for all aspects of performance (KPMG 2005, 10). Today, sustainability reporting tends to focus largely on more traditional reporting topics such as those related to health and safety, employee relationships, and philanthropy and charitable contributions.

CSR reports have also moved toward the external assurance of reports. Third party assurance can be defined as "a process in which a practitioner expresses a conclusion that intended users can have about the evaluation or measurement of a subject matter that is the responsibility of a party, other than the intended users or the practitioner, against criteria" (Brorson, Torbjom, and Park 2004, 1104). Externally verified reports are generally considered to be of higher quality and more reliable. As a result, both companies and stakeholders alike are very interested in third-party assurance. In 2002, 13% of the top 250 from Fortune's Global 500 companies published third-party assured CSR reports (Brorson, Torbjom, and Park 2004, 1105). Since that time, the rate of third-party assured CSR reports has increased slowly; nevertheless, independent assurance remains a valuable part of reporting today.

2.3 CSR Reporting Today

According to the literature, it is evident that communicating effectively with stakeholders on progress towards economic prosperity, environmental quality, and social justice will become a defining characteristic of corporate responsibility in the 21st century (Wheeler and Elkington 2001, 2). Over the past ten years, corporate sustainability reporting has entered into the mainstream such that a respectable percentage of leading global corporations now have some form of stand alone sustainability report. According to the estimates of some analysts, there are more than 1,900 institutions worldwide producing CSR reports (Palenberg, Reinicke, and Witte 2006, 9). The number of CSR reports produced globally has increased from less than 50 in 1992 to 1,906 in 2005; therefore, the number of published CSR reports has grown in size by almost 39% each year for those thirteen years (Palenberg, Reinicke, and Witte 2006, 10). Growth has been the strongest in the United Kingdom and Japan. In particular, studies indicate a steady growth in the number of reporters among the Fortune 250 companies; in 2005 more than 52% of the Fortune 250 produced CSR reports, compared to 45% in 2002 (Palenberg, Reinicke, and Witte 2006, 11). Growth in CSR reporting among the Fortune 250 has been particularly strong in specific industrial sectors such as chemicals, mining, oil and gas, forestry, pulp and paper, and utilities. These sectors lead in reporting because their operations have relatively high environmental impacts; as a result of these impacts, public attention has focused on how the companies in these sectors are minimizing their environmental footprint.

Although the number of CSR reports has increased dramatically over the past ten years, most of this growth remains highly concentrated in the OECD world. As most would suspect, the European Union has experienced the most significant growth in reporting; within the European Union, the United Kingdom is the clear leader. Between 2002 and 2005, CSR reporting saw impressive growth rates in France, Spain, Canada, and Italy (Palenberg, Reinicke, and Witte 2006, 14). Nevertheless, the extensive use of CSR reports in industrialized countries is not surprising. Companies headquartered in the OECD world can often commit more resources to sophisticated reporting systems. In addition to this, these companies also tend to face significant pressure from an organized civil society that demands greater accountability and responsible corporate behavior.

As a result of increased pressure from internal and external stakeholders, it is not surprising that more and more organizations are measuring and reporting on their social and environmental performance. In addition to this, the worldwide growth of socially responsible investment funds, investment rating systems such as the Dow Jones Sustainability Index and investment policy disclosure requirements also have put financial pressure on companies to make these kinds of non-financial disclosures. Although disclosing this kind of information is not mandatory in the majority of countries, a number of companies have begun to recognize the potential competitive advantages of publicly disclosing their goals related to non-financial and financial performance measures and then reporting on how well they achieve them. Ans Kolk, Professor of Sustainable Management at the University of Amsterdam, has identified the following eight benefits that result from reporting: "(a) enhanced ability to track progress against specific targets, (b) facilitating the implementation of the environmental strategy, (c) greater awareness of broad environmental issues throughout the organization, (d) ability to clearly convey the corporate message internally and externally, (e) improved all round credibility from greater transparency, (f) ability to communicate efforts and standards, (g) license to operate and campaign, and (h) reputational benefits, cost savings identification, increased efficiency, enhanced business development opportunities and enhanced staff morale" (Kolk 2004, 54).

In most of the world, CSR reporting remains a voluntary practice. Currently, France is the only country to enact specific legislation requiring publicly listed companies to produce reports covering economic, social, and environmental dimensions. The Nouvelles Regulations Economiques came into force in 2003 and provide baseline sustainability reporting standards that French corporations can voluntarily build upon (Palenberg, Reinicke, and Witte 2006, 9). However, there are no penalties for non-compliance. Nevertheless, most countries mandate detailed reporting for specific industry sectors. In the United States, there is no federal or state law that forces companies to produce a CSR report; however, there is a host of industry- and state-specific regulatory reporting requirements. For example, the Toxic Release Inventory requires companies with more than 10 full time employees to submit data on emissions of specified toxic chemicals to the Environmental Protection Agency. Lastly, some stock exchanges now make producing a CSR report a requirement for listed companies, such as the South African stock exchange.

CSR covers an extremely wide range of issues. However, effective reporting is not about volume, but should rather enable stakeholders to make informed decisions relevant to their interests. A key issue for many companies is how to decide what they should report, i.e. what are the really significant or material issues for users. Another challenge companies face is stakeholder engagement. Companies often struggle to identify target stakeholder groups; in addition, companies do not typically respond to issues and concerns raised by these stakeholders in their reports. Lastly, other challenges identified by SustainAbility and UNEP relate to the following issues: the need to link sustainability issues with brand and corporate identity, the continuing disinterest of most financial institutions and the so called "carpet-bombing" syndrome of bombarding readers with more information, rather than more insight (KPMG and UNEP 2005, 7).

III. Corporate Social Responsibility and Emerging Markets

3.1 Definition of Emerging Markets

The International Finance Corporation is responsible for coining the term 'emerging market,' which describes a fairly narrow list of middle to higher income economies among the developing countries, with stock markets in which foreigners can buy securities (SustainAbility Ltd. 2007, 1). According to the World Bank, these are countries with a 2003 Gross National Income per capita of less than $9386 (Baskin 2005, 1). Over time, however, the term's meaning has since been expanded to include more or less all developing countries. Nevertheless, such countries constitute approximately 80% of the global population, representing about 20% of the world's economies (Heakal 2003, 1).

Emerging Market Economies can be characterized as transitional, meaning they are in the process of moving from a closed to an open market economy while building accountability within the system. As an emerging market, a country embarks on an economic reform program that will lead it to stronger and more responsible economic performance levels, as well as transparency and efficiency in the capital market. In addition to implementing reforms, an Emerging Market Economy is also likely to be receiving aid and guidance from large donor countries and/or world organizations such as the World Bank and the International Monetary Fund.

3.2 CSR Reporting in Emerging Economies

Very few developing and emerging economies are included in regular surveys on CSR reporting trends. Nevertheless, academics and sustainability professionals are just beginning to uncover the role CSR reporting is playing in these countries. In Asia, the practice of CSR reporting is slow but growing.[3] Those companies that do practice CSR reporting are typically encouraged to do so by Asian subsidiaries of multinational companies; therefore, producing CSR reports are generally restricted to large local corporations from sectors with a high environmental impact (KPMG 2005, 7). In Latin America, the developments of the corporate social responsibility field are at an early stage. In 2005, only 20 CSR reports were released; 80% of these were from companies headquartered in Brazil, Chile, Argentina, and Mexico (KPMG 2005, 16). Like Asia and Latin America, reporting on CSR performance is a relatively new concept in Africa, with the exception of South Africa. Unfortunately, the companies that are reporting outside of South Africa are usually subsidiaries of multinational companies. Lastly, CSR reporting is only emerging in Eastern European countries. Therefore, it is evident from the literature that CSR reporting in emerging economies is at an early stage of development and is typically only practiced by large corporations or by subsidiaries of multinational companies.

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[3] Japan is the biggest outlier to this generalization. For a number of years, CSR reporting in Japan has far surpassed that of Western countries.

Research has determined that there is a strong business case for companies located in emerging economies to strive for sound environmental and social performance. In emerging economies, the most significant opportunities available by actively pursuing more sustainable approaches to business are to: (a) saving costs by making reductions to environmental impacts and treating employees well, (b) increasing revenues by improving the environment and benefiting the local economy, (c) reducing risk through engagement with stakeholders, (d) building reputation by increasing environmental efficiency, (e) developing human capital through better human resource management, and (f) improving access to capital through better governance (SustainAbility Ltd., IFC, and Ethos Institute 2002, 4). Emerging market companies' typically focus more on short-term cost savings and revenue gains;[4] therefore, a strong case for sustainability can be made because these are the two most likely effects of pursuing more sustainable business practices.

Assuming that emerging economies stay on course, the coming years will see their ever-greater influence in the economic, geopolitical, social, environmental and cultural realms. Whether their emergence--and the global conduct of their firms, their aggregate 'corporate footprint'--will lead to a race-to-the-top in terms of values and standards or, as presently feared, a descent-to-the-bottom, remains too early to tell. Nevertheless, some CSR milestones can be identified in many emerging markets- for example, Brazil's adoption of a national 'Corporate Sustainability Index' in 2002 to profile vanguard firms; or China's admission that 5,986 workers had died in Chinese coal mines in 2005 and the subsequent closure of 580 coal mines; or the adoption by the Confederation of Indian Industry of sustainability and integrity as two of its core themes in 2006 (Mehra 2006, 1). These actions are encouraging yet not strong enough to be labeled a turning point.

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[4] Intangibles such as brand value and reputational issues tend to be more significant in developed countries.

3.3 Six Country Studies of CSR in Emerging Economies

3.3.1 Brazil

From the Amazon rainforest to the sprawling cities of Sao Paulo and Rio de Janeiro, Brazil is a place where modern industry and commerce has flourished alongside extraordinary inequality, poverty, crime and violence (SustainAbility Ltd. 2006, 1). Both economically and politically, Brazil is set to be amongst the major players shaping the world in the 21st century. Since returning to democracy in the mid 1980s, the country has been slowly gaining economic and political stability, while developing an increasingly central role in international affairs. Brazil continues to face many of the same social challenges as other developing countries, such as poverty, health, education, food security, human rights and governance. However, these social challenges are often exacerbated by great extremes of inequality. As a result, Brazil has amongst the highest income inequality in the world – with the poorest one fifth of the population accounting for only a 2.4% share of national income (World Bank 2006, 1). Brazilians also suffer from inequitable access to services like social welfare and assets (such as land). While there are ongoing efforts around land reform, continued disappointment, especially with the failure of the Lula administration, which was elected in part to tackle this problem, has led to ongoing and wide-scale land occupations. The high level of violence in Brazil's cities, amongst the highest of any region not at war, is another legacy of extreme inequality (SustainAbility Ltd. 2006, 1).

The corporate social responsibility movement in Brazil emerged during the 1980s as a result of the country's re-democratization and rise in civil society movements. The social and political developments that occurred during this time resulted in a growing consensus of the importance of the business sector to the country's social well-being (KPMG and UNEP 2005, 31). By the 1990s, various think tanks and civil society organizations focused on private sector conduct, ethics, and social responsibility. The growing momentum of social reporting that was occurring at that time resulted in a political initiative that would require all companies with over

100 employees to publish a "balanco social" using criteria taken from the French social reporting legislation.[5] This initiative is still being considered today.

Since the 1980s, the nation of Brazil has been associated with sustainable development: hosting the first Earth Summit in 1992 and convening the first World Social Forum in 2001 (KPMG and UNEP 2005, 33). Civil society has been critical in focusing attention on certain key issues such as labor conditions, land, forest and biodiversity, consumer rights, transparency and accountability. Corporate responsibility activities have typically been largely philanthropic and associated particularly with community investment. According to the Ethos Institute, there are three main motivations for corporate sustainability in Brazil: (a) the need to adapt to the international market, (b) the desire to bring about swift and significant improvements in poverty and the country's extreme social differences, and (c) concern to maintain natural and human resources for future generations (SustainAbility Ltd., IFC, and Ethos Institute 2003, 21). Nevertheless, as a result of rising public pressure, many Brazilian companies are beginning to take a more strategic approach to sustainability. For example, in December 2005, the São Paulo stock exchange launched a new 28-member Corporate Sustainability Index, in line with international indices linked to the Dow Jones and Financial Times Stock Exchange (SustainAbility Ltd. 2006, 1).

In conclusion, the country of Brazil is becoming increasingly influential – "punching above its weight in international affairs" (SustainAbility Ltd. 2006, 1). Although Brazil has many things to offer to this world, the country's social, political, economic, and environmental progress will continue to be hampered by the fundamental issue of inequality. Addressing the centuries-old divide in wealth will require serious and ongoing efforts on the part of government, civil society and business.

[5] Requirements for social reporting emerged as early as 1975; at this time, it was required that all companies, regardless of size, release basic labor statistics and consolidated numbers concerning company staff. This requirement is still valid today.

3.3.2 China

Over the past few years, China has rapidly become an economic and political force. Economic growth has been a result of liberalization; in the early 1980s, China introduced market reforms that lead to the privatization of many state owned enterprises. As a result, only about a third of the economy is directly state-controlled (The Economist 2007, 1). Since joining the World Trade Organization in 2001, China's economy has continued to open up. However, because of the high number of disadvantaged citizens, the balance of economic power is being altered in favor of social priorities. The private sector, which is made up of both domestic and foreign funded interests, is now strongly encouraged to expand and complement the state sector in aiding these citizens.

Although the Chinese government has been gradually downsizing and withdrawing from direct economic management, the "socialist market" is still very interventionist (Young 2005, 3). SOEs still dominate the poor, western provinces, despite efforts to lure private investment there. Nevertheless, entrepreneurs are constrained by the lack of an adequate legal framework, the absence of an effective judiciary, and the inability to access credit from a politically directed banking system. Despite the difficulties of foreign investment, the Chinese government expects the private sector to provide a variety of social services to the general public. In the meantime, the government has recast itself as a facilitator, rather than a provider, of social services (Young 2005, 7). The combination of being severely under funded and not willing to provide social services for its country's citizens has lead the Chinese government to create an increasing gap between the rich and the poor.[6]

The concept of CSR was first introduced to China after the mid-1990s when the number of industrial accidents began to skyrocket. It was not until recently,

[6] Government investment in social services is concentrated in urban areas, where populations can afford to purchase such services. Heavily indebted local governments in rural areas can barely pay schoolteachers, let along provide medical clinics. Inhabitants of these rural areas typically cannot pay for such services anyway. Therefore, aid is only being given to those who can afford it.

however, that the Chinese government began to take a proactive position on this issue. The growing consensus on the increasing importance of corporate social responsibility worldwide has surprisingly enticed the Chinese government to act accordingly. In 2005, corporate social responsibility was among the major themes in the 11th Five-Year Plan recently approved by the Central Committee of the ruling Chinese Communist Party (CCP) (Zheng 2006, 3). This plan aims to achieve sustainable development by addressing the mounting problems China faces as a result of the nation's previous preoccupation with rapid economic growth.[7] China's rapid development has borne heavy environmental, social, and human costs. The CCP believes that this kind of development is not only unsustainable, but is also likely to result in social instability (Zheng 2006, 4). Therefore, the CCP plan hopes to continue economic development in a sustainable matter.

Nevertheless, China faces considerable obstacles in promoting CSR. In the state-owned sectors, which have previously operated along socialist lines, social responsibility has gone out of fashion as corporations have focused on the need to become more businesslike (Zheng 2006, 10). In many cases, they have largely shed the social responsibilities that they previously exercised in local communities. Also, irresponsible corporate behavior such as labor rights violations, ignoring environmental regulations, and tax evasion are widespread in China. In addition, the Chinese state does not have the required capacity to regulate effectively; because law enforcement capabilities are still weak it will be extremely difficult to ensure that even the minimum legal levels of CSR are achieved (Zheng 2006, 12).

According to KPMG's 2005 international survey of CSR reporting, the practice of producing CSR reports is almost non-existent in mainland China. However, this situation is slowly beginning to change as China continues to expand foreign trade, seek overseas stock listings, and as multinational companies increase the sourcing

[7] The 11th Five Year Plan (2006-2011) calls for efforts to address social ills, land dislocation issues, inadequate rural social security and health care, and to industrialize the rural sector. The plan also stresses that China should maintain a stable and rapid economic growth, with a target of doubling, by 2010, the per capita GDP achieved in the year 2000.

of products from Chinese suppliers (KPMG 2005, 35). In 2002, the GRI guidelines were published in Chinese to encourage local companies to report. Therefore, as the Chinese government continues to attempt to create an environment in which CSR can flourish, it should only be a matter of time before local corporations start to report on their social and environmental performance.

As a member of the World Trade Organization, China stands closer to the international community. As a result, Western investors are slowly beginning to have a profound effect on the actions of Chinese companies. While many foreign firms went to China to take advantage of China's unregulated markets, many have brought technology and management know-how to the country (Zheng 2006, 14). Although corporate social responsibility and CSR reporting is a new concept for most Chinese companies and for government officials, both entities are beginning to realize that it is important to engage in CSR. Nevertheless, without a firm establishment of the rule of law, the CCP leadership faces a daunting task to implement CSR effectively.

3.3.3 India

The growth of India as an economic power has brought the country into the global spot light. India, like China, has an increasingly influential role to play in the shifting politics, strategies and alliances that will determine the nature of globalization in years to come. With over 1 billion people, India is home to 17% of the global population, and is set to overtake China as the world's most populous nation in three decades (SustainAbility Ltd. 2006, 2). India is the world's largest democracy and 12th largest economy; in Asia, its economy is third only to China and Japan (SustainAbility Ltd. 2006, 2).

Typical of most emerging economies, the challenge of governance and bridging the divide between the rich and the poor is immense. The infrastructure for government in India is weak, as it is stretched over 28 states, each with its own governance structure (SustainAbility Ltd. 2006, 1). The judiciary is separate from government and shows evidence of acting as an increasingly influential and modernizing force. There is legislation with regard to labor rights and the environment, and there have been high profile actions such as the closure of polluting factories around the Taj Mahal (SustainAbility Ltd. 2006, 2). However, outdated laws and corruption inhibits the judiciary from exercising its influence. Problems of child labor persist, along with human rights infringements, particularly with regard to caste and gender inequalities in parts of Indian society.

International businesses have only been allowed to invest directly in India since 1991. Prior to that, following the country's independence in 1947 and in a determined quest for self-sufficiency, the government required all companies operating in the country to be majority owned by Indians. This resulted in many multinationals leaving the country. In the last decade, they have returned en masse.

India has a long tradition of a highly active civil society with about 2 million NGOs (SustainAbility Ltd. 2006, 3). The Bhopal disaster in 1984 contributed to the formation of a highly vigilant and vocal community of activists and NGOs. In addition, Indian media is free and active in reporting on CSR issues. Recently, Coca-Cola faced high profile criticism, locally and internationally, with regard to its alleged exercise of double standards when it comes to toxicity controls for its beverages in India compared to developed markets (SustainAbility Ltd. 2006, 3). It has also been criticized for the impact of its bottling plant in Kerala on the local community's access to drinking water; this is a serious problem because India faces real challenges in regards to water scarcity.

Sustainability reporting in India is at the beginning stages. There are no officially recognized guidelines or reporting standards.[8] Companies typically publish a wide variety of information relating to various sustainability themes. As a result, Indian companies' publish a diverse set of information in a variety of

[8] Although there are no formal reporting frameworks in India, companies are relying on global standards of sustainability reporting, in particular the GRI.

different formats. Traditionally, however, many organizations in both the private and public sectors engage in some sort of CSR program, yet it has not become common to report on it. However, increasing awareness of the importance of CSR reporting has encouraged many firms to start reporting on sustainability issues. Nevertheless, the drivers to report on CSR performance are very different in India. For example, pressure from NGOs is low in India in comparison to other countries (KPMG and UNEP 2005, 41). Instead, pressure originates from increasing involvement in the global business environment. Nevertheless, the concept of CSR reporting is becoming popular and it is only a matter of time before more local companies begin to report.

3.3.4 Mexico

From 1929-2000, the nation of Mexico was governed by the strongly nationalist group known as the Institutional Revolutionary Party (PRI) (The Economist 2007, 1). However, by the 1990s, the PRI began to embrace free market policies and economic liberalization. Since the year 2000, Mexico has been lead by various members of the National Action Party, thus ensuring its eventual transition to democratic pluralism. However, the country faces serious problems that are hampering its economic growth; these problems include high-cost labor and energy inputs, dependence on the US export market, reliance of the public finances on oil revenue, and a shallow credit market (The Economist 2007 1).

Mexico, an advanced middle-income country, has recently experienced steady economic performance and rising income levels. Nevertheless, poverty rates are high as well as income inequality. Although the country continues to evolve from a "hierarchical-corporatist system" to one where power is shared, significant challenges exist in terms of carrying out policies and programs (World Bank 2007, 2). These challenges are a result of the ability of all three major political parties, as well as powerful interest groups, to block the structural reforms that are needed to accelerate growth (World Bank 2007, 2).

While during most of the 20th century the state has had a powerful influence on the Mexican economy, private corporations have recently become more important in producing economic and social activities because of deregulation, or the privatization of state-owned enterprises. Also, the weakness of Mexico's regulatory systems and the effects of government corruption have raised social expectations of local businesses (Van Buren 2006, 2). As a result, the corporate citizenship that exists in Mexican firms is rooted in the country's own cultural history and development. Interestingly, the role of NGOs has not been as important in promoting CSR, rather firms engage in this kind of behavior for historical and cultural reasons (Van Buren 2006, 3).

Currently, only a few Mexican companies issue sustainability reports. Primarily, large local corporations or multinationals are the ones producing these kinds of reports. However, more than 4,000 Mexican companies have achieved ISO 9000 or ISO 14000 certification (Deaton 2004, 2). Nevertheless, Mexico needs to attract foreign investment in order to grow its economy, thus it may be able to benefit by having more companies engaging in CSR initiatives (Weyzig 2007, 4). Therefore, Mexican companies not only have to produce CSR reports, but they also have to allow them to be observed and understood in the global context. Currently, Mexican firms' CSR reports are only found in Spanish and cultural nuances have produced certain CSR orientations particular to Mexico (Weyzig 2007, 4). Once these challenges are overcome, investing in Mexico will be more attractive to investors.

3.3.5 Russia

As the largest republic of the former Soviet Union, the Russian economy was centrally planned and the political system was based on the one party rule of the Communist Party of the Soviet Union (The Economist 2007, 1). However, 1991 heralded the disintegration of the Soviet Union and the individual republics declared their independence from Moscow. The nation of Russia was, and still is, made up of a collection of diverse territories at different stages of development.

During the 1990s, liberalization, privatization, and stabilization were three concepts at the forefront in trying to make Russia a market-led economy. In order to change Russia's economy, leaders sought the liberalization of production, business, the domestic market and foreign trade as well as macroeconomic stabilization by harnessing inflation and privatization of state and collectively owned enterprises (Soderbaum 2006, 23). Although Russia has been designated as a market economy, many reforms need to be enacted in order for the country to be truly economically and politically stable. In particular, Russia needs to diversify its economy, improve competitiveness, encourage the growth of small and medium enterprises, build human capital, and improve governance (World Bank 2007, 2).

Throughout the Soviet Union's existence, the state owned business sector was the main provider of social infrastructure (World Bank 2007, 3). At the time of the collapse of the USSR, local administrators were given the responsibility of funding and implementing government programs. As taxes were reduced, these local administrators were put in a severe situation. Today, inequalities have increased steadily; the financial crisis in 1998 intensified the inequalities and now Russia is one of the most unequal societies in the world (World Bank 2007, 3).

In Russia, the incorporation of CSR into the business principles of both small and medium enterprises and state-owned companies is very low. In many ways, this is due to the problem of non-transparency in Russian business (UN Economic Commission for Europe: Committee on Environmental Policy 2006, 4). Nevertheless, socially responsible behavior is still a novelty in Russia. It is rarely understood beyond philanthropy. However, the oil companies located in Russia are beginning to lead the CSR revolution; it is these few companies that are responsible for the growth of CSR reporting in Russia.

According to Perm State Technical University, between 2003-2004, only five of the top one hundred Russian companies produced a separate report on environmental or social matters (KMPG and UNEP 2005, 7). Twenty of these companies included CSR information in their annual report. Nevertheless, CSR reporting is increasing as a result of many leading Russian companies becoming engaged in specific environmental and social programs. A key driver for the development of CSR reporting in Russia is the need for transparent and reliable information for key stakeholders, in particular the general public, local communities, and international business partners. In addition to this, Russia's recent corporate governance scandals have also fuelled a broader need to rebuild the confidence of international investors now skeptical of the management practices and ethics of Russian companies (KMPG UNEP 2005, 8). The influence of foreign multinationals with well-established CSR activities has also increased the practice of reporting in Russian companies. Nevertheless, in order for CSR to become mainstream, significant challenges must be overcome; in particular, two problems in the development of CSR in Russia are the lack of coherent legal system and the absence of independent monitoring (Tkatchenko 2002, 30).

3.3.6 Thailand

Before the 1997-1998 Asian financial and economic crisis, Thailand enjoyed a long period of rapid economic growth, supported by high levels of foreign investment. Since that time, Thailand has implemented a number of reforms in its financial sector, strengthening corporate governance, reforming lending practices, and boosting incentives for increasing competition (World Bank 2007, 1). However, as of 2006, economic growth has become rather sluggish because of high oil prices and political uncertainties.

Since 1932, the year the absolute monarchy was abolished, there have been 18 military coups. The most recent coup occurred in September 2006. Presently, Surayud Chulanot, a retired general, is acting as prime minister for a one year period during which a new constitution is to be drafted and new elections held. In the meantime, important economic policy initiatives are being put on hold; thus, Thailand's economic development is being put on pause until the political situation becomes less fragile.

Between 1997 and 2001, the percentage of the top 40 Thai companies producing some kind of CSR report increased from 72.5% (29 companies in 1997) to 75% (30 companies in 2001) (Ratanajongkol, Davey, and Low 2006, 2). Shockingly, the finance and manufacturing sectors are responsible for this growth in reporting. The trend may be in response to the promotion of corporate governance practices in Thai companies since Thailand confronted the economic crisis of 1997 (Ratanajongkol, Davey, and Low 2006, 5). During that time, public pressure was mounting against companies to release non-financial related material. Nevertheless, this pressure continues as Thailand slowly emerges onto the CSR reporting scene.

IV. Research Design

4.1 Outline of Project Analysis

The growth in CSR reporting is occurring all across the world. However, most of the literature focuses on the CSR reporting efforts of companies located in the developed world. Nevertheless, CSR reporting is becoming relatively popular in many emerging economies. Active NGO networks along with growing public awareness and interest in corporate social and environmental performance has put a significant amount of pressure on companies located in emerging economies to report on their CSR efforts. Current research only states that CSR reporting is occurring in emerging economies; however, the quality of these reports is unknown. Therefore, because of the lack of knowledge concerning the quality of CSR reports in emerging economies, this project seeks to focus its analysis only on those companies located in those transitional areas.

In order to truly determine the quality of CSR reports of companies from countries with emerging economies, it would be necessary to look at a variety of different sectors. Nevertheless, because of the narrow scope of this project, the analysis will only focus on the petroleum-refining sector. Over the past ten years, conflicts involving oil and gas companies, governments, local communities, pressure groups and non-governmental organizations have been a regular feature item in the international news media as well as the focus for civil society campaigns. At the broadest level, stakeholders' concerns center on the level of economic power and influence that oil and gas companies have, and how that power and influence is used- particularly with respect to vulnerable stakeholder groups such as poor communities in developing countries or indigenous groups (SustainAbility Ltd. and UNEP 1999, 41). Therefore, this sector was chosen because of (1) the large environmental footprint the petroleum-refining industry places on the world, (2) stakeholders' interest in how these companies use their power and influence in the politically volatile areas in which they operate, and (3) the recent shift of company executives' views of environmental sustainability.[9] In addition, it can also be noted that many other companies that are headquartered in emerging economies but are included in other industry sectors are still not reporting at the present time. Therefore, only a very small number of other sectors could have been selected for such an analysis at this time. Finally, this sector was chosen because it has a long history of CSR reporting, especially among firms based in developed economies. Thus, CSR reporting will not be an entirely new concept to companies in this sector, even if they themselves have not generated reports in the past. Many companies in this sector have produced high quality reports; therefore, examples of what exactly a high quality report entails are available to all firms in the sector. It is reasonable to expect that reports produced by any group of firms in this sector would provide a rich basis for close examination and comparison.

Through the products it provides, the petroleum-refining industry helps fuel economic development and social progress. Petroleum products are essential building blocks for development, from asphalt for roads, fuels for transport, electricity generation, heating and cooking, and the raw material for plastic (API IPIECA 2005, 9). Therefore, petroleum-refining companies play a critical role in

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[9] As early as a few years ago, company executives of major oil and gas companies were still denying that climate change even exists. Recently, however, these companies have begun to invest in renewable energy and are running sustainable market campaigns.

aiding an emerging economies' transition into a developed society. As a result, companies are facing an extraordinary amount of pressure from both stakeholders and NGOs to report on their environmental and social performance. Nevertheless, only recently have petroleum-refining companies from emerging economies begun to produce these kinds of reports.

The purpose of this analysis is to determine the quality of CSR reports produced by large petroleum-refining companies headquartered in emerging economies. By using the standardized benchmarking system developed by SustainAbility Ltd. and UNEP, a compare and contrast analysis will be conducted of each of the six chosen petroleum-refining companies' CSR reports. The companies that were chosen for this analysis met a number of criteria including (a) being listed as a part of the petroleum refining sector, (b) included in Fortune's Global 500 (2006 edition), (c) being headquartered in a country that is included in Morgan Stanley's 2006 Emerging Markets Index, and (d) authored a separate sustainability report that was accessible online. In addition to these four criteria, an equal number of state-owned enterprises (SOEs) and publicly traded companies were chosen for this analysis. By using the benchmarking methodology developed by SustainAbility Ltd. and UNEP, this project seeks to determine the range of CSR reporting quality scores that will be given to these emerging economy 'reporting leaders.'[10] The decision to select an equal number of SOEs and publicly traded companies allows the researcher to compare and contrast the differences in quality that is expected to be seen in the reports.

In order to answer the research question concerning the quality of CSR reports of petroleum refining companies located in emerging economies, an extensive literature review of the history of CSR in six countries with emerging economies was conducted first. These countries are the headquarters of each of the six companies chosen for this analysis. Then, the CSR report from each company was

[10] By leaders, I do not mean the highest quality reporters. Rather, I mean that these companies are the only ones who are really making an effort to report.

evaluated according to a standardized benchmarking methodology developed by SustainAbility Ltd. and the United Nations Environment Programme, allowing for several hypotheses to be tested regarding which type of petroleum refining firms in emerging economies would be likely to produce the most thorough and complete CSR reports.[11] The final section of this paper contains a qualitative discussion about the differences that were observed in the reports and possible reasons for them.

4.2 History of CSR Reporting in the Petroleum Refining Sector

Ten years ago, a ‘responsible’ company was one that “made a profit without breaking any laws or causing any high-profile disasters or scandals” (SustainAbility Ltd. and UNEP 1999, 6). The term now implies much greater accountability for, as well as a higher degree of transparency on, the environmental and social dimensions of a company’s operations. Today, oil companies around the world are struggling to meet the ever-rising expectations of corporate responsibility. By attempting to produce high quality CSR reports, these companies are trying to prove that they truly are good global citizens.

Since the late 1990s, the petroleum-refining sector has been among the highest reporting sectors. CSR reporting was a relatively standard practice for many large petroleum companies at this time. Of the 50 petroleum companies that were surveyed by SustainAbility Ltd. in 1999, 34 of them were already publishing some type of corporate environmental report (SustainAbility Ltd. and UNEP 1999, 10).[12] In addition, about 28 of the 50 companies surveyed were releasing some form of systematic social disclosure (SustainAbility Ltd. and UNEP 1999, 44). However, the majority of these reporting companies are headquartered in North America or

[11] Refer to following section for more detail on the scoring methodology used in this analysis.

[12] The 1999 study done by SustainAbility Ltd. and UNEP looked specifically at the status of CSR reporting in large petroleum companies.

Europe. In the meantime, reporting was essentially non-existent in state owned companies, smaller petroleum companies, and upstream-only companies.[13]

As of 2005, all but one sector of those included in Fortune's Global 250 showed an increase in reporting activity. Sectors in which more than 80 percent of the companies have CSR reports include electronics and computers, utilities, automotive, and oil and gas (KPMG 2005, 17). Therefore, it is evident that the typical industrial sectors with a relatively high environmental impact continue to lead in reporting. As a result, many companies in industrial sectors that are headquartered outside the developed world are now beginning to report.

V. Hypotheses

***Hypothesis 1*: Overall, publicly traded companies will score higher in the benchmarking analysis than state-owned enterprises.**

New communications technology and globalization have given rise to a veritable explosion in NGOs that are focusing on one or more aspects of corporate social responsibility. These organizations are pressing governments and multilateral institutions to require high standards of CSR from corporations. At the same time, these organizations are also pressing business directly to adopt voluntary approaches in many areas of CSR. In addition to this, investors have become highly sensitive to these public pressures and this is influencing the ways pension funds invest and giving rise to rapidly growing socially responsible investing funds. Therefore, as the multitude of pressures mount on business, so does the quality of reporting. Since publicly traded companies face the brunt of this public pressure, the quality of their reports will no doubt be more superior than those of state owned enterprises. Each company's report will be scored using the SustainAbility/UNEP benchmarking methodology; scores from each of the 29 criteria will determine the report's overall rank. Generally, a company will receive higher ratings if they

[13] At this time, many countries with emerging economies had state owned petroleum companies; a few years later, however, many of these countries began to privatize them.

thoroughly discuss each of the three pillars of sustainability and provide concrete evidence (i.e. quantitative data) of their social and environmental performance. Lastly, a company can expect a high ranking if the organization has illustrated how it is making a systematic attempt to integrate its sustainable development goals into its business strategies and everyday decisions.

***Hypothesis 2*: Publicly traded companies face a significant amount of pressure from their shareholders, NGOs, and the general media. Therefore, these companies are most likely going to devote more of their report to the discussion of engaging stakeholders. As a result, these reports will contain more documentation of how they identify stakeholders, listen to their concerns, address those identified issues, and include a description of the results from implementing stakeholders' recommendations.**

Stakeholder engagement is one of the current challenges in sustainability reporting; in particular, publicly traded companies see this concept as an important issue, one that can increase their bottom line. SOEs know who their stakeholders are and will spend their money on social programs that the state thinks are important, not necessarily its citizens. Public companies often have a variety of stakeholders that are not always easy to identify. Nevertheless, these companies face a significant amount of pressure to address this challenge. SOEs, on the other hand, do not face any pressure to engage stakeholders because they are not looking to compete with international brands. Also, these companies typically do not have a large number of competitors in their home market. Nevertheless, public companies in emerging economies are competing against companies from industrialized nations. In the interest of receiving foreign investment, it is important that public companies in emerging economies work on addressing the same issues that are being addressed by companies located in the Western world. Therefore, it is in these public companies' best interest to strive to meet international standards of reporting by engaging further with their stakeholders.

***Hypothesis 3*: In most emerging economies, the people expect business to provide the necessary social services that are not being offered by the government. Therefore, both publicly traded companies and SOEs will focus**

on the various social issues that are plaguing the particular country they are located in. However, SOEs will most likely focus less on environmental issues and more on the country's various social problems and what they are doing to remedy them. Reports produced by publicly traded companies will tend to focus an equal amount of attention on environmental and social issues.

It is evident that a large number of the inhabitants of emerging economies are faced with many of the same problems, such as poverty and inequality. These problems are very serious and must be overcome in order for the country to develop further. Economic growth is often a remedy, yet it usually comes at the sacrifice of the environment. Inhabitants of emerging economies expect business, especially SOEs, to provide those social services that are not being provided by the government. Since SOEs are essentially an extension of the government it is not surprising that people would look towards these companies to provide aid (Shleifer 1998, 136). At the same time, people expect publicly traded companies that operate in emerging economies to provide social services; however, these services are only expected to be found in those areas in which they operate. SOEs, on the other hand, are more likely to engage in wide-ranging social programs that will help the entire country. Therefore, it is likely that SOEs will devote a significant portion of their report to describing the social programs the company is actively promoting. On the other hand, it is likely that public companies will have an equal focus on the environment and social issues because they are: (a) more aware of international standards of CSR reporting; (b) looking for foreign investment; and (c) using the quality of their report to increase brand value and their reputation as a good corporate citizen. These companies may seek to develop reports that are on par with those from developed countries, which would place at least as much emphasis on environmental issues as social issues. Having a well-balanced CSR report could potentially lure more foreign investment than having a report that unevenly focuses on social and environmental performance.

VI. Methods

6.1 Company Selection

The companies chosen for this analysis are petroleum-refining firms included in Fortune's Global 500 (2006 edition).[14] Selecting companies ranked in the Global 500 allows the following assumptions to be made: (1) these companies have a large amount of financial wealth and power and therefore have the resources necessary to produce a CSR report; and (2) these companies, regardless of whether they are publicly traded or not, face external and internal pressure from stakeholders to report on their social and environmental performance. In order to further narrow down the list of companies that were to be included in this analysis, only those companies that were headquartered in countries with emerging economies, as defined by inclusion in Morgan Stanley's 2006 Emerging Markets Index. Also, companies were only selected if they had produced a separate sustainability report that was accessible online.[15] Essentially, this project seeks to examine a set of "best performers"- companies that are relatively advanced in CSR in comparison to other firms in the same countries. Finally, in order to test the first hypothesis, an equal number of state-owned enterprises and publicly traded companies were selected. The final six companies that were chosen for this project are listed below:

Company	SOE or Public	Rank in Global 500	Country of Origin
China National Petroleum	SOE	39	China
PEMEX	SOE	40	Mexico
Petrobras	½ Public, ½ SOE	86	Brazil
Lukoil	Public	115	Russia
PTT	½ Public, ½ SOE	265	Thailand
Reliance Industries	Public	342	India

[14]Please see the following website for a complete list of companies: http://money.cnn.com/magazines/fortune/global500/2006/industries/Petroleum_Refining/1.html

[15] Although the current trend is to produce a separate sustainability report, many companies still continue to just devote a section of their annual report to social and environmental issues. However, in order to use SustainAbility Ltd.'s benchmarking methodology, it was imperative that the final companies chosen have separate reports.

6.1.1 Company Background

6.1.1.1 Petrobras

Petrobras, short for Petroleo Brasileiro S.A., is a semi-public Brazilian oil company headquartered in Rio de Janiero.[16] Although the company ceased to be the country's oil monopoly in 1997, it remains a significant oil producer with output of more than 2 million barrels of oil equivalent per day (Petrobras 2007, 1). In April 2006, Petrobras was producing enough oil to allow the country of Brazil to achieve oil self-sufficiency.

Petrobras is renowned for its leadership in developing one of the most advanced deep-water and ultra-deep water technology for oil production (Petrobras 2007, 1). Other accomplishments include the fact that Petrobras is the largest sponsor of arts, culture, and environment in Brazil. Over the past decade, the company has worked to expand its operations beyond the borders of Brazil. Today, the company controls oil and power industries assets in 23 nations.

6.1.1.2 China National Petroleum (CNPC)

China National Petroleum, a state-owned fuel-producing corporation in the People's Republic of China, is the country's largest integrated oil and gas company (CNPC 2007, 1). CNPC has exploration and production projects in China and 26 other countries (Yahoo Finance 2007, 1). In 1999, CNPC formed a holding company, PetroChina, including most of its domestic assets for the purpose of offering shares in the international market. In 2005 it was announced that China National Petroleum agreed to buy PetroKazakhstan for $4.18 billion; this is the largest overseas acquisition by a Chinese company (CNPC 2007, 1).

6.1.1.3 Reliance Industries

Reliance Industries is India's largest private sector company with businesses in the energy and materials value chain (Reliance 2007, 1). Oil refining and the

[16] About 55.7% of Petrobras' stock is owned by the Brazilian government. However, privately held portions are traded on the Bovespa, otherwise known as the Sao Paolo Stock Exchange.

manufacture of polymers account for nearly all of Reliance's sales. In 2006, following a dispute among the founding Ambani family, the company demerged into four separate entities: Reliance Capital, Reliance Communications, and Reliance Energy (Hoovers 2007, 1). The company has production facilities at three locations in India and four locations in Europe as well as exploration and production interests in India, Yemen, and Oman.

6.1.1.4 PEMEX

In 1938 President Lazaro Cardenas nationalized 17 foreign oil companies to create PEMEX, the largest Latin American petroleum company and a major world exporter of fossil fuel. This state-owned oil company is responsible for fueling both the nation's economy and its citizens' automobiles; currently, about one third of the Mexican government's revenues and 7% of its export earnings come from PEMEX (Hoovers 2007, 1). The company's operations, with are spread throughout Mexico, range from exploration and production to refining and petrochemicals (Hoovers 2007, 1). Presently, Mexico is the only major Latin American country that does not allow foreign oil majors to participate in oil exploration and production.[17]

PEMEX, despite its current $77 billion in revenue, pays extremely high taxes to the Mexican government in order to cover a large portion of the federal government's budget (Smith 2004, 2). The company has only been able to meet ends meet through heavy borrowing; if oil prices drop or no new major discoveries of crude oil are found this could mean big trouble for the state oil company. Recent attempts to privatize PEMEX and reduce its tax burden have meet opposition in Mexico's Congress (Malkin 2005, 1).

6.1.1.5 Lukoil

Founded in 1991, Lukoil is Russia's largest producer of oil; the company is also one of the world's top five publicly traded oil companies in terms of proven oil reserves (Lukoil 2007, 1). The company produces, refines, and sells oil and oil products.

[17] PEMEX has also made itself the sole supplier of commercial gasoline in Mexico.

These products account for 19% of Russia's crude oil production (Hoovers 2007, 1). As of 2005, Lukoil carried out exploration and production of oil and gas in Russia, Kazakhstan, Azerbaijan, Uzbekistan, Egypt, Iran, Iraq, Colombia, Venezuela, and Saudi Arabia (Lukoil 2007, 1).

Lukoil sells gasoline in 59 regions of Russia and in 16 countries across the world. In 2000, Lukoil purchased the remaining assets of Getty Oil and began opening gasoline stations in the U.S (Lukoil Americas 2007, 1). In September 2004, American oil company ConocoPhillips purchased a 7.6% stake in Lukoil and signed an agreement to jointly develop an oil and gas field in northern Russia. In 2006, Lukoil began purchasing oil reserves from Venezuela, thus marking the first time the company has bought reserves outside of Russia. As a result, Lukoil is able to continue its growth as a multinational oil giant.

6.1.1.6 PTT

PTT is Thailand's only fully integrated gas company engaged in the marketing and trading of various crude oil and refined petroleum products. Thailand, which created PTT to secure energy supplies during the oil crunch of the late 1970s, sold a third of the company in 2001 (Hoovers 2007, 1). Currently, Thailand's Ministry of Finance is the majority shareholder of the company with 52.33 shares of stock (PTT 2007, 45). Presently, PTT owns 49.5% of the nation's largest refiner, debt-plagued Thai Oil, and the government has recently announced plans to combine Thai Oil with PTT Oil (Hoovers 2007, 1).

6.2 Benchmarking CSR Reports

6.2.1 Background on Benchmarking Methodology

The procedure used to benchmark each company's CSR report was developed by SustainAbility Ltd., an extremely well respected strategy consultancy and independent think-tank that specializes in the business risks and market opportunities of corporate responsibility and sustainable development, and the United Nations Environment Programme. SustainAbility has been working on CSR reporting since 1992; since that time their benchmarking methodology has evolved considerably. The previous methodology (2000) focused on how well a report covered a specific set of sustainability topics such as water use, air emissions, human rights, etc (SustainAbility Ltd. and UNEP 2006, 4). However, this approach failed to take into account the relative importance of these issues. Nevertheless, in the current version of the methodology (2005/2006) the focus has been shifted to assess a set of generic business processes, and to consider the extent to which these processes take account of sustainability impacts and performance (SustainAbility Ltd. and UNEP 2006, 5).

In the early 1990s, there were no agreed criteria for measuring the quality and usefulness of corporate environmental and sustainability reporting. SustainAbility and UNEP's Global Reporters Program was designed to fill this gap and has become the leading report benchmarking program, with a major impact on what and how companies report. The Global Reporters benchmarking surveys have become the 'gold standard' for companies interested in corporate sustainability reporting. The reports, which are built around the SustainAbility/UNEP benchmark methodology, have served as background material for awards schemes, investor rating research, and performance benchmark studies as well as material for a wide-range of media studies and commentaries on the developing practice of non-financial reporting. SustainAbility's benchmarking methodology is so well respected because they engage a multitude of stakeholders, including UNEP and Standard & Poor's, as well as the reporting companies themselves. By working with these various stakeholders, SustainAbility's methodology is updated every few years.

Using the highly respected SustainAbility/UNEP benchmarking methodology, each of the six companies' CSR reports was surveyed and then ranked in terms of quality. The benchmarking methodology is described in detail in the following section.

6.2.2 Benchmark CSR Reports using the SustainAbility/UNEP Benchmarking Methodology

Scores given for approximately 29 criteria determine the company's overall reporting score. These 29 criteria are organized into four major content areas: Governance and Strategy (11 criteria), Management (9 criteria), Presentation of Performance (4 criteria), and Accessibility and Assurance (4 criteria) (See Table 1). Descriptions of each content area are found below (Standard & Poor's, SustainAbility Ltd., and UNEP 2006, 5):

i. *Governance and Strategy*- (1) Assesses how well a company explains its activities and their associate economic, environmental, and social impacts, (2) the governance of sustainability performance, and (3) the integration of sustainability into business strategy.

ii. *Management*- Evaluates how well a company reports on implementation processes. Focus is on the extent to which reporting demonstrates alignment between internal systems and declared intentions, and the report explains the influence of the company on external stakeholders and market conditions.

iii. *Presentation of Performance*- Designed to assess how well a given company explains its performance on material issues.

iv. *Accessibility and Assurance*- How successful are companies in designing their reporting approach to meet the needs of key audiences. This includes an assessment of efforts to give readers confidence in the information presented.

A score is given for each of the 29 criteria. Scoring is done using a standard score sheet that requires the analyst to state his/her rationale for the score given, and for not awarding a higher score (Standard & Poor's, SustainAbility Ltd., and UNEP 2006, 6). The analyst must provide the evidence, such as page numbers, that was taken into consideration when determining a particular section's score. While the specific scoring device varies according to the criterion being considered, the overall approach is based on an underlying scoring framework that ascribes a score of 0-4 for each criterion. This framework is described in detail below (Standard & Poor's, SustainAbility Ltd., and UNEP 2006, 6).

0 = NOTHING

The report provides no information on (the criterion), or nothing sufficiently significant to suggest the company understands or takes (the criterion) seriously. Overall, any statements appear generic or formulaic, without specific links to the company and its own activities or impacts.

1 = SKETCHY

Coverage suggests the company recognizes (the criterion) to some degree, and is attempting to present it in a serious way.

> BUT: The company does not (yet) address (the criterion) in a systematic way. Without assurance of the existence of a systematic approach, the reader cannot be sure that the coverage is not due to a good report writer and/or the company's desire to be seen in a favorable light, rather than a true reflection of actual reporting activities under way within the company. Overall, there is evidence of effort, but it is difficult to tell whether the company is really moving in the right direction, because the overall pattern does not come into view.

2 = SYSTEMATIC

Coverage suggests the company is taking (the criterion) seriously and seeking to present the information systematically. Overall you get the sense that the company is on the right track in terms of satisfying the criteria.

> BUT: Even though the systems and processes are robust, they have not yet fully been developed or rolled out across the company, across divisions and across issues, all of which takes time.

3 = EXTENSIVE

Coverage is serious AND systematic AND not suffering from major gaps in coverage, presentation, or interpretation- a systematic treatment that has been rolled out across the company and across a range of issues and concerns. N.B. This is not to require explicitly that every single company activity, major issue and individual site has achieved the same level of sophistication in issues management, information gathering and presentation. The ‘preponderance of evidence’ should show a significant, widespread level of success in rolling out systems and processes.

BUT: The information is not explicitly or fully linked to core business decision making. Overall, while the reporting in this area is very good, there is insufficient evidence that the company in general could be deeply affected and influenced by the process of reporting.

4 = INTEGRATED

Reporting is serious, systematic, and extensive, AND evidence is given that shows how reporting in this area is linked to general business decision-making and core processes to improve sustainable development effectiveness. The readers is confident that the company at the highest levels takes to heart the results of reporting in this area and alters course accordingly.

Scores are sequential; for any report to merit a particular score, it must have achieved the requirements of the lower score as well. The final report score is determined by taking the sum of all scores in each of the 29 different areas and dividing it by the total number of possible points, 116 (or 29*4). Lastly, this number is then multiplied by 100 in order to be converted into a percentage. This percentage is the final score of the CSR report.

VII. Results

7.1 Summary Table of Results[19]

Governance and Strategy

	Petrobras	CNPC	Reliance	PEMEX	Lukoil	PTT
Company & Industry Profile	2	1	2	1	2	1
Top Management Statement	1	1	1	1	1	1
Issue Identification & Prioritization	1	1	1	1	1	0
Values, Principles & Policies	3	2	1	1	2	1

[19] See Appendix A for score validation information.

Business Strategy & Sustainable Development Vision	1	0	2	1	2	1
The Business Case	0	0	1	1	0	0
Sustainable Development Implementation Challenges	0	0	1	0	0	0
Governance Responsibilities & Structure	1	1	2	0	2	1
Risk Management	1	0	1	1	0	0
Meeting Tomorrow's Needs	2	1	3	1	1	2
Customer Influence & Market Shaping	3	0	1	0	0	1
Total	**15**	**7**	**16**	**8**	**11**	**8**
Ranking	**2**	**5**	**1**	**4**	**3**	**4**

Management

	Petrobras	CNPC	Reliance	PEMEX	Lukoil	PTT
Management Procedures	2	1	1	1	2	1
Value Chain Management	2	0	0	0	0	1
Stakeholder Engagement	3	1	3	0	1	1
Personnel Performance Management, Training & Development	1	0	1	0	0	1
Learning & Knowledge Management	0	0	1	0	0	1
Public Policy & Regulatory Affairs	0	0	0	0	1	0
Industry Influence	2	0	0	0	0	1
Philanthropy & Social Investment	4	1	1	1	2	0
Investor Relations	1	0	0	0	0	0

Total	**15**	**3**	**7**	**2**	**6**	**6**
Ranking	**1**	**4**	**2**	**5**	**3**	**3**

Presentation of Performance

	Petrobras	CNPC	Reliance	PEMEX	Lukoil	PTT
Performance & Strategy Alignment	2	2	3	2	2	2
Measuring Sustainable Development Performance	2	2	3	2	2	1
Context & Interpretation	0	1	1	1	2	2
Target Setting	1	0	1	0	1	1
Performance Against Standards	3	0	1	1	2	2
Total	**8**	**5**	**9**	**6**	**9**	**8**
Ranking	**2**	**4**	**1**	**3**	**1**	**2**

Accessibility and Assurance

	Petrobras	CNPC	Reliance	PEMEX	Lukoil	PTT
Assurance	1	0	2	2	3	0
Reporting Commitment, Policy, & Strategy	1	1	3	0	2	0
Reporting Standards	2	1	2	1	2	1
Accessibility of Information	1	1	1	2	1	0
Total	**5**	**3**	**8**	**5**	**8**	**1**
Ranking	**2**	**3**	**1**	**2**	**1**	**4**

7.2 Final Reporting Scores and Ranking

Petrobras	½ SOE ½ Public	37%	1
China National Petroleum	SOE	16%	6
Reliance Industries	Public	35%	2
PEMEX	SOE	18%	5
Lukoil	Public	29%	3
PTT Public Company Limited	½ SOE ½ Public	20%	4

VIII. Discussion

8.1 Overview of Final Results

Results indicate that as a whole, publicly traded companies rank higher in the benchmarking analysis than SOEs. Therefore, these case studies suggest that the first hypothesis is correct. Of the top four companies, two are publicly traded and two are partially state-owned. Petrobras, a 55.7% state-owned enterprise, had the highest ranking. As hypothesized, the two SOEs were found at the bottom of the rankings. An explanation of how the companies performed in each of the four criterion categories is followed by further discussion of the reasons why publicly traded companies appear to have performed better, below.

Governance and Strategy

High scores in the governance and strategy criterion category indicate that the company was able to thoroughly explain its activities as well as its associative economic, environmental, and social impacts. In addition, the company was also clear about the governance of sustainability performance and was able to prove that sustainability was being integrated into business strategy. Publicly traded companies, as a whole, performed better in this category than SOEs. Reliance Industries, Petrobras, and Lukoil were ranked in the top three. However, PTT, a partially state-owned company, found itself in the bottom three with the two state-owned enterprises.

These results are not the least bit surprising. Recent corporate scandals have raised fundamental questions over the way companies are organized and whose interests they serve. As a result, companies are now responsible for thoroughly describing the structures and lines for accountability of various issues. Therefore, it is in a publicly traded company's best interest to describe its strong governance system because it will increase its corporate accountability and transparency, which in turn will gain public confidence and a give the company a social 'license to operate'. SOEs do not face the same pressure to report on their corporate governance system. Often times, SOEs do not have many competitors so consumers do not have a choice when they buy. Therefore, since releasing such information does not affect their competitive advantage, there is no reason to report on it. This same reasoning can be applied to why SOEs are not reporting on integrating sustainability into their business strategies.

In general, all companies scored relatively high in three of the eleven criteria: (a) company and industry profile, (b) values, principles, and policies, and (c) meeting tomorrow's needs. This indicates that every company was able to describe the nature and scale of their activities and the major sustainable development implications resulting from such operations. Companies also included a discussion of an overall framework for accountability (i.e. mission statements, business principles, core values, etc.) and a description of the company's processes for developing new areas of business that are aimed at meeting sustainable development related needs. Both Petrobras and Reliance Industries found themselves at the top of each of these three criteria. For the most part, publicly traded companies ranked higher in the company and industry profile criterion category and the meeting tomorrow's needs criterion category. The reports produced by publicly traded companies had extremely thorough descriptions of their business activities as well as the related sustainable development impacts. On the other hand, the SOEs' reports did not include much of a discussion on the sustainable development impacts of their operations (i.e. only generic statements) and did not provide much information on how they will meet their future sustainable development needs. In general, SOEs do not seem to have their future as planned out as the publicly traded companies; the only information the reader was able to obtain from these reports is what the company plans to spend on future research and development expenditures. However, since SOEs do not have investors, it is not surprising that these companies are not revealing their future plans because they really have no incentive to do so. The reports of publicly traded companies went into sustainable development opportunities that the company plans to pursue; for example, Reliance Industries is working on a sustainability roadmap which will enable the company to implement its sustainability strategy across all business units. As a result, more sustainability opportunities will be discovered that the company will be able to profit from in the future.

Low scores were given to all of the companies in the following five criteria: (a) top management statement, (b) issue identification and prioritization, (c) the business case, (d) risk management, and (e) sustainable development implementation challenges. Weaknesses were not only found in how the companies described the relationship between the nature and scale of the companies activities and the associated positive and negative sustainable development impacts but also on how the companies described the process they use to determine the relative importance of those impacts on stakeholders and business strategy. Companies also did an unsatisfactory job of describing the links between sustainable development performance and business value. Also, almost no one discussed the challenges they are facing when implementing sustainable development mechanisms. In addition, no company provided a true description of the their internal approach to the identification and management of business risk, and specifically how sustainable development related issues are integrated into this assessment. It is not surprising that the reports of SOEs scored low in these five criteria; it is, however, surprising that publicly traded companies had such low scores. Investors typically believe that it is important to know how a company manages its risk; risk management is a pre-condition for success in exploiting new opportunities. As a result, the reaction investors will have to reports that do not contain a description of their risk management system is questionable.

In general, reports produced by publicly traded companies were better at describing their long term vision so that the reader could put current trends and performance in context. As a result, the reader was able to assess the company's commitment to and competence in integrating sustainable development thinking into its strategic decision-making and innovation (i.e. business strategy and sustainable development vision criteria). For example, Lukoil, a public company, believes that engaging in sustainable development is helping the company develop into one of the world's most successful and admired oil companies. Therefore, the company's envisioned direction is very much related to sustainable development performance; therefore, Lukoil is integrating this sustainable development vision into their business strategies. However, all six companies were not able to translate the link between business value and sustainable development performance nor were they able to describe the challenges they faced when implementing sustainable development mechanisms. It should also be noted that publicly traded companies' reports contained more thorough descriptions of the organizational structures that are responsible for monitoring and addressing sustainable development related issues. PEMEX, a SOE, did not even mention who was responsible for sustainable development; Petrobras, CNPC, and PTT included elements of organizational accountability in their reports but the information was rather fragmented. On the other hand, both Reliance Industries and Lukoil demonstrated a systematic effort to explain accountability for sustainable development issues.

In conclusion, there is a rather large gap between the three leaders and the three lowest ranked companies. Petrobras's behavior seems more consistent with what we would expect to see from a true publicly traded company, whereas PTT's behavior is more consistent with a SOE. A potential reason for this divergence is the difference in cultural views of corporate social responsibility. CSR is essentially a brand new concept for Thailand and most of southeast Asia. Therefore, PTT may not face the same pressure to be transparent as a western publicly traded company. Brazil, on the other hand, has a vibrant CSR community and an extremely active network of NGOs. The country is currently trying to making producing a 'balanco social' mandatory for all businesses with 100 or more employees. These factors are most likely influencing Petrobras to report like a true publicly traded company.

Management

The management criterion category evaluates how well a company reports on its implementation processes; the focus is on the extent to which reporting demonstrates alignment between internal systems and declared intentions. In addition to the above, high scores in this criterion category indicate the company was able to clearly explain the influence of the company on external stakeholders and market conditions. As a whole, both the publicly traded companies and the partially state-owned enterprises scored higher than the fully state-owned enterprises. Petrobras, in particular, outperformed the other companies considerably.

Although publicly traded companies as well as partially state-owned enterprises performed better than fully state-owned enterprises in this criterion category, the overall scores were not that impressive. With the exception of Petrobras, each company performed rather poorly in each of the nine criteria that make up the management category. Only Lukoil and Petrobras were able to describe a robust and logical framework for managing material impacts. The other reports mentioned that certain management systems were in place to manage such impacts but no further detail was provided. Companies also did not describe their approach to identifying, systematizing and tracking performance requirements of their suppliers and value chain. Petrobras, however, has a program in place in order to assess suppliers based on how well they adopt environmental health and safety criteria. Suppliers will not be hired unless they meet the social and environmental responsibility requirements of the Ethos Institute. In addition, Petrobras is not only in the process of integrating sustainability goals into personnel performance management and training but it is also training its suppliers in sustainability as well. Reliance Industries and PTT are also in the process of training their employees in sustainable development; however, they have not indicated whether they plan on integrating sustainability objectives into performance management.

All companies had extremely low scores for the following three criteria: (a) learning and knowledge management, (b) public policy and regulatory affairs, and (c) investor relations. Even the best corporate reporters are scoring low in these three categories. All six reports contained very little information on these three topics. It is surprising that the publicly traded companies are not trying to educate the investment community on the value of sustainability related performance. However, since those companies headquartered in industrialized countries are not currently reporting on this criterion, it is not shocking that these companies are following suit. Also, if these companies are modeling their reports after those located in industrialized countries, it makes sense that the same flaws would appear.

Lastly, almost all the companies performed poorly in the industry influence criterion category. Only Petrobras illustrated some description of the way in which its organization strives to influence sustainable development performance across its industry. It is surprising that Petrobras was the only company to discuss such an issue rather than the two publicly traded companies. Nevertheless, sustainable development is engrained in the minds of Brazilians so it is not surprising that Petrobras outperformed the other companies in the management category by a significant margin. The biggest difference between Petrobras's report and those of the other five companies is that Petrobras did not just make generic statements of how it was managing its material impacts. Thorough descriptions of its numerous management systems prove that this company is truly working towards aligning its internal systems with its stated intentions.

Presentation of Performance

The presentation of performance criterion category is designed to assess how well a given company explains its performance on material issues. Overall, both Reliance Industries and Lukoil were ranked the highest; both SOEs were ranked in the bottom two. However, in general, each report spent most of its time describing the important material issues and the company's performance in that particular area. As a result, it is not surprising that there is a small range between the final scores for this criterion category.

All companies scored relatively high in the performance and strategy alignment criterion category. This criterion is meant to determine how well the company presents and explains its performance on material sustainable development related topics aligned to the issues identified and its overall strategy. In particular, Reliance Industries' report contained an extensive and in-depth account of the links between sustainable development issues and performance. Information was also provided on the company's performance on all material issues and included an explanation of the gaps in its performance reporting. Each company also had high scores for the measuring sustainable development performance criteria category; this category rates the presentation of performance and quality of indicators on material sustainable development issues. Once again, Reliance Industries was the only report that contained an in-depth account of sustainable development performance and interpretation.

Companies scored relatively low in the context and interpretation criterion category and the target setting criterion category. Only Lukoil and PTT illustrated a clear and consistent attempt to explain company performance in light of the company's own view as well as internal and external benchmarks. The other reports did not make it clear how they judged their performance. All companies did state that they follow the laws of their home country as well as the laws of the countries in which they operate. However, with the exception of PEMEX and CNPC, all the other companies seek to go above and beyond their nation's laws and meet international standards. In terms of target setting, all companies scored poorly. In general, no reports provided information on how the company uses performance data to set future performance priorities. It is evident that all the companies really seek to do is follow the law or meet international standards. Once those goals are met, it is unclear what targets the company is striving to meet in the future.

Reporting on targets and forward-looking information remains an area of striking weakness in these reports. However, this weakness is found in many CSR reports around the world. Companies are obviously concerned about setting goals or targets that they will not be able to meet. Therefore, as long as they are following the law, companies see no reason to strive for anything more.

Accessibility and Assurance

High scores in the accessibility and assurance criterion category indicate that a company has been successful in designing a reporting approach in order to meet the needs of key audiences. These reports will also include an assessment of efforts to give readers confidence in the information presented. Once again, publicly traded companies performed better in this category than SOEs; both Lukoil and Reliance Industries received the highest ranking. Surprisingly, PTT, a partially state-owned enterprise, was ranked last.

Publicly traded companies hold the opinions of their stakeholders in high regard. On-going relations with stakeholders increases corporate accountability and transparency, which in turn, increases a company's competitive advantage and investment potential.   Therefore, these companies realize that it is imperative that their CSR reports meet the needs of its stakeholders. As a result, it is not surprising that publicly traded companies received higher scores than SOEs in three of the four criteria categories. Every company, except for CNPC and PTT, had independently verified external assurance statements. Organizations that fail to obtain assurance for their reports are likely to face issues of credibility; therefore, publicly traded companies face a significant amount of pressure to have their reports independently verified. As the results indicate, both publicly traded companies had their reports verified. Lukoil, in particular, thoroughly described the mechanisms by which it assures the reliability of its reporting process. The report also outlined the key findings and conclusions of its external auditors; this was the only report that described what the external auditors thought of the firm's reporting process.

This was the first CSR report for many of these organizations. Almost every company stated in its report how important it is to produce this kind of publication and most plan on having the next report available within one to two years. However, only Lukoil and Reliance Industries made it clear that they were committed to reporting. Both reports stated their reasons for reporting and discussed how they plan to extend or improve reporting in the future. In the four other reports, it was unclear why the company was reporting in the first place.

Although each company is not necessarily committed to reporting, every company did state that it was committed to the use of standards in reporting-related activities, in particular the GRI Guidelines. Petrobras, Lukoil, and Reliance Industries had the highest scores for this category. The last category, accessibility of information, indicates how serious a company is about communicating with stakeholders by using clear language with minimal jargon and providing information on the best way to use the report to help readers with different interests. Surprisingly, state owned PEMEX received the highest score in this category. PEMEX's report was extremely well written; each material issue was prefaced with a description of the problem and why it is important to address it. This report also had extensive footnotes on how the reader could get more organization-related information than was included in the report. Publicly traded companies did not score very well in this category because they did not provide evidence of a systematic attempt to use reporting to facilitate readers' understanding of the organization's sustainable development commitment and performance. Inclusion of directions to other sources of organization-related information, such as financial reports or a glossary of terms, would have put these reports at the same level as PEMEX's.

It is important to note that PEMEX performed relatively well in this criterion category. As an SOE, it is unusual that PEMEX's report would meet the needs of various different stakeholders. However, throughout the report, PEMEX mentions how the Mexican people value trust. As a result, the report made an honest attempt to show that PEMEX is making a significant effort to be transparent. For example, the company participated with Transparency International in a joint effort to promote an objective and timely account of the company's results. Transparency International's findings and conclusions are listed in the first few pages of the report. The reasons PEMEX would engage in such an exercise is unknown since the company faces no competition from other companies. Therefore, PEMEX must be trying to prove it is trustworthiness because it is an important cultural value to the Mexican people.

8.2 Stakeholder Engagement Analysis

The second hypothesis states that publicly traded companies are more likely to thoroughly discuss their methods of stakeholder engagement. Results from these case studies support this hypothesis. However, the two partially state-owned enterprises performed just as well as the two publicly traded companies. Both Reliance Industries and Petrobras had the highest ranking for this criterion category. Reliance Industries, in particular, devoted a large portion of its report to the identification of stakeholders, a description of their individual needs, and a discussion on what is being done by the company to satisfy these needs. Interestingly, the report not only listed current stakeholder concerns, but past ones as well. Therefore, the reader is able to see a clear picture of Reliance's processes in dealing with stakeholder needs. Petrobras, on the other hand, takes stakeholder engagement to an all new level. This company uses stakeholder engagement to determine what kind of social and environmental projects to invest in. Every year, the general public is responsible for submitting project ideas for the company to invest in; a company committee as well as a panel of outside experts determine which projects are the most feasible, sustainable, and can make the most impact. The report then goes into a considerable amount of detail to describe each of the 76 projects that were chosen for 2006. In the end, these two reports stand out because of the amount of effort put into their reports in describing their stakeholder engagement processes.

The other reports, with the exception of PEMEX, were only able to identify their stakeholders and acknowledge the value of their engagement. Lukoil, for example, stated that it recognized its weakness of lack of stakeholder engagement; they realize this is a necessary endeavor in order to become one of the most admired oil companies in the world. In general, all these reports lacked a description of what methods they use to engage with stakeholders, what their current stakeholder concerns are, and what is being done to address these concerns. While companies like Reliance Industries and Petrobras spent quite a few pages describing these processes, the rest of the companies only had a few non-descriptive paragraphs. Finally, PEMEX was the only company to not even mention the word ‘stakeholder’ in their report. As a result, they received the lowest score in this criterion category.

As the results indicate, both publicly traded companies and partially state-owned enterprises obviously view stakeholder engagement as an important and worthwhile endeavor. It is not surprising that these two groups of companies have more active stakeholder engagement processes because they are either partially or completely owned by shareholders. Therefore, it is in these companies best interest to have their valued shareholders’ needs meet, as well as the needs of other groups of stakeholders. In the end, transparent stakeholder engagement processes spur investment and encourage consumers to purchase their product.

Once again, state owned enterprises are ranked in bottom of this criterion category. Surprisingly, however, CNPC identifies key stakeholders in its report and recognizes that working with stakeholders has many benefits for the company. In the future, this company plans to expand their stakeholder engagement processes. Nevertheless, it is important to note that it is rather shocking that CNPC is recognizing the need for stakeholder engagement whereas PEMEX has ignored the concept in its report altogether. Considering how Mexicans value trust and transparency, it is surprising that PEMEX did not even mention the word ‘stakeholder.’ It would be more reasonable to expect that CNPC would be the company that would lag behind in reporting on stakeholder engagement. Reasons for this include: (a) Chinese citizens’ understanding of corporate social responsibility seems to be at an infancy stage, more so than in other emerging economies; (b) non-financial reporting is almost non-existent in China at the present time, and (c) CNPC is a SOE and doesn’t face a lot of pressure to be transparent and accountable, in particular from the majority political party, the Communist Party of China. Therefore, the reason why CNPC is further along in establishing stakeholder engagement than PEMEX is unclear at the present time.

8.3 Analysis of Coverage of Social and Environmental Performance

The third hypothesis, which states that publicly traded companies are more likely to report equally on social and environmental performance whereas SOEs are more likely to concentrate on social performance, was not supported by the case studies. About half of the reports were able to evenly split the coverage between social and environmental performance; these reports were produced by CNPC, Reliance Industries, and PTT. These three reports not only used the same number of pages to describe performance in each area but also used the same level of description. On the other hand, PEMEX, went into much more depth over environmental rather than social performance. Finally, Lukoil and Petrobras both had extensive social reporting rather than environmental reporting.

The similarities between Lukoil and Petrobras' reports are striking. Unlike the other companies, Lukoil and Petrobras describe all the projects their company is engaging in. Also, the range of social projects that chosen was similar. Both companies are actively engaged in social projects that fit under the following categories: indigenous peoples, women, children, rural populations, job/income generation, education and professional skills, preservation of culture, and encouragement of participation in sports. In both the social and environmental sections, each report contains a description of the project, its goals, and the results that have seen from engaging in such an endeavor. Both companies' reasoning for including more coverage on social issues rather than environmental issues is that each company is engaging in more social endeavors than environmental ones. Because each company reports on all its activities and projects, the social performance section contains more information than the environmental section.

On the other hand, the other four reports only seemed to include descriptions of those social and environmental projects that were successful. Although these sections of the report were rather vague, each report did spend an equal amount of time discussing these two pillars of sustainability. In the future, these companies should expand their coverage of their social and environmental projects to include each project's goals and results.

IX. Conclusions

Using the Sustainability/UNEP benchmarking methodology, this project set out to determine whether or not the CSR reports of publicly traded petroleum-refining companies headquartered in emerging economies would rank higher than the reports of state-owned petroleum refining companies that are also located in emerging economies. This analysis generally supports this hypothesis. In addition, this project also sought to determine whether the data support two other minor hypotheses: (a) that publicly traded companies would include more information on stakeholder engagement processes in their reports than SOEs, and (b) that publicly traded companies would spend an equal amount of effort in describing their social and environmental performance whereas SOEs would focus more on social performance. Results from the case studies support the first minor hypothesis but not the second.

Although publicly traded companies performed better as a whole than SOEs, it is important to note that Petrobras, a partially state owned enterprise, had the highest ranking of all. One potential reason for this is that Petrobras is extending its sustainable development efforts beyond the walls of the company and the communities in which it operates. Unlike the true publicly traded companies, Petrobras is reporting on how it is managing its supplier's environmental and social impacts as well as how it is educating both its own and its supplier's employees. In its CSR report, no other company, except for Petrobras, has described how it is considering the social and environmental impacts of its value chain. Petrobras also goes above and beyond in describing how it chose to invest in various social and environmental projects. All of the projects the company chose to invest in 2006 were thoroughly described in the report. Overall, Petrobras wrote an extremely thorough report that is easy for people of various backgrounds to understand. Detailed descriptions of the company's various social and environmental management systems make Petrobras' report the most transparent of the six.

The striking weakness of all six reports was the lack of a description of the integration between sustainable development and business strategy. Most companies had stated that sustainable development was incorporated into the company's long-term vision and strategy; however, there was a lack of evidence to prove that these companies were actually doing what they saying. In order to have these companies' reports on the same level as those of western petroleum refining companies, it is imperative to include a discussion of how sustainable development is being incorporated into business strategy.

In the future, this kind of research should include other companies, outside the petroleum-refining sector, that are headquartered in emerging economies. It would be interesting to see how the petroleum-refining sector would rate against other global and highly competitive sectors, such as electronics or manufacturing. In a few years, research should also compare the reports of companies from emerging economies to those of industrialized countries. It would be interesting to see whether the current gap that exists between the reports from firms in emerging economies and industrialized economies narrows in the future.

X. References

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Appendix A

a. Petrobras
Criterion Category: **Governance and Strategy**

Criteria	**Score**	**Score Validation**
Company/Industry Profile	2- Systematic	A very serious attempt is made to help the reader understand the company. Relevant company information is included; a real picture of the company emerges (p. 8). Information on where and how the company operates and some of the SD implications (mainly social) are thoroughly illustrated (p. 16- Job creation in many L. American countries). Nevertheless, the company profile is not wide ranging enough to constitute a score of 3; no discussion of major SD impacts (no environmental) and issues resulting from operating abroad.
Management Statement	1- Sketchy	A top management statement was made by the company's CEO. A significant portion of the letter discussed specific aspects of the company's SD commitment and activities (p. 3-4). However, overall statement is rather selective (only achievements are mentioned, not failures or future challenges). Nevertheless, reader does get a sense of how the given examples relate to the whole. No mention of company approach to SD and the company's future course
Issue Identification & Prioritization	1- Sketchy	There is no serious attempt to present a balanced report on the positive and negative impacts of the company's/industry's activities. Only positive impacts are really discussed. Report also discusses how the company determines what a project's impacts will be (i.e. risk assessments). Reader is not able to

		fully understand the range of positive and negative impacts because they are not addressed at all in the report.
Principles, Values, & Policies for SD Accountability	3- Extensive	Report describes values, principles, and policies clearly and logically. It is clear what the company approach to SD is (i.e. following the guidelines of the UN Global Compact; these guidelines influence all the SD projects that are implemented by the company, p. 26). CSR is embedded into the mission statement, vision, and corporate strategy.
SD Vision & Business Strategy	1- Sketchy	There are some specific examples of how the company plans to evolve in terms of SD. However, these examples are primarily only included in some of the environmental issues that were discussed in the report. There is no sense of an overall direction in what the company plans to do in terms of SD in the future. Petrobras invests in various SD projects based on a public selection process; this determines the company's SD agenda.
The Business Case	0- Nothing	There is no discussion of the relationship between business value and SD performance or expectations. Motivations for engaging in SD projects include appeasing stakeholders (i.e. by only investing in those projects that the public deem necessary) and increasing the value of the Petrobras brand. It is obvious that the company believes that being green is good business sense; however, no linkage is made between the two concepts.
SD Implementation Challenges	0- Nothing	No discussion of implementation challenges.
Governance Structure & Responsibilities	1- Sketchy	Elements of organizational accountability are included but are the information is fragmented throughout the report. Therefore, the reader is not able to see the whole picture of who

		is responsible for what. No systematic effort is made to explain accountability for SD issues; report just focuses on how the report is produced and who is responsible for doing it (p. 10).
Risk Management	1- Sketchy	Numerous generic statements such as "Acting responsibly helps us manage our risks better" are made throughout the report. However, the coverage on risk management is rather small and vague; there is some information on the application of the precautionary principle. Only a small paragraph is dedicated to risk management and it just discusses how HSE risk assessments are made periodically; it is very vague (p. 131). Readers is not able to know how the company understands risk in the context of SD impacts.
Meeting Tomorrow's Needs	2- Systematic	Report does provide information on the efforts to develop the business to meet social and environmental needs (i.e. lots of data on how much spending goes into R&D). Big connection is made between R& D and investment decisions. Petrobras also discusses how partnerships and collaborative efforts help drive innovation (i.e. many of their environmental efforts such as biofuels, p. 116). Major gaps do exist; there is no meaningful detail on opportunities to meet SD needs (only generic statements), no discussion of future business models. Essentially, the presentation and interpretation of material are not very clear.
Customer Influence & Market Shaping	3- Extensive	Report provides some information on brand or current customer priorities that affect SD (i.e. how projects are chosen by the public, p. 38). Report also demonstrates a systematic attempt to assess the relationship

		between brand, customer preferences and the company's ability to meet SD goals (i.e. the Corporate Image Monitoring System (Sismico), p. 122). From the report, it is obvious that the company puts a lot of effort into influencing and educating its customers on its SD performance.

Criterion Category: **Management**

Criteria	**Score**	**Score Validation**
Management Procedures	2- Systematic	The report references and describes the company's various management systems. Material issues are managed by the SER Management Committee (p. 22). Pettrobras makes it clear that its operations follow international standards (ISO 14001 and OHSAS 18001). EMS's are in place at the majority of its plants. Company is actively involved in developing a social management system (ISO 2600). Managing impacts in this way is linked to company's core values & principles. However, major gaps remain; reader doesn't learn how management priorities are set or what issues are considered high priority.
Value Chain Management	2- Systematic	It is obvious that the company has a management system that is used to define, manage, and evaluate the SD impacts of value chain performance (p. 53). However, coverage

		isn't very extensive; reader gets the general idea but you do not get a wide range of information about the value chain's performance in comparison to that of the company.
Stakeholder Engagement	3- Extensive	Key stakeholders are identified (p. 120). It is evident from the report that their input is imperative to the company's CSR activities. Report includes discussion of stakeholder perceptions of company behavior and what issues need to be addressed in the future (p. 122). Feedback has been integrated into the company's decision making processes. The only thing that should be included in the report is the results of integrating stakeholder concerns into company decisions.
Personnel Performance Management, Training, & Development	1- Sketchy	Report has information regarding employee training in SD management and employee performance management (p. 66). Evidence shows that the company is trying to integrate sustainability goals into performance management and training programs. No discussion of SD objectives with respect to employee skills or effectiveness.
Learning & Knowledge Management	0- Nothing	No discussion of knowledge management as a part of sustainability management. Report emphasizes importance of knowledge for personal career

		advancement. No mention of how this helps the company manage its SD impacts.
Public Policy & Regulatory Affairs	0- Nothing	No information is provided on lobbying. Company makes general statements such as, 'It's Petrobras' corporate policy to not make donations to politicians, political parties, or related institutions,' (p. 129). There isn't much insight into the company's lobbying activities; only vague references to certain public policies they support (p. 41).
Industry Influence	2- Systematic	Report contains a few examples of how the company has participated in attempts to influence industry SD standards (i.e. as a member of the Weaving Sustainable Networks program, Petrobras is an anchor firm in the oil and gas sector; its goal is to enhance sustainability, productivity, and market opportunities for small businesses, (p. 54). It plans to do this by training & educating.) Major gaps do exist; company doesn't truly realize scope of accountability for industry influence and doesn't summarize main opportunities to influence industry.
Philanthropy & Social Investment	4- Integrated	Extensive information is provided on the company's charitable donations (p. 39). A clear connection is made

		between identified material issues/impacts and the company's strategy, views on the relevance of these projects, and references to the management of social investment performance with clear interpretation of results. A link was made between social investment activities and actions to manage the company's identified issues.
Investor Relations	1- Sketchy	Report provides isolated examples of how the company has engaged with its investors (i.e. meetings, roadshows, conference calls, etc.) (p. 122). However, reporting suggests no systematic approach to ensuring investor relations address the SD agenda & performance.

Criterion Category: **Presentation of Performance**

Criteria	**Score**	**Score Validation**
Performance & Strategy Alignment	2- Systematic	Report shows that there is a connection between reported performance information and the major SD issues that were identified. Major gaps still remain; there was no description of the links to issue identification process or any explanation of any gaps in performance reporting.
Measuring SD Performance	2- Systematic	The last 20 or so pages of the report provides an extensive amount of

		information on the company's efforts to define and measure SD performance. Indicators are linked to company's value, mission, and strategy. Major gaps still remain; no mention of challenges and no comprehensive coverage of performance by geography, business line, over time, etc.
Context & Interpretation	0- Nothing	No information on company's performance information in context. Reader gets no sense of overall performance context or how the company judges its peformance.
Target Setting	1- Sketchy	Limited discussion of target setting (only examples include future investments in certain energy types), but reader gets no overall sense of specific performance goals the company plans to achieve in the future. The examples that are given are patchy and unspecific.
Performance Against Standards	3- Extensive	Report demonstrates a systematic attempt to explain how the company considers codes, norms, and legal requirements. Company makes it clear that following the law is a must as well as meeting a variety of international standards. Auditing SD activities is stressed and information is provided on how often this action occurs. Major gaps include: coverage only addresses a limited number of material impacts (i.e. only

		environmental). Information is also provided on how well or poor the company has performed in comparison to a standard, how this activity is related to SD impacts, and links to company's SD commitments.

Criterion Category**: Accessibility and Assurance**

Criteria	**Score**	**Score Validation**
Assurance	1- Sketchy	External assurance mechanisms were discussed (external analysis by stakeholders, independent audit, p. 29). Data collection processes were vaguely mentioned; however, reader gets no sense of the reliability of the overall reporting process.
Reporting Commitment, Policy, & Strategy	1- Sketchy	It is obvious of the organization's commitment to regular reporting and why it is important to do so (p. 29). You get some sense of organization's plans for regular reporting (based on how many they have produced in the past), but it is not clear when they plan to produce the next report and whether or not they will extend coverage in certain areas.
Reporting Standards	2- Systematic	Report indicates organization's commitment to use various standards in reporting related activities (i.e. GRI, Ibase, DJSI, Ethos-IBP, p. 29). Also,

		includes why many different kinds of indicators are important for a more comprehensive report. There is a clear picture of the company's commitment to and implementation of standards in reporting. A clear attempt is made to describe company's overall use of standards and what it plans to include in the future and how standards are used to help drive internal performance and awareness. Major gaps still remain.
Accessibility of Information	1- Sketchy	There is information on the best way to use the report to help readers with different interests (i.e. four simplified versions of the CSR report are launched for specific segments of the public; the report is also published in three different languages, (p. 29). There is also evidence that the authors tried to explain the basic report's organization (i.e. CSR efforts are classified and reported in one of the nine principles of the UN Global Compact). Nevertheless, information is spread out so it is somewhat confusing. There is an attempt to use the report to help reader's understand the organization's SD commitment and performance (i.e. UN Global Compact Principles). However, there is no inclusion of directions to other sources of

		organization related information.

b. China National Petroleum

Criterion Category**: Governance and Strategy**

Criteria	**Score**	**Score Validation**
Company & Industry Profile	1- Sketchy	Aspects of relevant company information is included in report (i.e. products, geographical presence, industry, etc., p. 5). No real picture of company emerges (i.e. what the large amount of subsidiaries do). Only a page of report is devoted to the company profile; it's very vague.
Top Management Statement	1- Sketchy	Top management statement (p. 2 by Company President). Statement shows some seriousness of intent (discussion of major SD commitments). Overall statement is haphazard and selective. Reader only sees company's commitment to China's socioeconomic development, not SD.
Issue Identification & Prioritization	1- Sketchy	Report identifies some material impacts associated with the company and/or industry operations (i.e. work accidents, low costs, lots of information on positive impacts). Reader gets no sense that these positive and negative impacts have been identified through a systematic process. No range of positive or negative impacts are

		discussed.
Values, Principles, & Policies for SD Accountability	2- Systematic	Some discussion of an overall framework for accountability (i.e. head of each subsidiary company, p. 21). Reporting describes values/priorities. Reader gets a clear idea of company's approach to SD (p. 11). Major gaps remain in coverage, explanation, etc.
Business Strategy & SD Vision	0- Nothing	Only generic statements on the link between company's key values and company's business model are made. No examples of how the company plans to evolve.
The Business Case	0- Nothing	No discussion of the relationship between business value and SD performance. Generic statements are unsupported by examples. Reader doesn't truly understand why CNPC is engaging in SD.
SD Implementation Challenges	0- Nothing	No discussion of implementation challenges. Company does not recognize that SD is a challenge.
Governance Responsibilities & Structure	1- Sketchy	Elements of organizational accountability included, but fragmented. Reader gets confused when reading about corporate governance (p. 6-7). Reader doesn't truly understand who is responsible for monitoring and addressing SD related issues.
Risk Management	0- Nothing	No discussion of risk management, only generic statements; 'acting responsibly helps us

		manage our risks better.'
Meeting Tomorrow's Needs	1- Sketchy	Report provides some information on efforts to develop the business to meet social or environmental needs (i.e. information on R/D spending). Insufficient information to provide a clear picture. There is no identification of opportunities or links to SD drivers.
Customer Influence & Market Shaping	0- Nothing	No discussion of customer influence and market shaping.

Criterion Category**: Management**

Criteria	**Score**	**Score Validation**
Management Procedures	1- Sketchy	Report references the HSE management system. No true description of management system is presented (i.e. report just states that CNPC's HSE systems could essentially meet the ISO 14001 standards, p. 22). Report fails to provide a clear picture of the company's overall framework to manage material impacts.
Value Chain Management	0- Nothing	Only generic statements are made about value chain SD management issues. Report states, 'when selecting contractors or suppliers, subsidiary companies shall first review their HSE management/achievements and specify HSE requirements in the contract that define their representative HSE responsibilities,' p. 21).

Stakeholder Engagement	1- Sketchy	Key stakeholders are identified and the value of their engagement is acknowledged (p. 8). No evidence of a systematic attempt to draw on stakeholders to inform activities.
Personnel Performance Management, Training & Development	0- Nothing	No discussion of employees' performance management and training as a part of SD management.
Learning & Knowledge Management	0- Nothing	No discussion of knowledge management as a part of SD management. Report only mentions career development from a general education or business focus.
Public Policy & Regulatory Affairs	0- Nothing	No information provided on lobbying; no insight into lobbying activities.
Industry Influence	0- Nothing	No description of the way in which an organization strives to influence SD across its industry. Only generic statements are made (i.e. listing memberships in trade organizations with no discussion of company's efforts, p. 8).
Philanthropy & Social Investment	1- Sketchy	Report lists the sum of philanthropic donations and discusses how their money has led to positive impacts (i.e. poverty alleviation in Xinjiang). Isolated examples are given for how the company has supported charitable causes; reader gets no sense of the company's social investment agenda.
Investor Relations	0- Nothing	No discussion of investors; however, CNPC is not a public company.

Criterion Category**: Presentation of Performance**

Criteria	**Score**	**Score Validation**
Performance & Strategy Alignment	2- Systematic	Reader is able to see a connection between performance information reported and major issues identified. The whole report identifies key issues and their performance in relation to them. However, major gaps remain (i.e. there is no coherent information on performance for all material issues, no links to issue identification processes and no explanation of any gaps in performance reporting).
Measuring SD Performance	2- Systematic	Company defines and measures certain aspects of its SD performance; reader gets the idea of what the current overall effort to date is. However, the reader is not able to truly understand what the company plans to do in the future. A clear attempt is made to explain and measure SD performance, but gaps remain (i.e. there is no in depth account of SD performance).
Context & Interpretation	1- Sketchy	Some limited examples of performance evaluation and information in context. However, as a reader, you get no sense of overall performance context or how the company judges its own performance. Examples are patchy (i.e. goal of zero injury, accident, and pollution, p. 20). No real

		future targets, just generalizations.
Target Setting	0- Nothing	No information on target sets; reader isn't able to form a clear picture of the company's efforts.
Performance Against Standards	0- Nothing	Only generic statements of compliance. Only specifications for performance is following laws.

Criterion Category**: Accessibility and Assurance**

Criteria	**Score**	**Score Validation**
Assurance	0- Nothing	No external assurance mechanisms evident or discussed.
Reporting Commitment, Policy, & Strategy	1- Sketchy	This is CNPC's first CSR report. Report illustrates some sense of the organization's plan for regular public reporting (annually); however, this information is written in small print on the flap of the report. Limited discussion for why CNPC reports (i.e. reporting is an avenue in which stakeholders can help the company construct a harmonious society). In conclusion, there is no clear picture of the company's commitment to reporting.
Reporting Standards	1- Sketchy	Limited or unqualified discussion of generic standards (i.e. 'we refer to the GRI Guidelines and the Oil/Gas Industry Guidance on Voluntary Sustainability Reporting, p. 1). Reader does not understand the company's commitment to and implementation of standards in reporting.

Accessibility of Information	1- Sketchy	Some effort is made to facilitate the reader's understanding (i.e. there is a brief sentence or two on how the report is organized; report is organized around company's 4 corporate values, p. 10). Report was hard to understand at times; the messages the report was trying to convey was not always clear. No information was provided on how this report could be used to help readers' with different understanding.

c. Reliance Industries

Criterion Category: **Governance and Strategy**

Criteria	**Score**	**Score Validation**
Company & Industry Profile	2- Systematic	There is a serious attempt to help the reader understand the company. Report includes relevant company information (p. 12). Report includes key sustainability challenges the company faces and what they plan on doing to overcome them (p. 26). RIL is obviously looking to become a SD enterprise in the future (report lists sustainability opportunities and have a company roadmap). Major gaps do remain: there is no wide ranging profile of the company and their activities (i.e. no description of company's history linked to its present, company size, etc.).
Management Statement	1- Sketchy	Statement is made by the

		chairman & managing director. Statement shows a seriousness of intent; Director discusses a few significant aspects of the company's SD commitment and activities. The statement, however, does not describe the company's approach to SD, their recent progress, and the company's future course.
Issue Identification & Prioritization	1- Sketchy	There is some discussion of the positive and negative impacts of the company's/industry's operations; mostly positive though. Impacts are very general though. Therefore, it seems like these impacts were not identified through any sort of systematic process.
Principles, Values, & Policies for SD Accountability	1- Sketchy	Report discusses an overall framework for accountability (i.e. company vision). However, company is actively forming a sustainability roadmap; this map will guide their future efforts, p. 30. However, this roadmap is in the process of being created so there is not a true description of their accountability system.
SD Vision & Business Strategy	2- Systematic	Reporting demonstrates a systematic attempt to explain how the company's envisioned direction is related to SD performance. One major gap, however, is that only environmental performance seems to be covered in the sustainability roadmap.
The Business Case	1- Sketchy	The company does provide

		examples of particular links between SD performance & the business case. All examples are from the environmental section of the report, i.e. waste minimization, energy conservation and saving money. Reader doesn't see the big picture of the relationship between these two principles. All other comments are very generic, 'being good is good business.'
SD Implementation Challenges	1- Sketchy	Company recognizes that SD is a challenge, but report is rather vague in terms of discussing it. Challenges are not discussed in depth. Reader gets little sense of the significance of these challenges (i.e. all report talks about is how they overcame a certain challenge).
Governance Structure & Responsibilities	2- Systematic	Elements of organizational accountability are included in report; only the groups that are responsible are mentioned (p. 33). It is evident who is responsible for SD issues, but major gaps remain (i.e. such as broad level SD concerns).
Risk Management	1- Sketchy	Report briefly mentions particular areas of business risk (i.e. foreign exchange volatility). However, only economic risks are mentioned. Reader gets no sense of how the company understands risk in the context of SD impacts.
Meeting Tomorrow's Needs	3- Extensive	Reporting suggests a systematic attempt to

		develop future innovative products and services (i.e. information on R/D spending). Identification of SD opportunities to meet needs of tomorrow. Company's report provides meaningful detail on opportunities to meet SD needs and clear interpretation of the results (p. 27-28).
Customer Influence & Market Shaping	1- Sketchy	Report provides some information on brand or current customer priorities that affect SD. Mostly, however, it seems that RIL believes that other stakeholders hold SD higher than their consumers. Company has not systematically assessed the issue of how customers influence their SD goals.

Criterion Category: **Management**

Criteria	**Score**	**Score Validation**
Management Procedures	1- Sketchy	Report outlines the company's various management systems. There is not a clear picture of the company's overall framework to manage material impacts. Reader knows that management systems are in place, but no further description of how material issues are managed is discussed.
Value Chain Management	0- Nothing	No value chain SD management issues are evident in reporting. Only issue with suppliers that is mentioned is the safety of workers (p. 46).

Stakeholder Engagement	3- Extensive	Stakeholder engagement is obviously important to RIL (according to the nature/structure of the report). Key stakeholders are identified and the value of their engagement is acknowledged. Examples of results are given as well as key findings and the nature/extent of the engagement processes used.
Personnel Performance Management, Training & Development	1- Sketchy	Report states that employees are key to delivering on their SD goals. However, there is no real evidence of a systematic attempt to integrate sustainability goals into performance management or training processes. Certain groups of employees are starting to get trained in HSE management.
Learning & Knowledge Management	1- Sketchy	Brief identification of knowledge retention as key to delivering on SD goals, but no evidence of a systematic attempt to integrate sustainability goals into knowledge management.
Public Policy & Regulatory Affairs	0- Nothing	No information is provided on the company's lobbying activities. RIL states that it follows all the nation's laws and works with lawmakers to develop policies and product quality standards (p. 46).
Industry Influence	0- Nothing	Only lists membership in outside organizations (this list is scattered throughout the report). Company's own efforts are not discussed.

Philanthropy & Social Investment	1- Sketchy	Report discusses RIL's total charitable contributions. Company's social investment agenda is clear (4 particular areas is what the company is focusing on). Major gaps still exist (i.e. how do they decide which projects to fund, how are these projects connected to company strategy, etc, p. 83).
Investor Relations	0- Nothing	Only lists investors as key stakeholders.

Criterion Category: **Presentation of Performance**

Criteria	**Score**	**Score Validation**
Performance & Strategy Alignment	3- Extensive	Reader is able to see the connection between reported performance information and the major issues that were identified by the company. The whole report goes into detail about each material issue and the company's performance in this particular area. Coherent information on performance is given for all material issues and the company explains the gaps they have in performance reporting (i.e. how they are developing the sustainability roadmap). One major gap includes no description of how the company's performance on material SD issues has affected core business thinking or decisions.
Measuring SD Performance	3- Extensive	A clear attempt is made to explain and measure SD performance (i.e. linked to company values). Report

		goes into an in-depth account of the company’s SD performance; however, no explanation of how SD performance has affected core business thinking or decisions.
Context & Interpretation	1- Sketchy	Some limited examples of performance evaluation and information in context. Reader doesn’t truly understand how the company judges its performance (i.e. any reduction or improvement is seen as positive, no goals or benchmarks have been set). Examples are patchy; only goals the company has are really broad or general.
Target Setting	1- Sketchy	Report has a limited discussion of target setting, but reader gets no sense of specific performance goals the company aims to achieve in the future (i.e. all goals, if there are any, are general). Only targets seem to be reductions or any improvement in social/environmental performance.
Performance Against Standards	1- Sketchy	Brief mention of internal and external compliance activities (‘RIL follows the laws of the land’) but reader gets no overall sense of how the company applies and uses these activities in the context of SD impacts.

Criterion Category: **Accessibility and Assurance**

Criteria	**Score**	**Score Validation**
Assurance	2- Systematic	Clear attempt to describe mechanisms by which the

		company assures the reliability of the reporting process (i.e. an assurance statement from Ernst & Young, internal audit function, etc.). Major gaps still remain; these include a description of the challenges and queries on the organization's reporting/performance and a discussion of the assurance processes and results with proper context and interpretation.
Reporting Commitment, Policy & Strategy	3- Extensive	Report includes a full description of current and future reporting strategies; in particular, company goes into detail about its commitment to evolve its coverage and how its report can be used to communicate across multiple platforms.
Reporting Standards	2- Systematic	Clear attempt to describe company's overall use of standards including identification of standards used and their applicability. Major gaps still remain (i.e. interpretation of how reporting related standards are used to help drive internal performance and help the company meet objectives).
Accessibility of Information	1- Sketchy	Some evidence of attempts to facilitate readers' understanding. However, report does not include references to any external documents or websites and there isn't any information on the best way to use the report to help readers' with different interests.

d. PEMEX

Criterion Category: **Governance and Strategy**

Criteria	**Score**	**Score Validation**
Company & Industry Profile	1- Sketchy	Aspects of relevant company information are included in report. However, information is sketchy and not brought together in a systematic way. No real picture of company emerges.
Top Management Statement	1- Sketchy	Top management statement shows some seriousness of intent (i.e. discussion of specific aspects of company's SD activities). Overall, the statement is haphazard and selective (i.e. reader gets no sense of the company's future course).
Issue Identification & Prioritization	1- Sketchy	There is some discussion of the material impacts associated with the company/industry's operations. However, these impacts are extremely general. It is obvious that these impacts were not identified through any sort of systematic process. Also, the impacts are only truly discussed in the context of environmental issues.
Values, Principles, & Policies	1- Sketchy	There is a set of principles that set out the scope of accountability for SD impacts (i.e. ruling principles, p. 9, and values, p. 8). However, these principles and values are merely stated, no further details are provided. It is not clear what the

		company's approach to SD is.
Business Strategy & SD Vision	1- Sketchy	There are some examples of how the company plans to evolve in the future (i.e. in terms of each of the three pillars of SD). However, reader gets no sense of the company's overall direction. It is not clear how the company's envisioned direction is related to SD performance (i.e. it is obvious SD has no role in the company's business strategies).
The Business Case	1- Sketchy	The company provides a few examples of particular links between CSR performance and business value (i.e. more efficient equipment saves oil (not money) and water treatment plants allow the company to recycle water). Reader is not able to see a clear link between these two concepts. According to the report, it seems as if engaging in SD does nothing to the company's bottom line.
Sustainable Development Implementation Challenges	0- Nothing	No real discussion of implementation challenges; company doesn't state that SD is a challenge; the only true challenge that is described is how lack of funding has led to the leaking of pipelines.
Governance Responsibilities & Structure	0- Nothing	It is unclear who is responsible for SD; there is no organizational tree described. Reader does not know if the company even has an HSE team.
Risk Management	1- Sketchy	Brief mention of particular

		areas of business risk (i.e. spills, natural disasters, etc. p. 13). Reader gets no overall sense of how the company understands risk in the context of SD impacts. SD risks are really not discussed; report only mentions that they have insurance to cover most business risks.
Meeting Tomorrow's Needs	1- Sketchy	Report provides some information on efforts to develop the business to meet social and environmental needs (i.e. information on R/D). Reader is not able to form a clear picture (i.e. no identification of SD opportunities or links to SD drivers).
Customer Influence & Market Shaping	0- Nothing	No discussion of how customer priorities affect SD performance. In fact, the word 'stakeholders' is not mentioned once in the report.

Criterion Category: **Management**

Criteria	**Score**	**Score Validation**
Management Procedures	1- Sketchy	Some reference to the company's management systems, but it is insufficient to form a clear picture of the company's overall framework to manage material impacts.
Value Chain Management	0- Nothing	No value chain SD management issues are evident in reporting.
Stakeholder Engagement	0- Nothing	No discussion of the importance of stakeholders; from the report, it is evident that PEMEX has not

		seriously considered the role of stakeholders for the company.
Personnel Performance Management, Training, & Development	0- Nothing	No discussion of employees' performance management and training as part of SD management.
Learning & Knowledge Management	0- Nothing	No discussion of knowledge management as part of sustainability management.
Public Policy & Regulatory Affairs	0- Nothing	No information provided on lobbying.
Industry Influence	0- Nothing	No discussion of company's own efforts to influence one or more industry SD standards.
Philanthropy & Social Investment	1- Sketchy	Company states its total charitable contributions; however, there is a limited discussion of how their donations have led to positive impacts. Report includes a few isolated examples but reporting shows no systematic approach to assessing its social investment agenda in light of its business impacts and stakeholders' needs.
Investor Relations	0- Nothing	No discussion of investors. However, PEMEX is a state owned enterprise.

Criterion Category**: Presentation of Performance**

Criteria	**Score**	**Score Validation**
Performance & Strategy Alignment	2- Systematic	Report illustrates the link between the issues identified and the performance reported. Performance information is given for almost all material issues. However, major gaps remain.
Measuring SD Performance	2- Systematic	Reader is able to get a sense of the company's current

		efforts and what they plan to do in the future. Report discusses how the company defines and measures certain aspects of its SD performance. Major gaps remain (i.e. no information on indicators or the different business lines).
Context & Interpretation	1- Sketchy	Some examples of performance evaluation and information in context. Examples are patchy; it only seems as if PEMEX is disappointed if they increase from the previous years numbers. Therefore, it seems as if the only context they are comparing themselves to is their past record.
Target Setting	0- Nothing	No information on target sets. Targets seem to be just to follow the law and continually try to improve performance (very general).
Performance Against Standards	1- Sketchy	Brief mention of internal and external compliance activities (i.e. PEMEX seeks to follow all national laws). Standards include decreasing levels from the previous year and ensuring that all activities are lawful.

Criterion Category**: Accessibility and Assurance**

Criteria	**Score**	**Score Validation**
Assurance	2- Systematic	External mechanisms were discussed (i.e. by KPMG). Reader gets a sense that the reporting process is pretty reliable. The SISPA system helps to compile various company statistics. However, major gaps

		remain (i.e. the company does not provide a response to the assurance statement and there is no information on key findings and conclusions).
Reporting Commitment, Policy & Strategy	0- Nothing	It is not clear why PEMEX reports in the first place. Although, PEMEX has issued a few CSR reports in the past, the current report does not mention the organization's commitment to on-going regular reporting.
Reporting Standards	1- Sketchy	Limited or unqualified discussion of generic standards (i.e. report makes it clear that all they abide by the GRI Guidelines). However, reader is not able to get a clear picture of the company's commitment to and implementation of standards in reporting (i.e. although PEMEX states they follow the GRI Guidelines, many performance indicators are not included in the report. Therefore, it doesn't seem like they are making a systematic attempt to truly incorporate the GRI Guidelines into their reporting methodology.
Accessibility of Information	2- Systematic	Report is easy to understand because the language is relatively clear and there is a minimal use of jargon (i.e. the introduction to each material issue contains a very clear description of the problem and why it is important that something is done about it). Basic report

		format is discussed in the reporting principles section (p. ii). Report contains numerous footnotes on where the reader can get more information on particular issues or activities. One gap includes no clear suggestions on how different stakeholders can get the most out of the report.

e. Lukoil

Criterion Category: **Governance and Strategy**

Criteria	**Score**	**Score Validation**
Company & Industry Profile	2- Systematic	Aspects of relevant company information is included. Company information is presented systematically; report also includes a discussion of SD impacts as a result of operations. However, major gaps remain (i.e. insufficient discussion of the industry in which they operate. Report also needs a more wide ranging company profile.
Top Management Statement	1- Sketchy	The top management statement is written by the company director; statement does show the seriousness of Lukoil's intent. The director's letter highlights Lukoil's SD activities throughout the past two years. However, the statement does not discuss the company's future course.
Issue Identification & Prioritization	1- Sketchy	There is a limited discussion of the material

		impacts associated with the company/industry's operations. Those impacts that were identified did not seem to be identified through any sort of systematic process to understand and describe the range of positive and negative impacts.
Values, Principles & Policies	2- Systematic	Report does describe the company's overarching principles that set out the scope of accountability for SD impacts. These principles are described clearly and logically. However, a more complete description of the accountability framework is needed.
Business Strategy & SD Vision	2- Systematic	Specific examples of how the company plans to evolve in terms of SD are included in the report. Lukoil believes that engaging in SD is helping the company develop into one of the world's most successful and admired oil companies. Therefore, the company's envisioned direction is very much related to SD performance.
The Business Case	0- Nothing	Generic statements are made about the relationship between business value and SD performance. However, the information in these statements is not elaborated on; as a result, the reader is not able to see the full picture of the relationship between these two principles.
SD Implementation	0- Nothing	Simple generic statements

Challenges		are made about the challenges related to pursuing SD initiatives. These statements do not provide much depth for the reader.
Governance Responsibilities & Structure	2- Systematic	Elements of organizational accountability are included in report. Reporting demonstrates systematic attempt to explain accountability for SD issues but major gaps remain (i.e. no description of EHS departments or board-level SD concerns).
Risk Management	0- Nothing	Very limited discussion of risk management; a few generic statements are made but reader gets no overall sense of how the company understands risk in the context of SD impacts.
Meeting Tomorrow's Needs	1- Sketchy	Report provides some information on efforts to develop the business to meet social and environmental needs (i.e. information on R/D spending). However, this information is insufficient to form a clear picture. Major gaps remain (i.e. limited identification of opportunities or links to SD drivers).
Customer Influence & Market Shaping	0- Nothing	No real discussion of customer influence and market shaping.

Criterion Category: **Management**

Criteria	**Score**	**Score Validation**

Management Procedures	2- Systematic	Company describes a more robust and logical framework for managing material impacts (i.e. linked to company principles). Major gaps remain in content, coverage, and presentation.
Value Chain Management	0- Nothing	No discussion of value chain management; a few generic statements made on how it is difficult to control how suppliers operate.
Stakeholder Engagement	1- Sketchy	Key stakeholders are identified and the company realizes the importance of engaging with them. No evidence of a systematic attempt to draw on stakeholders to inform activities. Company does realize this needs to be done in the future.
Personnel Performance Management, Training & Development	0- Nothing	No discussion of employees' performance management and training as a part of SD management.
Learning & Knowledge Management	0- Nothing	No discussion of knowledge management as part of sustainability management.
Public Policy & Regulatory Affairs	1- Sketchy	Company recognizes the relevance of lobbying to material SD issues and goes into some detail to provide insight into the company's overall philosophy on the role of public policy in driving SD improvements in the industry. However, it is hard to tell whether there are any management systems in place in order to help the company disclose its lobbying and public policy activities.
Industry Influence	0- Nothing	A few generic statements

		are made regarding the company’s own efforts to influence industry SD standards.
Philanthropy & Social Investment	2- Systematic	Report lists the company’s total charitable contributions. Reporting demonstrates a systematic attempt to assess its various charitable and social investment activities, their magnitude, location, and purpose but major gaps still exist (i.e. how are projects chosen?).
Investor Relations	0- Nothing	Investors are listed as being key stakeholders. The report contains no examples of how the company is engaging with investors.

Criterion Category: **Presentation of Performance**

Criteria	**Score**	**Score Validation**
Performance & Strategy Alignment	2- Systematic	A connection is made between the reported performance information and the material issues that are identified. Reader gets a sense of the company’s overall performance. Major gaps do remain (i.e. performance is not yet linked to issue identification processes and there is no explanation of any gaps in performance reporting).
Measuring SD Performance	2- Systematic	A substantial amount of information is provided on the company’s efforts to define and measure its SD performance. The reader is able to clearly understand the company’s effort to date and what the company plans to do the future. SD

		performance is linked to company principles. Major gaps remain (i.e. report does not include all business lines, there is no explanation of why certain indicators were selected, etc).
Context & Interpretation	2- Systematic	Report has information on company's effort to place performance information in context. Company seeks to be on par with the world's major oil companies and better than the national industry average. Reader gets a sense of how the company judges its own performance. However, in the future, the report needs to provide its efforts to characterize and enable interpretation of its SD impacts honestly and accurately.
Target Setting	1- Sketchy	Information on target sets is provided. Reader gets an overall sense of specific performance goals the company aims to achieve in the future. Targets, however, are very general and unspecific.
Performance Against Standards	2- Systematic	Report mentions internal and external compliance activities. In general, reporting demonstrates a systematic attempt to explain how the company considers codes, norms, and legal standards as well as audit requirements of SD. Gaps still remain.

Criterion Category: **Accessibility and Assurance**

Criteria	Score	Score Validation
Assurance	3- Extensive	External assurance mechanisms were discussed thoroughly (p. 96). Clear explanation of scope of assurance and key findings and conclusions. Statements are made by Bureau Veritas Rus throughout the report (i.e. reader thoroughly understands the reliability of the process). In the future, Lukoil should include an explanation of how the organization aims to implement the recommendations made from the assurance process.
Reporting Commitment, Policy & Strategy	2- Systematic	Organization states its commitment to on-going reporting (i.e. every two years). Reasons for reporting are given and a clear picture of the company's commitment to reporting appears. Company plans to further engage stakeholders in the future (p. 11). Gaps include a more full description of the company's future and current reporting strategy.
Reporting Standards	2- Systematic	Company is clear that the organization is committed to the use of standards in reporting (in particular, international standards). Clear attempt to describe company's overall use of standards and which standards they are using (p. 11). Company also states why the use of these standards is important. Major gaps remain (i.e. no

		full description of current and future use of standards in reporting).
Accessibility of Information	1- Sketchy	Report's language is very clear and explains concepts that would not be known to the ordinary person very well. No explanation of basic report organization. However, report includes directions to other sources of information.

f. PTT

Criterion Category: **Governance and Strategy**

Criteria	**Score**	**Score Validation**
Company & Industry Profile	1- Sketchy	A few aspects of relevant company information are included in report. However, this information is sketchy and not brought together in a systematic way. No real picture of company emerges.
Top Management Statement	1- Sketchy	The company's president wrote the top management statement; the statement shows some seriousness of intent (i.e. discussion of company's SD activities over the year). However, the overall statement is haphazard (i.e. description of SD activities are very vague and no examples of success stories are given).
Issue Identification & Prioritization	0- Nothing	No discussion of the company's impacts. A generic statement is made about how the company is creating value by engaging in SD.
Values, Principles & Policies	1- Sketchy	Only the company's core values seem to guide their

		SD actions. However, these core values are very vague. The existence of these values is mentioned but no detail is provided.
Business Strategy & SD Vision	1- Sketchy	Report provides a description of how the company plans to evolve in terms of SD (i.e. joint management of PTT Group, upgrading existing QSHE management system, knowledge sharing of QSHE information, etc. (p. 78)). However, the report does not explain how the company's envisioned direction is related to SD performance.
The Business Case	0- Nothing	No discussion of the relationship between business value and SD performance.
SD Implementation Challenges	0-Nothing	No discussion of implementation challenges.
Governance Responsibilities & Structure	1- Sketchy	Elements of organizational accountability are included in report. However, the information is fragmented, leaving little sense of the whole. However, it is obvious that corporate governance is very important to the company; report spends a lot of time discussing it (p. 5).
Risk Management	0- Nothing	No discussion of business risks; report only mentions the risks of accidents and getting hurt on the job.
Meeting Tomorrow's Needs	2- Systematic	Report provides some information on efforts to develop the business to meet social and environmental needs (i.e. a large portion of the report is

		devoted to discussing what the R/D department is doing). However, this information is insufficient to form a clear picture.
Customer Influence & Market Shaping	1- Sketchy	Report provides some information on current customer priorities (i.e. cheaper fuel than gasoline) that affect SD performance. However, it is clear that the company has not systematically assessed the issue.

Criterion Category: **Management**

Criteria	**Score**	**Score Validation**
Management Procedures	1- Sketchy	Some description of management systems, but insufficient to form a clear picture of the company's overall framework to manage material impacts.
Value Chain Management	1- Sketchy	Brief discussion of value chain issues and management but insufficient to form a clear picture. Report mentions training suppliers to help them improve their SD performance (i.e. PTT wants suppliers to have same QSHE standards as themselves but they do not make this a mandatory requirement).
Stakeholder Engagement	1- Sketchy	Key stakeholders are identified in report. Although the company states that it engages with stakeholders, it is not quite clear how this process occurs and what current stakeholder concerns are. It

		is not clear how stakeholders inform activities.
Personnel Performance Management, Training & Development	1- Sketchy	The company recognizes the fact that employees are key to delivering on their SD goals but there is no evidence of a systematic attempt to integrate sustainability goals into performance management. However, it does look like the company is starting to train their employees in SD management.
Learning & Knowledge Management	1- Sketchy	Brief identification of knowledge retention as key to delivering on SD goals, but no evidence of a systematic attempt to integrate sustainability goals into knowledge management.
Public Policy & Regulatory Affairs	0- Nothing	No insight is provided on lobbying activities.
Industry Influence	1- Sketchy	Isolated examples of how the company has participated in attempts to influence industry SD standards (however, this only applies to local industry, not global). Examples include working with government to develop improved fuel standards.
Philanthropy & Social Investment	0- Nothing	Generic statements have been made about what they are spending their money on. However, there is no discussion on how their money has impacted the local communities (i.e. no discussion of results).
Investor Relations	0- Nothing	Shareholders are listed as key stakeholders. The needs of this group are stressed

		throughout the report; it is extremely important for PTT to cater to the needs of their shareholders. However, there are no examples of how the company has engaged with investors.

Criterion Category: **Presentation of Performance**

Criteria	**Score**	**Score Validation**
Performance & Strategy Alignment	2- Systematic	Clear link between the issues identified and performance reported (i.e. a multitude of information is provided on safety and accident performance; however, it is not clear how the company is performing environmentally and socially). As long as the company is following the laws and a few international standards, performance is judged as satisfactory. Major gaps still remain (i.e. especially in terms of social performance).
Measuring SD Performance	1- Sketchy	Report provides information on company's efforts to define and measure SD performance (i.e. need to follow all Thai laws and strive towards meeting international standards). Reader understands the company's current effort to date but is not quite sure what the company plans to do in the future.
Context & Interpretation	2- Systematic	Relatively clear and consistent attempt to explain company performance in light of

		company's own view and internal and external benchmarks (i.e. company goals and meeting national/international laws). Major gaps remain.
Target Setting	1- Sketchy	A limited discussion of target setting is included in the report. Besides following the law, the reader gets no overall sense of specific performance goals the company wishes to meet in the future.
Performance Against Standards	2- Systematic	Reporting demonstrates a systematic attempt to explain how the company considers legal standards as well as audit requirements of SD dimensions of business activities (i.e. many of PTT's activities are audited), but major gaps remain.

Criterion Category: **Accessibility and Assurance**

Criteria	**Score**	**Score Validation**
Assurance	0- Nothing	No external assurance mechanisms evident or discussed.
Reporting Commitment, Policy & Strategy	0- Nothing	No indication of organization's commitment to on-going regular reporting (this is PTT's second CSR report) or reasons for reporting (only discusses reasons for why SD is important).
Reporting Standards	1- Sketchy	Limited discussion of generic standards (i.e. GRI). This discussion is insufficient to form a clear picture of the company's commitment to and

		implementation of standards in reporting.
Accessibility of Information	0- Nothing	No information on the best way to use the report is given. However, the report is translated into two different languages and there are links to external material throughout the report. No information on basic report organization is given.