Sustainability Reporting in a Large Russian Oil Corporation. Production Safety Issues

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Ph.D. dissertation submitted to
Bodø Graduate School of Business
for the degree of Ph.D.

University of Nordland

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1. edition 2013
Ph.D. nr 39 – 2013

ISBN: 978-82-92893-29-6

Print: Trykkeriet UiN

University of Nordland
8049 Bodø
www.uin.no

ACKNOWLEDGEMENTS

I am very grateful to many people who have been supportive and helpful to me during the period I have been writing this thesis. I could not have completed my work without the invaluable assistance of my supervisors, faculty members of University of Nordland and of other universities, the administrative staff of University of Nordland, and my friends and family. I am very fortunate to have all of you around.

First and foremost I would like to offer my special thanks to my PhD advisors. I am particularly grateful to my main research supervisor Professor Frode Mellemvik (University of Nordland). He has always been very energetic and enthusiastic, and his advice and guidance has contributed greatly to the realizing of this project. Since I was accepted on to the International doctoral programme in St.Petersburg and throughout my study in Bodø his phrase "It is smart to be smart!" has encouraged me. Thank you for your support and believing in my abilities to become a PhD scholar. I feel very privileged to have had such a mentor!

I would like to express my greatest appreciation to my second research supervisor professor Olov Olson (University of Gothenburg). His insightful comments, research experience and suggestions have helped me a lot in writing my doctoral dissertation. I am grateful to you for providing constructive advice and encouragement which always made me feel more self-confident. Thank you for your enthusiasm and invaluable help!

I first became acquainted with Bodø Graduate School of Business in 2006 when I was a part-time participant on the International doctoral programme established in collaboration with Baltic State Technical University. I gained a unique opportunity to learn about the study system and the academic perspective in Norway and started

off by taking some doctoral courses in Bodø while permanently living in my home city of St.Petersburg. I am very grateful for this chance to all the people who stood for the launching of this programme.

I wish to express my deepest sense of gratitude to Professor Anatoli Bourmistrov (Bodø Graduate School of Business) for warmly welcoming me to Bodø, for useful guidance from the very first steps in my doctoral study and for good advice ever since!

In August 2008 I was fortunate enough to come to Bodø for an exciting full-time study and later was enrolled as a PhD student at Bodø Graduate School of Business. This department has a highly friendly and professional team. I am very grateful to the dean Bjørn Olsen, former deans Svenn Are Jenssen and Frank Lindberg, faculty director Steinar Stene-Sørensen, senior advisor Grete Knudsen, advisor Pernille Høgseth Hansen, advisor Aurora Dyrnes and all the administrative staff for providing great assistance and always having a pleasant attitude. I am glad to be part of the High North Centre at Bodø Graduate School of Business. I am thankful for the interesting time spent together at conferences, research seminars, and social activities and to all present and former colleagues - Lill Hilde Kaldager, Sigbjørn Eriksen, Andrey Kazakov, June Borge, Andrei Mineev, Dmytro Yakovenko, Frank Strand, Nadezda Nazarova, Elena Panteleeva, Elena Zhurova and all fellow PhD students at the Centre. Thank you for sharing this unforgettable time for me in Bodø.

Constructive advice and critique given by many experienced academic scholars during research conferences, colloquia, doctoral courses and seminars has been invaluable for carrying out my PhD project. It would have been impossible to complete this work without a range of recommendations and lots of ideas. I wish to acknowledge the inspiring comments of Professor Inger Johanne Pettersen (Trondheim Business School), Professor Sten Jönsson (Gothenburg Research

Institute), Professor Barbra Czarniawska (Gothenburg Research Institute), Professor Jan Mouritsen (Copenhagen Business School), Professor Salvador Carmona (Instituto de Empresa Business School), Professor Trond Bjørnenak (Norwegian School of Economics and Business Administration), Professor Kjell Grønhaug (Norwegian School of Economics and Business Administration), Professor James L. Chan (University of Illinois at Chicago), Professor Kari Lukka (Turku School of Economics), Associate professor Jiri Novak (Charles University in Prague), Associate professor Abbas Strømmen-Bakhtiar (Bodø Graduate School of Business), Associate professor Konstantin Timoshenko (Bodø Graduate School of Business) and Associate professor Levi Gårseth-Nesbakk (Bodø Graduate School of Business). I also appreciate the assistance provided by Associate professor Marina Volkova (Baltic State Technical University) to gain special experience in teaching.

The quality of language in this thesis was extremely enhanced after the great proofreading job done by Peter Glanfield, Senior advisor at University of Nordland. Thank you for your great professionalism and kind support!

The assistance to check the consistency of my manuscript provided by Elena Dybtsyna, Advisor at The Research Administration of University of Nordland and my PhD studies colleague, has been extremely valuable. Thank you for your helpful ideas!

I would like to extend my thanks to all the interviewees for their assistance in data collection – Fran Ulmer, the chair of the U.S. Arctic Research Commission and the Chancellor of the University of Alaska Anchorage and the managers of Rosneft Oil Company.

I would like to express my everlasting gratitude to my mother Lilia Tronkina. I know it is very hard to have me staying far from home, and I will always be thankful to you for your continuous support, your strong love, your understanding and for taking

care of me. I highly appreciate the cheering up provided by my dearest mom, my brother Andrei and my cousin Ira.

I am also grateful to my friends in St. Petersburg and Moscow for warm and funny parties, dinners and concerts together and for believing sincerely that one day I can achieve a PhD degree.

The great support and encouragement given by the big and friendly family Andreassen, and in particular, by Toril and Gunnar, has made my life in Bodø feel like home and this means a lot to me.

Finally, I wish to thank my beloved husband Thomas Andreassen for his endless faith and love. I owe my study time in Bodø for meeting up with you and I am grateful for your patience, enthusiasm, music, and emotional help during the completion of my PhD. You are my soulmate and the most warm-hearted person I have ever met.

Bodø

March 2013

Natalia Andreassen

ABSTRACT

Sustainability reporting designates the corporate reporting of a company's performance in all respects showing its capacity to endure. This phenomenon has embedded the globalized concepts of "corporate social responsibilities" and "sustainability" into management and financial accounting. The introduction and development of the sustainability concept in the Russian context has been influenced by the unique socio-economic and political conditions in Russia during more recent times. The energy sector became extremely important for Russian economy growth, and energy companies became leaders in integrating the sustainability idea into their business and corporate reporting. Moreover, production safety issues have also gained importance due to major and severe accidents taking place in the energy sector. The recent catastrophe in The Gulf of Mexico has created worries about how oil companies deal with production safety and whether corporate reports provide information about the companies' actions. The focus of this study is: how are production safety issues represented in the sustainability reporting of a major Russian oil company?

The sustainability reporting phenomenon has been viewed in this project in terms of norms and practice. The study describes how production safety issues are represented in sustainability reporting norms and practice, and analyzes the connection between norms and practice in the case of the largest Russian oil company, Rosneft. Spurred on by shortcomings in production safety disclosure revealed by the investigation carried out by the institutional investors Ceres after The Gulf of Mexico oil spill, this study looks at the norms and practice of sustainability reporting at Rosneft using the lens of production safety questions.

The research project gives a thorough review of the dominant theoretical approaches and study objects in the mainstream sustainability accounting literature

in order to discuss the empirical results. The main empirical findings reveal that the oil and gas sustainability reporting guidelines developed by IPIECA/API are more relevant in guiding production safety disclosure than the global sustainability reporting guidelines developed by GRI or the national guidelines developed by RUIE. It is also shown that the stand-alone sustainability report is more significant with regard to production safety issues representation than the annual report. Finally, the study concludes that with respect to production safety issues representation, Rosneft's practice of sustainability reporting has attained a more advanced level than the sustainability reporting norms themselves.

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LIST OF ABBREVIATIONS

API	American Petroleum Institute
AR	annual report
Ceres	formerly: Coalition for Environmentally Responsible Economies
CSR	corporate social responsibility
EUR	euro
FRC	Financial Reporting Council
GDP	gross domestic product
GDR	Global Depositary Receipts
GRI	Global Reporting Initiative
HSE	health, safety and environmental
IEA	International Energy Agency
IPIECA	International Petroleum Industry Environmental Conservation Association (Formerly: International Petroleum Industry Environmental Conservation Association)
IPO	initial public offering
LOPC	loss of primary containment
MBA	Master of Business Administration
MICEX	Moscow Interbank Currency Exchange
mln	million
mmt	million metric tons
OHS	Occupational Health and Safety
RAS	Russian Accounting Standards
RTS	Russian Trading System
RUB	Russian rouble
RUIE	Russian Union of Industrialists and Entrepreneurs
SR	sustainability report

U.S.	United States of America
UK	United Kingdom of Great Britain and Northern Ireland
UN	United Nations
UNCED	United Nations Conference on Environment and Development
US GAAP	Generally Accepted Accounting Principles (United States)
USD	United States dollar
WBCSD	World Business Council for Sustainable Development
WCED	World Commission on Environment and Development
WEC	World Energy Council

Chapter 1 Introduction

Sustainability reporting is a recently emerged phenomenon meaning corporate reporting on a company's performance in all respects and showing its capacity to endure. This broad concept introduces a part of organizational accounting system which can be used as a managerial tool (Burritt and Schaltegger, 2010). Understanding how to handle this phenomenon in practice can have major influence on the long and prosperous life of companies, industries and countries. The research community has shown considerate interest in the phenomenon and the challenges it presents (see e.g. Unerman et al., 2007). The phenomenon of sustainability reporting is being investigated from different points of view to explain its development in the management strategy of companies. Studies have also examined this reporting dealing with the questions: what companies disclose – focusing on certain components of statements, how – focusing on the practice procedures and statements, and why - exploring the role of sustainability reports as a tool for managers and their possible connections with stakeholders. The importance of politico-economic and social contexts and their influences have been acknowledged in sustainability reporting research as well (e.g. Halme et.al, 2009; Idowu and Filho, 2009). My primary research interest is related to the practice of sustainability reporting. As in previous research papers this study focuses on a certain component of disclosure, a specific geographical and industrial context. The topic of this research is production safety issues representation in the context of a big oil Russian company. These choices are explained further on in this chapter.

The purpose of Chapter 1 is to outline my study. Firstly, the phenomenon of sustainability reporting is described in general and in the Russian context. Then the important industry in this geographical context to which this research thesis relates is highlighted. Furthermore the background for the focus of the study is explained

and the problem in this research area is outlined. The chapter ends by suggesting a research question and presenting the design of a case study.

1.1 The main ideas of sustainability and the sustainability reporting phenomenon

Before introducing the phenomenon of sustainability reporting it is relevant to describe a wider concept of sustainability. Worldwide there is a growing concern about sustainability and survival at the micro level of firms as well as at the macro level of industries. Historically speaking businesses mostly took charge of economic growth which is associated with energy, materials and workforce intensive production. Unerman et.al. (2007) states that many people nowadays argue that this dominant objective of maximizing economic growth results in damage to the ecosphere, society and the environment. Therefore, such business activities are not economically, socially or environmentally sustainable in the longer term (Unerman et.al., 2007). Recently an increasing interest in the 'sustainability' term in different kinds of literature has emerged.

There are a lot of interpretations of sustainability in a large amount of books, scientific journals and non-academic articles (see, e.g., Unerman et al., 2007; Glavik and Lukman, 2007; Krajnc and Glavik, 2005). The most often quoted definition of sustainability remains similar to the "sustainable development" concept given by the World Commission on Environment and Development (WCED)[1]. The so-called *Brundtland* Commission issued the report "Our Common Future" in 1987, also called *the Brundtland Report* in literature. They define:

[1] World Commission on Environment and Development (WCED) – established by the United Nations General Assembly in 1983 with a mission to unite countries in pursuing sustainable development together and was officially dissolved after releasing the Brundtland Report.

> *"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland et al., 1987, p.43).*

The concept of sustainable development focuses on how to organize and manage human activities in such way that they meet physical and psychological needs without compromising the ecological, social or economic base which enables these needs to be met (Unerman et.al., 2007). Globally the definition from the Brundtland Report has become much quoted by many politicians and business leaders (Ball and Milne, 2005). The concept began to be referred to as issues of eco-justice, inter and intra generational equity, as well as one of eco-efficiency (Owen, 2004). In 1992 at the United Nations Conference on Environment and Development (UNCED)[2] the "Rio Declaration"[3] was presented with principles for sustainable development (UN, 1992).

Meanwhile sustainability reporting concept development is not much over a hundred years old, according to Buhr (2007) who studied the a history of the phenomena of sustainability accounting, reporting, and standardization.

> *"The process begins with employee reporting and then moves on to social reporting, environmental reporting, triple bottom line reporting and eventually, and ideally, sustainability reporting" (Buhr, 2007, p.59).*

The emerged concept of sustainability led to a re-introduction of the social element into environmental accounting (Owen, 2004). Essentially the phenomenon of sustainability reporting was developed within the field of social and environmental

[2] United Nations Conference on Environment and Development (UNCED) also known as "World Summit" was held in Rio de Janeiro in 1992.

[3] "The Rio Declaration on Environment and Development" consisted of 27 principles intended to guide future sustainable development around the world.

accounting and auditing. In order to introduce the main conceptual ideas it seems appropriate to refer to Owen's (2004, 2008) reviews. In particular Owen provides a definition of social and environmental accounting and auditing research dimension:

> "Conventional accounting's pre-occupation with financial performance as the sole yardstick of organizational success leads inevitably to its implication in the environmental destruction, social dislocation and exploitation of the weakest members of society consequent upon such a narrow interpretation of 'success'. Research in social and environmental accounting and auditing is, therefore, largely concerned with critiquing current accounting practice and searching for more emancipator alternatives that may improve the situation, in terms of delivering greater levels of organizational accountability" (Owen, 2004, p.24).

At the same time sustainability reporting is seen in literature as part of globalized corporate social responsibility (CSR) idea. CSR is usually defined as the economic, legal, ethical and philanthropic responsibilities of companies (Carroll, 1991). CSR has increasingly become integrated into the global managerial culture activities of every company wanting to be perceived as modern and legitimate (Gjølberg, 2009).

> *"Just as conventional management and financial accounting has been a powerful tool in the management, planning, control and accountability of the economic aspects of an organization, broader techniques of sustainability accounting and accountability have the potential to be powerful tools in the management, planning, control and accountability of organizations for their social and environmental impacts" (Unerman et.al., 2007, p.3).*

In order to be useful as a tool of organizations sustainability the reporting process needs to result in a sustainability statement, or sustainability report. The global ideas of “sustainability”, “CSR”, “sustainability accounting and reporting” have been introduced at the micro level of companies by way of sustainability reports. In practice, with varying degrees of understanding of sustainability reporting concept an increasing number of large corporations all over the world have started publicly to issue formal stand-alone non-financial reports containing information on the corporation’s environmental/social performance, and/or sustainability reports (Bennett and James, 1999; GRI, 2006; Ballou et al., 2006; Milne and Gray, 2007; KPMG, 2008; Owen, 2008).

Nowadays in many countries there are concerns about essential distinctions in what companies report, why, and how. Therefore professional accounting firms show a growing interest in sustainability reporting and make institutional efforts to standardize the practice (Owen, 2004). A number of global organizations have become standardizers providing certain recommendations for non-financial reporting and describing management trends on sustainability. Standards issued by standardizing organizations can be applied in various types of companies. Firstly, there are global recommendations which are applied generally by all companies worldwide. They recommend general reporting principles, the focus of report content and indicators for corporate performance. Secondly, initiatives and rankings at national and regional level have emerged. The standardizing organizations struggle to develop recommendations for businesses in a given society based on global principles and standards. Thirdly, there are sector- and industry-specific initiatives and ratings which are usually called “sector supplements”. Their aim is to help companies with managing and reporting sustainability impacts associated with the industry concerned.

Summing up, the idea of sustainability reporting has been introduced aimed at incorporating social, environmental and financial responsibilities of organizations and becoming a tool for companies in management, planning, control and accountability. In order to guide companies in doing their reporting some worldwide organizations issue their recommendations and standards. Therefore, practice and recommendations for practice as well as conceptual background for sustainability reporting have been developed nowadays to some extent. Even though this development implies variety and uncertainty starting from the very term of sustainability reporting itself.

Many attempts have been made in research literature to define the term of sustainability reporting. It seems appropriate to refer to several often quoted definitions. The World Business Council for Sustainable Development (WBCSD)[4] gives the following definition:

> *"We define sustainable development reports as public reports by companies to provide internal and external stakeholders with a picture of the corporate position and activities on economic, environmental and social dimensions" (WBCSD, 2002, p.7).*

Global Reporting Initiative (GRI)[5] releases the 2002 Sustainability Reporting Guidelines to support the growing framework of sustainability reporting.

> *"GRI uses the term "sustainability reporting" synonymously with citizenship reporting, social reporting, triple-bottom line reporting*

[4] The World Business Council for Sustainable Development (WBCSD) is a CEO-led, global association of some 200 international companies dealing exclusively with business and sustainable development created in 1995 after the Rio de Janeiro Earth Summit (see www.wbcsd.org).

[5] The Global Reporting Initiative (GRI) is a non-profit organization that promotes economic sustainability. It was formed by the Ceres (see more in the section 1.5) with the mission to make sustainability reporting standard practice by providing guidance and support to organizations. The GRI produces standards for sustainability reporting (see www.globalreporting.org).

and other terms that encompass the economic, environmental, and social aspects of an organisation's performance (GRI, 2002, p.1).

KPMG[6] gives a definition of sustainability reports corresponding to the 2002 GRI Guidelines in their International Survey of Corporate Sustainability Reporting:

> *"[…] reports that include quantitative and qualitative information on their financial/economic, social/ethical and environmental performance in a balanced way (KPMG, 2002, p.7)*

Companies generally group their responsibilities into economic, environmental and social dimensions. The mutual connections between these dimensions are important as well. Schaltegger et al. (2003) suggest the idea of "four corporate sustainability challenges" and outline environmental, social, economic, and integration challenges. According to Krajnc and Glavic (2005) sustainability reporting is pronounced to provide an invaluable holistic view of the company, connecting all the aspects of corporate performance previously evaluated separately. Daub and Karlsson (2006) are also inspired by the idea of corporate sustainability challenges. Therefore they suggest another definition which highlights the importance of challenges or changes that happen in an organization's sustainability performance:

> *"[Sustainability report] must contain qualitative and quantitative information on the extent to which a company succeeds during a reporting period in raising its eco- and socio-effectiveness and improving its eco- and socio-efficiency, and integrating these aspects into sustainability management" (Daub and Karlsson, 2006, p.558).*

[6] KPMG is one of the world's largest providers of audit, tax & advisory services (see www.kpmg.com).

Daub (2007) summarizes that the sustainability report should be public and should tell the reader how the company

> *"[…] has managed to improve its economic, environmental and social effectiveness and efficiency in the reporting period and integrate these aspects in a sustainability management system" (Daub, 2007, p.76).*

It seems that the idea of the corporate sustainability report has been developing along with the discussion about how to perceive the sustainability report in the strict sense. Globally companies issue public reports called "sustainability reports" describing how they manage economic, environmental, and social aspects of their activity. In practice companies perceive themselves what is essential for their sustainability within their institutional environment. There seems to be gap between the idealistic definitions of sustainability reporting and the practice which companies perform. For my study it seems relevant to use these definitions in order to gain an understanding of the sustainability reporting idea and then move on to look at its practice in the context of the study. So, I use the following definition: the sustainability report is a public corporate report that includes quantitative and qualitative information on economic, environmental, and social activities that the company has managed to do during the reporting period.

1.2 Sustainability reporting in Russia

Companies operate in society, adapting and developing their strategies in constant interaction with other actors and institutional environment. Research literature acknowledges the importance of contextual factors and institutional environments in corporate responsibilities studies (e.g. Halme et al., 2009; Idowu and Filho, 2009). Gjølberg (2009) has studied corporate responsibility practices and performance in different countries and confirms that the idea of sustainability reporting has

developed differently in the various countries. Sustainability reporting is applied differently across various social, economic, cultural, legal and political contexts (Gjølberg, 2009).

There is a lack of studies shedding light on the sustainability reporting practice in Russia. Belal and Lubinin (2009) argue that the literature depicts corporate social disclosures in this country as an under-researched area. The idea of sustainable development was introduced after the dissolution of the Soviet Union during the long "reform" period. The development of the "sustainable development" and "sustainability reporting" concepts here has been slower than in many Western European countries. Russia has experienced unique socio-economic and political conditions influencing the sustainability concept development. The economy, society and the environment were all damaged but the country still possessed a wealth of resources. Thus the incorporation of the sustainable development idea into business life was necessary according to governmental calls (The Decree of the President №440, 01.04.1996). It seems interesting to choose the context of Russia for my study. It is also appropriate because the author of the dissertation is Russian and can use the knowledge of the language to gain a better understanding of the literature in this context.

The terminology for the concept of 'sustainable development' in Russia is generally considered as first appearing after the 1992 Rio Declaration (Koptyug et al., 2000). Sustainable development was described according to the principles defined by UN as a balanced development in all respects, which are environmental performance, societal responsibility, and economic contribution. The importance of the problem of introducing the principles of sustainable development was also recognized by the Russian government. In 1994 a Presidential Decree regarding state strategy on environmental protection and sustainable development was issued (The Decree of the President of Russian Federation №236, 04.02.1994). Later in 1996 a Presidential

Decree concerning Russia's transition towards sustainable development concept was introduced (The Decree of the President of Russian Federation №440, 01.04.1996). The main point of the 1996 decree was to underline the necessity to introduce the sustainable development concept during the period of Russian reforms and transition:

> *"The reason is that the Russian economy in the reform and transition period turned out to be distorted and inefficient. Negative impacts on the environment were more substantial than in developed countries. Much of the Russian production funds did not meet up-to-date environmental standards, while 16 percent of the territory with more than a half of the population was characterized as ecologically dysfunctional. However, Russia still has the world's largest potential of natural ecosystems (8 million square kilometers). The transition towards sustainable development should be a long process since a lot of decision-making is required in social, economic and environmental fields previously not practiced. As we (the country, people, government, and companies) move towards sustainable development, the sustainable development idea is itself being changed and refined" (The Decree of the President of Russian Federation №440, 01.04.1996).*

As Koptyug et al. (2000) state, at that time Russian economy was characterized by depletion of natural resources, criminalization of economy, speculation in the capital market, wage-cutting, increasing the population poverty rate. It is considered that this mostly happened as a result of the privatization of the huge governmental stake, fast enrichment in the private sector, bankruptcies, "shock therapy", and protectionist governmental policy towards industrial sectors (Koptyug et al., 2000). The reductions in state ownership led to the lack of governmental support of social

programmes in education, research, health and culture (Kozlova et al., 1999). Russian reforms during the period 1992-1998 are often called “shock therapy”. Nekipelov (1999) summarizes the period as being characterized by price liberalization, followed by the growth of fuel and energy prices, and governmental reforms to control the rate of inflation by hard limitation of domestic demands. This resulted in a financial crash in 1998 which was caused by the budget deficit, growing state debts, inflation and increased poverty (Nekipelov, 1999). Russian industry faced reduction of production and numerous barriers during the reforms (Fourçans and Franck, 2003). The so-called “Protectionist policy” was applied to “privileged” industries: energy resources and transport. The strategy was to keep fixed prices in these sectors (Koptyug et al., 2000). The oil and gas industry had constituted a large share of national exports and receipts (Fourçans and Franck, 2003). To summarize, a lot of reforms were held during the transition period but did not improve the economic situation in Russia. The reforms led to a slowdown in economic growth and social wellbeing. Therefore, as Kuznetsov et al. (2009) conclude, the period generated a lack of mutual trust between people, businesses and authorities. Thus a presidential call for implementing the concept of sustainable development to Russian companies (The Decree of the President of Russian Federation №440, 01.04.1996) did not lead to any changes in corporation policies.

The concept of sustainability reporting came to Russian companies almost 10 years later after the introduction of the worldwide wider concept of sustainable development. During Putin’s administration from 2000 to 2008 the economy was characterized as growing and stabilizing (Gavrilenkov et al., 2004). During President Medvedev’s rule from 2008 Russia again became one of the largest economies in the world. The country has responded to international trends by promoting the idea of corporate social responsibilities and non-financial reporting through international conferences on corporate social responsibility, publications by The Russian Union of

Industrialists and Entrepreneurs (RUIE)[7], and analytical reports written by big accounting and consultancy firms (Kuznetsov et al., 2009; Shokhin, 2008). As in many other countries, large companies influencing a country's economic development are the pioneers and leaders in the field of non-financial reporting (Shokhin, 2008). According to RUIE surveys, in Russia some large companies also constitute a special case for integrating the sustainability idea into business. These are large corporations seeking international investment, announcing transparency, environmental protection, community support and social responsibility (RUIE, 2012). These companies, sometimes called "national champions" or "blue chip companies", were accomplished during president Putin's government in the oil and gas business as well as other strategic industries (Goldman, 2010; Kuznetsov et al., 2009). As Kuznetsov et al. (2009) describe they form a rather a small group of super large companies, which are highly visible but not representative of the majority of firms in Russia. At the same time, these companies hold a strategic position in the national economy and, as Goldman (2010) argues, rich oil and gas resources in particular was one of the most important factors behind the stabilizing of the Russian economy. To summarize then, "national champions" are strongly connected to government, mandatory or recommended regulation, the international investment market and responsibility for national energy security. They are leaders in integrating the sustainability idea into business and corporate reporting (RUIE, 2012). Therefore it seems useful to describe the importance of the oil and gas industry for Russia in the next section.

[7] Russian Union of Industrialists and Entrepreneurs (RUIE) – in Russian: Российский Союз Промышленников и Предпринимателей - is an independent Russian non-governmental organization with a membership base of over 120 regional alliances and industry associations representing key industries in the economy. RUIE initiates efforts to improve the existing legislation, maintains regular contact with the authorities at federal and regional level, holds roundtables, forums, conferences and public discussions on key issues of business development in Russia, coordinates efforts in improving the Russian investment climate, and keeps the general public informed of the position and role of Russian business (see http://eng.rspp.ru/about).

1.3 The Russian oil and gas industry

Russia has the world's largest capacity of natural ecosystems and has always been known for its rich oil and gas resources. Even during a long period of reforms leading to inefficiency in the Russian economy, the energy sector was considered “privileged” and as being the most important sector for the state. The energy sector became extremely important for Russia’s wellbeing from 2000 during the Putin administration. By becoming the world's largest producer of petroleum and the world's second largest exporter, Russia paid off its international debt and accumulated the world's third largest holdings of foreign currency reserves (Goldman, 2010). The gross domestic product (GDP) began to increase. This occurred at the same time as increases in industrial and agricultural production, construction, a decrease in the level of poverty, and a general increase in industry production (Gavrilenkov et al., 2004). This period is characterized by increasing economic stability. Goldman (2010) claims that Putin’s most significant contribution to Russia’s economic and political renaissance was his adoption of the notion of “national champions”. Energy and material resources capabilities were merged to state interests by creating big state-controlled companies and re-nationalizing energy assets. “National champions” are vertically integrated companies in strategic sectors that not only seek profit, but also have to "advance the interests of the nation" (Goldman, 2010).

Energy efficiency continued to be the major economic area in order to secure the economic modernization of Russia as from 2009. During President Medvedev’s rule the Russian economy was aimed at modernization, decreasing the country's dependency on oil and gas revenues and creating a diversified economy based on high technology and innovation. This vision was criticized by putting forward doubts about the potential for scientific innovation and about the possibility of making the policy real (Eke, 2009). Oil prices were reduced somewhat in an attempt to stabilize

them, but oil and gas exports continued to be the main source of hard currency for the country. Thus the oil and gas industry remained strategic. The government laid out ambitious plans to raise oil and gas production and exports by 2030 even more. The Russian 2030 Energy Strategy (The Order of the Government of Russian Federation 1715-R, 13.11.2009) was approved in 2009 and highlighted the central role of energy for the development of the Russian economy and national security. The main aim of the Russian strategy is to create an innovative and effective energy sector meeting the needs of both growing energy demands and the external economic relations of Russia (The Order of the Government of Russian Federation 1715-R, 13.11.2009).

According to the key world energy statistics issued by The International Energy Agency[8], The Russian Federation has since 2011 become the world's leading producer and second leading world exporter of crude oil (after Saudi Arabia). At the same time, The Russian Federation has since 2011 become the world's leading producer and exporter of natural gas. The production of crude oil amounts to 12.7% of the world total. By 2010, as the International Energy Agency (2012) informs, 510 million tonnes of crude oil were produced and 246 millions tonnes of crude oil were exported. Energy intensity in Russia per unit of gross domestic product is still one of the highest compared to other countries, as well as CO2 emissions, and makes up a significant amount statistically (IEA, 2012). Oil companies in Russia are mostly characterized as being big corporations with a large amount of employees, often operating in remote areas as major employers in these regions. Thus their responsibilities include supporting a large section of the local infrastructure, including housing, education, health.

[8] The International Energy Agency (IEA) - an autonomous organization which was founded in 1973 is made up of 28 member countries. The IEA works with and produces publications on energy security, economic development, environmental awareness, and engages in worldwide issues (see www.iea.org).

Oil companies all over the world became pioneers and dominant in statistics in issuing corporate social responsibility, environment or sustainability reports to ensure their stakeholders sustainable development of their business. According to statistics provided by The Russian Union of Industrialists and Entrepreneurs (RUIE, 2012) as from 2010 oil and gas companies published the most non-financial reports compared to other industries (Appendix 1). They were also leaders in issuing statements called “sustainability reports”.

Large oil corporations have a potentially great negative economic, social and ecological impact. At most the exploration runs onshore in Russia. Though there are many off-shore operations and some deep-water drilling contracts in Russia. Russian oil industry increased exploration drilling during the last decade. Any production accidents can cause significant economic and environmental losses. It means that companies have to demonstrate to their stakeholders their ability to operate safely. Therefore it seems necessary to describe the role and importance of production safety issues of oil companies.

1.4 Production safety

As observed earlier, to a significant extent the Russian economy depends on energy sector stability and security. This industry ensures integration of the regions, forms a considerable part of budget revenues and attracts foreign currency inflows. Energy security is a term for an association between national security and the availability of natural resources for energy consumption (World Energy Council[9], 1992). Energy security is one of the concerns of the sustainable development concept, and it is also important to define threats which energy industry may cause on economy, environment and society (Koptyug et al., 2000).

[9] The World Energy Council (WEC) is the United Nations-accredited network formed in 1923. WEC’s mission is "to promote the sustainable supply and use of energy for the greatest benefit of all people" (see www.worldenergy.org).

All threats to energy security can be divided into four categories: economic, socio-political, industrial (or caused by production), and natural (Koptyug et al., 2000). Economic threats mean getting an investment deficit leading to exploration shortage and resources reduction, financial destabilization, and other negative consequences. Socio-political threats to energy security of Russia include national and international conflicts, labour conflicts and strikes, illegal regional and federal government actions. Threats caused by production are amongst other things accidents happening at for example oil fields. Large-scale accidents can be caused by an increasing proportion of worn-out equipment, the failure to fulfill equipment modernization plans, an insufficient level of human resources qualification, and weak development in energy production monitoring. These are some reasons for production safety risks. Last but not least natural threats include natural disasters (e.g., earthquakes, floods, surface-icing which can damage communications), and severe winter conditions. Koptyug et al. (2000) state that the dominate position of economic development has recently had only economical and socio-political threats. As the economic and political position of Russia has stabilized during the last decade, so the significance of these threats has started to slow down. The importance of industrial and natural threats has now grown because major and severe accidents take place in the energy industry.

Energy security is one of the necessary prerequisites for the country's sustainable development. The environmental and social damage resulting from accidents, inefficient natural resources usage, reduction of the energy supply and energy supply interruption cause big losses to the country's development. Therefore, in order to avoid losses it is necessary to address the issues of economic and financial stabilization, energy efficiency, and being able to reduce production accidents and emergencies. As Burgherr and Hirschberg (2008) confirm, accidents in the energy sector had been recognized as one of the main contributors to manmade disasters.

The oil sector as well as all other kinds of energy production experiences a lot of production accidents. The largest example of a production catastrophe in the oil industry was the oil spill in The Gulf of Mexico in 2010. It seems appropriate to describe this accident in the next section as this motivated me to choose production safety issues as a main focus of my study.

1.5 The Gulf of Mexico accident motive

A major accident affecting the global oil industry occurred on 20th of April 2010 with the explosion of a platform owned by British Petroleum (BP). This production accident resulted in the biggest unintentional offshore oil-spill in the history of the petroleum industry (*Telegraph*, 03.08.2010). The oil-spill in The Gulf of Mexico sent a challenge to the global oil industry. Causes of the catastrophe were discussed as well as the responsibilities of global oil companies, and also whether it had indeed been possible to prevent the catastrophe.

> *"The Deepwater Horizon oil spill highlighted shortcomings of existing financial and sustainability disclosure standards and practice" (Lewis, 2011, p.197).*

The wake of significant financial losses caused by the The Gulf of Mexico accident strengthened publicity concerns about the different types of content that are required in the different accounting reports and about the reports' transparency (Gronewold, 2010). According to the poll carried out in *The Financial Times* talks emerged regarding the demand for more regulation of oil companies (Boxell and Pfeifer, 2010). The majority of people from the surveyed countries agree supporting greater regulation. The oil spill also increased peoples' worries about climate change, fears about a country's dependence on oil, and worries about wildlife and

the environment and fears about further exploration were voiced (Boxell and Pfeifer, 2010).

The Gulf of Mexico accident raised concerns that reporting gives users a more transparent view of the company. The concerns were aimed at safety and risks associated with oil companies' operations and whether the company takes production risks seriously in its attempts to prevent a lot of catastrophes and achieve sustainable growth. It seemed that corporate reporting had not responded sufficiently to external readers in providing information about production safety and risks.

According the *New York Times*, 05 August 2010:

> *"A coalition of mostly institutional investors (Ceres10) is demanding oil and gas companies disclose their existing safeguards and plans of action in the event of another rig disaster and possible oil spill like the one experienced by BP and other companies in the Gulf of Mexico" (Gronewold, 2010).*

After the oil spill *The New York Times* published a press release about Ceres investigation. Ceres is a national network of investors, environmental organizations and other public interest groups working with companies and investors in order to address sustainability challenges. Led by more than 50 U.S. and global investors letters were sent to major offshore oil and gas producers and insurance companies.

[10] Ceres is an active coalition of investors and environmental, social and public interest groups in a common effort to help transition business strategy and performance towards a more sustainable economy. The Ceres Coalition is comprised of more than 130 institutional and socially responsible investors, environmental and social advocacy groups and other public interest organizations. The Ceres Coalition promotes sustainability to companies, policy makers and other market players, helping them better to understand their environmental and social impacts, effectively identify emerging risks, and seize opportunities that meaningfully improve their sustainability performance and disclosure (see http://www.ceres.org/about-us/coalition).

The oil spill and the Ceres investigation have motivated me when choosing the focus of this project. Oil companies address production safety issues in order to secure threats caused by production. This makes production safety issues an interesting and relevant topic for studying sustainability reporting. It seems that the representation of production safety issues in sustainability reporting is challenging for oil companies. This information is important in describing sustainability and the stability of a company.

The importance of representing production safety information and the lack of research in the Russian context show a possible way of studying these issues. It is expected that one of the "national champions" in Russian oil industry is strongly committed to the sustainability reporting issue. Thus it is interesting to pose a research question to study sustainability reporting practice in context.

1.6 The research question

The previous discussion showed that large strategic corporations known as "national champions" are extremely important for Russia's well-being. The oil and gas industry is of great significance for Russia as well. The oil industry has a key role in the global sustainability reporting discussion. Oil "national champions" are huge corporations which can cause production accidents and they are leaders in corporate reporting. The case of being an oil "national champion" has a special meaning for sustainability reporting development in Russia. Here we are talking about a privileged sector which means that companies' property is secured by the state. One of the main missions for a strategic oil company is to ensure national energy security. Therefore it seems relevant to focus the study on production safety issues. It is expected that a large Russian oil company will be committed to presenting production safety performance in their corporate reports. Such a case illustrates the best practice example of production safety issues in sustainability reporting.

The research question of the study is *how production safety issues are represented in sustainability reporting of a large Russian oil company?*

As discussed previously, reporting practice is influenced by the institutional context. It is also necessary to highlight the importance of norms influence. In sustainability accounting reporting the norms system consists of sustainability reporting standards which consist of different guidelines, lists of indicators and recommendations. Therefore, in this study it is important to describe how sustainability guidelines available for Russian oil companies recommend presenting production safety issues.

The purpose of the research is *to describe how production safety issues are represented in sustainability reporting norms and practice for a large Russian oil company, and to analyze the connection between norms and practice*. The study will contribute to the literature by discussing these results in the light of the mainstream sustainability reporting literature.

1.7 Study design

The focus on production safety issues is particularly important in the context of large oil corporations. The chosen research question suggests focusing on the case of such a large corporation. Case-based design is considered a relevant way of studying the phenomenon of sustainability reporting in context.

The posed "how" question can be investigated using various different types of social science research methods. Yin (2009) says that a case study method overlaps in many ways with experiments, surveys, archival analysis and stories. Although a case study has an advantage in situations when a researcher designs a study with a "how" or "why" question (as opposed to surveys and archival analyses), with a focus on a contemporary phenomenon within a real-life context (as opposed to historical studies) and has little control over events (as opposed to experiments).

All case studies analyze contextual conditions in one way or another in relation to a study unit. As Scapens (2008, p.259) states

> *"it is important to start by recognizing that case studies can be used in a variety of different ways in accounting research".*

According to the classification developed by Yin (2009) there are four types of case studies: single-case holistic designs, single-case embedded design, multiple-case holistic design and multiple-case embedded design. Therefore two steps are important for the researcher – choosing between single-case or multiple-case designs and choosing between holistic and embedded designs.

It seems appropriate to choose a single-case study design for the study. As Yin (2009) argued this design is preferable if the case represents one of the following: a critical test of existing theory, a rare or unique circumstance, a typical case, or serving for a revelatory or longitudinal purpose (Yin, 2009). This study aims at making a contribution by discussing existing theory in a case company in the context of Russian oil and industry. Having described the complexity and significance of this context the single case of an oil "national champion" can be considered to constitute a unique circumstance. Scapens (2008) describes that such exploratory research design is often criticized for not being able to produce generalizations about practices in a wider context. As previously summarized the sustainability reporting literature is underdeveloped in Russia. Thus before attempting to make significant theoretical generalizations in this field, it is important to explore cases which can at the same time illustrate recently emerged practices of sustainability reporting. According to Silverman (2010) necessary generalizations in a single case study can be obtained by theoretical sampling.

> *"[…]theoretical sampling means selecting groups or categories to study on the basis of their of their relevance to your research*

questions, your theoretical position and analytical framework, your analytical practice, and most importantly the argument of explanation that you are developing. Theoretical sampling is concerned with constructing a sample … which is meaningful theoretically and empirically, because it builds in certain characteristics or criteria which help to develop and test your theory or your argument" (Mason, 2002, p.124)

The choices of the setting of a strategic Russian oil company and focus on production safety issues representations have been discussed earlier. It is relevant to suggest that the contribution of this study can be made by discussing more observations from literature about analytical framework and comparing with the results from other studies in the same empirical setting. This critical case study seeks to contribute to existing sustainability reporting literature by determining whether its propositions are correct or whether some alternative explanations may be more relevant. The discussion of production safety issues representation in the sustainability reporting of a big oil corporation can influence future investigations in the entire field of sustainability reporting research.

Considering further choice suggested by Yin (2009) for designing a case study it is important to determine the nature of the case. It is explained that if the study examines the global nature of a case or the relevant theory underlying the case study has a holistic nature, then this design is called holistic. On the contrary, if the same study involves more than one unit of analysis or subunits, it is called embedded design. It seems appropriate to design this study using the embedded type. The research question recognizes two sub-units for production safety issues representation. These are practice of sustainability reporting and norms for sustainability reporting. In embedded case study t is important to analyze both sub-

units and to make conclusions on the upper level. Therefore the analysis includes both the norms and practice of sustainability reporting and then compares the results in order to connect norms and practice.

Research design is used to direct and systemize a study. According to Yin (2009, p.24)

> *"A research design is the logic that links the data to be collected to a study's initial questions and, ultimately, to its conclusions".*

The choice of the design for my study is based on the research question and objectives. It is a framework for choosing research methods, data collection techniques and approaches to data analysis.

First of all, for dealing with the problem it is necessary to position the study and find an approach for solving the problem. The frame of reference describes the conceptual approach to be used for the study. No especially defined theory exists in the field of sustainability reporting and safety issues; therefore creating a model was considered for researching this issue. The consideration is made based on a literature review of theoretical approaches in sustainability accounting research and previous empirical research studies of the phenomenon sustainability reporting in the chosen context. Perceptions from the literature review construct my research model in Chapter 2 "Frame of Reference" and provide more understanding of the research field. The literature review also provides a basis for expectations about the phenomenon in the context according to the literature.

An example of a Ceres investigation after the recent Mexican Gulf catastrophe provided motivation for developing the research method (see Gronewold, 2010). The drama of the oil spill played out for the whole world on the 20th of April 2010 and highlighted the importance of production safety for oil corporations. The

questions from the institutional investors Ceres imply shortcomings in safety issues disclosures. I use these issues to construct my research model as well. Therefore my research model consists of knowledge from mainstream research literature and research model dimensions formed from the investors' questions.

The catastrophe in The Gulf of Mexico generates worries about how oil companies deal with production safety questions. It is expected to find a disclosure of this information in sustainability reporting of my case company. Therefore a case company is chosen in order to fit the context and problem descriptions provided in this chapter.

The main research technique chosen for the study is content analysis. Such an empirical investigation can test my research model using naturally occurring data – the company's annual and sustainability reports, and sustainability reporting standards guiding the reporting. The contained information in all the documents is non-financial. The text in the reports describes current sustainability practices, experience and narratives guided by different standards and recommendations but not unified by accounting laws. Qualitative summative content analysis (e.g., Hsieh and Shannon, 2005) is chosen because the analysis can hardly be directed by standards, codes, or practice. The research model dimensions identified in advance in the frame of reference chapter guide the analysis as research codes. This approach aims to build up a case study directed by the frame of reference. The summative content analysis is utilized by understanding the contextual use of the research codes or my model dimensions. The description of the research methodology is presented in Chapter 3 of the study.

According to my research model the analysis of sustainability reporting norms is performed, followed by the analysis of sustainability reporting practice. Then the results from the norms analysis are discussed together with the results of the

practice analysis and, thereby, the connections between them are defined. The empirical analysis is then carried out in Chapter 4 and 5 of the thesis.

Chapter 6 discusses the empirical conclusion and leads on to my contribution. It seems appropriate to discuss the empirical and theoretical expectations I had in my frame of reference in the light of my study results. Finally some ideas for future research are suggested. The figure presenting my overall study design is as follows.

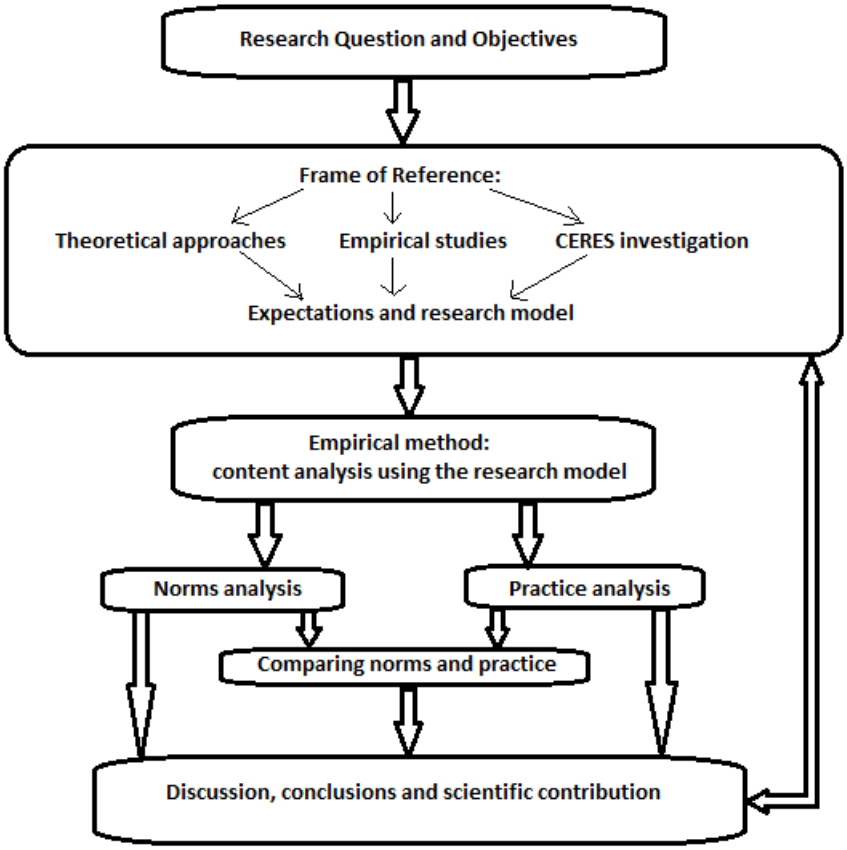


Figure 1.1 Study design

The study is designed in a way to use mainstream theoretical ideas for investigation of domain sustainability reporting phenomenon, and empirical investigations in the Russian context and in the oil companies' context, as well as contemporary concerns about production safety in oil companies especially relevant after the accident in The Gulf of Mexico. Empirical analysis, results and contributions are discussed according to the frame of reference. The strength of this case-based design is that the study contributes to a better understanding of the phenomenon in its real-life organizational context.

Chapter 2 Frame of Reference

The aim of this chapter is to provide a review of the sustainability reporting literature and describe the choice of the applied perspective for the study. As it is explained in the previous chapter, the single case study of sustainability reporting can contribute to the literature by adding more observations from the analytical framework and by comparing with results from other empirical studies. It is interesting to review relevant proposals in relevant theoretical frameworks which are used for analyzing the phenomenon and in an institutional context. The frame of reference is based on considerations of the main theoretical approaches used in sustainability reporting and accounting research, on previous empirical studies on sustainability or social and environmental reporting and questions regarding production safety which the investors' coalition Ceres happened to require from global oil companies after the Mexican Gulf accident. Firstly, the main theoretical approaches in the mainstream sustainability reporting research literature are described. Attention is especially paid to the fundamentals of stakeholder and legitimacy theories as these are considered to be the two dominant ones. Then, a review of empirical studies in the chosen context describes relevant knowledge. The research model is built and the chapter defines the concept of production safety issues for making possible further empirical analysis. Finally the study limitations are outlined.

2.1 Paths in sustainability reporting research

Sustainability reporting research deals with different questions connected to the sustainability reporting phenomenon. Many studies discuss the conceptual development of the phenomenon and many studies explore practice. Sustainability accounting and reporting research literature suggests plenty of different studies – from commentary on progress and achievements to a robust critique of its efforts

(Gray, 2010). As Burritt and Schaltegger (2010) put it, there are two main paths in the development of sustainability accounting and reporting – critical and managerial. The first one asserts that it is still possible to say that sustainability is insufficiently understood and thus critiques sustainability accounting efforts (Gray, 2010; Owen, 2008; Parker 2005; Schaltegger and Burritt, 2009). Awareness of this issue is the main focus of attention (Burritt and Schaltegger, 2010). The focus of the managerial path recognizes the importance of managerial decision- making, developing accounting approaches and the tools to provide relevant information to stakeholders dealing with different decisions, designing information processes and understanding where in corporate practice the data comes from and the uses to which it can be put (Burritt and Schaltegger, 2010; Spence et al., 2010). Burritt and Schaltegger (2010) suggest that the future development of sustainability accounting and reporting should be oriented more along this path, because it supports argumentation aimed at problem solving.

Burritt and Schaltegger (2010), moreover, locate three approaches within the managerial path to sustainability accounting. The first "inside-out approach" means that sustainability reporting is designed to provide information for decision-making, and it is defined by the internal managerial demands. Managers are supposed to contribute to the development of sustainability reporting. Sustainability reporting is being developed according to the aims of the inside corporate business strategy. The "outside-in approach" considers management's contribution from another angle. Sustainability reporting is being developed under external parties' pressures and in order to fulfill stakeholders' expectations. Companies exist in society and are judged by stakeholders, on which they depend. Managers communicate with stakeholders via stakeholders' dialogues and find out what expectations, goals and views stakeholders have. The sustainability reporting practice has some problems though. The literature highlights the lack of information (Aras and Crowther, 2009),

the lack of standardization of the information creation processes and the information provided (Schaltegger and Burritt, 2000), too narrow a range of stakeholders and a lack of engagement (Adams and Larringa-Gonsalez, 2007; Bebbington et al., 2007; Belal and Owen, 2007) or conversely, reports overloading with actors' views taken into account (Adams, 2010). The approach deals with resolving the completeness and credibility issues related to sustainability disclosure by corporations, and providing an induced demand for and trend towards sustainability accounting information (Burritt and Schaltegger, 2010). It is based on stakeholders' dialogue, social acceptance, reputation, and legitimacy. Finally the "twin-track approach" combines both approaches and tries to bring together a managerial, business -oriented view and stakeholder perspectives on sustainability accounting (Burritt and Schaltegger, 2010).

It seems that previous research in the critical path is pragmatically oriented towards discussing the underdevelopment of the sustainability reporting phenomenon. Yet, large corporations worldwide pronounce their corporate social responsibilities and environmental protection responsibilities and their commitment to adopt sustainability reporting processes. The companies discuss problems dealing with sustainability-related issues and sustainability reporting. The fact of growing sustainability reporting practice makes it necessary to go down the path of management-oriented research. The critique path does not seem to be applicable because of this. Considering the different political and social factors influencing interpretations of research literature, it is hard to speculate upon sustainability reporting's importance for management decision-making. There are not certainly defined common reasons for producing sustainability reports for different companies in different settings. It seems more interesting to use the managerial path in order to support companies. Their practice contributes to the development

of accounting approaches by providing understanding of where the data comes from and the uses to which it can be put.

2.2 Main theoretical approaches in sustainability reporting research

Sustainability reporting and accounting research forms part of the broader social and environmental accounting research literature. Many reviews have been published on this niche development. The reviews discussed how publications on this topic have been developed over time and offer a variety of analyses and insights into how corporations report on their social and environmental achievements (see, e.g., reviews of Gray, 2010, 2002; Spence et al., 2010; Owen, 2008, 2004; Thomson, 2007; Parker, 2005).

The existing literature suggests that the theoretical perspective for explaining social and environmental or sustainability reporting activities is not organized around particular paradigms and is rather a dissipative process (Belal, 2008; Thomson, 2007; Gray 1995). Wherever the paths of the phenomenon discussion lead, critical or managerial, the most common theoretical reference points for the social and environmental accounting field are derived from legitimacy, stakeholder theory and political economy theory (Spence, 2010; Owen, 2008; Unerman, 2007; Gray et al., 1995). This type of research came to the mainstream of social and environmental accounting in the 1980s and early 1990s and more urgently until present day (Owen, 2008).

The legitimacy theory is used by researchers because of increasing requirements for companies to demonstrate satisfactory performance within sustainability. This theory is overwhelmingly employed to become the main interpretive focus for disclosure policies. Reporting becomes a possible legitimacy tool for influencing and manipulating organizational stability (Deegan et al., 2002). Numerous studies have been conducted embracing legitimacy theory. At most these studies contribute to

the theory concern about the reasons for producing corporate reports. The studies discuss companies' actions for gaining satisfactory results in the face of increasing social and environmental requirements as well as support from society. It is expressed, for example,

> *"in terms of increased capital inflows, customer and supplier appreciation, labour participation, government 'blessing' and community (and media) acceptance through acting as a good and environmentally friendly 'corporate citizen'" (Mahadeo et al., 2011, p.160).*

Different studies illustrate communication as a crucial element of the legitimacy process because society needs to be made aware of the legitimacy-seeking actions of organizations (e.g., Deegan et al., 2000). Therefore this theory is closely aligned with stakeholders' engagement and dialogue theory.

The second important theoretical standpoint for sustainability reporting research is derived from the stakeholder theory approach (Owen, 2008). Stakeholder theory has also been employed in attempts to explain sustainability accounting and reporting practice. This theory helps researchers to define the main users of sustainability information, and their perceptions of sustainability reporting, and to investigate stakeholder engagement practices and the reporting examples. Internal and external stakeholders are increasingly recognized as crucial elements of sustainability reporting, they identify which issues are important to report on and how well companies perform on sustainability issues (Unerman, 2007; Tilt, 2007). Stakeholder engagement and dialogue approach are used by organizations as part of the reporting process. Stakeholders are involved in the process and identify which issues are important to report on. However, studies recognize a shortage of evidence within social and environmental reports that such engagement and

dialogue are actually taking place (Unerman, 2007). Stakeholder theory is thus used by researchers for studying practice to identify and analyze which issues are reported on. This approach allows investigating the motives for organizations for reporting.

Political economy theory is employed in social and environmental accounting research when the phenomenon is studied in relation to the political, social and institutional framework of the economy. It is used to examine accounting in order to explain the politico-economic context. The theory is intertwined with stakeholder and legitimacy theories though it has a different focus. Spence et al. (2010) in their review point out that while stakeholder and legitimacy theories deal with the legitimacy of firms, political economy theory deals with the legitimacy of the system. This theory is described using a focus that firms promote or promulgate their corporate values and ideology to society (Spence et al., 2010). Though they argue that, according to political economy theory, disclosures as a response to social pressures may occur only if they are linked to a wider politico-economic system in some particular way.

The politico-economic system can be interpreted differently and tends to focus on the structural conflicts within society (Deegan, 2007). Legitimacy theory is considered to derive from political economy but does not consider the structural conflicts within society. For this study it seems relevant to bring in the reasoning of Spence et al. (2010).

> *"[…]the concern of […] political economy is with the system-level conflicts and mediations […]whereas legitimacy and stakeholder theories look at the micro level of firm-stakeholder relations, effacing the wider political issues" (Spence et al., 2010, p.83).*

Studying the company concerned as a case at micro level, it seems appropriate to leave the main concern of political economy. Moreover, mainstream literature discusses that there are two dominant approaches at the organizational level: stakeholder and legitimacy theories. These seem to be the most suitable theories for explaining the practice of the sustainability reporting phenomenon. Further it is discussed how these approaches are useful in explaining sustainability reporting practices.

2.2.1 Stakeholder theory approach

Stakeholder theory is employed in attempts to study different aspects of sustainability reporting practice.

> *"Broadly defined, a stakeholder is "an individual or group having a legitimate claim on the firm – someone who can affect or is affected by the firm's activities" (Tilt, 2007, p.104, citing Freeman).*

According to Mahadeo's et al. (2011) literature review stakeholders' influence occurs by way of two possible mechanisms – ethical (normative) and managerial (instrumental). The first one reflects an organization's duty to account for its actions. The second one has attracted more attention in literature. The managerial mechanism of stakeholder theory assumes that organizations can influence the stakeholders who are believed to have a more direct and critical impact on the company. The stronger the dependency on a stakeholder, the greater the probability that the organization will incorporate the stakeholder's demands into its operations.

> *"These stakeholders can withdraw resources destined for the company and thereby endanger its existence. Hence, stakeholders need to be managed to ensure their continued support and ultimately*

ensure that corporate objectives are met" (Mahadeo et al., 2011, p.160).

Stakeholder theory explains then that organizations can disclose information about their needs in order to respond to stakeholders' needs or strategically control stakeholders' decision-making.

Stakeholders have been categorized in various ways and include shareholders, investors, employees, creditors, suppliers, customers, banks, government, community, public interest groups and the general public (Tilt, 2007). However, the majority of empirical studies identify stakeholder groups in their way and tend to be commercially (or financially) motivated – for example, more studies focus on suppliers, customers, lenders, competitors and investors, and relatively less on the public, governments, employees and communities (Mahadeo et al., 2011).

Following the logic of stakeholder theory, sustainability reporting is oriented towards the main stakeholders of companies. The information contained in reports aims at providing a reliable and efficient image of the company. Once stakeholders are identified, the next crucial point is to identify social, environmental and economic expectations of these stakeholders (Unerman, 2007). The disclosure of particular types of information can be used to gain or maintain the support of particular groups (Deegan, 2007). Therefore, stakeholder engagement is a relevant procedure for companies in order to find out which information certain stakeholders regard as important. This procedure is a part of the sustainability reporting process. Stakeholder engagement has resulted in improved reporting and transparency and an ongoing and increasing awareness of the importance of sustainability reporting (Tilt, 2007). By comparing the needs and expectations of stakeholders and the content of sustainability reporting this approach enables auditors to assess sustainability reporting.

The stakeholder approach is applicable for studying corporate reporting and accounting. By analyzing the contained information it is possible to discover on which stakeholder groups the corporate reporting focuses. For instance, if a sustainability report contains representation of certain issues and an investors' group is interested in these issues, then this means that investors are considered to be important stakeholders for the reporting process. The organization's goal influences their decision-making. Their corporate report is a tool for providing efficient information for investors. The approach illustrates a link between reporting strategy and particular stakeholders.

To summarize, the stakeholder theory literature seeks to identify possible stakeholders, define which are most powerful and link reporting strategies to particular stakeholders groups (Adams, 2008). Often this approach is considered together with legitimacy theory and they complement each other (de Villiers and van Staden, 2006). In the following section the legitimacy theory approach is reviewed. It seems relevant to discuss how it is used in sustainability reporting and accounting literature.

2.2.2 Legitimacy theory approach

Legitimacy is generally defined in literature as congruence between an organization's value system and the value system of the larger social system of which the organization is a part (Gray et al., 1995).

> *"Organisational legitimacy predicts that corporations will do whatever they regard as necessary in order to preserve their image of a legitimate business with legitimate aims and methods of achieving it" (de Villiers and van Staden, 2006, p.763).*

Similar to stakeholder theory, the organizational legitimacy perspective focuses on the need of an organization to control stakeholders who are considered to have a

critical impact on the company. Critical stakeholders whose approval is necessary for the fulfillment of an organization's functions were suggested by Hybels (1995). In his model of organizational legitimation he focuses on: (1) the state, (2) the public, (3) the financial community, and (4) the media. The organization makes efforts to gain support or approval from stakeholders in order to concur with the value system of environment (Hybels, 1995).

The legitimacy approach is widely used in sustainability reporting literature. It is considered that the organization is able to manipulate its critical stakeholders through various disclosure-related strategies (O'Donovan, 2002; Deegan, 2007; Tilling and Tilt, 2010). Strategies aimed at gaining, maintaining or repairing legitimacy lead to various changes in the corporate culture of a company in order to become more attractive to external stakeholders. However,, such corporate actions are not enough for the legitimating process. As de Villiers and van Staden (2006) note the changes in corporate actions can in fact remain undisclosed. They continue to discuss that a disclosure of the actions which reaches society or other influential stakeholders is sometimes even more important. Legitimacy theory emphasizes disclosure as a managerial tool. Corporations seek to adapt sustainability reporting in order to manage their legitimacy. Thus legitimacy theory has been employed in studies in attempt to explain how organizations develop the focus of their reporting and to explain certain disclosures in the reporting practices.

Corporate performance and the expectations of a larger social system can change over time leading to changes in the legitimacy of the corporation. When the corporate image does not correspond to relevant societal expectations, a legitimacy gap occurs (O'Donovan, 2002; Nasi et al., 1997; Sethi, 1977). Sethi (1977) suggests that there are two important sources of a legitimacy gap. First, societal expectations can change, and a gap between the corporation's performance and societal expectations arises. Second, new information about corporation activities can

suddenly become known. This is particular the case if the new information varies dramatically from the corporation's image. This could be the result of some social event or a discovered issue influencing the corporation's reputation. In these cases a corporation may strive to narrow this "legitimacy gap" to maintain maximum discretionary control over its internal decision making and external dealings (Sethi, 1977).

O'Donovan (2002) suggests illustrating this perspective by presenting potential legitimacy as a result of a corporation's negative association with an issue/event.

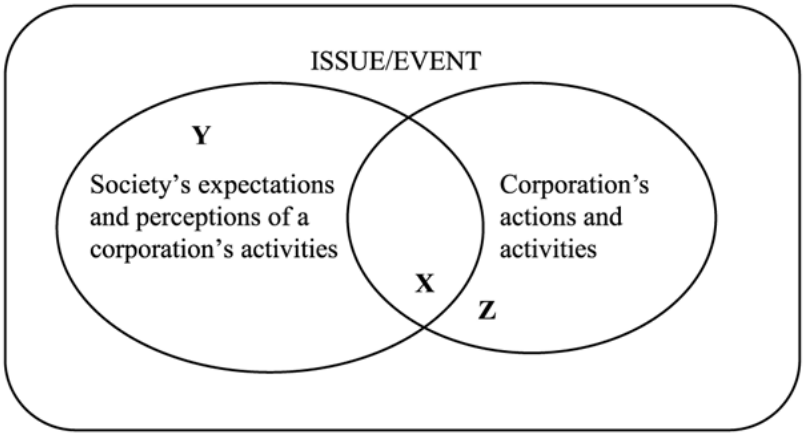


Figure 2.1 Issues/events and corporate legitimacy (adopted from O'Donovan, 2002)

Figure 2.1 demonstrates that the incongruence between a corporation's actions Z and society's perceptions of these actions should be Y. The aim of the corporation is to be legitimate, to ensure that area X is as large as possible, thereby reducing the legitimacy gap (O'Donovan, 2002). The corporation can manage legitimacy in this situation by identifying, at first, issues or events that have occurred and resulted in negative associations which threaten legitimacy. Secondly, groups of stakeholders can be identified with the necessary attributes to be able to influence legitimacy in respect of the occurred issue/event.

Major accidents in oil industry could serve as examples of events threatening the legitimacy of an organization. Even though the reason for the accident is related to the production or corporate management activity of one company, there may be serious consequences for the whole industry. Society expects the whole industry to operate more safely. This means a gap developing between society's expectations of safety to be performed by petroleum companies, and the actual disclosures made by these organizations. For instance, Patten (1992) in his paper argued that the Exxon Valdez oil spill in Alaska in 1989 resulted in a threat to the legitimacy of the entire petroleum industry. The study indicated increased environmental disclosures by the petroleum companies after the incident, and not just by Exxon Oil Company. The disclosure reaction took place across the industry, which is consistent with a legitimacy theory perspective (Deegan, 2007). The study confirms that companies respond to public expectations to ensure that their actions are desired. In other words, the companies were acting to attempt to reduce the legitimacy gap after the major accident.

To sum up, organizational legitimacy studies provide evidence of how volumes of disclosure differ over time, between organizations and in response to particular events (Adams, 2008; Patten, 1992). The literature seeks to describe corporations' efforts to adapt sustainability reporting to satisfy the expectations of critical stakeholders. Stakeholders' and legitimacy theoretical approaches are intertwined in sustainability reporting literature. In order to consider the nature of certain corporate disclosures critical stakeholders are identified.

2.3 Previous empirical studies on sustainability reporting

The literature contains plenty of empirical studies on sustainability accounting and reporting phenomena. These studies have a great significance for testing theoretical implications and for better understanding motivations, purposes, and the influence

of context and outcomes of sustainability reporting. Researchers focus their attention on different published corporate reports by evaluating disclosed information, discussing managerial motivations, stakeholder needs and perceptions (Owen, 2008).

Many important target stakeholder groups are investigated by studies employing stakeholder theory approach. It seems that the literature is especially interested in the shareholders' and investors' group (e.g., Deegan and Rankin, 1997). They have been considered an important and influential group for company decision-making. Thus the issue of the role they play in the dialogue regarding environmental issues is raised. The literature indicates that institutional investors appear to be interested in environmental information (de Villiers and van Staden, 2010). Their review describes the results of several surveys which have shown that private investors are not particularly interested in reports giving environmental information and the need for this information published by companies in their annual reports. However their review demonstrates that there is a demand from individual investors for environmental information (de Villiers and van Staden, 2010). The area of investors' influence on social and environmental accounting calls for further investigation (Tilt, 2007).

Empirical studies also analyze and criticize emerged sustainability reporting initiatives. Particularly noteworthy recommendations here are the Sustainability Reporting Guidelines[11], issued by the Global Reporting Initiative (GRI), and the work of the AccountAbility[12] in attempting to standardize principles to be followed for

[11] Since 1999, GRI has provided a comprehensive Sustainability Reporting Framework that is widely used around the world. The cornerstone of the Framework is the Sustainability Reporting Guidelines. GRI's Framework has become a de facto standard in sustainability reporting (see https://www.globalreporting.org/information/sustainability-reporting/Pages/default.aspx).

[12] AccountAbility – a global organization created in 1994 as the Institute of Social and Ethical Accountability. Their mission is to provide innovative solutions to the most critical challenges in corporate responsibility and sustainable development (see www.accountability.org).

securing quality of social and ethical accounting, auditing and reporting (Owen, 2004). Besides, many companies use the United Nations Global Compact (UN Global Compact)[13] principles as well. Apart from the global overall standards there are sector- and industry-specific initiatives issuing recommendations usually called "sector supplements". For instance, the global oil and gas industry association for environmental and social issues (IPIECA)[14] is a global association representing the oil and gas industry on key global environmental and social issues. This organization has issued "Oil and Gas Industry Guidance on Voluntary Sustainability Reporting" – principles which guide oil and gas companies in sustainability reporting. In addition, initiatives and rankings at national and regional level have been emerging. In Russia such an initiative has been taken by The Russian Union of Industrialists and Entrepreneurs (RUIE). They have initiated efforts to improve corporate responsibilities and provide a framework for non-financial reporting. As a result, several global and national initiatives now exist providing frameworks, guidelines, indicators for companies who have committed to sustainability reporting practices. This is useful in order to highlight industry-specific initiatives and country-specific initiatives.

Some attention in literature has been paid to analyzing which particular topics companies disclose in their social and environmental reporting and how this is done. Previously research had focused on four major themes according to the mainstream literature. These are: natural environment, employees, community, and customers (Gray et al., 1995). Later researchers have tended to measure practice in studies by finding out disclosed categories.

[13] United Nations Global Compact (UN Global Compact) is a United Nations initiative since 2000 to encourage businesses worldwide to adopt ten sustainable and socially responsible principles in the areas of human rights, labour, environment and anti-corruption (see www.unglobalcompact.org).

[14] The Global Oil and Gas Industry Association for Environmental and Social Issues (IPIECA) - When IPIECA was set up in 1974 the acronym stood for the International Petroleum Industry Environmental Conservation Association. IPIECA operates globally and contributes to sustainable development issues of the oil and gas industry (see www.ipieca.org).

Literature uses different indicators to measure the quality of the reports and to identify the categories disclosed in different cases. For instance, Guidry and Patten (2010) and Brown et al. (2010) used GRI recommendations and developed a coding scheme identifying 55 environmental and social performance indicators. Sample firms in both studies were US-based public trade corporations with available sustainability reports. The studies investigated the links of sustainability reporting with market reactions and changes in corporate reputations. The industrial context was not specified in these studies. Then there is another example. Dong and Burritt (2010) specify the sample for investigation as oil and gas companies. Their study categorizes social and environmental disclosures of companies using IPIECA guidance. They highlight the idea of the importance of industry-specific indicators. The findings of empirical studies depend not only on the sample companies but also on the used sustainability reporting indicators and criteria.

The problem with the great number of recommendations is that nowadays no proper assessment system exists for sustainability reporting. The research literature reflects on this as follows:

> *"[…] only a lot of commentary about the confusion caused by multiple standards, the resultant non-comparability of sustainability performance and the variable quality of assurance statements" (Adams, 2010, p.86).*

Adams (2010) expresses an opinion that seeking to satisfy the needs of too many different stakeholders and using various standards, sustainability reports and CSR sections in annual reports became overloaded with data and difficult to understand and analyze. Concerns about the increasing complexity and decreasing relevance of corporate reports in recent years are confirmed by The UK Financial Reporting

Council (FRC)[15] in May 2009. The UK FRC issues a consultation document called "Louder than words (principles and actions for making corporate reports less complex and more relevant)" and suggests that there is a need to refocus reports on their primary purpose: providing investors with information that is useful for making their resource allocation decisions and assessing management's stewardship:

> *"Many users and preparers say that CSR information can be important; but they are concerned that overloading reports with this type of information make them cluttered" (Adams, 2010, p.87, citing FRC, 2009).*

Companies publish corporate reports which are too broad even though they might include key performance indicators from each guideline. The *Financial Times* cites Hans-Joerg Hinkel, a strategic planning manager at "Mitsubishi Electric":

> *"…whatever the outcome, companies should have the freedom to report in a way that is relevant for their business and sector, and also be given options, so it is not too much of a burden" (Financial Times, 04.20.2010, p.4).*

In the opinion of Patrick Eastwood, managing partner at London-based branding agency "Further", many organizations

> *"treat it [sustainability reporting] as a box-ticking exercise, and provide too much information, disclosing everything and making it difficult for readers to see the wood for the trees" (Financial Times, 04.20.2010, p.4).*

[15] UK Financial Reporting Council (FRC) - is the UK's independent regulator responsible for promoting high quality corporate governance and reporting to foster investment (see www.frc.org.uk).

Research literature focuses heavily on case studies and discusses industrial challenges and practices in different countries. Sustainability reporting is applied differently across different social, cultural, industrial and political contexts (Gjølberg, 2009; Halme et al., 2009). The geographic and industrial settings are particularly recognized as being important. Most studies are conducted in UK, USA, Europe and Australia (Thomson, 2007; Belal and Owen, 2007). As for industries, oil and gas, utilities, chemicals, mining, and forest, pulp and paper companies have a dominate place in reporting statistics (see e.g. Milne and Gray, 2007). For instance, literature pays attention and describe cases in the mining sector (Mudd, 2012; Coetzee and van Staden, 2011; Yongvanich and Guthrie, 2005; Jenkins and Yakovleva, 2006), petroleum and oil and gas industry (Siveter et al., 2012; Dong and Burritt, 2010), forest sector (Mäkelä and Näsi, 2010), food industry (Establet and Marshall, 2011; Jones et al., 2005). Geographical or industrial trends can be criticized for being biased towards the overall picture of results but they do highlight many underdeveloped topics. The studies' geographical locations and industrial settings only serve to complement the understanding of phenomenon development.

The setting chosen for this study is the Russian oil industry. It seems relevant to present the main findings of the research conducted so far. In the following sections the empirical studies conducted in the context of Russia and the oil industry are described.

2.3.1 Knowledge we have in the context of Russia

Most prior studies on sustainability reporting and accounting are empirically oriented towards the context of Western developed countries (Belal and Owen, 2007). However, some studies are also conducted in the context of developing countries, albeit mainly concentrated on Asian economies (Belal and Lubinin, 2009). Fewer publications are possible to find related to the Russian context (e.g.

Kuznetsov and Kuznetsova, 2010; Kuznetsov et al., 2009; Belal and Lubinin, 2009; Kostin, 2005).

Kostin (2005) describes the phenomenon of corporate social responsibility and states that sustainable development for Russia is calling for more conceptual discussion and development. He writes that even though the corporate social responsibility concept was introduced in Russia later than in many other countries, it is now rapidly developing. Corporate social responsibility reports or sustainability reports are issued in compliance with international sustainability reporting standards and guidelines. Big companies learn to produce corporate reporting based on the experience of global standard-setters, other companies, seminars and international conferences (Kostin, 2005). Practice in Russia is developing and understanding of the sustainable development concept corresponds to the international version.

Other studies provide research analysis of social and environmental disclosures within annual reports. However, in these studies the analyses of stand-alone sustainability reports have not been conducted. Belal and Lubinin (2009) studied 20 large Russian listed companies' annual reports for the year 2004 with the aim of providing insights about the current Russian situation. They conclude that the quality of disclosure is generally poor because of the lack of external verification and completeness. They conclude that, in order to improve corporate social disclosures practice, there is a need for mandatory requirements for corporate social disclosures in Russia, strong NGOs and other pressure groups (Belal and Lubinin, 2009). The findings of Kuznetsov et al. (2009) support this point of view and show that

> *"firms also blame the state and the legal system for not providing enough incentives" (Kuznetsov et al., 2009, p.41).*

However Kostin (2005) points out that mandatory legislation for corporate social reporting in Russia might just destroy the constructive nature of the corporate social responsibility concept, turning it into another state tool to put pressure on business.

Kuznetsov et al. (2009) conduct an empirical study based on a survey of 129 medium and large industrial enterprises in all regions in Russia, and investigate the attitudes of Russian executives towards corporate social responsibility. They draw the following conclusion:

> *"…firms appear to embrace the policies of CSR as a means of legitimization much less willingly than might be expected on the basis of accepted theory" (Kuznetsov et al., 2009, p.41).*

Their analysis demonstrates that the company respondents have the awareness of society's expectations directed at them, but they do not believe that corporate social responsibility activities can benefit them in any way, even by increasing the prestige of the firm in the eye of the public or the state. Kuznetsov et al. (2009) state that the possible reason for this is that the state only focuses on large strategic corporations and thus the legitimacy issue works mostly for them.

> *"[Large strategic corporations] are called upon to put in place CSR policies and become more transparent and accountable to the public and international investors and thus contribute to improving the legitimacy of both the state and these strategic corporations" (Kuznetsov et al., 2009, p.43).*

Corporate social responsibility efforts including sustainability reporting in large strategic corporations can be beneficial both for the state, by ensuring energy security and for corporations by gaining prestige in society, attracting investments or governmental support.

The study of Kuznetsov and Kuznetsova (2010) concludes that after privatization Russian corporations have faced a legitimacy challenge. This means that the corporations gained a low reputation at that time, so a meaningful management-stakeholder dialogue is necessary for them. However, the analysis shows that in the case of most of groups of stakeholders such dialogue has hardly any significance (Kuznetsov and Kuznetsova, 2010).

2.3.2 Knowledge we have in the context of the oil industry

Oil corporations are concerned about environmental protection and corporate social responsibilities. The oil industry experiences a large number of manmade disasters which threaten to the country's sustainable development. Being production intensive with a great possibility to damage the ecosphere and the social environment oil companies are considered to be sensitive when gaining economic growth. The oil industry has an important role in global sustainability reporting discussion. Though the oil industry is one of the dominant industries in the statistics of issued social and environmental reports (RUIE, 2012), very few research studies have investigated social and environmental disclosures (see e.g. Dong and Burritt, 2010; Wood and Ross, 2008; Kolk et al., 2001). In short, it seems that sustainability reporting efforts do play a significant role in this sensitive industry.

The study of Dong and Burritt (2010) examines social and environmental disclosures in annual reports in the Australian oil and gas industry. They point out that oil companies have been identified as examples of "environmentally sensitive" industries because of the significant and pervasive environmental impact caused by their central activities. They also find out that oil companies tend to provide a greater volume of disclosures as a means of mitigating the negative impacts on the environment and society (Dong and Burritt, 2010). Oil companies globally depend more greatly on environmental regulation, mandatory disclosure, stakeholder

opinion (Wood and Ross, 2008) and a higher percentage of verified environmental reports (Kolk et al., 2001). Dong and Burritt (2010) conclude:

> *"[…] oil and gas companies contribute considerable space in their annual report to a variety of common social and environmental disclosures… However, most disclosures focus on information about employees and the environment" (Dong and Burritt, 2010, p.116).*

It means that companies do not take into consideration the specific safety issues associated with oil industry production:

> *"[…] relatively narrow focus […] undermines the credibility of social and environmental disclosures for decision making by investors because specific relevant information is not provided" (Dong and Burritt, 2010, p.116).*

It is also important to note that empirical studies in the context of oil and gas industry are conducted by means of analyses of annual reports. Studies of environmental and corporate social disclosure issues do not include stand-alone sustainability reports.

2.4 My research model

The literature review has demonstrated consideration and observations made by previous research. As already mentioned in the study design, these expectations form the research model. The example of The Gulf of Mexico accident debate on production safety issues provided the motivation for my choosing the focus of this study. Thus, the model also includes the issues of institutional investors' Ceres investigation. These issues are roughly grouped into five dimensions. This section is devoted to describing the five dimensions of my research model and defining the concept of production safety issues. I also outline my study limitations.

2.4.1 Five dimensions of the model

My study is focused on production safety issues representation. But what is included in this concept here? According to the Ceres investigation, institutional investors are concerned about production safety disclosure in corporate reporting. Their inquiries happened after the Gulf of Mexico catastrophe and therefore can be a call for all corporations in the oil industry. The notion of production safety issues in this study is built upon the questions from the Ceres investigation.

The Ceres investigation requested global oil and gas companies to response on five key topics: (1) company investments in spill prevention and response activity; (2) spill contingency plans for managing blowouts; (3) lessons learned from the BP oil spill, including more robust enforcement of offshore drilling in the Gulf and elsewhere; (4) possible actions to improve their safety contractor selection and oversight practices; (5) and governance systems for overseeing the management of offshore oil and gas operations (Fleming, 2010). The example letter of the coalition is attached in the Appendix 1.

The concerns of the Ceres investigation were limited to deepwater offshore drilling. However, oil industry is everywhere risky and large Russian oil companies specialize in different kinds of drilling activities – deepwater, shallow-water offshore and onshore. For my research model it is decided not to differentiate between oil production activities.

It seems possible to summarize that the investors group highlights a lack of production safety information disclosure in oil companies. Oil companies are supposed to describe these issues openly through their corporate reports. The production safety issues include corporate actions on prevention, readiness for accidents and the capability to operate safely. Further on, the term “production safety issues” is used as a concept formed out of the Ceres dimensions.

By choosing the focus on production safety issues I highlight the importance of the oil industry context. The study contrasts with prior studies as it focuses specifically on the issues relevant in the oil production context. Production safety issues also correspond to the production threats to sustainable development that is gaining significance in Russia. Companies' preparedness to these threats influence on energy security and global sustainable development.

The research model is formed on theoretical and empirical expectations from the literature review and 5 dimensions to describe production safety issues. This model is used in the further empirical analysis of practice and norms of sustainability reporting. However, the literature discusses plenty of questions not involved in this study's analysis. This is why it seems useful to comment on this study's limitations.

2.4.2 Limitations of the model

In order to explain the practice of sustainability reporting there is a need to explain how this can be understood. Recent research in accounting highlights the change process as an important way of understanding the accounting system. It is also important to consider the social and institutional context of accounting. Mellemvik and Olson (1996) describe accounting as an institution consisting of accounting norms, accounting practice and the use of accounting information (Figure 2.2). The idea of organizational learning illustrates how these systems develop and change. Accounting is seen as an institution which develops through its own experience and by other experience, including learning from the environment of accounting, as shown in Figure 2.2.

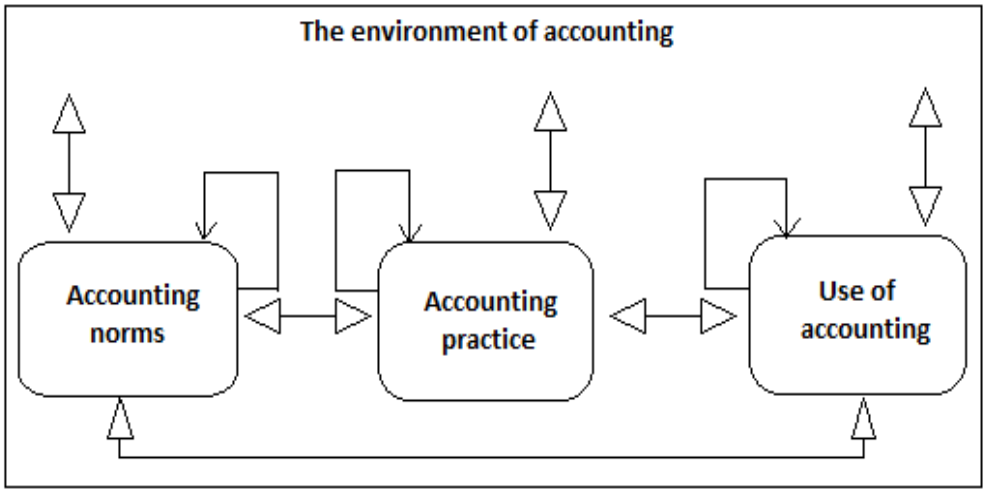


Figure 2.2 A model of organizational change of accounting (adopted from Mellemvik and Olson, 1996)

Viewing sustainability reporting in relation to the model of the organizational change of accounting means discussing the three stages.

“Sustainability reporting norms” in this study consists of sustainability reporting guidelines, indicators, recommendations. As the context influences the development of norms themselves, there could be differently oriented standard-setters. The review of sustainability reporting literature review has revealed at least three main groups of standard-setters: global sustainability reporting guidelines, industry-oriented guidelines and national recommendations.

“Sustainability reporting practice” stands for the main routines of sustainability reporting. Whatever the name or form of non-financial report, sustainability reporting can include stand-alone sustainability reports, corporate social responsibility reports, health, safety and environment reports or corporate social responsibilities sections in annual reports. These statements are a result of the sustainability accounting process which can communicate, on the one hand, with

sustainability reporting norms and, on the other hand, with the users of sustainability reporting information. Sustainability reporting practice is also much influenced by its context.

“Use of sustainability reporting” refers to users of these reports. Users should receive relevant data for their decision-making. Sustainability reports can be influenced therefore not only by the norms but also by users’ needs. Different stakeholders make use of sustainability reports. Sustainability reports contain issues which are useful for relevant stakeholders.

Studies of sustainability reporting can be summarized as focusing on the different actors and elements of the reporting process. This focus is distributed according to the idea of institutional change in accounting – accounting norms, accounting practice and the use of accounting. This study focuses on sustainability reporting norms and sustainability reporting practice. However, this project does not focus on the use of sustainability reporting.

The limitation of my study is made considering the empirical data reliability. Russian companies have a reputation of being very closed companies. It is not easy to discover structural influences especially when the structure is connected to the state and society. It means that any responses in a strategic company can be biased. It is difficult to receive and analyze the information about the use of reporting and the users. In this way the reliability of results is low. On the contrary, if one relies on openly published data like official statements and publications available on corporate websites, it is possible to enhance the reliability of the practice analysis. The texts can be seen as part of the communication effort made by practice itself. Use of sustainability reporting is addressed more hypothetically in the final part of this thesis as a suggestion for future research.

2.5 Summary

This study focuses on production safety issues' representation in sustainability reporting. In this chapter all relevant concepts, theories and observations are described. The frame of reference consists of knowledge from the mainstream research literature about practice and norms of sustainability reporting and a research model. The model has five dimensions formed in order to describe production safety issues. I have chosen to rely on the mainstream literature considerations to discuss my analysis results.

The review of empirical studies is presented in the context of oil companies and in the Russian context. Corporate social responsibilities disclosures in Russian large and middle-sized companies are considered to be poor because of the lack of completeness, lack of external verification and mandatory requirements (Belal and Lubinin, 2009). However, national champions are not included in this discussion. The study of one of them can help fill the gap in the literature. These companies are called on to be transparent and accountable to the public in their corporate social responsibility policies including sustainability reporting (Kuznetsov et al., 2009). These companies are supported by the government. Their sustainability reporting efforts are considered to increase their prestige in society, attract investments and governmental support.

Corporate social disclosure in global oil companies is considered to be narrow and not to provide relevant information to investors. It is appropriate to highlight the fact that all reviewed empirical studies analyze CSR parts of annual reports. It seems that this study can fill the gap in literature by analyzing stand-alone sustainability reports alongside annual reports.

The literature review has shown that the most common theoretical approaches for explaining the practice of sustainability reporting are stakeholder and legitimacy

theories. The research highlights critical stakeholder groups and suggests that corporate reporting is being adapted in order to manage their legitimacy. The notion of a legitimacy gap seems important. Whatismore there may be several reasons for the legitimacy gap occurring after major industrial accidents ranging between social expectations and corporate performance. Companies in the whole industry are expected to act towards reducing this by providing relevant disclosures. According to the approach it is expected that the legitimacy of oil extraction companies is challenged after the Gulf of Mexico accident. Russia may not be an exception to this rule. Russia is a big player in global business relations. The theoretical consideration of legitimacy theory should fit a Russian oil company as well. A Russian corporation can influence its own legitimacy by identifying events threatening legitimacy or identifying groups of critical stakeholders who are able to influence legitimacy. This study can contribute to the literature by testing whether the legitimacy and stakeholder theory approaches provide relevant explanations for the case company.

The limitations of the study are provided in order to focus on the practice and norms of sustainability reporting and not on the use of it. In order to explain how to study the focus on the research methodology and empirical method needs to be described. The next chapter is therefore devoted to the methodological underpinnings of the study.

Chapter 3 Research methodology

The aim of this chapter is to describe the methodological position of this study based on ontological and epistemological assumptions and the methodological strategy chosen for conducting this study. It is important to explain how the research phenomenon can be understood in the context concerned and how the research question can be approached. The research methodology and empirical method strategy are presented as steps taken during the designing and conducting of the study. It is also necessary to discuss the company chosen as the case for conducting this study. The chapter also describes the technique of the content analysis method. The units of analysis, the text codification technique, the data interpretation technique, and reliability issues are all outlined.

3.1 Philosophical assumptions

One of the most important steps necessary to make a dissertation meaningful is to find a philosophical position based on ontological and epistemological assumptions, as well as determining the method for gathering and analyzing the data, and making sense of it (e.g., Silverman, 2010). The process of looking for this position can sometimes prove time-consuming and includes many steps, phases and ideas. Some of these are important and form some of the background for understanding the problem. Some ideas are useful when approaching the research question. The ideas finding their place in this study are described here.

My research interests have always been related to sustainability reporting. The idea of the study came from a concern about the practice of sustainability reporting related to sustainability reporting regulation. A preliminary study on sustainability reporting regulation in Russian companies was conducted. The results of this study were discussed in the paper “Sustainability reporting regulation from a Russian perspective” and presented at the International Conference “Synergies of

Innovations in Developing Oil and Gas Industry" in Saint-Petersburg[16]. My research ideas were quite quantitative at this stage. The phenomenon was analyzed using a more positivistic philosophical paradigm giving preference to quantitative research methods. 55 sustainability reports of Russian companies in different industries were analyzed for the period 2004-2008. The study particularly looked at references to sustainability reporting standards and counted their frequency in order to understand what kind of sustainability reporting regulation Russian companies refer to. My findings included the list with citing frequencies of a number of different sustainability reporting regulations companies had referred to (see Appendix 2). Also it was revealed that oil and gas companies led the way in sustainability reporting regarding the number and size of the reports, the variety of disclosed issues and utilized standards (see Appendix 3). The study took the form of a preliminary review of practice and norms statistics in Russian companies, including oil and gas corporations. The results of this study confirmed my research interest in sustainability reporting practice and the norms in the Russian oil and gas industry. However, the conclusions did not provide explanations with regard to the phenomenon development, concepts, standards relevance or their differences. With such a position the reality became objectivistic. The research units - sustainability reports - were driven by norms in a rational and stated way. The guidelines used in the sustainability reports were not obligatory. The companies decided in their own way which guidelines to refer to and how to construct the content. There was also a question whether the data is sufficient to draw any conclusions concerning the setting. The study method could not help in explaining the phenomenon. Thus I realized the advantages of using qualitative method for my further research.

[16]The conference "Synergies of Innovations in Developing Oil and Gas Industry" was arranged 11.05.2010 by Baltic State Technical University "Voenmekh" (St. Petersburg, Russia), High North Center for Business and Governance at Bodø Graduate School of Business (Norway) and Statoil (Norway).

The oil and gas industry is a highly dynamic and sensitive sector in which all events occurring are of great significance. After the oil spill in The Gulf of Mexico in 2010 many debates about the meaning of accounting and sustainability reporting took place. It was mainly discussed whether the reporting with another content or assessment could help to improve interaction and preventing such huge catastrophes. Did the content of accounting reports provide relevant information for the stakeholders' needs? A lot of questions from analytics or investors could hypothetically have been responded to using sustainability reports, because these reports were supposed to tell the reader how the company succeeded in economic, environmental, and social activities. This motivated me to choose a research position and a focus for my study. Qualitative research is more suitable for understanding the practice of sustainability reporting. The safety aspect in oil companies' corporate sustainability reporting becomes the focus of interest.

> *"For the qualitative management accounting researcher, "reality" is created by organizational actors' interaction with each other and their contextual environment" (Parker, 2012, p.55).*

This study looks at the phenomenon from the subjectivist point of view. Hatch and Cunliffe (2006) define this ontological assumption about reality:

> *"[…] people create and experience realities in different ways because individuals and groups have their own assumptions, beliefs, and perceptions that lead them to do so" (Hatch and Cunliffe, 2006, p.12).*

The phenomenon of sustainability reporting is the result of active interaction between those actors or persons who want to obtain knowledge, those who think they know what kind of knowledge the other parties wish and those who provide guidance about how to construct a report. Reports are not a direct answer or

response to stakeholders. Their content is interpreted during the interaction process and discloses a representation of the knowledge of different actors.

American sociologist Herbert Blumer developed the term “symbolic interactionism” and conceptualized it in three premises:

> *“Human beings act towards things on the basis of the meanings that the things have for them” (Blumer, 1986, p.2);*
>
> *“These meanings are the result of social interaction in human society” (Puxty, 1993, p.60, citing Blumer);*
>
> Meanings are modified and formed through an interpretative process by each individual or actor (Blumer, 1986).

It is argued that this study can be attributed to the symbolic interactionism theoretical paradigm. First, from a managerial point of view, sustainability reporting offers a tool for influencing stakeholder actions or behavior. Therefore, one can say that actors involved in sustainability reporting production “act on the basis of the meanings”. The content of in the report is formed through adjusting different interaction processes. Stakeholder dialogue can be seen as an example of such interaction.

Second, meaning is intrinsic to the thing that has it. A sustainability report is an objective thing in itself and is the result of a formation of meanings of actors. These meanings themselves interact in society. A certain focus of the sustainability report can be an example of this. It is discussed and reconsidered by actors with regard to the relevance to a particular context.

Third, sustainability reporting is a social creation formed through interaction between people. Stakeholders have their needs, they express their needs in different ways, and standard-setters interpret the needs of stakeholders and of companies in order to guide the object of sustainability reporting. In turn companies

interpret their stakeholders' needs in their own way, interpret how to follow various guidelines and then act in accordance with their own opinion and attitude towards sustainability reporting. Following Blumer (1986), first, the actor indicates to himself the things towards which he is acting and, second, communicates and interprets for himself the meanings that become the creation of the action.

Sustainability reporting is the form through which reality can be accessed. This is the result of interaction between the various actors. The meanings are formatted during the interaction process and located inside this object. Therefore, in order to gain some understanding about sustainability reporting it seems relevant to choose and observe a certain focus meaningful in a particular context. In addition, a sustainability report is a narrative construction. This means that the report contains non-financial texts, so it is possible to study the representation of the focus through the text.

> *"Interactionist explanations reflect the point of view of the author" (Denzin, 2004, p.85).*

Thus the meaning is accessed by utilizing the model constructed for this context, interpreted and ascertained by the author.

Sustainability reporting is constructed by actors and persons. However, this study does not focus on how the reports are being constructed. Instead the study has chosen to consider that sustainability reporting is a symbol of the result of interaction between actors. Thus this can become the key for understanding the reality. The empirical analysis focuses on the questions "what?" (What do the reports constitute? What do they reflect?) and the discussion focuses on the question "why?". Using this approach enables a discussion about standard-setter influences and stakeholders' concerns relying on the symbolic representation of the chosen focus.

Having defined the ideological position it is important to discuss the methodological underpinnings. The empirical method consisting of the qualitative research design is outlined in the next section.

3.2 Empirical method strategy

The empirical method strategy for this case study includes qualitative research techniques. The interviews have been conducted in order to obtain background material and a qualitative content analysis became the method to approach the research question.

Following the catastrophe in The Gulf of Mexico President Obama's National Commission on the BP Deepwater Horizon Oil Spill completed their investigation[17] in January 2011 publishing their final report. The researcher was fortunate enough to meet a member of this Commission, the chairwoman of The Arctic Research Commission for the following 4 years and the Chancellor of the University of Alaska Anchorage, Fran Ulmer. This opportunity arose through the "Arctic Dialogue" conference[18] arranged by University of Nordland. Her opinion about the reporting of safety and risk issues by oil companies was very valuable since the Commission had specialized on giving recommendations how to prevent oil spills. This interview provided valuable background material for strengthening and legitimizing my choice of research focus.

The interview was conducted using open-ended questions. In-depth response and explicit opinion were expected as results. A list of questions asked is hereby attached in Appendix 4. The answers were tape-recorded with the permission of the

[17] The National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling was established by the United States President Barack Obama on May 21st, 2010 and had the task of providing recommendations on how the US can prevent and mitigate the impact of any future spills resulting from offshore drilling.

[18] The "Arctic Dialogue" conference was arranged by University of Nordland in Bodø on 22nd-24th of March 2011.

respondent. The background interview confirmed the importance of production safety issues disclosure for oil and gas companies. The respondent also expressed an opinion about the advantages such disclosure could have had for different stakeholders.

After the focus had been chosen the next important step was the choice of a case company for my investigation. Rosneft Oil Company is the largest company in oil extraction in Russia and it is one of the so called "national champions", making it relevant to choose this company for the case study of production safety issues representation in the context of the Russian oil and gas industry. A more detailed description of Rosneft is provided in the next section. I describe their market share, their mission as a strategic company, and general background information.

Conducting interviews with representatives of Rosneft became another preparatory step prior to the content analysis. An opportunity then arose to conduct 5 unstructured open-ended interviews[19]. All 5 respondents were managers at Rosneft's different departments. The purpose of a "small sample interview" was to ask them their opinion about the sustainability reporting phenomenon in practice. Saunders et al. (2000) label such a type of interaction as a "non-directive interview". Here the interviewees are given the opportunity to talk freely about their beliefs in relation to the topic area. The background material from the interviews strengthens the literature review considerations. Due to the issue of sensibility regarding the candor of the judgments for Russian managers, their anonymity was kept guarded. The interviews were not recorded and notes were made afterwards.

The background material gave me an understanding of the sustainability reporting phenomenon in the context of an oil company. The next step was to conduct an

[19] The interviews were held in Bodø during Rosneft's study trip to Bodø as a part of a MBA program. The corporate MBA program "International business in the oil and gas sector" is taught jointly with the International School of Economics and Law of the Moscow State Institute of International Relations (Russia) and Bodø Graduate School of Business (Norway).

analysis of production safety issues representation in the case of Rosneft. By my research method it was expected to find out what is constituted or what is represented in the content of sustainability reports and sustainability reporting standards with regard to production safety issues.

One of the best methods to find out what is contained in disclosed information is considered to be content analysis. Krippendorff (2004) defines content analysis as

> *"[…] a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (Krippendorff, 2004, p.18).*

Content analysis deals with a systematic examination of communicative material (Mayring, 2004). There are different types of content analyses and different levels of complexity. First of all, content analysis can be applied in both qualitative and quantitative studies. Methodological options would therefore vary. In general, quantitative content analysis method is used for deductive analyses and qualitative – for inductive analyses (Kondracki et.al., 2002). The information contained in sustainability statements is non-financial and narrative. The text describes current sustainability practices, experience and narratives.

> *"By virtue of its [qualitative content analysis] ability to use non-quantifiable frequencies, qualitative exegesis also penetrates textual dimensions which are completely inaccessible to quantitative techniques" (Kracauer, 1953, p.639).*

The narratives' meaning is not accessible using quantitative analysis. The objective of finding answers in sustainability reporting in a case company has defined the qualitative character of the research. Therefore qualitative content analysis has been chosen for my investigation.

Qualitative content analysis can examine the manifest or latent content of a text. The basic distinctive idea of qualitative content analysis is that the systematic nature of maintaining it means not making over-hasty quantifications (Mayring, 2004). Here several options may be available. For instance, Hsieh and Shannon (2005) generally distinguish between three approaches in qualitative content analysis methods – conventional, directed and summative.

Conventional analysis is mostly used when there a lack of theory exists around the research phenomenon. Codes or keywords are to be defined from the observation, during data analysis. This method allows describing phenomenon directly from the practice. A possible disadvantage of this method could be its limitations with respect to developing a complete understanding of the context without imposing preconceived categories or a theoretical perspective (Hsieh and Shannon, 2005). In the case of sustainability reporting such an analysis can fragment the disclosed categories. It seems that this method does possess advantages when studying a certain amount of reports in order to build theoretical propositions about the categories. In the case of just one company this does not seem appropriate.

The directed content analysis obtains research codes from existing theory. The purpose of this method is to validate or extend conceptually an existing theoretical framework (Hsieh and Shannon, 2005). The text in sustainability reports describes current sustainability practices, experience and narratives guided by different standards and recommendations and not unified by accounting laws. Thus, in this case study, the content analysis can hardly be directed by standards codes or practice.

Summative content analysis is conducted with research codes identified in advance. The framework is then built up around these research codes. Hsieh and Shannon (2005) explain that the purpose of summative content analysis is to understand the contextual use of the keywords or content. In my case study it is appropriate to use

a summative content analysis approach. Using this method it is possible to use the research model identified from the literature review. Thus, my analysis is directed by the model dimensions e constructed with regard to production safety issues.

The summary of my empirical method is represented in Table 3.1.

Method	Technique	Aim
In-depth interview	“Open-ended” questions	Background material
“Small sample” interviews	“Open-ended” questions	Background material
Content analysis	Summative qualitative approach	Studying representation of the production safety issues

Table 3.1 Empirical method

In order to obtain background material one in-depth interview and some small sample interviews were conducted using the open-ended questions technique. The representation of production safety issues in the case company was approached using the summative content analysis technique. The analysis is guided by the 5 model dimensions formed from the Ceres investors’ investigation. The text form these queries was interpreted in relation to the case company. The characteristics of the chosen case company Rosneft are described in the next section. The research codes are interpreted according to Rosneft’s special characteristics and the analysis technique is explained.

3.3 The characteristics of Rosneft Oil Company

Russia has ten large vertically-integrated companies carrying out almost all oil and gas extraction and production in the country. Each large oil producer holds a great stake in the whole industry. The list of production performance of the 5 largest oil and gas companies is presented in Table 3.2. This table shows the amount of millions of tons of oil the largest Russian oil companies have produced during the last couple of years (oil recovery).

	Oil recovery, millions of tons	
	2010	2009
Rosneft	122,7	116,3
Lukoil	90,1	92,2
TNK-BP	71,7	70,2
Surgutneftegaz	59,5	59,6
Gazprom neft	29,9	29,9

Table 3.2 Oil recovery in Russia (http://www.topneftegaz.ru/analisis/view/7735, accessed 01.09.2011)

The largest oil and gas companies play a significant role in Russia's total profits. They can continue their work successfully even during an economic crisis. To understand how large oil "national champions" are in Russia, financial performance indicators for the last couple years are presented in the following Table 3.3.

	Revenue, USD bln	Net income, USD bln	Revenue, USD bln	Net income, USD bln
	2010	2010	2009	2009
Rosneft (US GAAP)	63,1	10,4	46,8	6,5
Lukoil (US GAAP)	105,0	9,0	81,1	7,0
TNK-BP (US GAAP)	44,6	5,8	34,8	5,0
Surgutneftegaz	19,6	5,2	16,6	4,7
Gazprom neft	32,9	4,7	24,3	4,7

Table 3.3 Financial performance of the largest oil corporations in Russia (The information was fetched from corporate web sites, being accessed on 01.09.2011)

In 2008 the Russian government issued a list of strategic companies for The Russian Federation. They were called privileged corporations. The list included several oil enterprises. Amongst these there were not just state-owned or state-controlled companies, but also many private ones which were later excluded from the list. The list has been steadily reduced since then. All the companies on the list were promised comprehensive financial support – assistance in the form of preferential loans and government guarantees, as well as government contracts, additional capitalization, and implementation of social programmes. The strategic status means that the company must be under the control of the state. This means that it is in fact owned by the state. By removing a company from the strategic list the government actually agrees to the company's privatization. The main advantage of holding strategic status is that it provides a guarantee for state support. Such an

enterprise can expect the federal government always to support them by placing government orders, providing temporary subsidiaries, or grants.

Rosneft is a leading company in the field of oil extraction in terms of production, revenues and incomes by 2010. The biggest oil producer in Russia is vertically-integrated and has a complex structure with many subsidiaries making the company responsible for the entire complex production process. The company is included on the Russian Government's list of strategic enterprises and organizations. Rosneft is actually a case of an oil "national champion". This company fits the bill of being a suitable case for this study. Besides this access to data was possible due to the cooperation between the company and University of Nordland, and in particular with The High North Center of Business / Bodø Graduate School of Business. The corporate MBA programme "International business in the oil and gas sector" that has been jointly developed gave me an opportunity to gain access and background material to the study.

The state holds shares in this company ensuring support and control. The actions of Rosneft are then much influenced by the state. Vladimir Putin (at this time Russian Prime Minister) stated that the national oil and gas sector carries the social burden. He declared:

> "We have state-owned companies with state participation and control - "Gazprom"[20] and "Rosneft", and they now play an important role" *(RIA-Novosti, 06.02.2012[21]).*

In 1995 the president of Russia converted a previously state-run enterprise Rosneft into an oil joint stock company with the same name. Rosneft has itself become a vertically integrated oil company with its own array of exploration, production,

[20] Gazprom is an open joint stock company in Russia. It is the world's largest extractor of natural gas and one of the largest companies in the world (see www.gazprom.com)

[21] Available at http://www.rosneft.ru/news/news_about/06022012.html, accessed 09.03.12.

refining, transport and service entitlements (International Business Publications, 2011). From 1995 to 1998, the Rosneft management changed constantly and it is now considered that the company's capital was left unmanaged. The Rosneft corporate website describes[22] that oil production fell and oil refining collapsed to just one third of production capacity. During Putin's government oil production rose, the industry began to accumulate wealth and international influence and move closer to the interests of the Russian state (Goldman, 2010). In December 2004, the company acquired a controlling share in Yuganskneftegaz[23], one of the largest oil production enterprises in Russia. The acquisition of this asset, along with the significant growth of its own production, ensured further growth for Rosneft. The company became the second-largest producer of oil and gas in Russia. In April 2006, Rosneft announced plans to consolidate 12 subsidiaries engaged in exploration and production, as well as in the refining and sale of oil and petroleum products. In 2006 Rosneft conducted one of the largest initial public offerings (IPO) in financial history after placing nearly 15% of its shares on the Russian Trading System and the London Stock Exchange. In 2008, Rosneft strengthened its leadership and posted another year of outstanding financial results as well as crude oil and gas production growth. By the 2010, Rosneft remains in first place amongst Russian and foreign competitors measured by rates of oil production growth. The company is also at the same time initiating new refining projects.

Now Rosneft is still a vertically integrated company with a complex structure and it is also state-controlled[24]. The state holds 75.16% in the company as the largest

[22] This paragraph is based on the Rosneft history overview on the corporate website. Available at http://www.rosneft.com/about/history/, accessed 01.02.2012.

[23] Yuganskneftegaz – a wholly integrated subsidiary of Rosneft that owns and operates the second largest oil production complex in Russia. It was formerly the most important production subsidiary of Yukos (this Russian petroleum company went bankrupt in 2003), was then expropriated by the Russian government and handed over to Rosneft.

[24] This paragraph is based on the overview "Rosneft at a glance" on the corporate website. Available at http://www.rosneft.com/about/Glance/, accessed 01.02.2012.

shareholder is OJSC Rosneftegaz[25] which is fully owned by the Russian Government. 15% of shares are publicly traded. Rosneft is listed on the "Moscow Interbank Currency Exchange"[26] and the "Stock Exchange "Russian Trade System"[27], and is trading Global Depositary Receipts (GDR) on The London Stock Exchange. Rosneft explores for and produces oil and gas in all the key oil and gas regions of Russia, including West Siberia, Southern and Central Russia, Timan-Pechora, East Siberia, the Far East, and the Arctic sea shelf. The Company is also engaged in projects in Kazakhstan, Venezuela, Algeria, and the United Arab Emirates. Rosneft's seven major refineries are spread across Russia, from The Black Sea coast to The Far East, whereas the company's retail network encompasses 40 Russian regions. Rosneft brought the Vankor field in the Krasnoyarsk region on stream and in 2009 the field was officially launched. Vankor is one of Rosneft's most important projects, and is also one of the largest industrial projects in the whole of Russia. The field is important for the development of the whole oil and gas industry and for the Russian economy as a whole. Rosneft is Russia's petroleum industry leader, and ranks among the world's top publicly traded oil and gas companies.

Being a major oil corporation, Rosneft is committed to the CSR idea. The company has a "Sustainability policy" defining sustainability goals, objectives, and principles. According to the Sustainable Development section of the corporate website[28] there are significant impacts in all respects of sustainable development which the company calls "sustainability factors":

[25] OJSC Rosneftegaz is in 100% federal ownership. The Russian Government's direct share (through the Federal Agency for State Property Management) in Rosneft's equity is 0.000000009%. Rosneftegaz operates as a holding company through its subsidiaries engaged in oil and gas exploration, production and distribution. The company is based in Moscow, The Russian Federation.

[26] Moscow Interbank Currency Exchange (MICEX) was one of the largest universal stock exchanges in the Russian Federation and Eastern Europe from 1992.

[27] The Russian Trading System (RTS) was a stock market established in 1995 in Moscow. In 2011 MICEX merged with RTS Russian Trading System creating the "Moscow Exchange".

[28] see http://www.rosneft.com/Development/, accessed 01.06.2011

Key economic impacts:	Key environmental impacts	Key social impacts
- considerable contribution to ensuring Russia's energy security and petroleum product supplies to more than 50 regions; - the Company is amongst Russia's major taxpayers, with a total contribution to the consolidated national budget exceeding USD 40 bln in 2008; - has significant influence on the pipeline, machine-building and service markets; - the Company's subsidiaries are major employers in some Russian regions and	- air pollution (air contaminant and greenhouse emissions); - impacts on water resources (water consumption for process needs; water pollution resulting from operations, leakages and accidents); - land use for industrial development; - potential impacts on biodiversity; - pollution resulting from consumption of Company-produced petroleum products (indirect impacts).	- the company ensures stable employment and offers competitive compensation and social assistance; - promoting ethical social and business practices through strict observance of human rights, equality, transparent supplier and contractor relations, and a socially responsible approach to restructuring the Company and its subsidiaries and affiliates; - contributing to educational and cultural development of the host regions; supporting

serve as local economic mainstays for several municipalities, thus making a considerable contribution to the sustainability and investment attractiveness of such localities.		sports and promoting a healthy lifestyle; - charitable support of local communities and cultural institutions; - significant contribution to supporting the traditional lifestyles of Northern indigenous communities in the host regions.

Table 3.4 Key sustainability factors (adopted from the Rosneft website)

Recognizing the concept and value of sustainability factors Rosneft produces "sustainability reports" with information about how the company succeeded in the development of these impacts.[29] It seems that Rosneft pays much attention to the development of sustainability reporting.

Also, according to Rosneft policy, the company pays special attention to industrial safety and environmental protection. The company is also committed to ensuring safe working conditions and providing comprehensive health care assistance to its employees. Rosneft applies modern technology and enhancing production methods to create a safe and healthy working environment, as well as to minimize the environmental impact of its operations and the risk of industrial accidents and other emergency situations[30]. These issues emphasize the company's intention to be

[29] A more detailed description of Rosneft sustainability reports is provided in Chapter 5.

[30] The information is based on an overview of social responsibility presented on the Rosneft corporate website. Available at http://www.rosneft.com/Development/social/, accessed 01.02.2012.

responsible with regard to safety issues during the production of oil. It seems that production safety issues representation can be well illustrated by the case of Rosneft. This will be demonstrated using the content analysis technique. Therefore the next section is aimed at describing this technique in more detail.

3.4 Content analysis technique

Content analyses can be conducted differently depending on the techniques chosen (Gray et al, 1995; Krippendorff, 1980). In addition to the differences caused by methodological approach choices, there are also differences caused by technique choices. It is important to define which units are to be analyzed and how the text is to be codified and interpreted. Qualitative analysis also requires a discussion of the reliability issue.

3.4.1 Units of analysis

As discussed in Chapter 1 it has been decided to employ an embedded case study design. There are two units of analysis. This means that there are two main steps in the content analysis. The first one describes the representation in norms, and the second one describes the representation in practice. It is necessary to define which documents are included in the analyses.

The first step here is to determine the content analysis for the norms system. Sustainability reporting in Rosneft is organized according to several guidelines and indicators. Sustainability reporting in Rosneft is governed by: Sustainability Reporting Guidelines by Global Reporting Initiative (GRI), Oil and Gas Industry Guidance on Voluntary Sustainability Reporting by IPIECA (IPIECA) and Russian Union of Industrialists and Entrepreneurs Indicators (RUIE). These sustainability reporting standards are analyzed in this study. These norms originate from various different sources and are presented in Table 3.5.

	Russian	International
Oil and gas industry	---	IPIECA
General	RUIE	GRI

Table 3.5 Sustainability reporting norms

Two guidelines with sustainability reporting indicators – GRI and RUIE have general application on a global scale and accordingly then also apply in the Russian setting. IPIECA is global, but focuses on the oil industry. The analysis is conducted with the aim of finding out how production safety issues are represented in these norms. Then it is possible to analyze their various different influences on the content of the practice.

In the second step of the content analysis sustainability reporting practice is analyzed. Most previous research has been conducted on the basis of annual reports analyzing CSR disclosures in annual reports. Unerman (2000) remarks that recent studies have also analyzed other forms of reporting than annual reports. In summary these studies have included annual reports, corporate advertisements and brochures, environmental reports, press reports, securities exchange filings, third party verification statements, and environmental policy statements. Lately some research papers have started to focus on specific sustainability reports analysis as well.

> *"In an era when companies produce stand-alone reports reflecting aspects of their environmental performance and/or social impact, future studies focusing exclusively on annual reports might not produce particularly relevant results" (Unerman, 2000, p.674).*

The research purpose of this study is related to the sustainability reporting process. The practice of sustainability reporting includes rather more activities than non-financial voluntary reports. Buhr (2007) suggests including advertising material, press releases, security filings, voluntary environmental or sustainability reports, glossy brochures for employees and public related to sustainability reporting activities. Rosneft's sustainability reporting contains annual sustainability reports, annual reports, sustainable development information on their web site and other relevant documents. The easiest way of accessing such information for external stakeholders is searching for it on the company's corporate web site.

A stand-alone sustainability report and an annual report, in particular its CSR chapters, have been chosen for further analysis. This choice has been made based on a number of reasons discussed in previously conducted studies (see e.g. Nasi et al., 1997). First, the annual and sustainability reports provide an unobtrusive and easily accessible source of information and therefore also a good measure. Second, they are an essential part of the company's public image strategy. Third, the reports are a reasonable surrogate for corporate social performance. Finally, sustainability and annual reports offer a reasonable measure of the attention and priority given by managers, and thus also their intentions to disclose the information to their stakeholders.

The empirical analysis is conducted based upon the most recent sustainability statements available and the standards referred by the statements. Thus I have chosen to analyze the non-financial reporting standards developed by RUIE in 2008, the Oil and Gas Industry Guidance on Voluntary Sustainability Reporting by IPIECA/API 2010, the "GRI G3" guidelines issued by GRI, the most recently available analysis of the sustainability report for Rosneft (2010) and a CSR section in the annual report of 2010. The 2 steps in this analysis are presented in Table 3.6.

1st step – summative content analysis of sustainability reporting "norms"	2nd step – summative content analysis of sustainability reporting "practice"
1. Non-financial reporting standards 2008 by the RUIE	1. Sustainability report 2010
2. Oil and Gas Industry Guidance on Voluntary Sustainability Reporting 2010 by IPIECA/API	2. CSR part in the annual report 2010
3. GRI G3 guidelines	

Table 3.6 Content analysis

Hereby two units of the analysis are embedded in this study. The first one represents sustainability reporting norms, the second one – sustainability reporting practice. Having described which documents are included in these units, the next important step is to describe how the text is categorized.

3.4.2 Texts codification

The research codes for the content analysis are decided on and identified with the help of the research model presented in Chapter 2. The 5 dimensions in the research model are relevant for becoming dimensions of the analysis. As described previously these 5 dimensions are generated from the Ceres investors' coalition investigation. The original investigation requests information from the biggest oil companies specialized on deepwater drilling operations. Big accidents remind the whole industry about the importance of managing risks associated with oil and gas operations. The oil industry is indeed a risky business. Large oil companies are in the risk business whatever the kind of drilling activities they are engaged in – whether it is deepwater exploration, shallow-water offshore, or onshore. In this section I discuss how my research codes are drawn from the Ceres questions. This was done

by adapting these questions to fit my chosen case company. This was mainly done by focusing on the notion of the type of operation, for example, deepwater, shallow-water or offshore drilling. In this way it was possible to find information in Rosneft relevant to all its kinds of drilling operations. The original text is derived from the Ceres sample letter[31]. Moving further all 5 dimensions are illuminated. The most important words in the original text on the left hand side are italicized. This is done in order to demonstrate the logic of how the research codes are constructed. In the right hand column the research codes are presented. It also seems necessary to enumerate them.

The first part is devoted to investments in spill prevention and response. Potential investors assume that it is important to disclose investments in research and development with respect to safer technologies, accident prevention and response technologies. This is referred to as the first code for the content analysis.

Ceres questions	Research codes
1. *Investment* in spill prevention and response a) How much money has Apache[32] invested in each of the last three fiscal years *on research and development with respect to: safer offshore drilling technologies; technologies related to rig safety and accident prevention; and spill response technologies?*	1. Investment of Rosneft in research and development with respect to: 1a) safer drilling technologies; 1b) technologies related to rig safety and 1c) accident prevention; and spill response technologies.

Table 3.7 The 1st dimension of research codes. Investments

[31] The Ceres sample letter is attached in the Appendix 1. Available at http://www.ceres.org/files/Oil_and_Insurance_Investor_Letters_2010.pdf, accessed 20.05.2011.

[32] Apache Corporation is an American independent oil and gas corporation. Apache was among the global oil organizations which received letters from the Ceres investors' group.

The second dimension is called Spill contingency plans. “Deepwater” and “offshore” blowouts are generally categorized as “blowouts”. The second dimension of research codes is devoted to the information about plans and current technology for managing accidents.

CERES questions	Research codes
2. *Spill contingency plans* a) Detail Apache’s plan *to manage* deepwater *blowouts*. What *steps is the company taking, including steps in partnership with its industry peers, to study and develop improved ways to contain and manage spills and blowouts* offshore? b) How often does Apache *update its spill/disaster contingency plans*? Does the board approve those updates? c) Does Apache believe that *current technology for cleaning up oil spills at the surface* is adequate? If not, what *plans* does the company have *to improve spill cleanup technology*, either on its own or by working with industry peers? d) What *additional information* should *investors* consider *in evaluating* Apache’s *policies, practices and management systems for spill prevention and response*?	2. Spill contingency plans 2a) Details concerning Rosneft’s plan to manage blowouts. Steps the company is taking, including steps in partnership with its industry peers, 2b) to study and develop improved ways of containing and managing spills and blowouts. 2c) Frequency and approval of update of spill/disaster contingency plans. 2d) Current technology for cleaning up oil spills on the surface and 2e) plans to improve spill clean-up technology. 2f) Additional information for investors in evaluating Rosneft’s policies, practices and management systems for spill prevention and response.

Table 3.8 The 2nd dimension of research codes. Spill contingency plans

The third dimension discusses the lessons learned from the BP blowout. They are specifically directed at the implemented or planned changes in offshore risk management, well-designs, drilling and completion procedures, and disaster response plans. This dimension also includes information about the company's position and regulation support for The Gulf of Mexico drilling moratorium[33]. It seems that the catastrophe has not directly influenced the activities of Rosneft because the company had no drilling operations in The Gulf of Mexico. Nevertheless, an oil company's actions with regard to health, safety and environmental (HSE) performance are of interest for the external stakeholders, in particular investors. In order to adapt the text along this dimension in relation to research codes the words "and other incidents" are added and the issue s of the 2010 Moratorium is taken away from the codes.

CERES questions	Research codes
3. *Lessons learned from* the BP Macondo well[34] blowout a) What *lessons has the company learned from the BP spill*? Have those lessons caused Apache *to reassess* its offshore *risk management*, *its well designs and drilling and completion procedures*, or its *disaster response plans*? If so, what changes have been made or are planned?	3. Lessons learnt from the BP spill or other incidents 3a) Lessons learnt from the BP spill or other incidents causing Rosneft to reassess its risk management, its well -designs and drilling and completion procedures, or its disaster response plans.

[33] 2010 United States deepwater drilling moratorium – a 6 month moratorium on all deepwater offshore drilling on the outer Continental Shelf in response to the 2010 oil spill in The Gulf of Mexico.

[34] The Macondo well – the Macondo Prospect (frequently abbreviated to MC252) is an oil and gas prospect in The Gulf of Mexico where the rig explosion occurred in April 2010.

b) Based on current information, please describe how Apache's deepwater well designs, drilling and completion procedures differ significantly from BP's Macondo well with *regard to environmental, health and safety performance and safeguards*. c) The BP spill and the resulting Gulf of Mexico drilling moratorium suggest all offshore operators will be penalized for the mistakes made by weaker operators. Is Apache taking any steps to raise the bar for performance by the offshore oil and gas industry as a whole? Does the company support improved regulation, and improved enforcement of existing regulation, in the offshore environment both in The Gulf of Mexico as well as internationally? If so, what changes to these regulations and enforcement does the company support?	3b) Rosneft's actions with regard to health, safety and environmental (HSE) performance.

Table 3.9 The 3rd dimension of research codes. Lessons learned from the BP oil-spill or other incidents

The fourth dimension of research codes is devoted to contractor selection and oversight. The specification for offshore drilling is here removed from the codes in order to obtain information about drilling in general. Such questions can then be important for the case company Rosneft. The main point here is to find out if there are specific corporate actions to manage safety contractor selection and oversight procedures.

CERES questions	Research codes
4. *Contractor selection and oversight* a) What systems does the company have in place to *manage* and *evaluate* the *health, safety and environmental (HSE) policies, procedures and performance of contractors involved in the drilling* and service of offshore wells? Please describe how HSE criteria are weighted in the selection process and how due diligence is performed prior to hiring contractors.	4. Contractor selection and oversight 4a) Management and evaluation systems (criteria process) for health, safety and environmental (HSE) policies, procedures and performance of contractors involved in drilling.
b) What *steps* does Apache take to *verify that its contractors perform their services correctly and that their safety systems and equipment are in operating order*? In addition, please describe *how contractor compensation is determined, including whether incentives are used*. If *compensation or bonuses are tied to HSE performance*, please describe.	4b) Steps to verify that contractors perform their services correctly and that safety systems and equipment are in operating order. In addition, description of how contractor compensation is determined, including whether incentives are used. Description of whether compensation or bonuses are tied to HSE performance.

c) Does the Board *require third-party independent monitoring and auditing of HSE functions for the company's own* offshore *operations, as well as for contractors*?	4c) Any requirement to third-party independent monitoring and auditing of HSE functions for the company's own drilling operations, as well as for contractors.

Table 3.10 The 4th dimension of research codes. Contractor selection and oversight

The fifth dimension of research codes concerns government and management systems. Offshore specification of oil and gas operations is generalized for learning about oil and gas operations. These issues focus on regulations and management of HSE issues crucial in the wake of The Gulf of Mexico oil spill. The question devoted to the "Whistleblower programs"[35] is not practiced in Russia, so it has been removed from the survey. The question about disclosing material risks to US Securities and Exchange Commission[36] has also been removed because it is not relevant to the case company.

[35] "Whistleblower programs" are popularly practiced in large US companies by protecting whistleblowers. This practice is currently recommended in US but it not practiced in Russia, at least by Russian companies.

[36] The U.S. Securities and Exchange Commission (frequently abbreviated SEC) is a federal agency with primary responsibility for enforcing the federal securities laws and regulating the securities industry, the nation's stock and options exchanges, and other electronic securities markets in The United States (see www.sec.gov).

CERES questions	Research codes
5. *Governance and management systems* a) What *role* does *the company's board of directors play in overseeing the management of HSE risks* faced by Apache with respect to its offshore oil and gas operations? Is oversight of these risks assigned to a *specific committee* of the board? Is there *anyone on the board with specific expertise in management of these HSE risks*? How does the *board review these possible risks and the company's systems* and what *reviews*, if any, have been done since the BP Macondo well spill? b) Does the company have *specific, quantitative targets for managing* offshore oil and gas-related *HSE risks*? c) Do the *compensation and incentive packages for senior management include any specific links to HSE performance results*? If so, please describe.	5. Governance and management systems 5a) The role of the company's board of directors in overseeing the management of HSE risks faced by Rosneft with respect to its oil and gas operations. 5b) Description of whether any specific committee of the board has been assigned to focus on these risks. 5c) Description of whether anyone in the board has specific expertise in management of these HSE risks. 5d) Description of how the board reviews these possible risks and the company's systems and availability of the reviews. 5e) Specific, quantitative targets for managing oil and gas-related HSE risk. 5f) Description of whether there are any specific links between compensation and incentive packages for senior management and HSE performance results.

d) Where HSE regulatory requirements vary by jurisdiction for offshore oil exploration and production, how does Apache *design its wells and safety systems for highest safety performance*? e) Please describe your policies and procedures to ensure that whistleblower complaints are addressed, and whistleblowers are protected from retaliation. Do these policies and procedures apply to contractors? Who is ultimately responsible for ensuring that this system is functioning properly? Does the Board of Directors receive any reports relating to significant concerns raised through this system? f) What systems does your corporation have in place to ensure that material risks related to offshore drillings are disclosed in Securities and Exchange Commission filings?	5g) Wells and safety systems design for highest performance with a variety of HSE regulatory requirements by jurisdiction for oil exploration and production.

Table 3.11 The 5th dimension of research codes. Governance and management systems

The research codes are constructed in order to search for and describe the representation of production safety issues. The concept is divided into 5 dimensions. The research codes are used in the analyses of both sustainability reporting norms

and practice. Having enumerated the codes it is possible to provide results in an analytical way. The interpretation of data is described in the next section.

3.4.3 Data interpretation

According to prior research, complete, reliable and meaningful data for further content analysis is prepared using sentences for coding (Unerman, 2000; Milne and Adler, 1999). This concern is important for quantitative techniques. This study elaborates another technique. During the codification procedure the whole meaning i.e. whether it is the whole sentence or a part of the sentence is considered.

> *"Qualitative analysis does not seek to shut itself off from quantitative analytical procedures, but attempts to incorporate them into the analytical process in a justified way" (Mayring, 2004, p.267).*

Thus, the text in the norms and practice documents relevant to one of the five dimensions was coded and allocated a certain code name. The codes are then given points within each dimension. Then there a simple calculation of disclosure percentage within each group was conducted. The numerator refers to the number of represented points within each dimension. The denominator refers to the total possible points within each dimension.

For example, the first dimension consists of 3 codes (1a), (1b) and (1c). Each meaning has a point. If the texts refer to two research codes of the three, then this dimension is weighted using 67%. This means that 67% of the focus on investments in research and development is found in the particular document.

Table 3.12 demonstrates the list of research codes with the total possible points within each dimension.

Number of points	Research codes names	Total possible points
1st dimension "company's investments in spill prevention and response activity"		3
1 1 1	(1a) Investment of Rosneft in research and development with respect to safer drilling technologies; (1b) Investment of Rosneft in research and development with respect to technologies related to rig safety and accident prevention; (1c) Investment of Rosneft in research and development with respect to spill response technologies.	
2nd dimension "Spill contingency plans"		6
 1 1 1 1 1 1	2. Spill contingency plans (2a) Details concerning Rosneft's plan to manage blowouts. Steps the company is taking, including steps in partnership with its industry peers, (2b) to study and develop improved ways of containing and managing spills and blowouts. (2c) Frequency and approval of update of spill/disaster contingency plans. (2d) Current technology for cleaning up oil spills on the surface and (2e) plans to improve spill clean-up technology. (2f) Additional information for investors in evaluating Rosneft's policies, practices and management systems for spill prevention and response.	

3rd dimension "Specific spill response plans"		2
1 1	(3a) Any lessons learned from the BP spill or other incidents causing Rosneft to reassess its risk management, its well designs and drilling and completion procedures, or its disaster response plans. (3b) Rosneft's actions with regard to HSE performance.	
4th dimension "Contractor selection and oversight"		3
1 1 1	(4a) Management and evaluation systems (criteria process) for the HSE policies, procedures and performance of contractors involved in the drilling. (4b) Steps for verification that contractors perform their services correctly and that safety systems and equipment are in operating order. In addition, description of how contractor compensation is determined, including whether incentives are used. Description of whether compensation or bonuses are tied to HSE performance. (4c) Any requirement of third-party independent monitoring and auditing of HSE functions for the company's own drilling operations, as well as for contractors.	
5th dimension "Governance and management systems"		7
1	5. Governance and management systems (5a) The role of the company's board of directors in overseeing the management of HSE risks faced by Rosneft with respect to its oil and gas operations.	

1	(5b) Description of whether any specific committee of the board has been assigned to focus on these risks.	
1	(5c) Description of whether anyone in the board has specific expertise in management of these HSE risks.	
1	(5d) Description of how the board reviews these possible risks and the company's systems and availability of the reviews.	
1	(5e) Specific, quantitative targets for managing oil and gas-related HSE risk.	
1	(5f) Description of whether there are any specific links between compensation and incentive packages for senior management and HSE performance results.	
1	(5g) Wells and safety systems design for highest performance with a variety of HSE regulatory requirements by jurisdiction for oil exploration and production.	

Table 3.12 Dimensions with research codes for content analysis

Summing up then, in order to guide my content analysis research codes have been especially developed. For making sense of the data and drawing conclusions simple calculations are carried out. The results are interpreted as the percentage of production safety issues representation in sustainability reporting practice and norms. Thus, the results of practice and norms can be compared and further discussed.

3.5 The reliability issue

The reliability of data analysis in qualitative research is a debatable issue and should be addressed. Yin (2009) compares reliability with a final test with an objective that later investigations following the same case study procedures would arrive at the same findings. In general, reliability deals with the question of readers' trust of data analysis. It is hard to prove any reliability in a case study because any meanings depend greatly on the context. No proof in this issue exists with regard to the whole method itself and the findings.

Qualitative content analysis is conducted in this study bearing in mind officially published documents of organizations. According to Wolff (2004), documents are standardized artefacts intended for a defined circle of involved recipients.

> *"Official documents function as institutionalized traces, which means that they may legitimately be used to draw conclusions about the activities, intentions and ideas of their creators or the organizations they represented" (Wolff, 2004, p.284).*

The reliability of this study's analysis is enhanced by utilizing official documents in the content analysis. Reports and standards are in fact "naturally occurring data". As Silverman (2010) defined, this is data occurring in "non-research-generated" contexts. Such data defines the reality of each document. Once the documentary reality is established, or categorized, the analysis takes dynamics on its own without changing any consistency (Wolff, 2004).

This study uses sustainability reports issued by Rosneft, and guidelines issued by global and Russian organizations. These documents can be referred to as being produced in "non-research-generated" contexts. This means that this study did not cause any bias to the analysis. The results are in turn free of the actors' bias prepossessions.

Concerning the method technique, certain texts are not attributed strictly to one or another research code but, most importantly, related to the meaning of certain codes. The reliability of the codifying technique and analysis was secured by double-checking the coded texts. The results were also double-checked. The "yes/no" results were first summarized in a table and then the concrete references from the texts were added. The overall table with results is presented in Appendix 5 and discussed in detail in Chapters 4 and 5.

The reliability of the study problem is enhanced by conducting background interviews. The concept of production safety has not been studied explicitly in the field of prior sustainability research, although it does seem to be crucial in the context of oil industry. It was confirmed that the production safety issues are of a great importance for global oil companies and results are expected to be published routinely in corporate reports. The relevance of this question in the case company was also tested during interviews with Rosneft representatives.

3.6 Summary

Summing up this chapter, the ontological, epistemological and methodological underpinnings of the study have now been presented. This study aims to investigate the phenomenon of sustainability reporting. The study presents, moreover, a claim to be referred to in the context of the symbolic interactionism paradigm. Therefore, qualitative research methods have been chosen to approach the research question concerned. The data collection procedure began by conducting background interviews. Then a qualitative content analysis of norms, practice was conducted and results were compared afterwards. In order to be able to make meaningful conclusions about production safety representation, the analysis used the 5-dimensions model defined in Chapter 2.

The case study design is chosen for conducting this study. The characteristics of the case company “Rosneft Oil Company” are described. This company fits the requirements of being a Russian “national oil champion” well.

Studying production safety issues by analyzing the texts of sustainability reports means attempting to understand the results of the active interaction of different actors who have themselves constructed the representation of reality. This focus presumably affects stakeholders, and in particular investors. Thus my methodology position enables me to discuss possible interactions between practice and norms in the case of The Rosneft Oil Company.

Chapter 4 Production Safety Issues Representation in Sustainability Reporting Norms

The aim of this chapter is to give a description of the regulatory basis for production safety and risks disclosures, which is used by Rosneft Oil Company. The company conducts its sustainability reporting with the help of guidelines containing sustainability performance indicators. The sustainability reporting process at Rosneft is based on the following guidelines with indicators: the Sustainability Reporting Guidelines "G3" by Global Reporting Initiative (GRI), Oil and Gas Industry Guidance on Voluntary Sustainability Reporting 2010 by IPIECA/API (IPIECA), and basic performance indicators for non-financial reporting developed by the Russian Union of Industrialists and Entrepreneurs. In the appendices of the stand-alone sustainability report there is a table showing correspondence between the report and all the guidelines. The analysis considers three guidelines to which the Rosneft sustainability report 2010 referred.

The above-mentioned documents are examined with regard to research codes which construct the production safety representation in norms. The research codes are found in the texts and the production safety issues focus of the guidelines is described. The chapter contains an overview of sustainability reporting standardizing organizations; then each standard is presented with the analysis findings.

4.1 Overview of sustainability reporting standardizing organizations

As mentioned in the literature review, several frameworks for voluntary sustainability reporting have now emerged. Globally, a number of organizations provide recommendations for non-financial reporting and describe management principles concerning sustainability. There are also sector- and industry-specific initiatives issuing recommendations which can be highly relevant for companies in a

certain industry. Besides, initiatives in different countries also try to develop recommendations adapted to the features businesses have in this country.

Global Reporting Initiative (GRI) is considered in research literature to be one of the most dominant in sustainability reporting standardizing attempts (Owen, 2008). The GRI is a non-profit organization promoting economic, environmental and social sustainability. The mission of the GRI is to make sustainability reporting standard practice, by providing guidance and support to organizations. The organization abides by the principle of multi-stakeholder engagement and provides all organizations with a comprehensive sustainability reporting framework. The GRI framework is widely used all round the world. It includes the Reporting Guidelines which enable organizations to issue reports on their economic, environmental, social and governance performance. GRI was founded in Boston in 1997 by the US non-profit organizations the Coalition for environmentally responsible economies (Ceres) and the Tellus Institute[37]. In 2000 they launched the first version of their guidelines and later parted from Ceres becoming an independent institution. The second version called "G2" was issued in 2002 followed by the current version "G3" launched in 2006. In 2011 GRI published the G3.1 Guidelines – an update and completion of G3, with expanded guidance on reporting gender, community and human rights-related performance. GRI's current priorities focus on the mainstreaming of sustainability reporting. However GRI admits that many sectors face unique sustainability issues that should be captured in sustainability reports. These issues may not be covered in the original GRI reporting guidelines. Thus GRI issues so called "sector supplements" which provide recommendations for sector-

[37] The Tellus Institute - is a non-profit research and policy organization based in the United States. The Tellus Institute works to advance a global civilization of sustainability, equity and well-being through research, education, and action (see www.tellus.org).

specific content in reporting[38]. GRI works until now on the creation of their first oil and gas sector supplement. The only oil and gas guidance is provided by IPIECA.

The global oil and gas industry association for environmental and social issues (IPIECA) is the only global association involving both the upstream and downstream oil and gas industry on environmental and social issues. IPIECA was formed in 1974 following the launch of the United Nations environment programme and the acronym stood for "The International Petroleum Industry Environmental Conservation Association". IPIECA is the industry's principal channel of communication with the United Nations. IPIECA's membership covers over half the world's oil production. The mission of this organization is developing, sharing and promoting sound practices and solutions, enhancing and communicating knowledge and understanding, engaging members and other parties in the industry, and working in partnership with key stakeholders. Environmental and social issues require complementary participation and engagement by companies, governments and civil society. IPIECA conducts a large number of its activities by working with other organizations and incorporating input from stakeholders. By hosting "stakeholder dialogues" in 2001, 2003 and 2008, IPIECA has helped to explore sustainability issues for the oil and gas industry. IPIECA has published a lot of documents and technical reports to address these key issues. The organization launched "Oil and Gas Industry Guidance on Voluntary Sustainability Reporting" in 2005 in cooperation with the American Petroleum Institute and the International Association of Oil and Gas Producers and updated it in 2010 (IPIECA, 2010). IPIECA also focuses on providing practice publications and summaries including "Oil spill preparedness guidelines"[39].

[38] This paragraph is based on the overview at the GRI's website www.globalreporting.org, accessed 01.12.2011.

[39] This paragraph is based on the overview at the IPIECA's website www.ipieca.org, accessed 01.12.2011.

Apart from the global discussions there has always been a discussion around developing reporting guidelines specifically for Russia. The Russian union of industrialists and entrepreneurs (RUIE) launched the first such document with principles and reporting indicators. RUIE is an independent non-governmental organization in Russia and is also known there as RSPP - an acronym for the name in the Russian language. Its membership base consists of over 120 regional alliances and associations representing key industries of the economy, including the fuel and energy industry, the machine-building industry, the investment banking sector as well as the military industrial complex, the building industry, the chemical industry, light industries and the food industry. It has more than 328 thousand members representing industrial, scientific, financial and commercial organizations and individual members in all Russian regions. The main activities of RUIE include initiating efforts to improve existing legislation, maintaining regular contacts with authorities at federal and regional level, holding roundtables, forums, conferences and public discussions on key issues of business development in Russia, developing relations with business community organizations in other countries, coordinating efforts of Russian companies in improving the Russian investment climate, and keeping the general public informed of the place and role of Russian business. The Russian standard "Social Charter of Russian Business" was launched in 2004 at a RUIE congress, and updated in 2008. Since 2007 the document has been officially recognized as corresponding to the UN Global Compact[40] principles. Despite its youthful position, the Social Charter of Russian Business has gained many supporters amongst Russian organizations as listed on their web site in the database for socially responsible businesses. The basic indicators in the document are recommended for producing non-financial reports and for management activities in

[40] The United Nations Global Compact (UNGC) is a United Nations initiative to encourage businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation. The Global Compact is a principle-based framework for businesses, stating ten principles in the fields of human rights, labour, the environment and anti-corruption.

order to monitor, control and evaluate key issues of corporate performance (RUIE, 2008). These indicators have been developed bearing in mind international sustainability standards, Russian legislation and the practice of Russian and international companies in order to capture the specific characteristics of Russian business development[41].

The considered organizations have different standards but a similar aim. They strive to make businesses responsive and help various companies to issue sustainability reports. It would seem interesting to study how these documents represent production safety issues[42].

4.2 Production safety issues in IPIECA guidelines

The second edition of "Oil and gas industry guidance on voluntary sustainability reporting" was issued in 2010 by IPIECA/API. The guideline tells that oil and gas companies have been amongst the pioneers of sustainability reporting and have provided leading examples of good reporting practices. Therefore, guidance focuses on sharing good practice across the industry, encouraging companies to keep their stakeholders informed about their performance. IPIECA guidance consists of 146 pages and describes two types of assistance providing information on the process of reporting and the content of the report. The first section provides the foundation for practice describing principles and the reporting process and steps. The second section is devoted to information required to report. Here IPIECA provides indicators and issue categories used by companies and stakeholders, analysts and researchers. All indicators are divided into three categories. Firstly a description of the particular category is given, and then every indicator is described in the following order: 1. Description, 2. Purpose, 3. Scope, 4. Reporting basis, and 5. Reporting elements.

[41] This paragraph is based on the overview at the RUIE's website www.rspp.ru, accessed 01.12.2011.
[42] Overview of content analysis findings can be found in Appendix 5.

The first group of indicators relates to environmental issues. In respect to the research codes of this study the category "Local environmental impact" is important, and particularly the indicator E8 Spills to the Environment in this category. The production process in the oil industry can result in negative impacts on the local environment. Thus companies apply systematic tools to:

> *"assess environmental impacts, mitigate risks of pollution or contamination through control technologies, continuously reduce the impact of emissions, discharges and waste streams, and respond effectively to accidents, such as marine spills" (IPIECA, 2010, p.54).*

The guideline suggests applying a robust environmental management system and performance indicators in order to demonstrate continuous improvement in reducing industrial impacts on the environment. It is also suggested that companies should select elements through which they can describe their responses to the challenges they face in different areas (IPIECA, 2010, p.54). The indicator E8 Spills to Environment (IPIECA, 2010, p.57) is described as quantification of spills to the environment from operations, description of major spills, and response measures.

The next group of IPIECA indicators relates to the health and safety category. It is noted that management systems supporting sustainability reporting have been successful in mitigating health and safety risks and reducing the number of incidents. Five indicators are suggested in this group, and all of them are in fact relevant to the purposes of this study. The first three indicators HS1-3 focus on the protection of the workforce, including measurements of incidents that can provide lessons for the future. The next indicator HS4 describes product health, safety and environmental risks. A potential for serious consequences is indicated by a new indicator of process safety and asset integrity HS5 (IPIECA, 2010, p.66). For the first category looking at workforce protection it is explained that

> *"although the industry has long experience in dealing with health and safety risks, and serious incidents have been reduced, accidents or inadvertent exposures still occur. These may result in fatalities, severe injuries or illness" (IPIECA, 2010, p.67).*

In this way IPIECA explains the motivation for the management of oil and gas companies to adequately give priority to protecting the workforce and suggests that these indicators reflect:

> *"inputs to ensure that people are aware of risks and take steps with management to improve controls to prevent injury and illness (IPIECA, 2010, p.67).*

There follows a recommendation to disclose information about product health, safety and environmental risks (HS4) as it is important for end-user customers to be aware of these risks related to the everyday products they purchase and meet (IPIECA, 2010, p.75). Ensuring the safety of workforce is of prime importance to oil and gas companies. According to the indicator HS5:

> *"Process safety is the discipline of preventing an unplanned or uncontrolled loss of primary containment (LOPC) of hazardous material from a process due to an unintended event or condition" (IPIECA, 2010, p.78).*

The third group of social and economic indicators includes such categories as community and society, local content, human rights, business ethics and transparency, labour practices, and "reflect the evolution of social and economic reporting" (IPIECA, 2010, p.84). In this group two indicators pertain to my study. The recommendation SE7 "Local procurement and supplier development" calls for a description of the processes to improve the ability of local suppliers and contractors (IPIECA, 2010, p.99). The indicator SE9 "Human right and suppliers" calls for a

description of the approach for promoting respect for human rights and labour standards by suppliers and monitoring supplier adherence to contractual agreements related to human rights (IPIECA, 2010, p.103).

Thus, there are many recommendations in the IPIECA guidelines concerning production safety and it is possible to assort these reporting elements with a view to finding research codes.

Regarding the 1st dimension no reporting recommendation was found concerning "investment in research and development with respect to safer drilling technologies; technologies related to rig safety and accidents prevention; and spill response technologies". The research codes (1a), (1b), (1c) are not disclosed in IPIECA.

In relation to research code (2b) "spill prevention plans" the guidelines point to the indicator E8: Spills to Environment. The following is suggested in this case:

> *"for spills of significance, determined by the company, describe impacts and response actions. Describe emergency preparedness and response programmes, plans, organizational structures and affiliations for an effective response to spills and other emergencies" (IPIECA, 2010, p.59).*

This information relates to the plan of a company to manage spills. It can be seen as steps being taken to manage spills and blowouts. This corresponds to research code (2b) regarding plans to manage blowouts because it points to the necessity of studying and developing ways of managing spills. The character of the required information is descriptive. The guidelines call for an explanation of actions, rather than naming or counting spills that have actually occurred.

In addition, "HS3: Occupational Injury and Illness Incidents" identifies safety events of greater or lesser consequence which are to be held. Calling for the disclosure of

process safety event frequency rates can be related to research code (2c) (IPIECA, 2010, p.81). Here the focus is numerical, but still remains non-financial.

Research code (3a) about lessons learned from spills and other incidents is related to the indicator E8: Spills to the Environment by recommending reporting of the number and total volume spilled of hydrocarbon spills reaching the environment. It suggests

> *"for significant spills, companies may report both the causes of the spills and the lessons learned from investigations" (IPIECA, 2010, p.59).*

The indicator HS3: Occupational Injury and Illness Incidents can also help companies find recommendations for reporting answers to code (3a). The following is stated here:

> *"describe High Learning Value Events, including how lessons learned have been shared" (IPIECA, 2010, p.74).*

The metrics for identifying unplanned or uncontrolled losses of primary containment for indicator HS5: Process Safety

> *"should be based on the risk control barriers identified through past incidents, company experience with risk controls, and knowledge of their specific sites and facilities" (IPIECA, 2010, p.80).*

Therefore companies can themselves define which happenings were major for their production process and then discuss the lessons learnt. Here the narratives in the reports text are valuable.

Research code (3b) asks for a description of the company's actions with regard to environmental, health and safety performance and can be related to several IPIECA indicators. IPIECA here recommends including both descriptive and quantitative

information. For instance, one of these indicators is E8: Spills to the environment. It recommends reporting: the volume of spills recovered the total number of spills and the volume spilled, spills to soil and to water, and spills by business activity. Then it is suggested discussing significant impacts on the environment, as a result of spills, in qualitative terms. The indicator HS2: Workforce Health identifies and addresses significant workforce health issues at local, regional and global level, together with the resulting outcomes and plans (IPIECA, 2010, p.71). In addition, HS3: Occupational Injury and Illness Incidents identifies injuries and illness incidents for employees with

> *"a description of major consequence, determined by the company, together with impacts and response actions" (IPIECA, 2010, p.74).*

HS4: Product Stewardship suggests describing the following actions:

> *"report on activities to monitor, track, evaluate and manage product-related incidents" (IPIECA, 2010, p.77).*

As for process safety, the indicator HS5: process safety suggests a description of a demand on safety systems intended to protect against losses events, HSE operating envelope deviations, training and competency (IPIECA, 2010, p.81).

Management and evaluation systems for the environmental, health and safety policies, procedures and performance of contractors (4a) is the next research code and it can be disclosed using several indicators. The indicator E8: Spills to the Environment requires numerical measures i.e. separately reporting significant hydrocarbon spills from product transportation by third parties (IPIECA, 2010, p.59). Then comes the indicator HS1: workforce participation calls for explanations. It suggests discussing coverage of programmes and the extent to which contractors are included (IPIECA, 2010, p.69). The indicator HS3: Occupational Injury and Illness Incidents demands a description of reporting element for contractors as well. The

indicator SE7: Local Procurement and Supplier Development calls for discussing pre-qualification criteria for potential suppliers. The last reporting element can include a track record of working with local firms, strategies for developing local content in a given country, and demonstrable experience of developing capacity of local suppliers and subcontractors (IPIECA, 2010, p.99). The indicator SE9: Human Rights and Suppliers which concerns the research code (4a) asks to describe the policies, programmes and procedures the company has for promoting respect for human rights and core labour standards by suppliers (IPIECA, 2010, p.103). The indicators are again mostly descriptive and non-financial. They aim to demonstrate how companies evaluate their relations to sub-contractors and third parties.

The indicator SE9: Human Rights and Suppliers calls for a description of mechanisms to monitor supplier adherence to contractual agreements related to human rights, and actions taken when the findings do not meet the company's expectations (IPIECA, 2010, p.103). Such information is descriptive and corresponds to the research code (4b) concerning verification that contractors perform their services correctly.

The research code (5a) refers to management systems with respect to environmental, health and safety risks. This topic is covered by the indicator HS1: Workforce Participation. One of the reporting elements in this indicator asks management to:

> *"describe the company's approach to managing workforce participation in health and safety dialogues; and report specific activities that illustrate the application of the management approach" (IPIECA, 2010, p.69).*

The disclosure of the research code (5d) is recommended in the indicator HS4: Product Stewardship. This stands for a description of the product health, safety and

environment management system (IPIECA, 2010, p77). This offers yet another example of the research code needing to be described and explained. Besides this the indicator HS5 is also relevant: Process Safety recommends informing about the effectiveness of management system execution and management committee and culture (IPIECA, 2010, p.81). This enables the reader to acquire some understanding of the management systems and then to be able to evaluate them bearing in mind how the information flows work at and for the company.

The findings of production safety representation in the IPIECA guidelines are summarized in Table 4.1.

Research dimensions	Research codes disclosed within each dimension	Proportion of disclosure in each issue
Company investments in accident prevention technologies, 3 points	-	0
Spill prevention plans, 6 points	2	33%
Lessons learnt from other accidents and current actions, 2 points	2	100%
Contractor selection and oversight, 3 points	2	67%
Governance, 7 points	2	29%
Disclosed, total 21 points	*8*	*38%*

Table 4.1 Production safety issues representation in IPIECA/API guidelines

Summing up the findings, the IPIECA guidelines focus on many research codes. It seems that the guidelines are indeed oriented towards many issues specifically related to the oil and gas industry. Each disclosed code is recommended described and not just listed using numbers. It is possible for readers to understand such a report. They read about the actions, and then it is explained what this information means for the company. The nature of this recommended information is mostly non-financial and descriptive. The first dimension of research codes was not highlighted by IPIECA, the 2nd is 33% covered, the whole 3rd dimension is focused on in the guidelines, 67% of the 4th is covered, and the 5th is 29% mentioned.

4.3 Production safety issues in GRI guidelines

GRI guidelines are used by companies in all countries. My background study of Russian companies demonstrated that GRI has the most prominent position amongst Russian companies issuing sustainability reports (see Appendix 2). The examined sustainability reports for the period 2004-2008 referred to the GRI framework as the main reporting standard. The background study has also revealed that oil and gas industry companies also referred to the GRI guidelines in most cases.

The GRI framework also dominates with respect to providing an independent assurance of sustainability reports. For instance, Rosneft's sustainability report for 2010 was assessed by the firm Ernst and Young. This auditing company stated that it did not specifically assess whether the report corresponded with IPIECA and RUIE guidelines. The firm's engagement was undertaken in accordance with the GRI Sustainability Reporting Framework. (Rosneft Sustainability Report, 2010, p.84).

The current version of G3 was issued in 2006 and consists of 44 pages of the main Sustainability Reporting Guidelines. It introduces in the first place the sustainability reporting phenomenon description, and, then, describes how to define the

reporting content, quality, and reporting boundaries. There follows a large part with standards disclosures and concludes with general reporting notes. Reporting indicators are presented within the list of standards disclosures. The Reporting Guidelines G3 is then followed by 4 pages of "GRI Application level" and 119 pages of "Indicator protocols sets" in appendices. For the purpose of the study this section lists which indicators provide recommendations about how to report on production safety issues.

Each G3 indicator is outlined in the GRI sustainability reporting guidelines and then explained thoroughly in the "Indicator Protocols". The description is structured as follows: 1.Relevance, 2.Compilation, 3. Definitions, 4. Documentation, 5. References. All indicators are sorted into groups and include economic performance indicators, environmental performance indicators, social performance indicators, labour practices and decent work performance indicators, human rights performance indicators, society performance indicators, and product responsibility performance indicators.

The recommendation for disclosing the research codes (1a), (1b) and (1c) about investments in research and development is to be found in the indicator EC8: "Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement" (GRI, 2006, p.26). It is also possible here to refer to one additional indicator, EN30: "Total environmental protection expenditures and investments by type" (GRI, 2006, p.29). However, these GRI indicators are too generic concerning the type of investments. Thus they could not be related to the research codes. No specification for investments was found relating to safer drilling technologies, technologies related to rig safety and accident prevention, or spill response technologies.

The research code concerning spill prevention plans or company's steps to study and develop improved ways to contain and manage oil spills and blowouts (2b) was

found in the calls of the environmental category of performance indicators. One of these is EN14: Strategies, current actions, and future plans for managing impacts on biodiversity. Another one is EN19 Emissions of ozone-depleting substances by weight, and the third one is EN23 Total number and volume of significant spills (GRI, 2006, p.28). The first indicator can be referred though it is also quite generally used for describing managing the negative impacts of oil spills. The second indicator shows that the information in companies' reports is expected to be non-financial and yet still of a rather quantitative nature.

Many indicators have been designated by me to the research code (3b) concerning company's actions with regard to environment, health and safety performance. The research code is, however, broad in itself. The calls of the EN26: "Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation" (GRI, 2006, p.29), LA7: "Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region" (GRI, 2006, p.31) and LA8: "Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases" (GRI, 2006, p.31) are all relevant for the purposes of disclosing actions affecting the health and safety of employees. The safety of well-educated personnel following instructions is highlighted by LA10: "Average hours of training per year per employee by employee category" (GRI, 2006, p.31) and HR8: "Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations" (GRI, 2006, p.33). Health and safety impacts of oil production can be represented by PR1: "Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures" (GRI, 2006, p.36) and PR2: "Total number of incidents of non-compliance with regulations and voluntary codes concerning health

and safety impacts of products and services during their life cycle, by type of outcomes" (GRI, 2006, p.36). Indicators stress that companies should assure the quality of these activities in order to maintain safe and secure business activity.

Relations with sub-contractors and third parties are also found to be important in GRI. The notion for the research code (4a) concerning contractor selection was discovered in the indicator EC6: "policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation" (GRI, 2006, p.26). This indicator covers only a part of the suppliers, and probably not even the majority. This being said though, the research code is represented as it describes some practice to readers.

The description of management systems regarding oil operations are issues related to the 5th dimension. They are not required by the GRI indicators. However, it is stated that disclosures about the management approach should provide a brief overview under each indicator category in order to set the context for performance information (GRI, 2006, p.24). This means that any overview of risks and opportunities the company is currently facing should result in a management approach disclosure. This recommendation embraces it as a specific focus in the 5th dimension.

The findings of production safety representation in GRI G3 guidelines can be summarized in Table 4.2.

	Research codes disclosed within each dimension	Portion of disclosure in each issue
Company investments in accident prevention technologies, 3 points	-	0
Spill prevention plans, 6 points	1	17%
Lessons learnt from other accidents and current actions, 2 points	1	50%
Contractor selection and oversight, 3 points	1	33%
Governance, 7 points	-	0
Disclosed, all 21 points	*3*	*14%*

Table 4.2 Production safety representation in GRI G3 guidelines

Companies of different sizes, industries and countries are supposed to produce reports using the framework of reporting principles and the series of performance indicators called GRI. The guidelines try to serve companies globally. This is why the character of the guidelines reporting elements is very wide. Most indicators call for non-financial quantitative information, for example, the rates of injuries or the amount of incidents. The descriptive details about companies' plans to manage accidents may, however, be even more valuable for readers. GRI only provides some

recommendations for making descriptions. Summing up then, the 1st and 5th dimensions of research codes were not found in the GRI indicators. The 2nd dimension is represented by the rate of 17%, half of the 3rd dimension focus is found, and 33% of the 4th dimension is also presented.

4.4 Production safety issues in RUIE guidelines

The Social Charter of Russian Business is a document issued by RUIE containing a set of fundamental principles for responsible business practices. They are applicable in the daily activities of any organization, regardless of activity profile and ownership. In addition to the Social Charter of Russian Business, a document called "Basic indicators of performance" has also been published. These indicators help companies, analysts, and researchers to deal with sustainability reporting. The document includes recommendations designed by RUIE to deal with social, sustainable development or environmental reports. Proposed basic indicators correspond to reporting elements related to economic, social and environmental performance. It is stated that they do meet the international recommendations in this field and, at the same time, are adapted to the Russian accounting system and to Russian law. The purpose of the basic indicators is to provide organizations with systematic recommendations for non-financial reporting and indicators of economic, social and environmental performance.

The document consists of 68 pages and contains a list of basic indicators with detailed descriptions. All indicators are sub-divided into three groups: economic, environmental, and social. The description of each indicator includes 1. Status (core or additional), 2. Statistical indicator, 3. Description, 4. Metrics, 5. Data source, 6. Annotation, 7. Correspondence to GRI indicator.

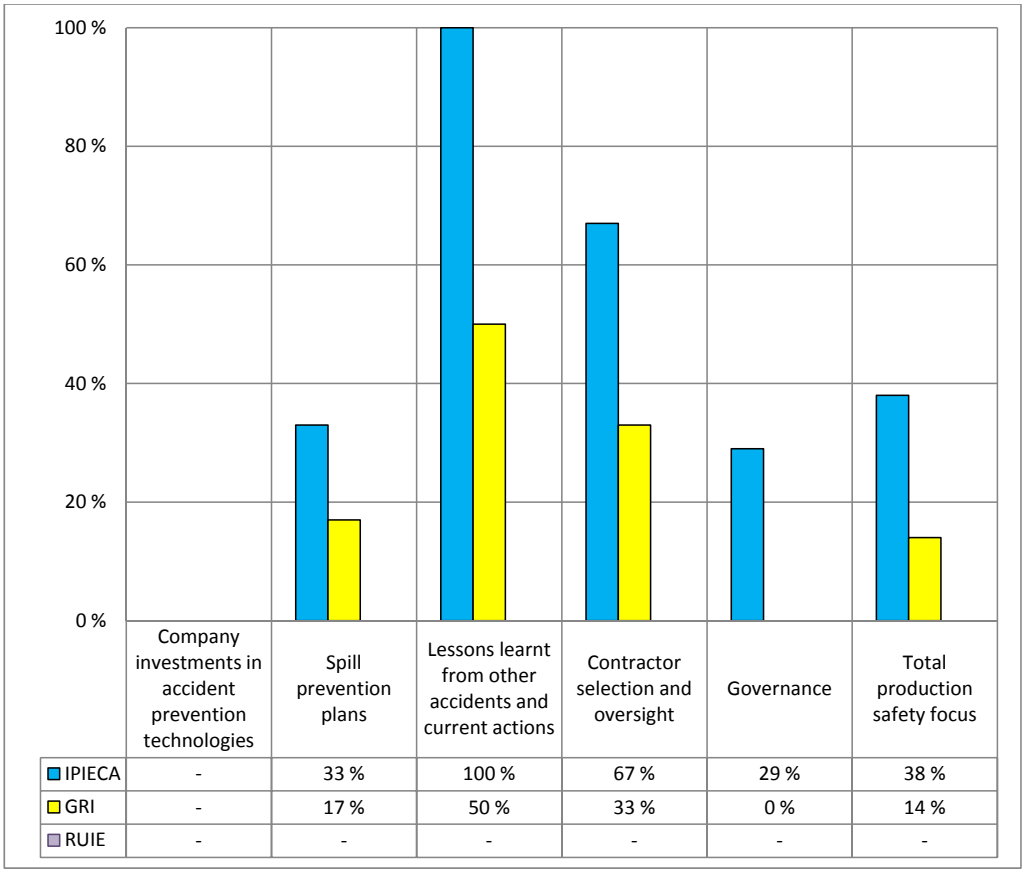
Several indicators were taken into account for deciding whether there are recommendations to be made related to this study. They are 1.5: Capital

investments; 2.9: Total number of significant spills; 2.10: Environmental damage recovered; 2.11: Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation; 2.12: Environmental protection investments; 3.1.5: Occupational injury rate; 3.1.6: Fatal accidents; 3.1.7: Occupational diseases. RUIE developed wide scope indicators to provide its members with information relevant to sustainability issues. Basic principles in the RUIE guidelines are issued to help companies to conduct sustainability reporting. However, none of them could be referred to as research codes. These indicators mostly focus on environmental protection, not on safer production technologies. Also the recommendations provided by RUIE indicators are rather quantitative. Indicators demand only quantitative rates. For instance, they call for disclosure of the total number of significant spills, the environmental damage restored, the occupational injury rate etc. By calling for the disclosure of a number of oil spills which have already happened RUIE does not recommend a description of actions about how to prevent these occurrences. Quantitative rates can be only explained by providing a description of what these rates mean for the company. A detailed description of investment plans, spill prevention plans or lessons learnt, and management systems related to production risks and safety could prove valuable for external stakeholders. Summing up for the purposes of further analysis, representation of production safety issues was not found in the RUIE indicators.

4.5 Summary for production safety representation in sustainability reporting norms

Sustainability reporting at Rosneft is based on three types of document. These documents are presented as lists of indicators with detailed descriptions. They guide companies in conducting and assessing sustainability reporting. The guidelines have different natures. The IPIECA guidelines focus internationally on companies in the oil and gas sector. The GRI guidelines focus internationally on all types of companies.

The third kind of guidelines focuses on all categories of Russian companies and they are issued by RUIE. Figure 4.1 demonstrates the portion of production safety issues representation in the studied sustainability reporting guidelines.



	Company investments in accident prevention technologies	Spill prevention plans	Lessons learnt from other accidents and current actions	Contractor selection and oversight	Governance	Total production safety focus
IPIECA	-	33 %	100 %	67 %	29 %	38 %
GRI	-	17 %	50 %	33 %	0 %	14 %
RUIE	-	-	-	-	-	-

Figure 4.1 Focus on production safety in sustainability reporting norms

No single document contained 100% of all the research codes. Different norms include different production safety issues. Therefore these norms are relevant to production safety issues representation to differing extents. It seems useful to enlighten and compare this wide-ranging scope.

Global oil and gas IPIECA guidelines cover 38% of production safety issues. The international GRI guidelines focus on 14% of all the relevant issues. Russian-specific guidelines RUIE have not focused on production safety issues explicitly. IPIECA focuses on more than two times more production safety issues than most common international GRI. It is interesting to outline the differences and similarities in the issues covered.

Details of a company's plans to manage blowouts including steps to study and develop improved ways to contain and manage spills and blowouts are recommended for disclosure both by the IPIECA and GRI guidelines. However, only IPIECA calls for listing process safety event frequency rates aimed at giving some understanding about the approval of updated spill and contingency/disaster plans. Lessons learnt from previous spills or other accidents are recommended described only by IPIECA indicators. These indicators ask for the following to be stated: the number and total volume of significant spills, the high learning value events involved in occupational injury accidents, past process safety incidents and experience. A company's actions with regard to environmental, health and safety performance are also recommended by both indicator systems. Some recommendations for management and evaluation systems for health, safety and environmental policies, procedures and performance of contractors are reflected both in IPIECA and GRI. The difference between the two standards here is that IPIECA pays attention to the contractors' participation in the production process in several of its indicators, while GRI highlights only policy and practices for locally-based suppliers at significant operational locations. Moreover, only IPIECA calls for the description of mechanisms to monitor supplier adherence to contractual agreements related to human rights. The final fifth dimension concerning the managing of safety issues is highlighted only by IPIECA. For instance, it is suggested that companies describe their approaches to managing workforce participation in health and safety dialogues, product health,

safety and the environment management system and the effectiveness of process safety management system execution.

Sustainability reporting indicators are used to guide sustainability statements preparation and analyze or evaluate them. The case company Rosneft used these three standards to prepare its sustainability reporting for 2010. The report also underwent an independent assurance process. The GRI Sustainability Reporting Framework was chosen as a criterion for the assessment of the Sustainability Report 2010 (Rosneft Sustainability Report, 2010, p.84). Correspondence between the report and the other guidelines was not included in this assignment. Representation of production safety issues was summarized in separate portions as demonstrated in Figure 4.1. The different nature of the described standardizing organizations explains the different relevance of the guidelines to the production safety issues. However, it is surprising that the most prominent guidelines GRI do not lead the way in representation of production safety.

Further discussion of these findings is provided in Chapter 6. Chapter 5 aims to present the findings of the empirical analysis of sustainability reporting practice at Rosneft and connect the norms and practice findings.

Chapter 5 Production safety in Rosneft sustainability reporting

The aim of this chapter is to give a description of the practice of sustainability reporting in the case company Rosneft with respect to production safety issues. The leader of the Russian oil industry Rosneft presents the existence of sustainability goals, objectives and principles in its management policy. Sustainability reporting in the case company includes many activities. As described previously, the 2010 stand-alone sustainability report and the 2010 annual report and in particular its corporate social responsibility section have been chosen for my empirical analysis. This chapter reviews the texts in these reports regarding the representation of production safety issues. The proportion of covered issues is summarized aimed at the further discussion of the overall focus of these issues in Rosneft's sustainability reporting practice.

5.1 Overview of sustainability reporting in Rosneft

Sustainability report definition is also described in the Russian literature. These are often called "non-financial reports" or "social reports". As defined by The Russian Union of Industrialists and Entrepreneurs, sustainability reports are:

> *"…understandable, reliable, balanced and coherent descriptions of the main aspects of the company and the results of achievements related to values, goals and policies of sustainable development on issues of key stakeholders' greatest interests" (Shokhin, 2008, p.7).*

The information concerning Rosneft sustainability reporting begins with the overview of their corporate website. Sustainable development commitment is described in both the Russian and English versions:

> *"As one of the largest Russian companies, Rosneft strives to demonstrate consistently superb operating and financial*

performance, while also maintaining its strong commitment to providing a significant and lasting contribution to the social and economic development of The Russian Federation" (http://www.rosneft.com/Development/, accessed 20.05.11).

It is, moreover, indicated that the company uses the definition and provisions of Social Charter of Russian Business, the guidelines issued by The Russian Union of Industrialists and Entrepreneurs. Their position can be expressed as follows:

"The company […] believes that: long-term economic and social achievements can be made possible only through maintaining the balance between the interests of shareholders, the Russian Government, company employees, suppliers, contractors, public institutions and other concerned parties; the ultimate factor of Russia's economic and social well-being is the shared responsibility by the Government, business and citizens based on the observance of civil rights and liberties, equal opportunities, respect for human dignity and the supremacy of law; well-balanced and effective social policies reduce business risks, strengthen competitiveness, enhance personnel performance and customer loyalty, and improve reputation of the business community at large" (http://www.rosneft.com/Development/, accessed 20.05.11).

Rosneft asserts that labour, environmental, safety, security, and regional social and economic development policies are integrated into their corporate sustainability strategy according to internationally accepted standards on human rights, and with current Russian labour and human rights legislation. They highlight a concern about

non-discrimination, freedom of association and collective bargaining, non-employment of child and forced labour, etc.[43]

According to the literature review, sustainability reporting can be embraced by stand-alone sustainability reports, CSR sections of annual reports, reviews on corporate websites or by various published corporate brochures.

An annual report is a comprehensive report on a company's activities which has become a powerful tool for shaping what is important in the company, and so it is considered to be a significant source of accountability (Louche et al., 2009). Financial management literature defines the annual report as a statement issued to the company's stakeholders. Basically it contains both verbal and quantitative sections. These consist of the letter from the chairman describing the firm's operating results during the reporting period, and financial statements giving an accounting picture of the firm's operations and financial position (see e.g. Brigham and Daves, 2009). Nowadays many corporations use annual reports or stand-alone sustainability reports to promote the CSR idea (Coombs and Holladay, 2011). Annual reports contain just a certain section devoted to CSR, while sustainability reports disclose CSR information in greater detail. Previous studies about CSR disclosures considered mostly only annual reports for analyses. Relatively recently some research papers started to focus on sustainability reports as well (Unerman, 2000).

Sustainability reporting in Rosneft is a comprehensive process involving the production of sustainability reports, CSR sections in annual reports, sustainable development overview on the corporate web site and other relevant documents and policies. The empirical analysis focuses on two sustainability statements that are easily accessible for external readers - "Sustainability report 2010" and "Annual

[43] Based on the overview at Rosneft's website www.rosneft.ru, accessed 20.05.11.

report 2010". They are uploaded on the corporate web-site in the English and Russian languages.

CSR sections in annual reports and sustainability reports are voluntary in Russia and in Rosneft as well. The reputation of Rosneft sustainability reports seems high. Rosneft was recognized as the best company in terms of information transparency in the category "Social Responsibility" in the contest conducted by The Russian Union of Industrialists and Entrepreneurs and their sustainability reports are assured by a third party.

> *"Rosneft's sustainability reports give a broad perspective on the Company's social and environmental performance as well as the corresponding effects on Rosneft's business at large, its shareholders and employees, and others concerned. The reports provide unified and comprehensive coverage of the Company's health, safety and environmental protection policy, regional socioeconomic development performance, effects on local environments and communities, social policy and staff training issues, interaction with government authorities at all levels and other parties, sponsorship and charity policy, etc."*
>
> *(http://www.rosneft.com/Development/reports/,*
>
> *accessed on 07.02.11).*

According to the literature review, Russian large and middle-sized companies do not believe that corporate social responsibilities activities can be of any benefit to them and this is possibly the role for strategic corporations (Kuznetsov et al., 2009). The Rosneft respondents expressed their opinions about the sustainability reporting efforts. One interviewee confirms this consideration:

"I don't think sustainability reports can be of benefit to the company. Investors and other stakeholders need financial statements to understand how the company operates".

In general uncertainty was expressed with regard to the meaning of this kind of reporting and its benefits for the company. One interviewee suggested:

"Maybe sustainability reports are published for public relations purposes".

However, other opinions do exist as well. Sustainability reporting is probably issued for foreign investors and is of benefit to the company's financial position. One interviewee said:

"I am sure that the foreign investors demand sustainability reports. Almost all credit agencies are international for Rosneft because the company's shares are traded on the stock exchange. Capitalization depends on investors and share indices. Thus the company's prosperity depends on this. Certainly we need sustainability reports, at least for investors".

Rosneft is now increasing its international partnership and projects. The strategic corporation constantly seeks international investments. For instance, their exploration and production moves up to The Arctic region. This means that Rosneft and their partners intend to assure their international investors of their commitment to sustainable development and continuously improvement of their operations' safety and preventing accidents and emergencies. Thus sustainability reporting in Rosneft is important, and the company may include such sustainability reporting for the information of investors.

In the opinion of Fran Ulmer[44], a member of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, the information about how safe an oil company is, is extremely important for the whole industry. The interviewee said:

> *"[…] if safety issues such as detailed information from the companies about how many deaths, accidents, fires, unintended blow-outs, loss of oil control, […] information that would be an indicator of how safe or unsafe the company is, could be routinely published, companies could compare the results and use these in their decision-making".*

The discussions regarding the importance of health, safety and environment issues have been a major focus for oil companies due to their risky operations. Big accidents in this industry strengthen this focus even more and remind companies to be competent and use safe technologies for their operational safety.

Rosneft is a strategic Russian company controlled by the government. A strategic Russian company has to play various particular roles. The state secures strategic companies by providing state guarantees for necessary investment in the oil business in case of a sharp fall in oil prices in the world market or during a financial crisis. Strategic companies in turn have to ensure national energy security. All emergences in a large corporation can be dramatic. The actions of a strategic oil company include providing a safe production process and the decreasing incidence of man-made accidents.

Rosneft adheres to the requirements of Russian and international legislation with regard to health, safety, security and environment. The company applies cutting-edge technology and enhanced production methods to create safe and healthy working conditions, as well as to the minimize risks of industrial accidents and other

[44] See the list of questions to the interviewee in Appendix 4.

emergency situations. Health, safety, security and environment policy have the following key objectives: reducing industrial injuries, improving industrial safety, maintaining an efficient management system for health, safety, security, and environmental protection; and reducing industrial risks from newly commissioned facilities[45]. In order to manage all industrial safety and environmental objectives, Rosneft implements a set of target programs, including the major Environmental, Gas, and Pipeline Reliability and Safety programmes, all described in the Sustainability Reports of the company. It would seem interesting to study how the sustainability reporting statements represent production safety issues[46].

5.2 Production safety issues disclosure in sustainability report

Rosneft Sustainability report 2010 is a stand-alone corporate report available on the company's official website, both in English and Russian. It consists of 123 pages and contains forewords from Igor Sechin, Deputy Prime Minister of the Russian Federation and Eduard Khudainatov, president of OJSC Rosneft Oil Company at that time; a chapter about the report; about the company; Stakeholder Engagement; Innovation at Rosneft; Health, Safety and Environment; Employees; Society; Independent Assurance Report from Ernst&Young; Objectives of the company; Key Sustainability Indicators, and Correspondence between the Sustainability report and reporting guidelines used. The English version is a translated copy of the Russian version and contains the same information. To avoid any misrepresentation of translations from Russian, the English version was used for the analysis. The research codes were found in all chapters except annexes 3-5 disclosing Correspondence between the report and reporting standards; the List of Abbreviations and contact details were not taken into account.

[45] Based on the overview given on Rosneft's website www.rosneft.ru, accessed 20.05.11.
[46] Overview of content analysis findings can be found in Appendix 5.

5.2.1 Investments in research and development

One of the first chapters in the "Rosneft Sustainability Report 2010" (SR2010) is devoted to innovations. Its text can be related to the first study dimension which is investment in research and development with respect to safer drilling technologies, technologies related to rig safety and accidents prevention, and spill response technologies. The SR2010 states that the company has built partner relations with a broad range of research and development organizations and it practices targeted innovation programmes in different segments of its operations. One of these practices is the creation of the Centre for Geological Support of Drilling Operations:

> *"[the Centre for Geological Support of Drilling Operations is] a system unique for Russia allowing the control of the drilling of complex wells in real time. Geological support of drilling operations, or geonavigation, is a state-of-the-art approach to the drilling of complex wells involving the analysis of real-time data […] In 2010, almost 180 horizontal wells and horizontal sidetracks were drilled with the Center's assistance" (Rosneft SR2010, p.30).*

This information is the way Rosneft demonstrates its expenditures in research and development with respect to drilling technologies. Although there are no quantitative financial rates, the non-financial description can be related to the research code (1a) as investments for safer drilling technologies.

Some quantitative data is presented in the Annex 2 "Key Sustainability Performance Indicators" of the SR2010. Indicators of expenditures according to management accounts of Rosneft are outlined here. Regarding investments for safer drilling, rig safety and accidents prevention, the following indicators have been found:

expenditures on occupational health and safety 2,111 mln RUB for 2010[47], and expenditures on emergency prevention, fire and radiation safety, and well control 4,716 mln RUB (SR2010, p.90). These indications refer to research code (1b). Accident prevention technologies are described on pp.48-51 of the SR2010. Firstly, the company carried out emergency preparedness training contributing to what is disclosed as staffing courses, for instance, 100,784 for 2010 (SR2010, p.90). Secondly, in 2010 the company developed a targeted program for the modernization and equipping of the corporate fire-fighting service. The cost of this programme is not presented, but the description refers to research code (1b). Thirdly, the company focuses on a description of implementing a Pipeline Reliability Program. This aims at reducing the pipeline accident rate and involves such activities as: using special corrosion-resistant steel grades and tubes with internal coating in pipeline construction and repair, corrosion inhibition of pipelines, pipeline cleaning, and deployment of a software system to track pipeline failures and ruptures and help identify critical pipeline sections for repair or replacement. This descriptive information for code (1b) is supplemented using financial rates. The overall cost of this programme amounted to 5,219 billion RUB (SR2010, p.50).

The information concerning preparedness drills on oil spills from p.48 is connected to research code (1c) describing investment with respect to spill response technologies. The total amount is not itemized to highlight the costs of spill response technologies. Expenditures on emergency prevention, fire and radiation safety and well control amounted to 4,716 mln RUB (SR2010, p.90).

The address of the president of Rosneft described that the company will continue to pay serious attention to innovation, strengthening and focusing its research potential and expanding its cooperation with the leading research and development

[47] According to The Central Bank of The Russian Federation rates for 31.12.2010 were as follows: 1RUB=0,033USD and 1RUB=0,025EUR.

centers in Russia and abroad (SR2010, p.9). It was stated that in 2010 Rosneft's expenditures on technology development and innovation amounted to almost 3 billion RUB, and were planned to exceed 8 billion RUB in 2011. This means that the company does describe investment activity in general, but this is not concrete enough to relate the information to the study.

5.2.2 Spill contingency plans

Research code (2a) requests details about the company's plan regarding how to manage blowouts and especially which steps the company takes in partnership with its industry peers. In July 2010 Rosneft held a major training drill on managing and eliminating an accident involving an oil spill and a fire on the site of Rosneft subsidiary RN-Yuganskneftegaz within the framework of a meeting of chief engineers and heads of HSE services of the company's subsidiaries and dependent companies (SR2010, p.48). In this way Rosneft keeps its partnership with its subsidiaries right across Russia.

The same information also refers to research code (2b). The company's actions to study and develop ways to manage spills and other accidents are described. Moreover, some statistics are provided in the section "Accident prevention and emergency preparedness" (SR2010, pp.48-51). It is stated that in 2010 no accident or emergency took place at the company's operators and it furthermore is described that Rosneft

> *"in order to keep staff and resources prepared for various accidents and emergencies, including accidental oil spills, 220 preparedness drills involving over 27 thousand employees were carried out at different levels across the Company" (SR2010, p.48).*

No information was found concerning the frequency and approval of update of the accidents contingency plan. The only notion for research code (2c) became an

overview of the most often discussed issues at the roundtable meetings in 2007-2010. They included prevention of oil spills and prevention of pipeline accidents. Roundtable meetings are held with stakeholders in the key regions of operations on an annual basis (SR2010, pp.20-21). This information is not enough concrete to describe the frequency and approval of spill contingency plans, so research code (2c) could not be considered disclosed.

Research codes (2d) regarding current technology for cleaning up oil spills at the surface and (2e) regarding plans to improve spill cleanup technology are described to some extent in the section "Remediation of oil-contaminated soils" (SR2010, p.37). The company developed and approved a corporate programme for the remediation of environmental damage accrued before the consolidation and was going to implement in 2011 with overall costs 10,5 billion RUB. In addition, for 2012-2015 it is planned to run a cleanup of all oil-contaminated lands historically accrued by the company's subsidiaries (SR2010, p.89). Now the technology is not described in this report, but the performance is presented:

> *"a total of 849 ha of oil-contaminated land was remediated and 100 sludge pits were eliminated" (SR2010, p.37).*

Therefore, this information can be related to the description of plans about its improvement referring to research code (2e), but cannot be related to the current technology description required by research code (2d).

No additional information with regard to research code (2f) was found while evaluating Rosneft's policies, practices and management systems for spill prevention and response in the Sustainability Report for 2010.

5.2.3 Lessons learned from the BP spill or other incidents

No description regarding previous oil spills from BP or Rosneft was found in the SR2010. Thus, no description can be related to research code (3a) concerning the lessons causing the reassessment of drilling risk management, well designs and drilling and completion procedures. The Independent Assurance Report confirms such a lack of information:

> *"Consolidated data on the volume of oil spilled and the area of land contaminated, included in the Report, are not complete" (SR2010, p.85).*

Research code (3b) about the Rosneft's actions with regard to HSE performance is presented by the company most completely in the Sustainability Report 2010. As previously mentioned, this research code is broad in itself, so relevant information can be found throughout the report. These actions are disclosed in different sections of the SR2010 including a foreword from the president of Rosneft, annual roundtable meetings with stakeholders, innovation programmes, providing HSE Policy, actions raising environmental performance, safety performance, the occupational health and safety programme, providing the health programme, presenting rates of expenditure for these actions, and the objectives of the company.

The president of Rosneft at that time, Eduard Khudainatov, addresses the readers of the report informing that:

> *"Rosneft supported the corporate programmes or improving the living and working conditions of its rotating crews and for employee health improvement, and developed its occupational pension system…" (SR2010, p.8).*

These examples are related to my study as a notion of HSE performance actions.

In addition, the roundtable meetings in 2007-2010 discussed the company's actions with regard to HSE performance. Amongst these actions were the following: development of HSE management systems, particularly at subsidiaries responsible for significant past environmental damage, the replacement of obsolete and worn-out assets, the introduction of state-of-the-art environmentally sound technologies, land reclamation, waste management, the elimination of underground "oil lenses" resulting from leakage of petroleum products, and participation in voluntary environmental initiatives (SR2010, pp.21-22). Moreover, an example of dialogue with stakeholders at one subsidiary (Udmurtneft) is described (SR2010, pp.23-24). Regarding this study, it was proposed to carry out an analysis of approaches to supplying employees with personal protective equipment, and answered that such an approach means acquiring a software system and this is in the process of being implemented in a planned manner.

Furthermore the disclosure of HSE actions includes the description of the innovation activities of the company.

> *"The innovation activities of the company are aimed at the modernization of its facilities and the development and adoption of new technologies for addressing priority operating objectives" (SR2010, p.28).*

One of these activities is efficient implementation of offshore projects and ensuring environmental and operational safety "Concept of Innovation-Based Development" of Rosneft. It also includes the modernization of the facilities targeted programme and the environmental and operational safety programme. The "Health, Safety, and Environment Policy" is the main document guiding Rosneft activities in this field.

The improvement of environmental performance is presented by describing biodiversity restoring programmes (SR2010, pp.45-46). Numerical information also exists concerning contaminated land, planned and managed land remediation, and the number of sludge pits. Two examples are described of restoring biodiversity in the rivers Bolshaya Makarikha in The Komi Republic and the Northern Dvina River. The corporate programme Pipeline Reliability Improvement is related to the research code because it describes the improvement of the safety performance (SR2010, p.49). The company states that a Workplace Assessment regulation related to working conditions was adopted. The quantitative results acquire some understanding: 91% of workplaces by the end of 2010 had been certified as compliant with the respective requirements (SR2010, p.52). Next up is a description of the corporate health programme (SR2010, p.69). This section discloses the steps taken in improving health performance and the objectives put forward to reduce the disease incidence rate, subsidizing health resort treatment of employees and their voluntary medical insurance plans, and the promotion of a sporty lifestyle. The descriptive information is supported by the figures for expenditure in the main areas of corporate social policy in 2010. These are disclosed on p.74, with the equivalent of 29,8% or 4928,4 mln RUB for creating and maintaining optimal labour conditions, 11,3% or 1879,7 mln RUB for regional socio-economic development, and 22,5% or 3751,2 mln RUB for health protection, the promotion of a healthy lifestyle, and other social expenditure.

Many described achievements for 2010 and many objectives for 2011-2015 can be related to HSE performance (SR2010, pp.86-89). Besides this, some of Rosneft's quantitative HSE objectives are presented for the period up until 2020. The targets and actual values of these key indicators are disclosed in "Health, Safety and Environment" section (SR2010, p.38). Research code (3b) is disclosed in greater detail in this sustainability report.

5.2.4 Contractor selection

The 4th dimension of research codes regarding contractor selection and oversight are also presented in the sustainability report. Firstly, relevant issues are mentioned in the Stakeholder Engagement section in the list of topics at the roundtable meetings in 2007-2011. The following are related to research code (4a): oversight of contractor organizations carrying out works at the company's facilities, facilitating the development of local contractors, and attracting small businesses as contractors and suppliers to the company's subsidiaries (SR2010, pp.21-22). Secondly, one paragraph in the section Occupational Health and Safety (OHS) demonstrates that the company is aware of the problems their contractors can have with inefficient HSE performance:

> *"The year 2010 saw an increased number of occupational injuries (including fatalities) in contractor organizations as the result of the increased amount of construction, modernization and reconstruction works at the Company's facilities carried out by external contractors" (SR2010, p.52).*

Furthermore the company demonstrates that it does have a special management system for assessing HSE policies and performance of contractors.

> *"In order to prevent such incidents, Rosneft has for several years had a corporate standard defining the key requirements for contractors in the field of operational and fire safety, OHS, and environmental protection. The standard establishes the conditions of contractors' access to the company's facilities, as well as requirements with regard to providing employees with personal protective equipment, employee qualifications and training, accident response actions etc" (SR2010, p.52).*

The criteria process for choosing contractors is described as follows:

> *"the agreements with contractors provide for regular inspections of their HSE compliance by Company representatives. Based on the inspection findings, corrective measures to be taken by contractors are identified. In addition, contractor companies are engaged in day-to-day occupational health and safety activities of the respective subsidiaries. In particular, in 2010, contractor representatives participated in over 3.5 thousand occupational health and safety meetings carried out at Rosneft's subsidiaries and dependent companies" (SR2010, p.52).*

Besides the descriptive information some quantitative indicators are also presented. For instance, the number of total occupational injuries amongst the company's and contractors' employees is presented on p.53.

No disclosure of research codes (4b) regarding the steps for verification that contractors perform their services correctly nor of codes (4c) regarding any requirements of third party independent monitoring and auditing of HSE functions for the drilling operations of the company and contractors was found in the Rosneft Sustainability Report 2010.

5.2.5 Governance and management systems

The 5th dimension of research codes is not disclosed completely. No notion was found with respect to research code (5a) describing the roles of the board of directors in overseeing the management of HSE risks with respect to the oil and gas operations. No notion of research codes (5b) concerning the specific committee of the board with assignation of these risks and (5c) whether anyone in the board has specific expertise in management of these HSE risks was found. However, this dimension is represented by research code (5d) describing how the board reviews

these possible risks. The Stakeholder Engagement section informs that one of the issues often discussed at the roundtable meetings during the period 2007-2010 concerned cooperation with supervisory agencies in the fields of HSE and participation in joint initiatives with them (SR2010, p.22). The described example of Udmurtneft's stakeholders' dialogue shows the suggestion to develop collaboration with the regional Ministry of Natural Resources on the basis of the shared information platform and responds that the "Environmental Monitoring" information and analytical system was developed to be accessible via the website of the Ministry (SR2010, p.24).

Research code (5e) calls for a description of the specific, quantitative targets for managing oil and gas-related HSE risks. The section "Health, safety and environment" sums up the HSE objectives and targets. Targets for continued reduction of the occupational injury rate, reduction of the occupational injury rate in transportation, and reduction of adverse environmental impacts are all presented here (SR2010, p.38). These targets are described as "reduction" and no quantitative amount is specified here. Yet one quantitative target concerning the amount of spilled oil per 1 mmt of output in the oil and gas production sector by 2020 was found (SR2010, p.39).

In relation to research code (5f) a notion of specific links between compensation and incentive packages for senior management was found. The section "Employees" describes that in 2009 Rosneft introduced a new system for determining annual bonuses paid to senior managers and heads of independent divisions of the company's headquarters, based on collective and personal key performance indicators. It is also stated that the system is based on a formalized and transparent approach making it possible to set clear objectives for managers (SR2010, p.62). However the report does not describe these objectives. The report shows that the company paid bonuses in accordance with this system in 2010. Plans to expand this

system of annual bonuses are also described. These plans include general directors of subsidiary companies and their deputies in 2011 as well as middle-level managers in 2012-2015 (SR2010, pp.88-89).

Further on comes a description of the Pipeline Reliability Improvement Programme which can be related to research code (5g) “wells’ and safety systems’ design for the highest performance with a variety of HSE regulatory requirements”. For instance, the programme includes activities such as:

> *“using special corrosion-resistant steel grades and tubes with internal coating in pipeline construction and repair” (SR2010, p.49).*

In this text the report describes the safety system used for oil exploration to achieve the highest performance. Rosneft also presents statistics on pipeline ruptures and oil spills for 2008-2010 and states that the programme budget will be increased to 7,514 billion RUB (comparing to 5,219 billion RUB in 2010). To better understand this amount of expenditure, the report describes plans to increase the amount of pipeline modernization works by over 39%. This means that research code (5g) is well described for readers using a description of the pipeline system and listing measures.

The findings of production safety representation in the Sustainability report 2010 are summarized in Table 5.1.

Research dimensions	Points disclosed within each dimension	Proportion of disclosure in each issue
Company investments in accident prevention technologies, 3 points	2	67%
Spill prevention plans, 6 points	3	50%
Lessons learnt from other accidents and current actions, 2 points	1	50%
Contractor selection and oversight, 3 points	1	33%
Governance, 7 points	3	43%
Disclosed, total 21 points	*10*	*48%*

Table 5.1 Production safety issues representation in the Rosneft Sustainability Report 2010

The sustainability report 2010 discloses many research codes. The report focuses on each research dimension. Each covered research code is often presented by several topics containing both descriptions and numerical rates. Rosneft reports about its actions, and then it is explained often what this information means for company performance. Summing up then, the first dimension is presented by the rate of 67%, the 2nd and 3rd 50% covered, the 4th is covered by 33% and the 5th dimension by 43%.

5.3 Production risks and safety disclosures in annual report

The Rosneft Annual report 2010 “New Horizons” (AR2010) is a consolidated financial statement and management report available on the company’s official website both in English and Russian. It consists of 301 pages and contains forewords from the chairman of the board of directors, the president of Rosneft, a list of key events in 2010; chapters: “Oil Refining: a New Stage of Development”, “Company Profile”, “Performance Review”, “Science and Innovation”, “Social Responsibility”, “Corporate Governance”; appendixes: “Consolidated Financial Statement under US GAAP”, “Non-Consolidated Financial Statements under RAS”, “Risk Analysis”, “Information on Observance of the Corporate Code of Conduct”, “Major Transactions and Related-Party Transactions in 2010”, “Taxation of Dividends and Capital Gains”, “Responsibility Statement”, and general and contact information. For the research analysis the English version was chosen, and the amount of sections to be analyzed was limited. It was assumed that the company’s production safety information can be found in the CSR part of this annual report. Two chapters were selected - Science and Innovation on pp.96-103 and Social Responsibility on pp.104-123. In addition, it is relevant to consider the section analyzing the various risks in Appendix 3 on pp. 242-247.

The “Science and Innovation” section was chosen for the analysis expecting to find a disclosure of the investments in research and development of different innovation programmes which can be referred to research codes (1a), (1b) or (1c).

Similar to the Sustainability Report 2010, a description of target innovation projects is here presented (AR2010, p.101). The report informs about the support of drilling complex wells, but does not present any concrete costs for projects. This cannot therefore be related to research code (1a) describing investments with respect to safer drilling technologies.

In the report Rosneft describes its corporate scientific research complex consisting of a corporate research and development centre and 10 regional institutes, of which seven specialize in exploration and production, and three in refining and marketing. The company shows the amount spent on the development of new technologies, drawing upon the potential of Russian high-tech companies and academic research. It is useful that the spending level is compared to the previous year showing that it increased by 50% (AR2010, p.98). The amount is not itemized into different kinds of spending, but the list of new technologies states quite broadly "improving HSE" (AR2010, p.99). Moreover, in the section "Social Responsibility" of the Annual Report 2010, Rosneft pays attention to environmental protection providing information on measures aimed at minimizing the negative impacts on the environment (AR2010, pp.122-123). One such measure is the targeted environmental programme for 2009-2014, which involves modernization of the company's environmental facilities and equipment, construction and reconstruction of work areas, provision of company subsidiaries with modern technology and equipment for recycling oil sludge and dealing with oil spillages. This information pertains to research code (1b) concerning investments with respect to rig safety and accident prevention. Some numerical rates are also disclosed. The amount spent on the Environmental programme for 2010 is 1,362 mln RUB, and this is compared to the 2009 level 2009 (AR2010 p.123). Total investments in environmental measures and total expenditure on such measures in 2010 are also stated in the report amounting to 13.3 billion RUB. The report emphasizes this level as being raised as compared to previous years (AR 2010, p.122).

Regarding research codes (2a) and (2b) a notion in respect to the steps the company is taking to study and develop ways to contain and manage accidents was found. Rosneft asserts that its major concern is continuously to improve the competences of all its employees in the HSE field. For instance, they put it like this:

> *"Rosneft selects subsidiaries for conducting emergency response exercises in a way that takes account of the specific conditions associated with company production, refining, and marketing operations in diverse geographical areas" (AR2010, p.121).*

This is an indication that the company does study how to manage accidents and relates this effort to research code (2a). It is also stated that Rosneft has a system for emergency prevention and response. In particular, the company carried out 220 emergency response exercises in 2010, involving approximately 27000 employees of subsidiaries, in order to maintain system readiness for combining oil leaks and fires, and for accident localization. Here the company adds some quantitative disclosure. The amount Rosneft spends on emergency prevention and response, and on fire and radiation safety, was increased by 20% in 2010, as compared with 2009 and reached a level of 4.5 billion RUB. This indicates the company's actions in developing ways to manage accidents, and this is clearly related to research code (2b). The information is described, financial rates are added and the comparison rate to the previous year enables a better understanding. The same events were described in the sustainability report for 2010.

Research code (3b) regarding the actions on HSE performance can be found in the AR2010. Here readers can find information concerning: innovation activity (AR2010, p.99), improvement of production and safety performance (AR2010, p.101), health and safety performance (AR2010, p.110), HSE policy informing about latest technologies to ensure health (AR2010, p.120), application of advanced environmental technologies during drilling (AR2010, p.122) and pipeline monitoring system approach (AR2010, p.123). This research code is rather wide-reaching. The described information is fairly similar to the information provided in the

sustainability report for 2010. However, the annual report does not disclose this so explicitly. The notion of each action is rather referential.

Not any description was found with regard to research codes from the 4th dimension on contractor selection and oversight in the Rosneft Annual Report 2010.

Next comes research code (5d) telling about the role of the company's board of directors in overseeing the management of HSE risks. The report discloses this as follows:

> *"Rosneft operates an Integrated Management System for HSE, enabling ongoing management, control and monitoring of company activity in these fields, and assessment of efficiency. Staff at all levels is involved in ensuring production safety and lowering negative environmental impacts" (AR2010, p.121).*

This information is supplemented by the notion that the number of industrial injuries at Rosneft enterprises declined compared to 2009, however, no direct target or plans for the next years are expressed. Neither is the focus on managing risks evident, so this cannot be related to research code (5e).

No description regarding research code (5f) describing the links between employees' compensation and HSE performance results was found. Similar to the sustainability report 2010, there is only a notion about the top managers' bonus scheme (AR2010, p.106).

The appendix "Risk analysis" describes information about the different risks faced by the company. Among these several groups of oil and gas-related HSE risks can be found. The first group concerns exploration drilling risks. Unexpected drilling conditions are dealt with as well as pressure or irregularities in geological formations, equipment failures or accidents, adverse weather conditions,

compliance with environmental regulations, governmental requirements and shortages or delays in the availability of drilling rigs and the delivery equipment. The second group of risks relates to geographic and climatic conditions in evidence in that Rosneft operates in northern regions with abnormally low temperature in winter. Risks associated with HSE laws and regulations are then highlighted. Rosneft, for instance, incurs substantial capital and operating costs in order to comply with HSE laws and regulations.

The findings related to production safety representation in the Rosneft annual report are summarized in Table 5.2

Research dimensions	Points disclosed within each dimension	Proportion of disclosure in each issue
Company investments in accident prevention technologies, 3 points	1	33%
Spill prevention plans, 6 points	2	33%
Lessons learnt from other accidents and current actions, 2 points	1	50%
Contractor selection and oversight, 3 points	-	0
Governance, 7 points	1	14%
Disclosed, total 21 points	*5*	*24%*

Table 5.2 Production safety issues representation in the Rosneft Annual Report 2010

The annual report for 2010 discloses many research codes. The report focuses on each research dimension, except issues in the 4th dimension regarding sub-contractors. All disclosed information in relation to production safety issues have a more referential character compared to the sustainability report. Summing up the coverage then, the 1st and the 2nd dimensions are disclosed at the rate of 33% each, a half of the 3rd dimension is presented, and 14% of the 5th dimension is mentioned.

5.4 Summary for production safety representation in sustainability reporting practice

Sustainability reporting at Rosneft is presented by way of two corporate reports. The first statement is a so-called stand-alone sustainability report and the second statement is an annual report with sections devoted to CSR and innovation issues. Rosneft sustainability reports contain many production safety issues. The focus for about half of the study research codes was found in the stand-alone sustainability report, with the focus for about a quarter of all the issues being found in the annual report.

Both statements covered all 5 dimensions of the production safety issues. For instance, the company describes its actions for safer drilling technologies, pipeline reliability, emergency prevention, improving ways to manage spills and accidents, remediation of environmental damage, actions with regard to HSE performance and safeguards, actions to evaluate HSE performance of contractors, actions to learn about possible HSE risks, quantitative targets, objectives and values for HSE, including those related to oil and gas production, and characteristics of pipeline systems and protection measures. These issues can offer good understanding of the company's production safety. Figure 5.1 represents the proportions of production safety issues representation in Rosneft sustainability reporting practice.

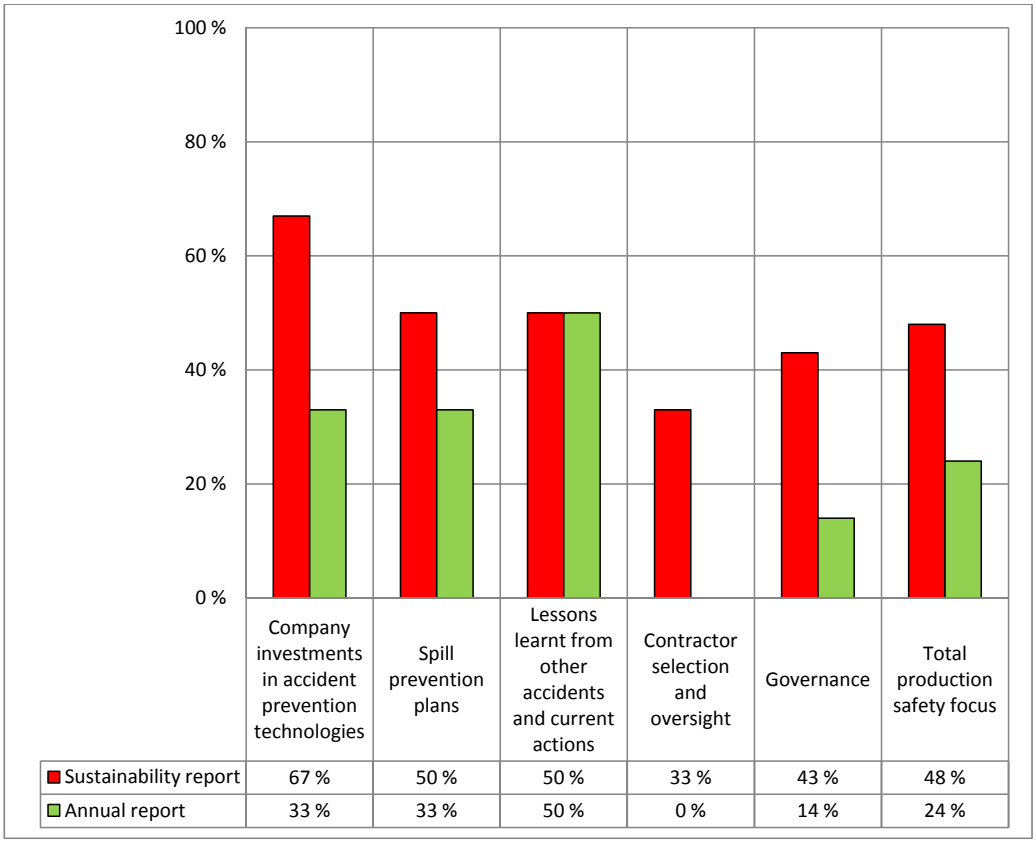


Figure 5.1 Focus on production safety in sustainability reporting practice

Many production safety issues of all five dimensions were disclosed by the Rosneft Sustainability report for 2010. Disclosures were found on: the company's investments with respect to safer drilling technologies, to safer technologies and accidents prevention, and spill response technologies, plans to manage spills and blowouts and plans to improve cleaning-up technology, the company's actions with regard to HSE performance, commentary on contractor selection criteria, and some points regarding governance and management systems.

The CSR section of the 2010 Rosneft Annual report also contains relevant production safety disclosures: on the company's investments with respect to safer technologies

and accident prevention, steps the company is taking to study and develop improved ways to contain and manage spills and blowouts, disclosure of some current actions with regard to HSE performance, and comments on an HSE management system.

The stand-alone sustainability report disclosed 48% of all production safety issues whereas the annual report disclosed 24%. The stand-alone report contains twice as much information as the annual report. Moreover, the information contained in the annual report replicates the information in the sustainability report and presents it more generically. When comparing the results from the two statements, it turns out that there are examples of both repeated but also divergent information in the annual and the sustainability report.

Both reports focus on information about investments in research and development with respect to technologies related to rig safety and accident prevention, but only the sustainability report additionally describes the investments with respect to spill response technologies.

Both reports describe plans to manage blowouts including steps the company is taking in partnership with subsidiaries to study and develop improved ways to manage spills and blowouts. The sustainability report also mentioned the plan to improve spill cleanup technology by describing a programme for remediation of environmental damage.

Both reports described many actions taken with regard to HSE performance. The sustainability report contained most information concerning this broad dimension. This can be explained by the nature of sustainability report. Such information refers to the main purpose of the sustainability report, while this information is more referential for the annual report.

Information regarding management and evaluation systems and criteria processes for the HSE performance of contractors is only disclosed in the sustainability report. The annual report does not focus on this at all. The sustainability report describes a corporate standard for key requirements for contractors in the field of operational and fire safety, HSE protection, evaluation system for contractors, and requirements related to HSE.

The last dimension regarding the management of environmental, health and safety risks is mentioned in both reports. This describes the operated integrated management system for HSE. In addition to this, the sustainability report focuses more strongly on describing cooperation with supervisory agencies in the field of HSE and participation in joint initiatives with them, collaboration with The Ministry of Natural Resources. Only the sustainability report states quantitative targets for HSE related to oil and gas production, objectives, and actual values.

The coverage of production safety issues varies between the reports, but it also differs from the proportion requested by sustainability reporting norms. It would seem interesting then to compare the focus of the practice and norms.

5.5 Comparing production safety representation in sustainability reporting norms and practice

Chapter 4 described production safety representation using three types of sustainability reporting norms. These were the Sustainability Reporting Guidelines G3 by GRI, the Oil and Gas Industry Guidance on Voluntary Sustainability Reporting by IPIECA/API, and the basic performance indicators for non-financial reporting developed by RUIE. The summarizing Figure 4.1 demonstrated that oil and gas industry guidelines the led the way in production safety issues representation. These guidelines focus on 38% of the issues compared to 14% in GRI and 0% in RUIE. Chapter 5 describes two types of sustainability reporting statements: the stand-

alone sustainability report for 2010 and Rosneft's annual report for 2010. Figure 5.1 demonstrates that the sustainability report represents 48% of the production safety issues as compared to 24% in the annual report.

In order to compare norms and practice only the norms and practice documents with the most prominent coverage were taken into account. These are the Rosneft sustainability report for 2010 and the IPIECA oil and gas industry guidance on voluntary sustainability reporting for 2010. Figure 5.2 summarizes the results of sustainability reporting norms and the comparison of practice.

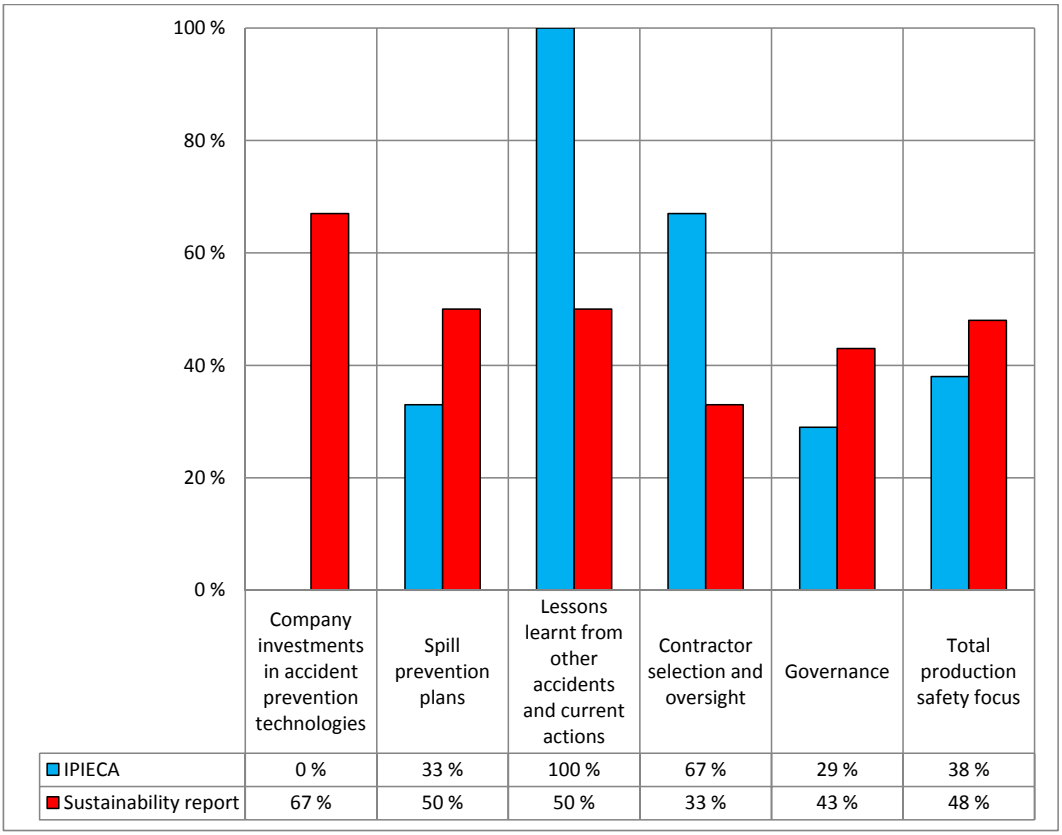


Figure 5.2 Comparison of production safety issues representation in sustainability reporting norms and practice

The stand-alone sustainability report discloses 48% of production safety issues, whereas the oil and gas norm calls for a description of 38% of them. It is interesting then to see how the two are connected to each other in the case company.

For most research codes sustainability reporting practice corresponds to the sustainability reporting norms. For instance, the company's actions to study and develop improved ways of containing and managing spills and blowouts are disclosed and requested disclosed by the industrial guidelines. Actions with regard to HSE performance are described by Rosneft and also requested described by the industrial guidelines. Management and evaluation systems for the HSE policies, performance and procedures of involved contractors are described by Rosneft, and are recommended by IPIECA. The company provides descriptions of the actions and how it reviews possible HSE risks. International industrial guidelines call for a description of this issue.

There are some production safety issues that the company does not focus on, though requested to by the norms. For instance, process safety event frequency rates, lessons learnt from other incidents and events, and steps for monitoring that contractors perform their services related to human rights correctly.

However, it is even more interesting to discover sustainability reporting disclosures which are not actually requested by the guidelines. Surprisingly, sustainability reports contain more information describing the company's actions regarding production safety. These provide examples of information Rosneft discloses irrespectively of sustainability reporting guidelines calls.

First, the sustainability report describes the company's investments in research and development related to accident prevention. The company discloses its actions: a major exercise aimed at eliminating an accident involving an oil spill and a fire was held, a fire-fighting programme and a pipeline reliability programme were

developed including costs and budget measures, and expenditures aimed at emergency prevention were also disclosed.

Second, Rosneft discloses its investing actions. Drills aimed at eliminating accidents involving oil spills and fires mean the company is investing research and development with respect to spill response technologies.

Third, the company describes the steps it is taking to manage accidents, including steps in partnership with its industry peers. The company describes its involvement with subsidiaries right across Russia.

Fourth, description of technology for cleaning up oil spills on the surface is included in the report. The company has developed and approved a corporate programme for the remediation of environmental damage. The current results of remediation of oil-contaminated land are presented. This relates to a description of the actions and results that has actually happened at the company.

Fifth, quantitative targets for managing environmental, health and social risks are presented by the company. There are also specific indicators related to oil and gas production which the norms did not mention.

Finally, wells and safety systems design is described. The company reports on the characteristics of pipeline system and protection measures.

The findings of my empirical analysis are summarized in Figures 4.1, 5.1 and 5.2. It is then possible to discuss further which guidelines and which reports are most representative in relation to production safety issues. The comparison of disclosed issues between norms and practice enables a discussion how norms actually connect to practice. Thus, the purpose of the next chapter is to explain why such results can happen and what this can mean in relation to mainstream theories and the study objects described in the literature review.

Chapter 6 Conclusions and Further Research

This study focuses on the phenomenon of sustainability reporting at Rosneft, a major Russian oil company. It discusses sustainability reporting in terms of norms and practice. The aim of this chapter is to present the conclusions of the study. The chapter is structured into five sections.

The first section (6.1) assesses the content analysis findings from Chapter 4 and Chapter 5, and empirical conclusions are presented. The representation of production safety issues is compared by surveying three different sustainability reporting guidelines and two sustainability reports published by Rosneft. Global guidelines issued by GRI and by IPIECA and the national guidelines issued by RUIE are discussed with regard to which set of guidelines is the most relevant for production safety issues. Furthermore the discussion addresses the question of which document is the most representative for production safety issues – the stand-alone sustainability report or the CSR section of the annual report. Then, by comparing the focus of production safety issues in practice with the norms, the connection between these two is analyzed.

The second section (6.2) of this chapter is devoted to a discussion of the main theoretical approaches in sustainability accounting and reporting research based on my empirical conclusions. Then the third section (6.3) brings in a discussion of the study objects focused on by mainstream sustainability accounting and the reporting literature.

These conclusions are summarized in section (6.4). This study was designed to focus on the practice and norms of sustainability reporting in a case company. Some potential targets for further research have also arisen, and these are then outlined in the last section (6.5) of this chapter.

6.1 Conclusions based on the empirical analysis

The aim of this section is to analyze sustainability reporting norms and sustainability reporting practice and in particular the connection between these two aspects of sustainability reporting. The empirical conclusions demonstrate the representation of production safety issues at Rosneft.

6.1.1 Analysis of sustainability reporting norms

Content analysis in Chapter 4 focused on production safety issues in three documents: Sustainability Reporting Guidelines G3 by Global Reporting Initiative (GRI), Oil and Gas Industry Guidance on Voluntary Sustainability Reporting by IPIECA/API (IPIECA), and basic performance indicators for non-financial reporting developed by The Russian Union of Industrialists and Entrepreneurs (RUIE). These guidelines with performance indicators were defined as sustainability reporting norms for the analysis. They have different origins and different purposes. One specializes on reporting recommendations for the oil and gas industry, one specializes on providing recommendations for Russian businesses, and one has become a global standard widely used in all types of companies. The analysis has demonstrated that international oil and gas norms focused more strongly on production safety issues than other types of norms. The global guidelines GRI were revealed to focus less on production safety issues. The specifically Russian RUIE guidelines did not focus on production safety issues in an explicit manner.

The association IPIECA specializes in providing sustainability reporting recommendations to the oil and gas industry, so their guidelines focus on many safety issues relevant to oil companies' production processes. For instance, the guidelines call for a disclosure of spill prevention plans, contractor selection, management with regard to production safety, lessons learnt from other accidents and current actions regarding HSE performance. These guidelines encourage oil

companies to include in their corporate reports those issues that are of special significance for the industry.

The globally comprehensive GRI guidelines are issued by a worldwide network-based organization aiming to enable all companies and organizations to report and measure their reporting on sustainability performance. According to the content analysis, the guidelines mention disclosure of current actions regarding HSE performance, spill prevention plans, and contractor selection. However, the guidelines focus less on calling for disclosure of production safety issues. The GRI focuses on keeping sustainability reporting mainstream and therefore naturally aims to capture mainstream business activity.

Russian-specific standards are issued by RUIE, the Russian organization with a membership base consisting of many regional alliances and industry associations. The organization has many lines of activity. These include efforts not only to standardize and promote the idea of sustainability reporting, but also to improve existing legislation, hold public discussions concerning business development in Russia, and keep the general public informed of the place and role of Russian business. Their standard which is called The Charter of Russian Business consists of wide-scope principles and indicators in order to fit companies in different industries and activities. The guidelines do not focus on production safety issues relevant for oil companies. Several indicators which could be related to the safety of an oil company require rather quantitative rating without recommendations describing actions to prevent undesirable events occurring. Standards specific for Russia for non-financial reporting issued by RUIE call for the disclosure of non-financial measures.

These observations lead then to my first conclusion. The industrial guidelines for sustainability reporting issued by IPIECA were more advanced in their calls for production safety disclosure than both the global and the national guidelines. The

international standards issued by GRI and the national guidelines issued by RUIE aim to provide recommendations for mainstream business activities, without industry orientation, so these do not benefit the guidance of reporting specific production safety issues in an oil company. The industry-specific IPIECA guides oil companies to disclose more production safety issues than the global GRI guidelines or Russian-specific guidelines. If oil companies intend to disclose production safety issues in their sustainability reports the IPIECA guidelines are then the most relevant to choose.

6.1.2 Analysis of sustainability reporting practice

Content analysis described in Chapter 5 focused on production safety issues in two statements: The Rosneft Sustainability Report for 2010 and The Rosneft Annual Report for 2010. Both statements contain information about sustainability performance; both are issued annually and easily accessible for external users on the corporate website. The analysis demonstrated that the stand-alone sustainability statement focuses more strongly on production safety issues than the annual report.

The annual report does represent some production safety issues. An annual report is a comprehensive report focusing on all the activities of a company during the reporting period. The main purpose of this document is to provide financial performance information, and thus it contains less non-financial measures and descriptions of the company's production safety. The CSR sections of the annual reports are not devoted to CSR to such a large extent as the stand-alone reports. The Rosneft annual report represented production safety issues focusing especially on plans to manage blowouts including some measures connected to HSE performance, as well as the management system for HSE. This relevant production safety information duplicates the information presented in the sustainability report.

The stand-alone sustainability report covers many production safety issues. Besides the same information as that found in the annual report, the sustainability report exclusively presents information on: investments with respect to spill response technologies, plans to improve spill cleanup technologies, explicit information on actions with regards to HSE performance, management and evaluation systems, criteria processes for HSE performance of contractors, and cooperation with supervisory agencies in the field of HSE and participation in joint initiatives with these agencies.

The second conclusion that can be drawn concerns sustainability reporting practice in Rosneft. The stand-alone sustainability report is more relevant for representing safety issues than the annual report. The sustainability report describes more production safety issues than the annual report. This enables making the assumption that if one is interested in production safety issues it is most relevant to address a sustainability report in order to look at these issues.

6.1.3 Comparing sustainability reporting practice and norms

Chapter 5 describes the comparison of production safety issues representation in sustainability reporting norms and practice. This comparison is conducted considering the most advanced norms for guiding production safety issues disclosure and the most relevant norms for the issuing of the production safety disclosure sustainability statement. These two documents are the oil and gas industry guidelines IPIECA and the Rosneft sustainability report for 2010. Similarities and differences in production safety issues representation are described, so that the correspondence between norms and practice can be discussed.

Similarities in representation mean that the guidelines were or could be used for the sustainability report construction. The guidelines have a voluntary nature, so it is not surprising that some of the issues recommended in the guidelines were not actually

disclosed in the report. However, it is more interesting to pay attention to differences the other way round.

Some discovered issues were disclosed by the sustainability report and yet the sustainability reporting norms did not focus on them in their recommendations. Notably these issues are: the company's investments in research and development with respect to accident prevention and spill response technologies, the steps the company takes in managing accidents, including steps in partnership with its industry peers, plans for improving the technology of cleaning up oil spills, specific quantitative targets for managing HSE risks, and wells and safety systems design. These production safety issues were only disclosed in the sustainability report without any recommendation being forthcoming through the sustainability reporting norms.

The sustainability report describes more production safety issues than the sustainability reporting norms recommend. This leads to the third conclusion of my study. In Rosneft the practice of presenting production safety issues by way of the sustainability report is more advanced than the sustainability reporting norms.

6.1.4 Summary of empirical conclusions

The empirical analysis revealed what kind of production safety issues were disclosed in sustainability reporting practice and requested disclosed by the sustainability reporting norms. My empirical conclusions can in this respect be summarized as follows.

Firstly, the oil and gas industry guidelines IPIECA provide the most advanced guidance with regard to production safety issues. If Russian oil companies intend to disclose production safety issues in sustainability reports it is more relevant for them to use IPIECA guidelines than GRI or Russian standard RUIE guidelines.

Secondly, my analysis shows that the sustainability report of Rosneft describes more production safety issues than the annual report. If external users intend to learn about production safety issues, it is more relevant for them to look at the sustainability report.

Thirdly, the analysis shows that in Rosneft the practice of sustainability reporting is more advanced in production safety issues presentation than the sustainability reporting norms. Thus in this case sustainability reporting is more of a "practice-driven" than a "norms-driven" phenomenon.

6.2 A discussion about the main theoretical orientation in sustainability accounting literature

In Chapter 2 my frame of reference was presented discussing theoretical approaches used in sustainability accounting and reporting mainstream literature. The dominant approaches providing understanding of sustainability reporting practice are stakeholders' and legitimacy theories. These two theoretical orientations in the literature are discussed below based on my empirical conclusions.

6.2.1 Stakeholder theory

The stakeholders' theoretical lens has been used in many sustainability accounting studies. This theory suggests that sustainability reporting can be holistically or strategically focused on important stakeholders. The literature seeks to categorize stakeholders' groups and connect particular disclosures to their needs by investigating stakeholder engagement. It seems that studies using the stakeholders' approach can explain how stakeholders use the disclosures. However, the stakeholders' analysis idea is often criticized by studies which argue that if corporate reports try to capture too many stakeholders' needs, they become overloaded with information and difficult to read. Stakeholder theory is often replaced almost at

once in discussions by the legitimacy theory approach. Thus, studies either outline all the possible stakeholders for companies, or discuss how to influence the critical ones from the perspective of legitimacy theory.

This study has focused on reporting practice in the case of Rosneft and has revealed advanced representation of production safety issues in the company's stand-alone sustainability report. However, Rosneft's reasons for producing sustainability reports were not studied. Still, considering the nature of this case company and the nature of the reporting output from practice it is possible to discuss important stakeholders in this context.

Rosneft is a major Russian strategic company. This means that the state secures it and at the same time needs to control its activities and CSR actions. This indicates that the state is an important stakeholder for Rosneft. Literature mentions that large corporations in Russia are called upon to become more transparent and accountable not only to the state but also to their international investors (Kuznetsov et al., 2009).

The coalition of institutional investors Ceres played an active part voicing their concerns about production safety at global oil and gas companies after the accident in The Gulf of Mexico. This indicates that investors are important stakeholders for large oil companies.

My study has demonstrated that the state is an important stakeholder for large strategic companies in Russia, and investors are important stakeholders for oil and gas companies worldwide. Consequently stakeholder theory may offer a useful approach for discussing the practice of sustainability reporting, especially in the Russian oil industry.

6.2.2 Legitimacy theory

Legitimacy theory is one of the most dominant theoretical approaches in discussing sustainability reporting. The main merit of this theory is that previous studies have enabled finding out that corporations use corporate social disclosures as a strategy to negotiate their relationship with powerful stakeholder groups in society (Belal and Lubinin, 2009). Even so it seems that the studies using legitimacy approach should be grouped into two separate branches.

The first one discusses legitimacy as an important process for organizations to correspond to relevant public expectations. Previous studies provide evidence that volumes of disclosure differ over time, between organizations and in response to particular events (e.g. Adams, 2008; Patten, 1992). Corporate reporting is handled here as a communication tool to demonstrate what the companies have managed to do according to public expectations. This perspective of legitimacy theory fits the stakeholder theory perspective.

The second group of studies emphasizes that the disclosures of an organization's actions reaching the public are sometimes more important than the actions themselves (e.g. de Villiers and van Staden, 2006). In this situation legitimacy is often interpreted as a "window dressing" mechanism which helps companies to appear more attractive. Corporate reporting is handled then as a public relation tool reflecting quickly changing social expectations.

According to my empirical conclusions sustainability reporting practice was advanced with regard to production safety issues. The concept of production safety was defined based on institutional investors' concerns related to global deepwater drilling oil companies. Rosneft was not involved in this global discussion and neither was it required to respond by issuing a production safety description. Thus, in this case, legitimacy cannot be interpreted as just providing a piece of "window-dressing" in the case of sustainability disclosures published by Rosneft. This means

in effect that Rosneft produces production safety disclosures related to the actions which the company actually considers important to hold legitimacy towards its investors.

6.2.3 Summary

The most dominant theoretical approaches in mainstream literature were discussed based on my empirical conclusions. The empirical conclusions correspond with both stakeholder theory and the branch of legitimacy theory arguing that legitimacy is about responding to relevant public expectations.

6.3 A discussion about study objects in previous sustainability accounting literature

The review of previous empirical studies in sustainability accounting was presented in Chapter 2. The aim of the following section is to discuss the leading topics of study in the mainstream literature based on my empirical conclusions. As previously observed, GRI guidelines strongly influence most analyses of the literature concerning sustainability reporting norms. Previous empirical studies have focused their analyses of sustainability reporting on annual reports.

GRI was proclaimed as one of the most dominant directions in sustainability reporting standardizing attempts (Owen, 2008). What is more GRI is one of the most often used frameworks for assessment of sustainability reports. In Russian oil companies sustainability reports most often refer to the GRI guidelines as well (see Appendix 1). However, this study concluded that for production safety issues disclosure it is more relevant to use the IPIECA guidelines than the GRI guidelines or the Russian guidelines developed by RUIE. Then it seems rather challenging for oil companies to disclose production safety issues. The most popular guidance is, however, too generic and provides few recommendations about production safety issues. The quality of sustainability reports is usually judged by their compliance

with GRI framework. In order to publish a highly ranked sustainability report, the report should be modelled according to the GRI framework. Disclosure of issues important for the industry does not influence the report's evaluations. This means that even a highly ranked assessment of a sustainability report with GRI criteria does not indicate how well the production safety issues are presented. Production safety issues presentation are so not much touched on in the GRI sustainability reporting guidelines.

Annual reports are the most dominant type of corporate statement studied in previous sustainability accounting research. According to trends in previous empirical studies, sustainability reporting analyses have usually been limited to disclosures in the corporate annual report (Thomson, 2008; Frost et al., 2005). However, this study also concluded that production safety issues representation was more advanced in the sustainability report than in the annual report. Thus it is more relevant to focus on sustainability reports in order to analyze these issues. It would seem then that the literature conclusions based on annual reports may be different if one extends the analyses by also considering sustainability reports. Previous analyses based on annual reports have observed that CSR disclosures in Russian companies constitute an underdeveloped field (Belal and Lubinin, 2009) and in global oil companies are too wide-reaching (Dong and Burritt, 2010). This study demonstrates that at least with regard to production safety issues the practice of sustainability reports at Rosneft is indeed advanced. Moreover, the empirical analysis has shown that the practice of sustainability reporting is more advanced in the representation of production safety issues than the sustainability reporting norms themselves. The disclosure of production safety issues is conducted by Rosneft for some other reasons than just responding to the guidelines. Production safety issues sustainability reporting practice and norms may in fact be loosely connected.

The most prominent study topics observed in previous research were discussed based on my empirical conclusions. The empirical conclusions do not support the choices of the study objects in the mainstream literature. GRI guidelines and annual reports do not play a dominant role in the case of Rosneft's sustainability disclosures.

6.4 Summary of conclusions

This study has looked at the phenomenon of sustainability reporting in terms of norms and practice. Sustainability statements are output generated from practice. At the same time they are also a product of the interaction between norms and practice. By means of the content analysis of sustainability reporting output in a case company an attempt has been made to study the phenomenon using the context of a Russian oil company.

The empirical conclusions showed that, firstly, the oil and gas sustainability reporting guidelines (by IPIECA) are more relevant in guiding production safety disclosure than the global sustainability reporting guidelines (by GRI) and national guidelines (by RUIE). Secondly, in this case the stand-alone sustainability report is more relevant in production safety issues representation than the annual report. And thirdly, with respect to production safety issues representation, the practice of sustainability reporting in Rosneft is more advanced than the sustainability reporting norms themselves.

The mainstream literature orientation was discussed based on my empirical results. Firstly, the most dominant theoretical approaches in the mainstream literature were considered. Secondly, the most prominent study objects in the mainstream research were discussed.

The empirical results of this study support the two most dominant theoretical approaches in the mainstream literature. Stakeholder theory is a useful approach for explaining sustainability practice, and should be used by studies as a way to reflect the needs of stakeholders and the use of corporate reporting. The legitimacy theory approach is useful for explaining how corporations respond to current public expectations. This branch of legitimacy theory is often intertwined with the stakeholder theory approach in sustainability reporting literature. The literature has on various occasions often repeated the calls of Gray et al. (1995) to use multiple theories to develop a richer explanation of CSR practices. This study demonstrates that in the context of the Russian oil industry it is useful to focus sustainability reporting explanation on the state and the investors as main stakeholders in this context.

My empirical results did not correspond to the study objects discussed in the mainstream literature. The literature in this field of study considers that GRI provides the most dominant sustainability reporting guidelines, but in my case study IPIECA proved to be most relevant. Social and environmental reporting studies use annual reports for their analyses, but in my case a stand-alone sustainability report proved to be more advanced. This conclusion supports the call of Unerman (2000) that future studies of social and environmental accounting and reporting amongst annual reports should focus strongly on stand-alone sustainability reports in order to produce relevant results.

6.5 Further research

This project studied the sustainability reporting phenomenon at Rosneft through norms and practice. However, this case study did not focus on the use of sustainability reporting. It concentrated its attention on sustainability reporting norms in terms of the guidelines used for conducting sustainability reports. Practice

was handled in terms of output from sustainability reporting practice. This case study has demonstrated the importance of the context of the Russian oil industry in influencing practice in one large company. It has also discussed that sustainability reporting practice and norms are may be loosely connected. The empirical results have showed that in this case sustainability reporting practice was more advanced than norms. The use of sustainability reporting was not included in the study. Therefore, further studies can focus research questions on the use of sustainability reporting. It would certainly be interesting to learn about the way sustainability reporting becomes part of organizational activity.

It would also be interesting to learn whether companies in similar industrial contexts in other countries have more advanced sustainability reporting and to focus on the use of sustainability reports. A comparative international study will probably provide new insights into the area of sustainability reporting.

The perspective of use of sustainability reporting relates to the question of use of reports by different stakeholders. This study has demonstrated that sustainability reporting practice in the case company was in line with stakeholder theory and legitimacy theory. It would be interesting to study the phenomenon of sustainability reporting from the perspective of the major stakeholders. Studies using the stakeholder perspective have so far primarily focused on outlining the various categories of stakeholders and then generalizing the data for different companies. There does seem to be a lack of case studies from the stakeholder theory perspective. A Russian oil company can for instance be studied from this perspective in order to learn about how to interpret the major stakeholders' needs in sustainability reporting practice. Implications concerning linkages between public expectations and sustainability reporting practice could prove interesting.

These paths of further research concerning the use of sustainability reporting can explore a more complete picture of the phenomenon in context. However these ideas are by no means the only ones. Surely, the phenomenon can be investigated from various perspectives using multiple theories in order to find better explanations to the global practice of sustainability reporting.

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Appendix 1 An example letter from Ceres to global oil companies

(http://www.ceres.org/files/Oil_and_Insurance_Investor_Letters_2010.pdf, accessed 20.05.11)

G. Steven Farris, Chairman and CEO

Apache

2000 Post Oak Boulevard, Suite 100, Houston TX 77056

August 4, 2010

Dear Mr. Farris,

We are a group of 62 investors representing more than $2.5 trillion in total assets who are concerned about potential risks associated with Apache's offshore oil and gas operations. The April blowout at BP's Macondo well in the Gulf of Mexico, and the explosion and fire on the Deepwater Horizon drilling rig that killed 11 workers, has led to one of the greatest environmentally-related destructions of shareholder value in history.

The shareholder harm that has flowed from the BP spill has focused investor attention on governance, compliance and management systems needed to minimize risks associated with deepwater offshore oil and gas development worldwide. The BP Gulf of Mexico disaster has also raised concerns about response plans by companies and the industry for dealing with offshore accidents, regardless of the strength of a company's risk management systems.

It is important for all companies involved in subsea deepwater drilling to be open and transparent with investors and stakeholders at this crucial historic moment. We write to request additional information on the measures and programs Apache has in place for managing risks associated with its offshore oil and gas operations, as

well as any changes the company plans to make in its risk management framework as a result of the BP Gulf of Mexico spill.

[…]

See the enclosed list of investor signatories that this letter represents.

1. Investment in spill prevention and response

a) How much money has Apache invested in each of the last three fiscal years on research and development with respect to: safer offshore drilling technologies; technologies related to rig safety and accident prevention; and spill response technologies?

2. Spill contingency plans

a) Detail Apache's plan to manage deepwater blowouts. What steps is the company taking, including steps in partnership with its industry peers, to study and develop improved ways to contain and manage spills and blowouts offshore?

b) How often does Apache update its spill/disaster contingency plans? Does the board approve those updates?

c) Does Apache believe that current technology for cleaning up oil spills at the surface is adequate? If not, what plans does the company have to improve spill cleanup technology, either on its own or by working with industry peers?

d) What additional information should investors consider in evaluating Apache's policies, practices and management systems for spill prevention and response?

3. Lessons learned from BP Macondo well blowout

a) What lessons has the company learned from the BP spill? Have those lessons caused Apache to reassess its offshore risk management, its well designs and drilling

and completion procedures, or its disaster response plans? If so, what changes have been made or are planned?

b) Based on current information, please describe how Apache's deepwater well designs, drilling and completion procedures differ significantly from BP's Macondo well with regard to environmental, health and safety (EHS) performance and safeguards.

c) The BP spill and resulting Gulf of Mexico drilling moratorium suggest all offshore operators will be penalized for the mistakes of weaker operators. Is Apache taking any steps to raise the bar for performance by the offshore oil and gas industry as a whole? Does the company support improved regulation, and improved enforcement of existing regulation, in the offshore environment both in the Gulf of Mexico as well as internationally? If so, what changes to these regulations and enforcement does the company support?

4. Contractor selection and oversight

a) What systems does the company have in place to manage and evaluate the environmental, health and safety (EHS) policies, procedures and performance of contractors involved in the drilling and service of offshore wells? Please describe how EHS criteria are weighted in the selection process and any due diligence performed prior to hiring contractors.

b) What steps does Apache take to verify that its contractors perform their services correctly and that their safety systems and equipment are in operating order? In addition, please describe how contractor compensation is determined, including whether incentives are used. If compensation or bonuses are tied to EHS performance, please describe.

c) Does the Board require third-party independent monitoring and auditing of EHS functions for the company's own offshore operations, as well as for contractors?

5. Governance and management systems

a) What role does the company's board of directors play in overseeing management of EHS risks faced by Apache with respect to its offshore oil and gas operations? Is oversight of these risks assigned to a specific committee of the board? Is there anyone on the board with specific expertise in management of these EHS risks? How does the board review these possible risks and the company's systems and what reviews, if any, have done since the BP Macondo well spill?

b) Does the company have specific, quantitative targets for managing offshore oil and gas-related EHS risks?

c) Do the compensation and incentive packages for senior management include any specific links to EHS performance results? If so, please describe.

d) Where EHS regulatory requirements vary by jurisdiction for offshore oil exploration and production, how does Apache design its wells and safety systems for highest safety performance?

e) Please describe your policies and procedures to ensure that whistleblower complaints are addressed, and whistleblowers are protected from retaliation. Do these policies and procedures apply to contractors? Who is ultimately responsible for ensuring that this system is functioning properly? Does the Board of Directors receive any reports relating to significant concerns raised through this system?

f) What systems does your corporation have in place to ensure that material risks related to offshore drillings are disclosed in Securities and Exchange Commission filings?

Appendix 2 Summary of guidelines referred by Russian companies in sustainability reports

for 2004-2008 (derived from the conference paper "Sustainability reporting regulation: Russia's perspective")

		Reporting period					
Guidelines	Level of Norms	2004	2005	2006	2007	2008	Total
GRI guidelines	International	1	3				4
G3 Guidelines (iss.by GRI, 2006)	International		1	8	15	12	36
standard AA1000 (iss.by AccountAbility, 1999)	International	1		4	7	7	19
Principles for SD of UN Global Compact (iss.by UN, 2000)	International			1	5	2	8
Oil and Gas Industry Guidance on Voluntary Sustainability Reporting (iss.by IPIECA /API, 2005)	International / industry-oriented			1	2	2	5

The Responsible Care Global Charter (RCLG ICCA)	International / industry-oriented				1		1
Social Charter of Russian Business (iss.by RUIE, 2004)	Russian			2	5	4	11
Arbitrary reporting form		1		1	1	2	5

Appendix 3 Sustainability Reports Output in Russia by industry sector

by 2010 in National Register RUIE (derived from the conference paper "Sustainability reporting regulation: Russia's perspective")

Industry	Amount of compa-nies	Amount of reports named:			
		”Sustain-ability”	”Social responsibility”	”Environmental”	Total
Oil and gas	12	26	6	16	48
Energy and electricity	20	13	25	5	43
Metals and mining	11	9	19	0	28
Chemical	3	1	7	0	8
Woodworking, pulp and paper	4	0	4	11	15
Food	3	0	11	0	11

Telecommuni-cations	3	2	2	0	4
Finance and insurance	11	2	27	0	28
Housing and communal services	2	0	5	0	5
Education	2	0	4	0	4
Transport	3	2	4	1	7
Other services	1	0	1	0	1
Non-profit organizations	2	1	1	0	2
TOTAL	77	55	115	33	204

Appendix 4 Interview guide

Type: In-depth interview, “Open-ended” questions

Interviewee: Fran Ulmer (the chancellor of the University of Alaska Anchorage, a member of Obama's National Commission on the BP Deepwater Horizon Oil Spill, and a chairwoman of The Arctic Research Commission)

Date and Place: 22.03.2011, Arctic Dialogue Conference, University of Nordland, Bodø, Norway

1. Offshore drilling is a risky and sensitive area. There are opinions after The Gulf of Mexico oil spill that this field requires more regulation. The Commission Report stressed a belief that, if properly managed and regulated, the risks of offshore drilling are still acceptable. Do you think that the need for regulation for oil companies’ activities includes the need for changes in corporate reporting?
2. Which information, do you think, should be provided by oil companies as a response to the spill in The Gulf of Mexico? Which kind of responsibilities should be emphasised?
3. What do you think about the oil spill response plans that are provided by the deepwater drilling companies in the US?
4. Public and other active investors (for example, CERES, a national network of environmental groups, unions, pension funds, and other investors) are concerning after the accident about how oil companies are improving safety and reducing the risk of a major spill. They ask for details about spill prevention, response plans and internal safety controls. What do you think, for whom would such information be interesting? And what kind of issues?

Appendix 5 The content analysis results

	Research issues about production safety	Disclosed/not: in Rosneft sustainability report 2010	in Rosneft annual report 2010	by IPIECA	by GRI	by RUIE
1	(1a) Investment of Rosneft in research and development with respect to safer drilling technologies;	center for geological support of drilling operations	center for geological support of drilling operations	not	not	not
2	(1b) Investment of Rosneft in research and development with respect to technologies related to rig safety and accident prevention;	drills (study) on eliminating an accident involving oil spill and a fire, fire-fighting program, pipeline reliability program with its cost and budget, expenditures on emergency prevention	Targeted Environmental Program with different measures and spent amount, total investments on environmental measures	not	not	not
3	(1c) Investment of Rosneft in research and development with respect to spill response technologies.	drills on eliminating an accident involving oil spill and a fire	not	not	not	not
4	(2a) Details on Rosneft's plan to manage blowouts. Steps the company is taking particularly in partnership with its industry peers,	involvement with its subsidiaries across Russia (drills as well)	response excercises with subsidiaries	not	not	not

5	(2b) Details on Rosneft's plan to manage blowouts. Steps the company is taking to study and develop improved ways to contain and manage spills and blowouts.	actions to study and develop improved ways to contain and manage spills and accidents, emergency response excersises	emergency response excersises, expenditure	E8: spills to Environment	EN14: Strategies, current actions, and future plans for managing impacts on biodiversity; EN19 Emissions of ozone-depleting substances by weight; and EN23 Total number and volume of significant spills	
6	(2c) Frequency and approval of update of spill/disaster contingency plans.	not	not	process safety event frequency rates in HS3: Occupational injury and illness incidents	not	not
7	(2d) Current technology for cleaning up oil spills on the surface and	not	not	not	not	not
8	(2e) plans to improve spill cleanup technology.	a corporate program for the remediation of environmental damage		not	not	not
9	(2f) Additional information for investors in evaluating Rosneft's policies, practices and management systems for spill prevention and response.	not	not	not	not	not

10	(3a) Any lessons learned from the BP spill or other incidents causing Rosneft to reassess its offshore risk management, its well designs and drilling and completion procedures, or its disaster response plans.	not	not	reporting of the number and total volume spilled of learned from investigations in E8: Spills to the environment, High Learning Value Events in HS3: Occupational injury and illness incidents, past incidents and experience in HS5: Process Safety	not	not
11	(3b) Rosneft's actions with regard to HSE performance.	many actions with regards to environmental, health and safety performance and safeguards	many actions with regards to environmental, health and safety performance and safeguards	E8: Spills to the environment, HS2: Workforce health, HS3: Occupational injury and illness incidents, HS4: Product stewardship, HS5: Process safety	EN26: Initiatives to mitigate environmental impacts; LA7: Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region; LA8: Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases; LA10: Average hours of training per year per employee by employee category; HR8: Percentage of	not

					security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations; PR1: Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures; PR2: Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle.	

12	(4a) Management and evaluation systems (criteria process) for environmental, health and safety (HSE) policies, procedures and performance of contractors involved in the drilling.	a corporate standard for key requirements for contractors in the field of operational and fire safety, OHS, and env.protection; evaluation system for contractors' access to the company's facilities; requirements with regards to EHS; agreement on regular inspections of contractors by the company's representatives.		separate report from 3rd parties transportation in E8: Spills to the Environment, contractor participation in HS1: Workforce Participation, report for contractors in HS3: Occupational Injury And Illness Incidents , criteria for suppliers in SE7: Local Procurement and Supplier Development , core labour standards by suppliers in SE9: Human Rights and Suppliers	EC6: policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	
13	(4b) Steps to verify that contractors perform their services correctly and that safety systems and equipment are in operating order. In addition, description of how contractor compensation is determined, including whether incentives are used. Description whether			mechanisms to monitor supplier adherence to contractual agreements related to human rights in SE9: Human rights and suppliers	not	not

	compensation or bonuses are tied to HSE performance.					
14	(4c) Any requirement to third-party independent monitoring and auditing of HSE functions for the company's own drilling operations, as well as for contractors.	not	not	not	not	not
15	(5a) The role of the company's board of directors in overseeing management of HSE risks faced by Rosneft with respect to its oil and gas operations.	not	not	the company's approach to managing workforce participation in health and safety dialogues in HS1: Workforce participation	not	not
16	(5b) Description of whether there is any specific committee of the board with assignation to these risks.	not	not	not	not	not

17	(5c) Description of whether anyone in the board with specific expertise in management of these HSE risks.	not	not	not	not	not
18	(5d) Description of how the board reviews these possible risks and the company's systems and availability of the reviews.	operates an integrated management system for HSE; cooperation with supervisory agencies in the fileld of HSE and participation in joint initiatives with them; colaboration with Ministry of Natural Resources;	operates an integrated managemen t system for HSE	describe the product health, safety and environment management system in HS4: Product stewardship, effectiveness of management system execution in HS5: Process Safety	not	not
19	(5e) Specific, quantitative targets for managing oil and gas-related HSE risk.	quantitative targets for HSE, objectives, actual values, incl. related to oil and gas production	not	not	not	not
20	(5f) Description of whether there are any specific links between compensation and incentive packages for senior management and HSE performance results.	not	not	not	not	not

21	(5g) Wells and safety systems design for highest performance with a variety of HSE regulatory requirements by jurisdiction for offshore oil exploration and production.	characteristics of pipeline system and protection measures	not	not	not	not
	Total (yes=1)	10	5	8	3	0
	/ 21 *100%	48%	24%	38%	14%	0%