Saimaa University of Applied Sciences Business administration, Lappeenranta Degree Programme in International Business Management International Business Management

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Case: Gasum's responsibility reporting from the point of view of customers. Analyzing the current state and development needs for reporting.

Abstract

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Case: Gasum's responsibility reporting from the point of view of customers. Analyzing the current state and development needs for reporting, 121 pages, 5 appendices

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The purpose of the study was to find out possible improvement issues and measure the quality of CR reporting based on opinions of Gasum's customer representatives as well as the author's, and internal GRI comparison for the future demands and changes in reporting guidelines (from G3.1 to G4). This study is based on empirical and qualitative research including a questionnaire and discussions.

The first main objective was to better develop and specify the CR reporting to meet customer demands and needs, to analyse the current state of reporting, and find out development needs for the future. The second purpose was to evaluate the current state of CR reporting, the strengths as well as the development targets. Evaluation took a position on three points of CR views: strategic, management and reporting. Thirdly, a comparison was done of how the indicators will change from G3.1 to G4 guidelines in 2015 and how reporting indicators currently fulfill the future demands.

The results of this study show that customers are rather satisfied with the reporting as an overall assessment of the report was 4.31 and overall opinion of Gasum's responsibility was 4.46 (scale 0-5). Gasum also got development targets from customers for developing reporting. The results of reporting evaluation and comparison of indicators gave information about the report content that fulfill reporting requirements, as well as what needs development for the future.

Keywords: CR, CSR, customer, environment, economic, Gasum, responsibility, sustainability

Glossary of abbreviations

BSAG Baltic Sea Action Group
CCS Carbon Capture and Storage

CLEEN Cluster for Energy and Environment

CO₂ Carbon Dioxide

CR Corporate Responsibility

CSR Corporate Social Responsibility/Corporate Sustainability Reporting

DMA Disclosure on Management Approach
DNV Det Norske Veritas (certification services)

EC European Commission

EEC European Economic Community

EMAS EU Eco-Management and Audit Scheme
EMS Environmental Management System

ENTSOG European Network of Transmission System Operators for Gas

EPRG European Pipeline Research Group ESG Environmental, Social and Governance

EU European Union

EUSS Electric Utilities Sector Supplement (key sector-specific issues/GRI)

FIBS non-profit corporate responsibility network in Finland

GERG European Gas Research Group
GIE Gas Infrastructure Europe
GRI Global Reporting Initiative

G3.1, G4 Sustainability Reporting Guidelines generation levels by GRI

HR Human Resources

IFRS International Financial Reporting Standards

IGU International Gas Union

ILO International Labour Organization IMS Integrated Management System

ISO International Organization for Standardization

KPMG Klijnveld, Peat, Marwick, Goerdeler (derived from founders)

LNG Liquefied Natural Gas

MEE Ministry of Employment and the Economy in Finland (TEM)

MEMA Master of Environmental Management and Responsible Business

(training program by Aalto Pro)

NGO Non-Governmental Organization

OECD Organisation for Economic Cooperation and Development
OHS Occupational Health and Safety Management System
OHSAS Occupational Health and Safety Assessment System

PDCA Plan, Do, Check, Act (related to TQM)

PwC PricewaterhouseCoopers

P2G Power to Gas

SME Small and medium-sized enterprises

SNG Synthetic Natural Gas

SWOT Strengths, Weaknesses, Opportunities, Threats (analysing tool)

sSWOT Sustainability SWOT (analysing tool)

TQM Total Quality Management

UN United Nations

UNPRI UN Principles for Responsible Investment

QMS Quality Management System

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1 Introduction

Responsibility and irresponsibility of companies has been one of the important topics of discussions in recent years. Companies have been required to pay more attention to social and environmental issues, act ethically and transparently as well as co-operate with local communities. Responsibility reports have been one good channel for the companies to respond and participate in the discussion and bring out their responsibility in business.

The energy sector has been one of the pioneers in responsibility reporting because it belongs to the sectors where responsibility has risen to the focus of common interest. For example, emissions of energy production and their reduction have been of interest to the worried public. The big actors in the Finnish energy sector have been reporting environmental issues for a long time.

Corporate responsibility (CR) is a part of a company's good reputation. The main issue in responsibility reporting is not the report itself, but rather that what kind of changes and impacts the reporting cause in company's actions. One might say, that responsible behavior is continuous selection making. It is not only a good operational model, it is also a way to stand out from competitors.

Today, instead of the Social or Sustainability Responsibility, the term Responsibile business is also a commonly used term. In Gasum, the terms Responsibility or Corporate Responsibility are used. In this study, the main term Corporate Responsibility (CR) is used, and the reporting of it is examined. Referring to Juutinen-Steiner; "It is important that the companies decide consciously what term they use in their own activities. This helps to perceive the character of the company as the part of society. It also opens the arguments behind the chosen term and facilitates the future communication of it. Using the term should be coherent". (Juutinen-Steiner 2010, p. 21.)

When an organization builds ethical and social elements in its operating philosophy and integrates them in its business model, it is said to have possessed a self-regulating mechanism that guides, monitors and ensures its adherence to law, ethics and norms in carrying out business activities that ensures serving the interest of all external and internal stake-holders. In other words, the objective of being a socially responsible business is achieved when its activities meet or exceed the expectations of all its stake-holders. Whatever is done in business, it has some connection to CR, and CR has some connection to competitiveness, costs, supplier relationships, customer relationships and satisfaction, personnel wellbeing, etc. So it can be said that this is not a zero-sum game; there is a clearly interaction between business and CR. (TQM 2013.)

This study is measuring the quality of CR reporting based on opinions of the customer representatives as well as the author's, and Gasum's GRI reporting comparison for the current state of reporting to the future demands and changes in reporting guidelines from G3.1 to G4.

1.1 Background of the study

A classic definition of sustainable development is: "Development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (Bruntland 1987).

Another definition regarding the corporate responsibility (CR) by WBCSD, World Business Council for Sustainable Development 1998 is: "The continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large" (Pesonen 2011).

Corporate responsibility definitions can be demonstrated in three categories as shown in Figure 1.

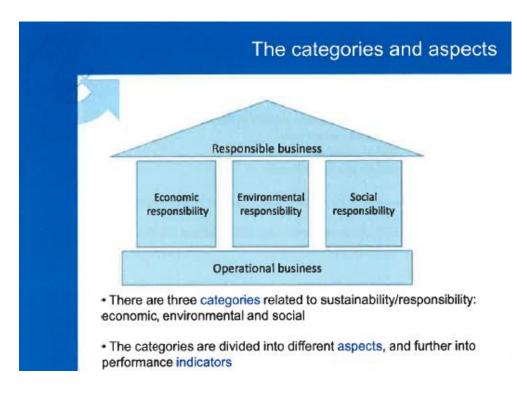


Figure 1. Categories and aspects of responsibility (Tofuture 2013, modified by the author)

The basic categories of CR above can be described as follows:

Economical responsibility

A company's responsibility is to produce goods and services that a society wants. An economically responsible, profitable and competitive company produces added value for its owners, employs people, pays taxes and creates welfare in common society. In many cases, economic responsibility is regulated by legislation, such as collective agreements, taxes, markets and competition laws.

Environmental / ecological responsibility

Ecologically responsible companies utilize natural resources and raw materials in a sustainable manner, reducing environmental pollution and climate change throughout their operations. They use energy efficiency technology and they have committed to comply with national or international environmental recommendations.

Many times national and international official regulations guide ecological responsibility. In many cases these companies have quality management systems, for example ISO 9001/14001/26000 or EMAS certification criteria, in use.

Social responsibility

The European Commission has described Social Responsibility as follows: "A concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment. It is also a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. (Laari-Muinonen 2013.)

A company's social responsibility is to ensure employees' wellbeing at work, develop their competence and pay attention to the human rights, and they have charitable activities, they employing those at risk of social exclusion, many times these companies are non-profit companies. Business oriented companies' activities in social responsibility level are many times that they support various social projects contributing to culture, science and education development and promulgation of a healthy lifestyle. They also might take a part of or have their own funds with which they grant economic support, for example for students.

The term Corporate Responsibility (CR) goes by many other terms such as corporate citizenship, responsible business or corporate sustainability. Sometimes there might be misunderstandings in abbreviations or terminology, especially between corporate sustainability reporting and corporate social responsibility, both can be shortened to CSR, below can be seen descriptions of both:

Corporate Responsibility is a business approach that creates long-term share-holder value by embracing opportunities and managing risks deriving from economic, environmental and social developments. Corporate sustainability leaders achieve long-term shareholder value by gearing their strategies and management to harness the market's potential for sustainability products and services while at the same time successfully reducing and avoiding sustainability costs and risks.

Corporate Social Responsibility is a concept whereby companies decide voluntarily to contribute to a better society. It is a concept whereby companies integrate social concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. (EC Europa.)

Conclusion of the previous terms: social responsibility is a part of corporate sustainability as well as environmental and economic responsibilities, and corporate sustainability (or corporate responsibility) is the main concept.

Referring to Juutinen-Steiner, "it is important to notice, that CR means exactly the responsibility of the business. Impacts of the business in its different areas must be recognizing, understand and their disadvantages has to be minimized as well as exploit the opportunities. According to the definition, separate, non-business activities like charity activities or one-time projects do not include to Corporate Responsibility". (Juutinen-Steiner 2010 p. 22.)

It should also be noted that Corporate Responsibility is not a law. It has been regulated in a voluntary level by organizations and in some cases it is mandatory, especially in state owned companies and based on the instructions, ownership policy and steering. Internationally OECD Guidelines for Multinational Enterprises, Caux Round Table principles for Business and Global Reporting Initiative (GRI) are the most well-known ones. (Carrots and sticks, KPMG 2013 edition.)

In recent years it has become common to consider the footprint created by nations, enterprises, communities or individuals. Calculations are made for example on their emissions, water, materials, business, tax, finance, community and others, even a responsibility footprint. Primarily these calculations are linked to environmental impacts.

It might be said that all these calculations mentioned on page 9 may be included under the term Ecological footprint (Picture 1).



Picture 1. Footprints (Footprintnetwork.2014)

In the author's opinion, there are many similarities between TQM (Total Quality Management) and CR (Corporate Responsibility), as can be seen in illustrated pyramids (Figures 2 and 3) below. Both aim at continuous improvement at all levels in business activities by developing and measuring the impacts to society and all other stakeholder groups. Reporting as a process is also rather similar.



Figure 2.Total Corporate Responsibility (TQM 2013)

Definition of total quality management: TQM is a management philosophy that seeks to integrate all organizational functions (marketing, finance, design, engineering, and production, customer service, etc.) to focus on meeting customer needs and organizational objectives.



Figure 3. Levels of CSR (Laari-Muinonen 2013)

The key principle in TQM is PDCA, meaning Plan (plan ahead for change, analyze and predict the results), Do (execute the plan, taking small steps in controlled circumstances), Check (study the results) and Act (take action to standardize or improve the process). That means continuous improvement in every activity in the company. Continuous improvement must deal not only with improving results, but more importantly with improving capabilities to produce better results in the future i.e. same kind of principles than corporate responsibility, a company should not stagnate but should develop it actions continuously.

TQM views an organization as a collection of processes. It maintains that organizations must strive to continuously improve these processes by incorporating the knowledge and experiences. The simple objective of TQM is "Do the right things, right the first time, every time." TQM is infinitely variable and adaptable so it can be applied into many kind of needs and business areas.

There is no single theoretical formalization of total quality, but Deming, Juran and Ishikawa provide the core assumptions, as a "discipline and philosophy of management which institutionalizes planned and continuous improvement and assumes that quality is the outcome of all activities that take place within an organization; that all functions and all employees have to participate in the improvement process; that organizations need both quality systems and a quality culture." (Sixsigma 2015.)

Corporate responsibility (or sustainability) is first of all about a company obeying common norms, or acting as the laws and orders require. On the other hand CR is that the company acts how it is expected to act. So it is not enough to live only within the given frameworks, but also to think which kind of expectations are linked to company and how well these expectations can be fulfilled. That means that the company must evaluate where its "responsibility footprint" is the biggest, meaning which is the area where company exposed to criticism most sensitively.

Another common description of CR is also as the integration of social, environmental and economic considerations into the decision-making structures and processes of business, using innovation to find creative and value-added solutions to societal and environmental challenges, engaging shareholders and other stakeholders and collaborating with them to more effectively manage potential risks and build credibility and trust in society and it is about not only complying with the law in a due diligent way but also about taking account of society's needs and finding more effective ways to satisfy existing and anticipated demands in order to build more responsible businesses.

In the end, CR is about improving the shareholder's value, providing responsibly produced goods and services for customers, creating credibility and trust in the society in which the business operates and becoming more responsible continually in the long term. There is again a straight connection to TQM, as can be seen in the TQM continual improvement cycles (Denim's or PDCA cycle) on page 13 and Figure 4.

Gasum has been committed to fulfill the principles of quality management and corporate responsibility in its daily activities.

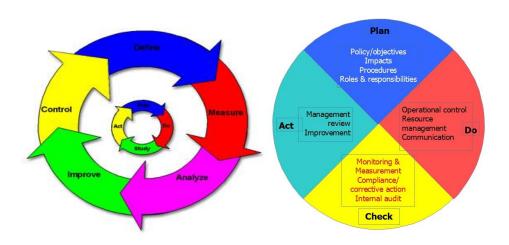


Figure 4. PDCA cycles (Gopix 2014)

Systematic responsibility reporting helps organizations to measure the impacts they cause or experience, set goals and manage change. A responsibility report is the key platform for communicating responsibility performance and impacts – whether positive or negative. Responsibility reporting is therefore a vital resource for managing change towards a sustainable global economy – one that combines long term profitability with ethical behavior, social justice and environmental care. (Global reporting 2013.)

You can also find similarities in reporting the processes between CR and TQM reporting, so there is found one more connection between these two.

In future, the importance of CR will be influenced by at least the following social trends: globalization, poverty and inequality, digitalization, climate change, sustainable use of energy and natural resources, economic rise and urbanization of developing countries, demographic change with emphasis on ageing, rising importance of CR among stakeholders and connected to these trends, human rights issues and a greater emphasis on human rights abuses. (TEM 2013.)

Referring to an interview in "Kauppalehti Optio", Casper Herler, a lawyer with Borenius said, "Corporate responsibility is also anticipation. Everybody knows that if a company or business sector has not been acting responsibly, media or NGO's raise the issue up immediately". (Kauppalehti Optio 2015, p. 56). So it is important for enterprises to be aware of the impacts of their operations for the environment as well as economics and social.

Internationally, the most commonly used standard for reporting on CR is the GRI (Global Reporting Initiative) guidelines, prepared by the United Nations environment programme. It comprises principles that guide reporting and reporting indicators. More detailed information of GRI is available in Chapter 8.

International codes of conduct include the OECD Guidelines for Multinational Enterprises, the ILO Declaration on Fundamental Principles and Rights at Work, and the tripartite declaration of principles concerning multinational enterprises and social policy by the ILO. These include instructions and rules of conduct concerning the financial, ecological and social responsibility of enterprises, such as human rights, rights at work, the abolition of child labor, the environment, anti-corruption measures, consumer protection and science and technology.

In the G3 guidelines, the principles defining report contents are materiality, stakeholder inclusiveness, sustainability context, and completeness, while those defining report quality are balance, comparability, accuracy, timeliness, reliability and clarity. (TEM 2013.)

Reporting requirements comprise the following:

- 1) Strategy and analysis
- 2) Organisational profile
- 3) Report parameters
- 4) Governance
- 5) Commitments and engagements
- 6) Management approach
- 7) Indicators for financial, social and environmental responsibility.

1.2 Objective and limitations

The first main objective of this thesis is to develop and specify the corporate responsibility reporting of the Gasum to meet customer needs better (with emphasis on the point of view of customers demand) as well as to analyse the current state of reporting and find out possible development needs for the future.

The second purpose of this study is also to analyze (evaluate) the current state of corporate responsibility reporting in Gasum, the strengths as well as the targets to develop. Analysis takes a position on three points of views which are; strategic corporate responsibility, management of the corporate responsibility and reporting of the corporate responsibility.

This study is based on the current state of CR reporting, references from literature and web pages as well as discussions with Gasum's staff involved in CR reporting and communication.

Basically, responsibility reporting is voluntary i.e. companies may consider do they report or not and what is the level they report. In the case of Gasum Oy, the company decided to report rather widely. Reporting is partly voluntary and as earlier mentioned, Finnish State's ownership steering department demands. The steering group and GRI indicators define the basic framework for reporting but there is a possibility that Gasum can improve and develop reporting even more widely based on customer's feedback.

Limitations of the study; this study's target group is limited to Gasum's customers and so it leaves the other stakeholder groups out because this study emphasizes the customer point of view. Gasum has over 50 customers but in this study the amount of customers is limited to 13. The focus is to take examples from the diverse customer base including small, medium and large customers in different business areas such as power production, paper & pulp industry, natural gas distribution companies and raw material (methane to hydrogen) companies.

Evaluation of the reporting current state and future demands has been made only at Gasum e.g. there is no comparison to other companies.

1.3 Research questions

Referring to the discussions with Gasum's other representatives, for example communication, strategic planning and HSEQ departments, the following research questions in this study will be beneficial for Gasum:

- Does Gasum's corporate responsibility reporting respond to our customer's needs?
- How could Gasum add value to customers by developing CR reporting and what is the current state of reporting versus demand and changes to future?
- What is the current state of Gasum's corporate responsibility reporting overall and how to respond to future demands?

Sub questions

- What is the usefulness and usability of the content of the report, in terms of possible enquiries from our customer's own customers or stakeholders?
- Does Gasum operate like a responsible company should? (We fulfil obligations but do we give any added value concerning the reporting).
- · Is the report related to Gasum's strategic themes?

More analysis objects for example:

- Ease of finding information (compact, scattered)
- Understandability (content, source)
- Comprehensiveness (GRI guidelines as minimum, what else essential information should be published)
- Usability, usefulness, relevancy, development targets, expectations
- Separate reporting vs. reporting in the annual report context

1.4 Theoretical framework

Guiding lines of theoretical framework are CR reporting (in general), GRI indicators and requirements as well as the Finnish government's corporate responsibility policy and instructions of Finnish State ownership steering department. Inaddition to the above mentioned; ISO-standardization and Gasum's sustainable development and quality management strategy. As background material, previous studies, literature, articles and theories of this phenomenon are used.

1.5 Research method

This study is based on qualitative research including a questionnaire and discussions. It is also based on collecting and comparing of the the evaluation of the CR report 2012 content against to GRI G3.1 guidelines and the demands of

Finnish government's corporate social responsibility policy and instructions. The case company in this study is the author's employer, Gasum Oy.

The research method is an inquiry into customer's representatives, including the responsible persons of CR reporting and customer operational persons. Target groups include representatives from 13 customer companies of Gasum.

In this study, data collection was conducted by using two methods. First, the author sent the 2012 annual report (paper and electronic version) which include responsibility report to Gasum's customer's representatives for reading and a cover letter in October 2013. The author got the last answers to the inquiry in January 2014. The electric questionnaire includes the numeric values (from 0-5) and open questions. Analyzing the answers and feedback lead to the results that can be used for possible development of CR reporting.

Second, in case of analyzing the current state of reporting versus future demands and changes, this analysis is based on the evaluation of Gasum's CR report content against GRI G3.1 guidelines and the demands of Finnish government's corporate social responsibility policy and instructions. In the GRI content comparison study, the author also examined how G3.1 indicators will change comparing for the coming G4 guidelines and what G3.1 indicators Gasum is reporting in the 2012 report. The results of this evaluation of G3.1 content gives a picture of what should be developed, or are there any shortcomings in reporting. The same also applies to the coming changes in G4 reporting.

2 Gasum Group introduction and influencing factors for CR

Gasum sells natural gas to power companies and industrial facilities with a direct connection to the transmission network as well as to regional companies engaged in the local distribution of natural gas. Large-scale users of natural gas like industrial facility power plants and district heating plants, account for the vast majority of total natural gas consumption in Finland.

Sales of natural gas for local distribution, in most cases small-scale users of natural gas, such as small and medium-sized enterprises and households as well as individual properties and property companies are connected to a local distributor's network.

Gasum Group structure in the year 2012 and natural gas transmission pipeline network

- Gasum Oy: Import and wholesaling of natural gas. Operating, maintaining and extending of transmission system in Finland
- Gasum Paikallisjakelu Oy: Local distribution and sale of natural gas
- Gasum Energiapalvelut Oy / Gasum Tekniikka Oy: Gas appliances, services for installation, maintenance and construction
- Kaasupörssi Oy (Gas Exchange Ltd): Natural gas trading on Internet
- Gasum Eesti AS: Distribution and sale of natural gas in Estonia (Tallinn)

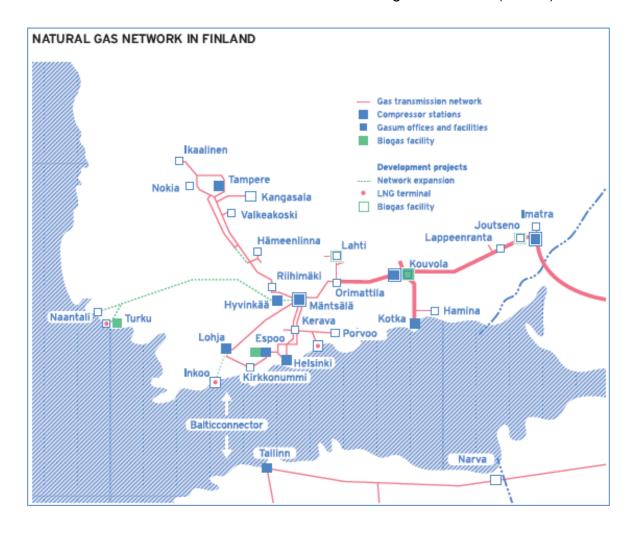


Figure 5. Natural gas network in Finland (Gasum CR report 2012, p. 15)

Below, in Figure 6, is shown a "Business playground map" of Gasum, which determines strategy and structure decisions as well as the development of them.

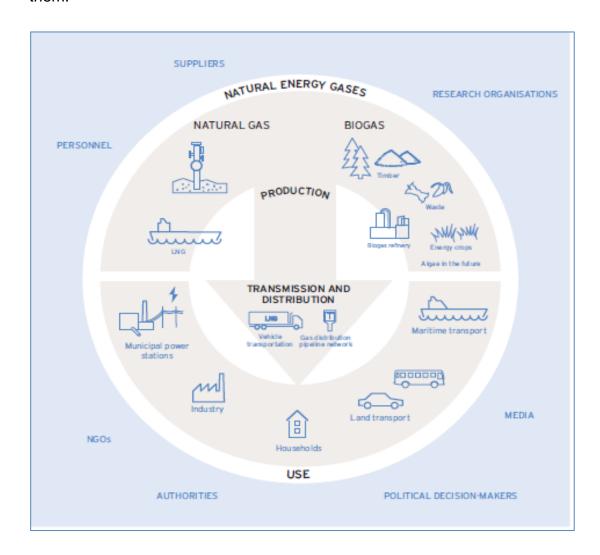


Figure 6. Business playground map (Gasum internal lecture material)

In 2012 home market net sales of Gasum Group were 1.28 billion €, operational profit 62.4 million €, investments 21 million € and paid taxes14.9 million €. There are 50 wholesale customer contracts and over 200 delivery points. Natural gas sales were 34.96 TWh, personnel 259. (Gasum Oy annual report 2012.)

Key figures of Gasum Group, year 2012:

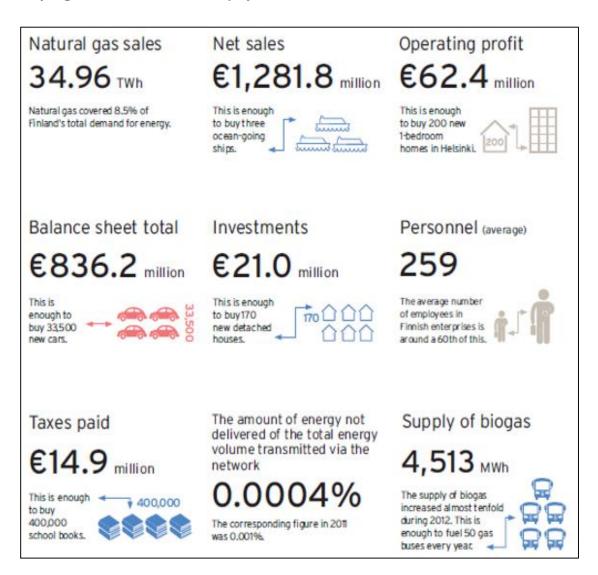


Figure 7. Key figures 2012 Gasum (Gasum Oy annual report 2012 p. 3.)

Influencing factors of CR reporting in Gasum Oy

CR reporting is one way to tell about Gasum's responsibility activities, which when used correctly and closely integrated with the management, is also efficient. A well-prepared report promotes continuous learning inside and outside of the company and it provides a solid base for active discussion with stakeholders and further development of the responsibility.

Some advantages of reporting include stronger financial performance and profitability through operational efficiency gains, improved relations with the investment community and better access to capital, enhanced employee relations that yield better results respecting recruitment, motivation, retention, learning and innovation, productivity, stronger relationships with communities and enhanced licence to operate, improved reputation and branding. In addition to the above mentioned issues, the energy sector has been committed to responsibility reporting for several years. Many of Gasum's customers publish their own reports and of course they require that their supplier do the same.

On the other hand, Gasum is in a challenging situation, since the business area of energy is changing fast. Political, economic and environmental "climate" has been in the turning point for few last years. Gasum has been conducting this business very successfully for almost 40 years here in Finland. Now this situation has changed. Alternative fuel sources, climate policy and "green trend" has impacted its business and even though Gasum's main product, natural gas is the purest fossil fuel.

That is one of the main reasons why Gasum has to change and follow the changing world of energy production. The business environment is changing and the market will change. This, as well as Gasum having to build up alternative solutions which give to it more opportunities to compete in this business area, like biogas, synthetic natural gas (SNG) or liquefied natural gas (LNG). Also political decisions and common opinions have an impact on the business environment. Competition against other fuel sources is essential and new businesses and product ranges are part of this game.

Gasum must focus on highly competitive energy markets in natural gas and related services and commercial solutions development for its core market and regional markets. Gasum has to build its position for the future, the current market position, and exploit its expertise.

So in summary, the global megatrends as well as changes in energy business area forcing Gasum to focus for the future challenges.

Below, in Figure 8 is a description map of the challenging and changing energy business area where Gasum operates.

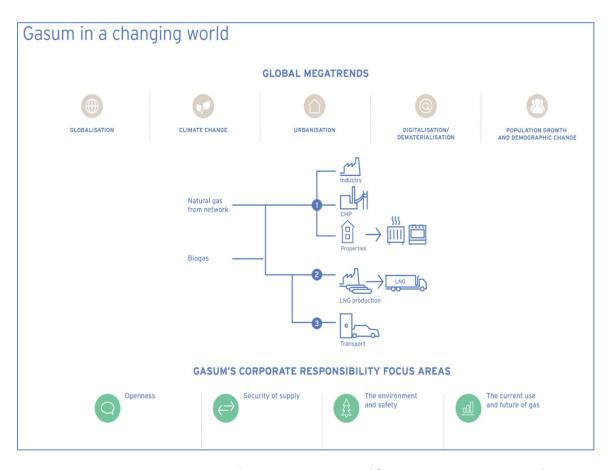


Figure 8. The changing world of energy business (Gasum internal material)

All these things require strategic planning in business as well as corporate responsibility. These are partly the reasons why Gasum has been committed to continuous improvement of it activities in the field of responsibility. You can even say that CR is one of the Gasum's critical success factors.

Good and well-structured sustainability reporting is one way to show commitments to social, economic and environmental issues. Of course reporting itself is not "the thing", but rather the way to show what Gasum has done, what it will do, how to do it as well as measure its actions and impacts to the surrounding society.

Gasum's reporting is also mandatory, because the company is partly owned by Finnish State (24%). That ownership also defines the framework of the reporting model concerning CR reporting based on the decisions of government and its ownership policy and steering by States Ownership Steering Department (VNp 3.11.2011). The department is responsible for state ownership steering in companies operating on market terms.

Finland has the ambition to be a forerunner in the field of CR and has had a CR action plan for a number of years. Additionally, in 2011 CR was, for the first time, integrated into the central government programme, with the key entry emphasising the ambition for Finnish companies to be forerunners in the field of CR. The Finnish Government's CR policy is built upon a notion of CR as the responsibility of organisations for their impacts on society. This means that all organizations should have mechanisms in place to help them to identify their key stakeholders and conduct dialogue with them in order to find solutions for shared problems.

Finland is committed to compliance with and the promotion of CR by supporting the implementation of international codes of conduct which guide the operations of multinational enterprises (TEM 2013).

Trends call for a strategic and sustained CR policy. Finland profits from first-rate legislation and a strong democratic tradition. Problems are openly debated, and there is readiness to work together to find solutions to problems. Globally, demand for responsible solutions will increase and their significance will grow. In this context, the strengths of Finnish society and enterprises should be promoted, taking full advantage of the business opportunities created by social trends, while meeting requirements for responsible conduct in such business operations.

Responsibility will also become an increasingly important factor in maintaining the competitiveness of Finnish enterprises in the global operating environment (TEM 2013).

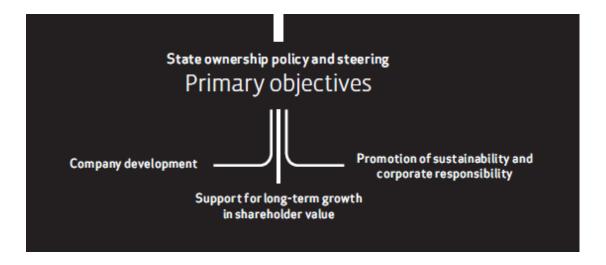


Figure 9. State ownership, primary objectives (Annual report of the State's ownership steering 2013, p. 8)

The government is committed to promoting CR in its administrative branches. In order to meet this commitment, the government requires that the ministries and administrative branches seek ways of including CR in their systems and to report on their progress by the end of the parliamentary term.

Principal responsibility parties in CR issues in Finland are: Ministry of Employment and the Economy, Ministry of Social Affairs and Health, Ministry of the Environment, Ownership Steering at the Prime Minister's Office. (TEM 2013.)

3 CR reporting

Corporate responsibility (CR) reporting has become the de facto law for business. CR reporting enhances financial value while combined reporting leads to integrated reporting. Standard CR metrics provide a consistent method for benchmarking progress, both against internal objectives and external competitors. What is a CR reporting; it is a report about economic, environmental & so-

cial impacts caused by an organization through its everyday activities. The report itself is a document resulting from a reporting process.

"To report or not to report? The debate is over"... Referring to KPMG's survey of CR reporting 2013, "companies should no longer ask whether or not they should publish a CR report. We believe that debate is over. The high rates of CR reporting in all regions suggest it is now standard business practice worldwide. The companies that still do not publish CR reports should ask themselves whether it benefits them to continue swimming against the tide or whether it puts them at risk".

The important questions now are "what?" and "how?" Or, in other words, it is now about the quality of CR reporting and the best means to reach relevant audiences. This includes assessing what is material for the business, proper engagement with stakeholders, having an honest communication strategy including openness about challenges and putting in place the underlying processes to gather and check data. (KPMG Survey of Corporate responsibility reporting 2013 p. 11.)

According to FIBS Sustainability in Finland 2014 survey (data selection was made by random sample of 1000 largest companies in Finland, N=201) and 71% of companies consider CR to be very important for their company at the moment. A year ago, only half of the respondents said the same. Positively, this year, not even one of the companies said CR to be "not important at all".

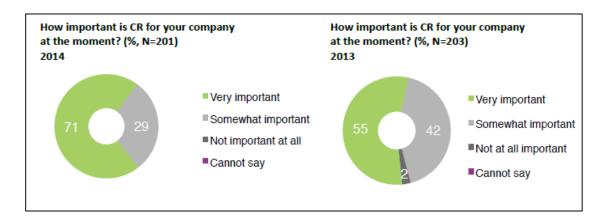


Figure 10. Importance of CR in Finnish companies (FIBS Sustainability in Finland 2014, p. 5)

A good report concentrates on materiality or in other words the things which are important to the company and its stakeholders. One typical internal consequence of responsibility reporting is strengthening understanding between different company's functions. Sometimes it happens that the participants whom are taking part in the preparation of the report, sit down around the table at first time when the project start-up.

The one who has made the report, knows what is going on and what are the objectives set to improve those objectives. The process behind the report is the key issue. In responsibility reporting just as in quality management, the systems have direct connections to the idea of continuous improvement. Monitoring or measuring are essential elements to enable the company find out the results of settled CR targets. Figure 11 below shows the results based on FIBS survey.

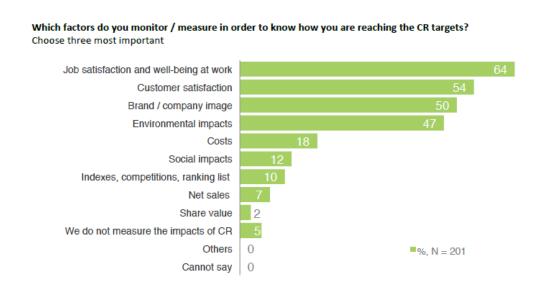


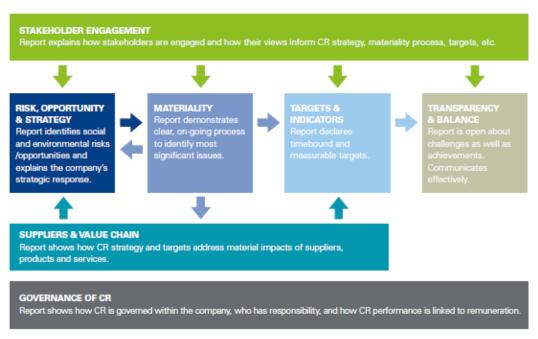
Figure 11. Monitoring/measuring factors CR targets (FIBS Sustainability in Finland 2014, p. 10)

Many responsibility reports follow the international GRI (Global Reporting Initiative) guidelines. Guidelines include also sector-specific supplements.

Different business sectors measure different things. The Basic guideline is not a standard. A good report does not usually arise so that the reporter takes the guidelines and report all the possible indicators, but when making the report the reporter should not waste resources on irrelevant things but focus on the issues that are relevant for the company.

An example of the content in CR reporting that should meet the criteria below:

- Strategy, risk and opportunity
- Materiality
- Target setting and indicators
- Suppliers and the value chain
- Stakeholder engagement
- Governance of CR
- Transparency and balance.



Source: KPMG International, The KPMG Survey of Corporate Responsibility Reporting 2013, December 2013

Figure 12. CR reporting criteria (KPMG Survey of Corporate Responsibility Reporting 2013, p. 37)

4 The purpose of CR reporting

Responsibility reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development. A responsibility report should provide a balanced and reasonable representation of the sustainability performance of a reporting organization – including both positive and negative contributions. Referring to earlier mentioned FIBS Sustainability in Finland 2014 survey results, one question was "how does your company benefit from CR reporting", the answers were divided as shown in Figure 13 below:

CR helps to ... improve company image save costs increase sales increase efficiency increse share value other way none of above cannot say

Figure 13. CR reporting benefits (FIBS Sustainability in Finland 2014, p. 10)

Based on those results, it seems that many companies are mainly looking for higher image or brand value and economic benefits from CR reporting. The results mentioned above also support the notion that CR is one good tool to create and development business benefits.

According to Bob Willard: "Saving the world and making a profit is not an either/or proposition; it is both/and proposition. Good environmental and social programs make good business sense" (The New Sustainability Advantage, p. 2).

5 International trends in CR reporting

The concept of CR is widely regarded as a voluntary business contribution to the societal guiding model of sustainable development and an active corporate engagement e.g. European Commission 2001/2002 that goes beyond legal compliance/European Commission 2008. Resulting from increased awareness of potentially unsustainable side-effects of economic success and growing pressure for more active engagement in CR from various stakeholders, the importance of acting beyond corporate philanthropy and incorporating social and environmental issues into business operations becomes more and more evident. (EC Europe 2013.)

The EU and its Member States are very active regarding sustainability reporting and public policy instruments on sustainability reporting, which vary widely, in type, focus and actors involved. Governments are increasingly assessing the effects of their policy instruments, showing that public policies have contributed to a stronger uptake of sustainability reporting. At the same time, many companies have already been reporting before such legislation was introduced.

Tools for governments, which are already effectively being used, and which can be used more to optimize sustainability reporting, are for example:

- Creating instruments to benchmark and recognize good performance.
- Setting an example by producing a sustainability report in public agencies.
- Promoting awareness of the benefits of reporting within government.
- Actively participating in discussions on the future of reporting.
- Assisting developing countries in data-collection technologies.
- Requiring state-owned companies to publish sustainability reports.
- Playing a role against fragmentation of sustainability reporting regulations.

For many large multinational companies, sustainability reporting has become a mainstream phenomenon. Also EU governments are very active regarding sustainability reporting. In cooperation with companies and organizations active in the field of (sustainability) reporting, governments may be able to further enhance the number of reports and the quality of reporting substantially. (The State of Play in Sustainability Reporting in the European Union, Executive Summary 2011 p.6)

5.1 Global sustainability impacts

According to KPMG's executive summary of Expect the Unexpected: Building business value in a changing world; Global sustainability megaforces will affect the future of every business. With potentially far reaching impacts on the horizon as a result of global sustainability megaforces, businesses and policymakers together must take strategic decisions now and promote changes in long term thinking. Sustainable growth requires action from both economic sides: supply and demand. The supply side must make more with less, increasing resource efficiency and minimizing the environmental footprint of processes and operations. The demand side must make less and do more, managing growing demand for goods and services, while addressing pressure on dwindling natural resources. Companies may already be using systems thinking, for example in strategic planning, revenue management or supply chain planning but in KPMG's view it should be applied as part of a proactive sustainability strategy. Global sustainability megaforces create both risks and opportunities. Businesses can design effective strategies to address the risk while simultaneously taking advantage of the opportunities. (KPMG 2014.)

The phenomenon of global sustainability mega forces has been described more detailed in Figure 14.

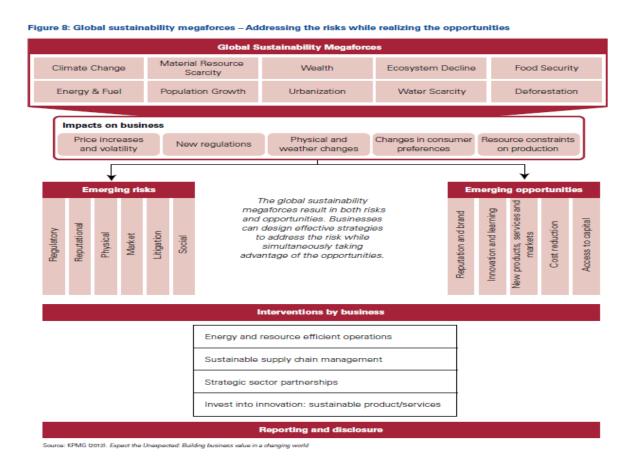


Figure 14. Global sustainability impacts (KPMG 2014)

Below in Figure 15 is presented statistics from global report output by type & year.

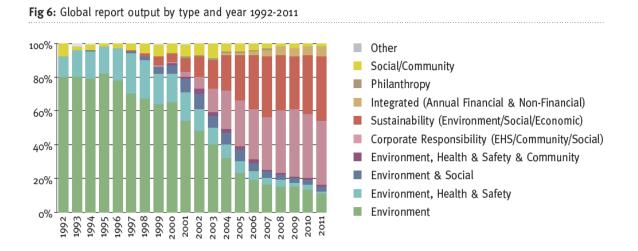


Figure 15. Global report output (Tofuture 2013)

Based on publicly-available information on policy and regulation related to sustainability and CR reporting which was collated and analyzed, the major developmental trends were concluded to be:

- Continued and growing interest in regulation, including corporate governance and disclosure requirements.
- An increase in the number of countries becoming involved in the sustainability reporting policy arena, including developing countries.
- An increasing number of policies inspired by or based on a 'report or explain' approach.
- Growing reference to existing sustainability and reporting frameworks, and the continuing emergence of new frameworks.
- A consistent focus on large and state-owned companies, yet voluntary reporting by SMEs is increasing.
- Sustainability reporting has become a listing requirement on several stock exchanges in non-OECD countries.
- The United Nations is now also asking governments to stimulate sustainability reporting by developing best practice and smart regulation.
- In their introduction of policies, regulation and guidelines, governments are striving to harmonize the use of multiple frameworks. (Carrots and sticks, KPMG 2013 edition p. 9)

Imperatives for achieving sustainable growth: The transition to a sustainable economy is possible, but it requires widespread global support from businesses, governments and civil society. This transition requires solutions that address both how and which goods and services are produced. Both the public and private sectors have a vital role to play and a coordinated approach holds the key to success. Below in Figure 16 is an illustration of the concerted actions on sustainability. (KPMG 2014.)

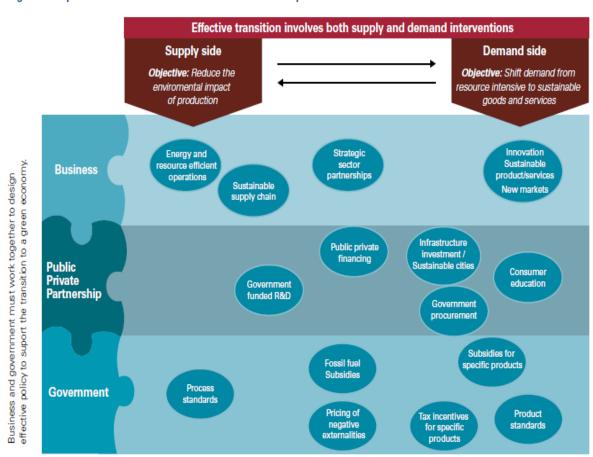


Figure 9: Imperatives for concerted action on sustainability

Source: KPMG (2012). Expect the Unexpected: Building business value in a changing world

Figure 16. Concerted actions on sustainability (KPMG 2014)

5.2 Ten sustainability global forces

Referring to the KPMG Survey of Corporate responsibility reporting 2013, today's businesses operate in a world increasingly shaped by social and environmental megaforces. The global population is growing and shifting to cities; wealth patterns are changing; natural resources, including water and food supplies, are becoming more difficult to access and/or more costly to produce as demand increases; the climate is warming and ecosystems are declining. These megaforces do not function in isolation from each other – they are interlinked in a complex system.

Business leaders need to understand these megaforces and be alert to the commercial risks and opportunities they present, both now and in the in the future. Only then can they create robust strategies for long term success and plan for the business models of tomorrow.

CR reporting should therefore demonstrate that the company is aware of social and environmental megaforces and how they impact, it understands and ideally, has quantified the resulting risks and opportunities and finally has a strategy in place to minimize risk and exploit opportunities and is clear about the actions it is taking. (KPMG 2013.)



Figure 17. 10 sustainability global forces (KPMG Survey of Corporate responsibility reporting 2013, p.48)

5.3 Sustainability Disclosure Milestones 2006-2013

Table 1. describes the evolution of sustainability reporting activities and highlights.

Year	Sustainability Disclosure Milestones 2006-2013		Year	Sust
2006	GRI G3 Sustainability Reporting Guidelines		2011	Upda
	Amsterdam Global Conference on Sustainability and			Anni
	Transparency			GRIC
	Carrots and Sticks for Starters			com
	Accounting for Sustainability launched by the Prince of			'A re
	Wales			the E
2007	'Growth and Responsibility in a World Economy', G8			repo
	Summit Helligendamm, Summit Declaration 'Guidelines for GRI based external reporting by state-			UNG
	owned companies (Sweden)			Laur
	Guidelines on Fulfilling Social Responsibility by State-			7 th K
	Owned Enterprises (China)			repo
2008	Financial Statements Act requires CSR disclosure for		2012	RIO+
	large businesses (Denmark)			Futu
	Amsterdam Global Conference on Sustainability and			susta
	Transparency			The
2009	White Paper on 'CSR in a global economy' (Norway)			gove
	The Corporate Social Responsibility Voluntary			Gren
	Guidelines in India launched by the Ministry of			Worl
	Corporate Affairs GRI's Amsterdam Declaration on Transparency and			unde
	Reporting		2013	Norv
	Update of King Code of Governance for South Africa			Para
	(King III)			Euro
2009	SEC shifts policies to incorporate ESG concerns (USA)			Cour
	European Workshops on the disclosure of ESG			rega
	Information (European Commission)			Infor
	Initiation of review of OECD Guidelines for			Repo
	Multinational Enterprises (OECD)			Laun
	Accounting for Sustainability launches 'A Practical			30 th
	Guide to Connected Reporting			Acco
	Inaugural Sustainable Stock Exchanges Global Dialogue			IIRC
2010	SEC releases Interpretive guidance on climate change risk disclosure (USA)			Repo
	Final EU Workshop on the disclosure of ESG information (European Union)		The nece	essity a
	Amsterdam Global Conference on Sustainability and		by the at	
	Transparency		Edelman business	
	Revision of OECD Guidelines		do not si	
	Launch of ISO 26 000		governm	
	Johannesburg Stock Exchange requires Integrated		protectio	
	reports from listed companies		action th	
	United Nations Global Compact: 10 year anniversary,	1	focusing	on gr
	launch of the UNGC Differentiation Framework		stability.	
	GRI Guidelines: 10 year anniversary		¹¹ Membe	vehin e
	Establishment of the International Integrated Reporting Committee/Council (IIRC)		Norway	, South
	committee/council (inte/		12 Edelma	n, 2012

Year	Sustainability Disclosure Milestones 2006-2013
2011	Updated OECD Guidelines adopted at the 50 th Anniversary Ministerial Meeting GRI G3.1 Guidelines launched, with updates on gender, community and human rights 'A renewed EU strategy 2011-14 for CSR' published by the European Commission, with new definition of CSR and announcement of future mandatory sustainability reporting UNGC women's empowerment principles Launch of the UN Guiding Principles on Human Rights 7 th KPMG global survey on corporate responsibility reporting
2012	Rio+20 summit in Brazil; outcome document The Future We Want adopted, with explicit reference to sustainability reporting in Paragraph 47 The Group of Friends of Paragraph 47 founded by the governments of Brazil, Denmark, France and South Africa Grenelle II passed in France Work on the post-2015 development agenda gets underway
2013	Norway and Colombia Join the Group of Friends of Paragraph 47 in the first four months of 2013 ¹¹ European Commission launches proposal amending Council Directives 78/660/EEC and 83/349/EEC as regards disclosure of non-financial and diversity information by certain large companies and groups Amsterdam Global Conference on Sustainability and Reporting Launch of G4, the fourth generation of GRI Guidelines 30 th ISAR conference on Corporate Transparency Accounting IIRC releases the draft International Integrated Reporting Framework for public consultation

The necessity and value of sustainability reporting was boosted by the attention it received at Rio+20. As shown in the 2012 Edelman Trust Barometer, citizens' trust in both government and business has declined. Many people believe that governments do not sufficiently regulate business. The Most stakeholders expect governments to play a more prominent role in consumer protection and responsible business practices. This is a call to action that governments are attempting to live up to, while also focusing on growth, job creation, and maintaining economic stability.

Table 1. Sustainability milestones (Carrots and sticks KPMG 2013 edition, p. 11)

¹¹ Membership of Group on 9 April 2013: Brazil, Colombia, Denmark, France, Norway, South Africa

¹² Edelman, 2012. 2012 Edelman Trust Barometer Global Results. Edelman.

There is a global increase in the amount of policy and regulation for organizational reporting.



Figure 18. Worldwide initiatives (Carrots and sticks, KPMG 2013 edition, p. 13)

What are the main trends? State-owned enterprises and large companies are increasingly being required to report. In parallel, there is an increase in mandatory sector-specific reporting.

Mandatory and voluntary approaches create mutual traction; an increase in one tends to lead to an increase in the other. An increasing number of organizations are reporting their sustainability performance. Various factors are driving this growth, including stakeholder and peer pressure, crises, growing awareness of the strategic importance of sustainability and of course, new reporting requirements – especially from governments and stock exchanges. (Carrots and sticks, KPMG 2013 edition p. 13.)

5.4 Trends in mandatory and voluntary reporting

The following countries have mandatory reporting requirements for state owned companies (Fogelberg 2014).

- China
- Denmark (large companies only)
- Finland
- France (all large companies)
- India
- Netherlands
- Norway
- Russia
- Sweden

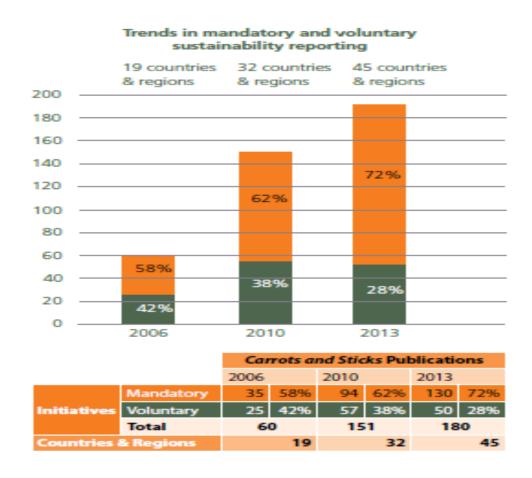


Figure 19. Trends of reporting (Carrots and sticks, KPMG 2013 edition, p. 13)

5.5 Rate of CR reporting by KPMG

The KPMG survey looks at the 100 largest companies by revenue in 41 countries to explore how many companies are producing CR reports and other issues, such as the drivers for reporting, sector variances, and the use of standards and assurance for CR reports. Results are shown below.

Rate of corporate responsibility reporting across 41 countries - 2011 and 2013 (% of companies reporting on CR).

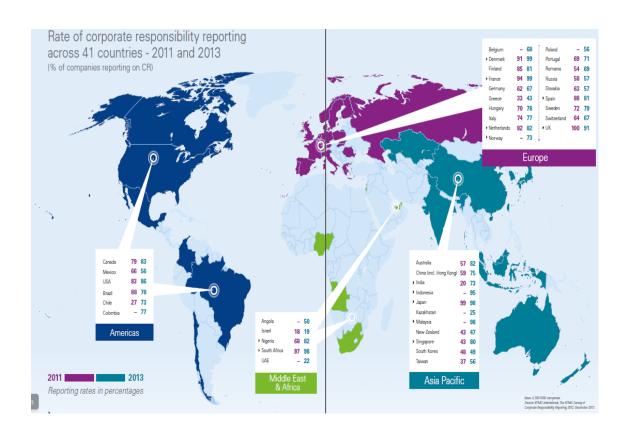


Figure 20. Rate of CR reporting (KPMG Survey of Corporate Responsibility Reporting 2013, p. 25-26)

Development of sector reporting trends in CR reporting and Global top 20 GRI reporting countries 2013 are shown on page 40, Figure 20 and 21.

Development of sector reporting trends in CR reporting.

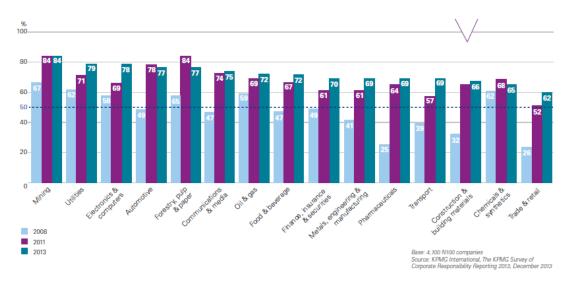


Figure 21. Sector reporting trends (The KPMG Survey of Corporate Responsibility Reporting 2013, p. 27)

Global top 20 GRI reporting countries 2013

As we can see United States is a leader in GRI reporting, Finland is in place 14.

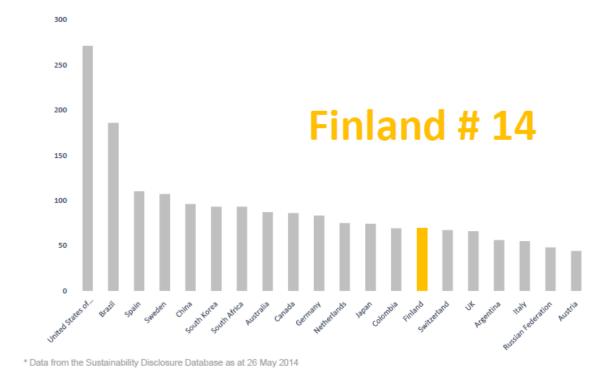


Figure 22. Top 20 GRI reporting countries (Fogelberg 2014)

Growth of reporting.

Regarding to earlier mentioned The KPMG survey, reporting has been growth initially rather fast but slowed down since 2010. Results are shown below.

Growth in reporting since 1993

Percentage of companies with CR reports

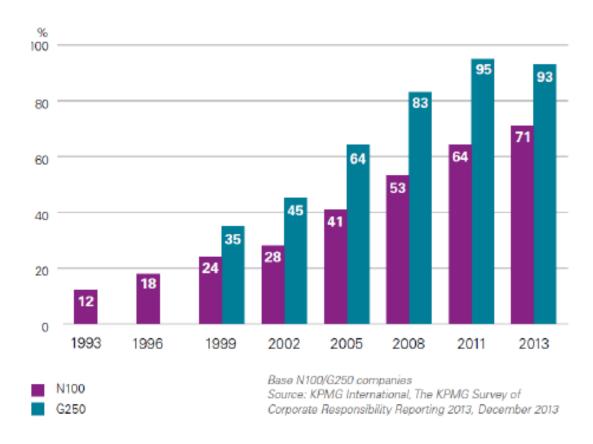


Figure 23. Growth of reporting (Fogelberg 2014)

6 Europe 2020 strategy and CSR Europe

The European Commission has adopted a proposal for a Directive on non-financial information disclosure, amending the Directives 78/660/EC and 83/349/EEC (known as the Accounting Directives). The new Directive aims to increase transparency and the relevance, consistency and comparability of non-financial information. (Global reporting 2014.)

It features a 'report or explain' approach: Companies with an average number of employees exceeding 500 during the financial year, and exceeding either a balance sheet total of EUR 20 million or a net turnover of EUR 40 million, are called on to provide information on their strategy, results and risks as part of their annual reporting cycle, or to explain why not. SMEs and companies already producing a comprehensive report using recognized frameworks in the same financial year are exempted. The proposal explicitly refers to GRI's Guidelines as one of the internationally accepted frameworks companies should use when preparing their reports. To be implemented by the European Commission and Member States, it needs to be approved through the ordinary legislative process of the EU. (Global reporting 2014.)

The European Union is taking more concrete steps on Corporate Social Responsibility and has announced its plans for a consistent approach to reporting, to support smart, sustainable and inclusive growth in pursuit of the Europe 2020 objectives according to Global Report Initiative:

The European Commission has adopted an ambitious Renewed EU strategy 2011–2014 for Corporate Social Responsibility.

The European Parliament has adopted two resolutions with regard to implementing the European Commission's CSR strategy: a Report on Corporate Social Responsibility: promoting society's interests and a route to sustainable and inclusive recovery; and a Report on Corporate Social Responsibility: accountable, transparent and responsible business behavior and sustainable growth. (Global reporting 2014.)

6.1 European directive on non-financial reporting

Objectives: strengthen transparency and accountability and ensure a level playing field across the EU, increase the relevance, consistency and comparability of information disclosed in the EU, enhance transparency regarding the diversity policy applied by the undertakings. This will apply to about 6.000 EU companies (scope to possibly be enlarged in 4 years).

Next steps: Council of the EU adopts the Directive as voted on in the European Parliament (Oct 2014), 2 years after entry into force the Directive will be transposed into national laws of Member States. (Fogelberg 2014.)

CSR Europe is the leading European business network for corporate social responsibility with around 70 multinational corporations and 36 national partner organizations as members from around 30 European countries. In total, the network reaches out to over 5000 companies throughout Europe. The organization was founded in 1995. In October 2010, CSR Europe launched a joint Enterprise 2020 initiative to address societal challenges through collaborative action and shape the business contribution to the European Union's Europe 2020 strategy for smart, sustainable and inclusive growth. (CSR Europe.)

CSR Europe is a lead partner of the EU institutions in defining the European CSR agenda and is also a key partner of other stakeholders on CSR Sustainability issues, e.g. through the European Alliance for CSR and the European Multi-Stakeholder Forum on CSR. (CSR Europe.)

Furthermore, in the context of the EU's Europe 2020 strategy, Enterprise 2020 highlights the contribution that businesses can make to achieve the EU goals for building a smart, sustainable and inclusive economy delivering high levels of employment, productivity and social cohesion by 2020. (Enterprise2020 - The Power of Collaboration – CSR Europe 2012_0.pdf.)

6.2 Enterprise 2020 project: Smart, Sustainable and Inclusive

"Scaling up collaboration for enhanced impact on sustainability challenges".

Enterprise 2020 is about stimulating business innovation and impact through the power of collaboration. Participating in Enterprise 2020 collaborative projects creates impact for companies in terms of professional development and influencing corporate planning, strategy and new innovative processes. Furthermore, as the only business network endorsed by the European Commission in its EU CSR strategy, Enterprise 2020 also aims to act as a platform for developing new synergies with policy making at national, European and international level. (Enterprise2020 - The Power of Collaboration - CSR Europe 2012_0.pdf.)

Through Enterprise 2020, the goal of CSR Europe is to act as the European platform of action for companies looking to make the most of their social innovation and positive impacts on society through sustainable business models, products and services. CSR Europe defines an Enterprise 2020 company as a company that has fully integrated sustainability issues into its business strategies. Through Enterprise 2020, the ambition is clear: to drive company action towards a smart, sustainable and inclusive Europe. CSR Europe believes that there are two basic requirements (Figure 24, p. 45) for the ideal company towards Enterprise 2020. (Enterprise2020 - The Power of Collaboration – CSR Europe 2012_0.pdf.)

Business contribution to smart, sustainable and inclusive growth, affecting factors and solutions to achieve the vision:

- 1. Highly developed CSR Management and transparency
- 2. Social innovation as business strategy

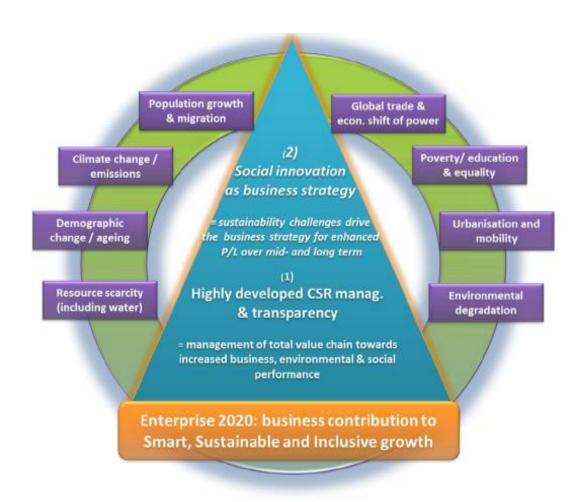


Figure 24. Enterprise 2020 (CSR Europe 2014)

7 CR reporting in Finland

The FIBS Sustainability in Finland 2014 survey asked for Finnish large companies the reasons why they are engaged in CR, result below:

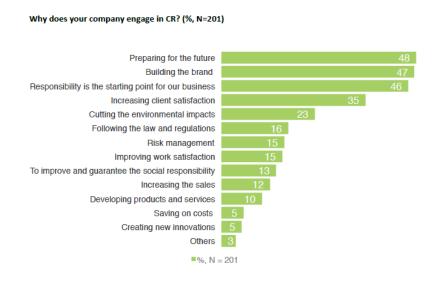


Figure 25. Why Finnish companies engage in CR (FIBS Sustainability in Finland 2014, p. 6)

FIBS also asked in their survey of which guidelines, principles or standards companies apply:

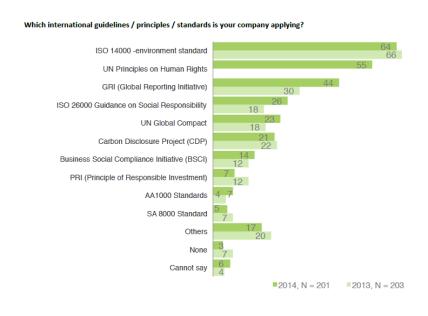


Figure 26. Which guidelines/principles/standards companies apply (FIBS Sustainability in Finland 2014, p.9)

According to PwC's Corporate Responsibility Barometer 2013, an increasing number of Finnish companies are including corporate responsibility as part of their target-setting. CR information is mainly published by large companies. Interest in responsible investing has increased as Finnish institutional investors are increasingly requiring that the companies they invest in are committed to responsible practices. These companies must consider the social and environmental effects of their activities, commit to principles of good corporate governance and manage their CR issues.

In addition to risk management, investors make investment decisions based on the companies' ability to create value; for example, through new markets or new products or by increasing the brand value. Along with institutional investors' increasing demands, an increasing number of asset managers have also incorporated ESG (Environmental, Social and Governance) issues into their investment process. This trend is further promoted by the UN Principles for Responsible Investment (UNPRI). (PwC's Corporate Responsibility Barometer 2013, p. 6.)

PwC's Corporate Responsibility Barometer reviews the corporate responsibility (CR) activities of Finnish companies using publicly available information. A total of 568 Finnish companies were evaluated for the barometer and 157 companies and organizations publishing CR information were analyzed for the barometer in closer detail. The barometer results are based on information available in the public domain. Corporate responsibility was evaluated on the basis of information obtained from the companies' websites, CR reports and annual reports. (PwC's Corporate Responsibility Barometer 2013, p. 3.)

7.1 Companies assessed for the responsibility barometer

PwC's Corporate Responsibility Barometer reviews Finnish corporate responsibility from three perspectives: strategic corporate responsibility, management and reporting. CR information is mainly published by large companies.

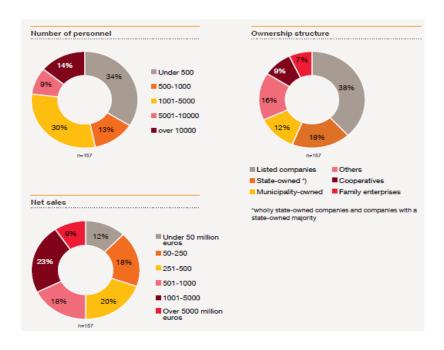


Figure 27. PwC barometer companies criteria (PwC's Corporate Responsibility Barometer 2013, p. 4)

Three perspectives on CR, strategy, management and reporting:

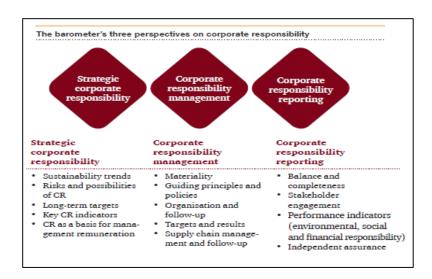


Table 2. PwC's barometer, perspectives (PwC's Corporate Responsibility Barometer 2013, p. 5)

In CR reporting, the progress has been steadier compared to previous years. Companies are now reporting more balanced information about their financial, social and environmental responsibility. (PwC's Corporate Responsibility Barometer 2013, p. 11.)

Number of Finnish companies reporting CR information



Figure 28. Reporting, Finnish companies (PwC yritysvastuubarometri 2014, p.3)

According to the international GRI guidelines reporting made by Finnish companies has nearly doubled in recent years as can be seen in Figure 35.

The number of Finnish companies reporting according to the international GRI guidelines has nearly doubled over the last four years

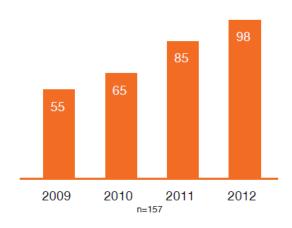


Figure 29. Reporting, Finnish companies GRI (PwC's Corporate Responsibility Barometer 2013, p. 9)

Regarding publishing channels of CR reporting, the Figure below shows the channels that are used for reporting. In Gasum, we use annual report and separate CR report (paper and electronic versions) as publishing channels.

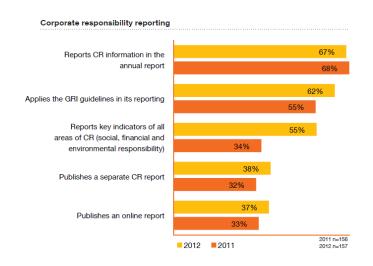


Figure 30. Reporting, publishing channels (PwC's Corporate Responsibility Barometer 2013, p. 9)

8 GRI

GRI (Global Reporting Initiative) is a worldwide initiative that United Nations started in 1997, which aim is to improve and unify corporate sustainability reporting policies. GRI-guidelines have achieved a status of internationally approved guideline which often compared to IFRS-standards in annual financial reporting. Global Reporting Initiative (GRI) is a network based non-governmental organization that aims to drive sustainability reporting and Environmental, Social and Governance (ESG) disclosure by all organizations. GRI produces the world's most widely used Sustainability Reporting Framework to enable this drive towards greater transparency.

GRI is a non-profit organization that provides a sustainability reporting framework used around the world. GRI works towards a sustainable global economy where organizations manage the impacts of their activities responsibly and report transparently.

GRI's mission is to make sustainability reporting standard practice by providing guidance and support to organizations. The GRI guidelines determine the principles and indicators that organizations can use to measure and report on their economic, social and environmental impacts. (GRI 2014.)

GRI guidelines version development milestones:

Below is shown a pathway of GRI reporting development since beginning to current versions.

```
-1999 (exposure draft)
```

-2000 (1.0)

-2002 (2.0)

-2006 (3.0)

-2011 update (3.1)

-2013 (4.0)

GRI offers guidance, support and resources. Guidance concerns the idea of sustainability reporting and how to do it (application level checks: confirm the amount of GRI standard disclosures you have addressed in your report). Featured reports: promotes your report – and your commitment to transparency. Sustainability disclosure database is a global resource for sustainability in one place, training programs (GRI certified training courses and modules). Support such as application level information, training programs and use of reporting hub. Resources include a reporter's starter kit, reporting framework, templates, and GRI content index and checklist. (GRI 2014.)

Measuring progress, true wealth & wellbeing of Nations e.g. how to create a global, overall picture of the worldwide responsibility/sustainability situation? GRI's reporting database is collecting reports so it has become an overarching tool to get a global picture of the situation. Also the governments as well as companies, universities, media, etc. produce important information for measuring needs. What kind of measures and information should be take into consideration for reporting and information collection to GRI database? Reporting is the key to get a total picture. In Figure 31 are presented the possible sources which are needed for creation of the global, overall view.

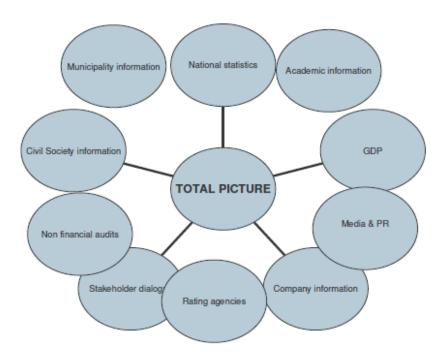


Figure 31. Total picture (Fogelberg 2015.)

The GRI framework, incorporating the G3 guidelines, sets out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. GRI is committed to continuously improving and increasing the use of the guidelines, which are freely available to the public. The Framework consists of the Sustainability Reporting Guidelines, the Indicator Protocols, Technical Protocols and the Sector Supplements. In general sustainability reports based on the GRI Reporting Framework disclose outcomes and results that occurred within

the reporting period in the context of the organization's commitments, strategy, and management approach. (GRI 2014.)

The basic concept of GRI is described in Figure 32.

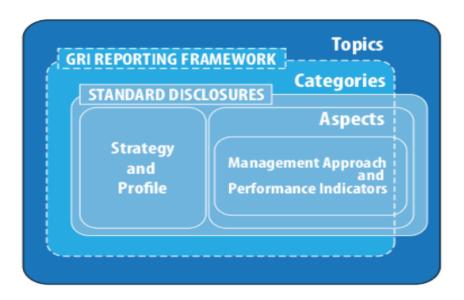


Figure 32. GRI concept (Aalto Pro MEMA 2014)

Reports can be used for the following purposes, among others:

- Benchmarking and assessing sustainability performance with respect to laws, norms, codes, performance standards, and voluntary initiatives.
- Demonstrating how the organization influences and is influenced by expectations about sustainable development.
- Comparing performance within an organization and between different organizations over time. (G3.1-Guidelines-Incl-Technical-Protocol.pdf.)

Frameworks disclose outcomes and results that occurred within the reporting period in the context of the organization's commitments, strategy and management approach.

GRI guidelines

GRI-guidelines define the content and structure of the report. The basic content of (standard disclosures) are divided in three (3) groups:

- Strategy and description of the background: general framework of the organization (strategy, basic information, reporting principles and management, commitments and stakeholder engagement)
- Management policy: how an organization managed the essential aspects of the corporate responsibility.
- Performance indicators: comparable information on relevant economic, social and environment impacts. (G3.1-Guidelines-Incl-Technical-Protocol.pdf.)

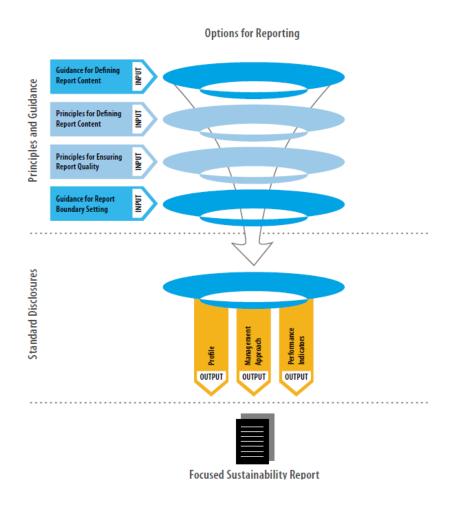


Figure 33. Overview of the GRI Guidelines (G3.1-Guidelines-Incl-Technical-Protocol.pdf, p. 4)

GRI reporting framework

Sustainability reports based on the GRI reporting framework disclose outcomes and results that occurred within the reporting period in the context of the organization's commitments, strategy and management approach.

As a source of information used below the Oil and Gas Sector Supplement is based on the G3.1 Sustainability Reporting Guidelines. (Authors remark)

Reports can be used for the following purposes, among others:

- Benchmarking and assessing sustainability performance with respect to laws, norms, codes, performance standards and voluntary initiatives.
- Demonstrating how the organization influences and is influenced by expectations about sustainable development.
- Comparing performance within an organization and between different organizations over time. (Oil & gas sector supplement reporting guidelines, p. 12)

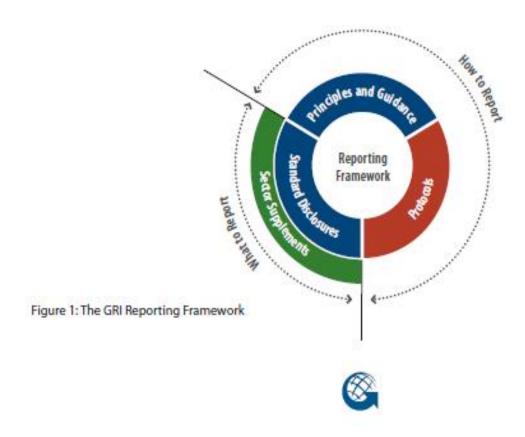


Figure 34. GRI reporting framework (G3.1-Guidelines-Incl-Technical-Protocol.pdf, p. 3)

The GRI reporting framework is intended to serve as a generally accepted framework for reporting on an organization's economic, environmental, and social performance. It is designed for use by organizations of any size, sector, or location. It takes into account the practical considerations faced by a diverse range of organizations. (GRI Oil & gas sector supplement, reporting guidelines, p. 12.)

The process of defining GRI report content

The three process steps for defining report content are depicted in Figure 35.

1. Identification

2. Prioritization

3. Validation

The four 'reporting principles for defining content featured in the GRI reporting guidelines should be used in the process for defining report content: 'Materiality', 'Stakeholder Inclusiveness', 'Sustainability Context' and 'Completeness'. (GRI Oil & gas sector supplement reporting, technical protocol, p. 4.)

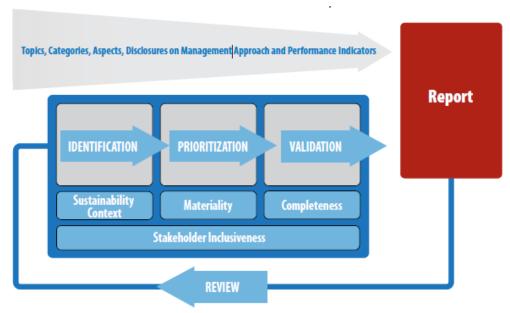


Figure 2: Defining report content - the process

Figure 35. CR content reporting process (G3.1-Guidelines-Incl-Technical-Protocol.pdf, p. 184)

GRI application level criteria

To indicate that a report is GRI-based, report makers should declare the level to which they have applied the GRI reporting framework via the "application levels" system. The reporting criteria at each level reflect a measure of the extent of application or coverage of the GRI reporting framework. They are titled C, B, and A. The reporting criteria at each level reflect a measure of the extent of application or coverage of the GRI reporting framework. When the report has been externally assured, the status of plus ("+") can be added to the application level. Reports intended to qualify for level C, C+, B, B+, A or A+ must contain each of the criteria that are presented in the column for the relevant level. GRI recommends reporting organizations include the application level table in their report as it illustrates the value and requirements of the system to report readers.

The Gasum's responsibility report in the year 2012 meets the requirements for GRI's application level **B** according to GRI G3.1 guidelines.

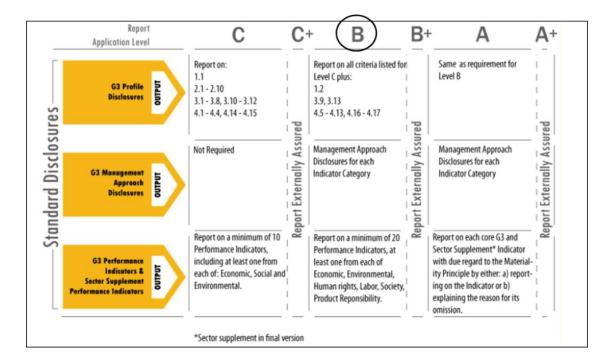


Figure 36. GRI application levels (Tofuture 2013, modified by the author)

A responsibility report should provide a balanced and reasonable representation of the responsibility performance of a reporting organization –

including both positive and negative contributions. In order to ensure a balanced and reasonable presentation of the organization's performance, a determination must be made about what content the report should cover. This determination should be made by considering both the organization's purpose and experience, and the reasonable expectations and interests of the organization's stakeholders. Both are important reference points when deciding what to include in the report. Some organizations may choose to introduce reporting against the full GRI Reporting Framework from the outset, while others may want to start with the most feasible and practical topics first and phase in reporting on other topics over time. (G3.1-Guidelines-Incl-Technical-Protocol.pdf, p. 5-6.)

GRI principles for ensuring information quality in the report are listed below in Figure 37.

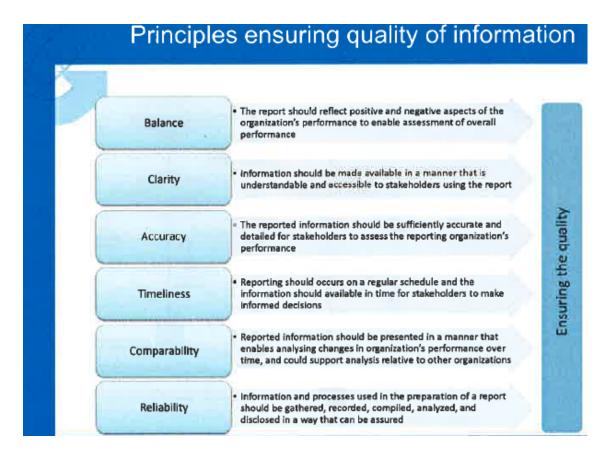


Figure 37. Ensuring of reports quality (Tofuture 2013, modified by the author)

GRI report basic content

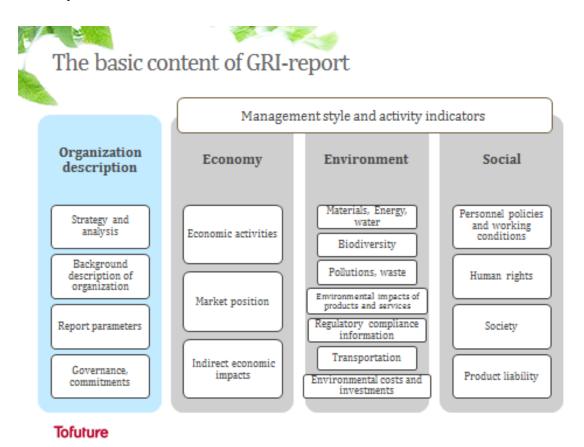


Figure 38. GRI report, basic content (Tofuture 2013, modified by the author)

Reporting process should be structured as follows:

Reporting process

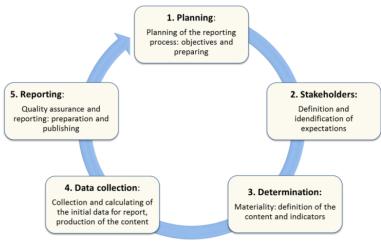


Figure 39. GRI reporting process (Tofuture 2013, modified by the author)

9 CR reporting at Gasum Oy

Gasum as Finland's main importer and distributor of natural gas has committed to responsibility reporting for several years. As such it is very clear why Gasum publish responsibility reports; Gasum's customers as well as the public and Finnish State instructions are the main triggers for Gasum's reporting. Of course Gasum has adopted Corporate Responsibility (CR) as a part of its strategy while transparency is also one of the competitive factors in good corporate citizenship and successful business.

As earlier mentioned, the current GRI G3.1 guidelines have three application levels: **C**, **B** and **A**, with **A** being the highest and least common. The reporting level is based on the reported indicators. When the report has been externally assured, the status of plus ("+") can be added to the application level. However, not all corporate responsibility reports by Finnish enterprises which have applied the GRI G3 reporting guidelines have been verified by external organizations.

Gasum's CR reporting rely on the Global Reporting Initiative's (GRI) guidelines, principles, terminology, indicators, calculation methods and structure. In addition to the basic GRI indicators, indicators in accordance with the GRI's Electric Utility Sector Supplement (EUSS) are applied to Gasum's operations. Gasum has been publishing CR report since 2010 as a part of annual report (paper and electronic version). The first and the second report in 2010 and 2011 meet the requirements for GRI's application level C+ according to GRI G3.1 guidelines. In the case of Gasum Oy, a third-party GRI application level check conducted by a corporate responsibility specialist Tofuture Oy, confirms Gasum's self-declaration that the corporate responsibility reporting meets the requirements for GRI's application level C+ according to GRI G3.1 guidelines in the year 2010 and 2011.

The 2012 report met the requirements for GRI's application level B according to GRI G3.1 guidelines and it has been published as a part of annual report (short, basic version) as well as a separate electronic publication which focuses only to the CR issues. This centralized mode is new and individual way for Gasum to report CR.

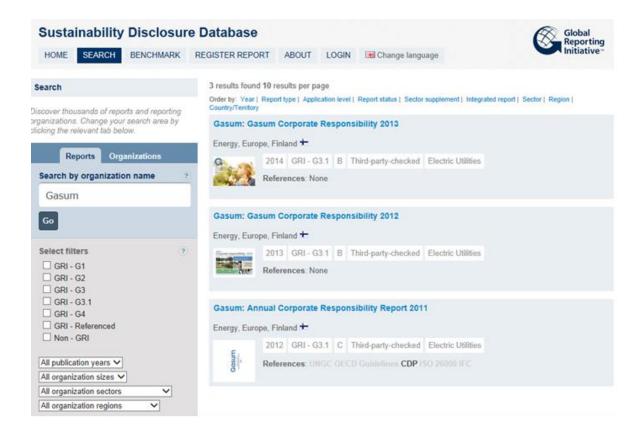
The report covers the functions of Gasum Group. The report includes the description of the most important product (natural gas) life cycle but excludes the production and transmission to Finnish border because these actions do not belong to Gasum's core functions (i.e. Russia / OAO Gazprom) and thus do not need to be included in the report at all.

Gasum wishes to incorporate sustainable development and corporate responsibility firmly into its business strategy. Gasum's sustainable solutions aim at a cleaner local environment and cleaner climate. On the basis of analyses conducted, Gasum's most important responsibility themes are openness, security of supply, the environment and safety and the current use and future of gas.

Gasum holds a certificate of an integrated management system (IMS) since 1993. It is in accordance with the ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 standards and has been certified by DNV Certification Ltd. The ethical principles followed by Gasum and its subsidiaries support the business activity and success by forming a shared foundation for its values and operations. Gasum is committed to full compliance with legislation and regulations both within the Group and in relation to customers, public authorities and other stakeholders.

In 2013 Gasum joined to FIBS (corporate responsibility network) membership http://www.fibsry.fi/fi/.

Information on Gasum's CR reports are available in GRI's sustainability disclosure database (http://database.globalreporting.org/search/Gasum) which cover page is shown below in Picture 2.



Picture 2. GRI/ Sustainability Disclosure Database/Gasum (Database 2014).

10 CR as a part of Gasum's strategy

Referring to Sirpa Juutinen, a specialist in strategic CR; "The aim of strategic responsibility is to analyze the phenomenon of sustainability as a factor that have impacts to business. It means that when you create business strategy, you have to take on account also the limitations and opportunities that sustainability brings with it. Responsibility of development and implementation of strategic responsibility is for company's board and executives".

(Mediaplanet no 3/yritysvastuuliite 2015, p. 5.)

Strategic CR describes how a company implements responsibility as a part of its business planning. Strategic CR is focused to the future; it covers the risks and opportunities, sustainability challenges and long term objectives. Referring the PwC's responsibility barometer, key factors in strategic CR are:

- · Development trends of sustainability
- Risks and opportunities of CR
- Long term objectives
- · Key figures of CR
- CR as a part executives' compensation system (PwC's responsibility barometer.)

Finnish companies are bringing corporate responsibility closer to their business. The perspective of corporate responsibility has to tie up more strongly to every stage in strategy process. In strategic working the risks and opportunities of business environment should be mapped also from the point of view of responsibility. Gasum is committed to full compliance with legislation and regulations within the group and in relation to customers, public authorities and other stakeholders. Gasum complies with the principles of openness, transparency and equality in relation to these. Corporate executives are required to be aware in responsibility issues and also set up improvement targets to them. The goal between executives and stakeholders is the same: productive responsibility.

Gasum's sustainable development strategy is to become Finland's leading bio-based gas producer. Gasum wished to incorporate sustainable development and corporate responsibility firmly into its business strategy. Gasum's sustainable solutions aim at a cleaner local environment, cleaner Baltic Sea and cleaner climate. A key role in the development of new solutions is played by research and development as well as the creation of innovations aimed to produce new technologies and business models. (Gasum CR report 2012, p. 6.)

Gasum has identified the most important stakeholder groups as follow: customers, staff and owners, national and local political decision makers, land owners, media, partners in R&D, consults and subcontractors. All of these stakeholders have an essential role for developing Gasum's activities and operating condi-

tions. In addition, many educational institutions and students are some sort of stakeholders which Gasum co-operates with on many kinds of issues.

10.1 Company's environment strategy

From the point of view of Gasum, environment is one key indicator of its responsibility because natural gas is a fossil fuel, even though it is the cleanest one. For that reason, Gasum's stakeholders are very much interested in its environmental actions, and for that reason Gasum has emphasized environmental issues in its strategic principles and themes.

Referring to professor H-L Pesonen from Jyväskylä University; "When the stakeholders submit specific environmental demands to company, these issues become also business demands i.e. they are not anymore only environmental issues." These submissions should be recognized and integrated as a part of company's core activities (calculation, financing, marketing, strategic management, etc.). Accordingly environmental strategy should be integrated as a part of company's strategy; it should not be a separate function but rather an integral part of company's practice. (Pesonen 2011.)

10.2 Integration of the responsibility into strategy

In opinion of the author, strategic responsibility can summed up as follows: "It is a part of company's everyday activities (business as usual) and it is systematic and communicative". Systematic approach is continuous development, evaluating and measuring. Communication (internal and external) is also vital, because it generates competitive advantages and visibility/transparency to the company.

What: A decision for where the company wants to go with responsibility issues. Strategic decisions will be made from the suitable strategic levels of previous items. How: Identify the significant aspects of responsibilities.

Many Finnish companies are bringing corporate responsibility closer to their business. Nearly half of the companies have incorporated CR activities into their business strategy (see Figure 40). Additionally, an increasing number of companies have set long-term goals and defined the key indicators to monitor CR management results. Figure 40 describes how Finnish companies utilize strategic CR in their reporting.

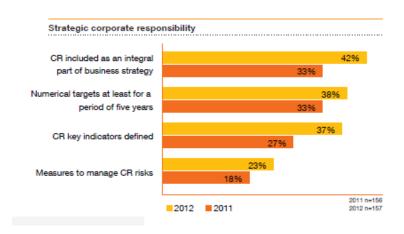


Figure 40. Strategic CR reporting in companies (PwC's Corporate Responsibility Barometer 2013, p. 6)

Strategic management of CR could be described as below in Figure 41.



Figure 41. Strategic management of CR (Pesonen 2011)

As earlier mentioned on pages 10-13, all management systems have a same basic idea: continous improvement on company's activities by Plan-Do-Check-Act, Deming's quality circle.

- Quality management, improving the quality of operations and products.
- Environmental management, improving the level of protection of the environment
- Safety management, improving and reducing the operational risks.

Common sections of the management systems:

- Organisation of the company (structure, people and their skills, values, culture)
- Companys processess (core- & support functions like training, communication and internal / external audits)
- Recordable documentation that guide and controlling activities.

Integrated management system (IMS) promote the approach that an organization should establish one integrated system that is best for the business and not set up separate, often duplicate, processes or documentation to satisfy each management standard. (Pesonen 2011.)

Pesonen (2011) suggests the most common management system is integration of a quality management system (QMS) with an environmental management system (EMS) and/or an occupational health and safety management system (OHS) and other regulations / standards and requirements into a single management system .

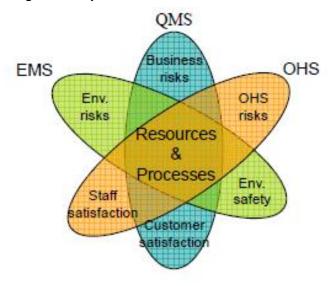


Figure 42. Integrated management (Pesonen 2011)

10.3 Gasum's principles of sustainable development

Gasum has determined its principles of sustainable development as shown on Table 3.

Gasum's principles of sustainable development



Table 3. Gasum's principles of sustainable development (Gasum Oy annual report 2012, p. 44)

For a sustainable tomorrow, Gasum has four (4) essential corporate responsibility themes which are linked closely to its strategy and strategic projects. The author believes that it is essential that responsibly matters have been integrated into the company's values. On the basis of analyses conducted, Gasum's most important responsibility themes for sustainable tomorrow are openness, security of supply, the environment and safety, and the current use and future of gas.

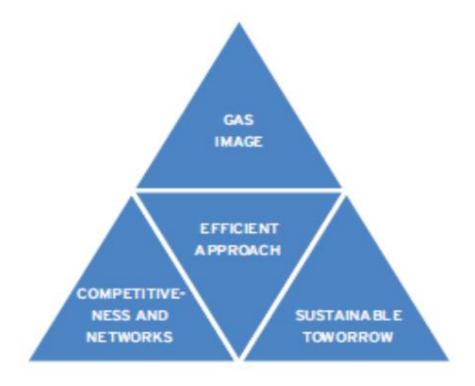


Figure 43. Gasum's strategic themes 2012 (Gasum internal material)

Competitiveness and networks

The aim is to transform Finland's currently isolated gas market into an open gas and energy market where Gasum operates as a competitive provider of natural energy gas solutions.

Sustainable tomorrow

The aim is to develop and offer Gasum's customers as diverse access as possible to sustainable utilization methods based on natural energy gases.

The openness objectives determined by Gasum are that the company must be fully informed of the environmental impacts of the natural energy gas production and usage chains and make efforts to contribute towards emissions reductions through its own activities. The supply security of natural energy gases. Gasum's objective is to eliminate unforeseen interruptions in gas deliveries and take supply security overall to the best Finnish energy sector and European gas sector level. Safety was regarded as such an important theme that two separate objectives were adopted. The first of these is to do with the gas system: Ensuring the safe use of natural energy gases and eliminating accidents in the gas transmission, distribution, and production and filling up systems. The occupational safety objective adopted by Gasum is zero accidents at work. The environmental objective is to systematically reduce greenhouse gas emissions from Gasum's operations.

Efficient approach

The aim is to develop Gasum from a reliable fuel supplier to a customeroriented provider of natural energy gas solutions.

Gas image

The aim is to increase public awareness of natural energy gases and communicate how natural energy gas solutions promote Finland's targets regarding climate change, renewable energy and energy efficiency.

For Gasum, this means taking its share of responsibility for the environmentally friendly development of the gas sector in Finland; developing new environmentally friendly and energy-efficient technologies for the energy sector; increasing the efficiency of Gasum's approaches; acting in close cooperation with natural gas suppliers to secure the supply chain and minimize lifecycle impacts.

The aim is to develop and offer to customers as diverse access as possible to sustainable utilization methods based on natural energy gases. Gasum's research and development cooperation: Gasum supports research and development in the gas sector through its Natural Gas Fund. Gasum is also a shareholder of CLEEN, a Strategic Centre for Science, Technology and Innovation. CLEEN promotes strategic research and research cooperation that supports its shareholders' business and international success.

Below is demonstrated Gasum's natural gas value chain, where has been described the whole supply chain in Finland, Gasum's responsibility and sustainability commitments.

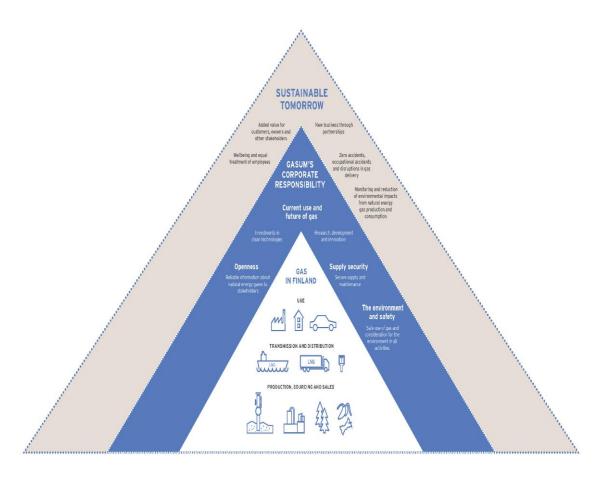


Figure 44. Gasum's natural energy value chain (Gasum CR report 2013)

The basic task of Gasum is: "Natural gas solutions for cleaner tomorrow"

Gasum's value circle: Values tell what we appreciate in Gasum, what we want to uphold, but also which kind of approaches we do not except.



Figure 45. Gasum's value circle (Gasum Intranet)

Gasum's Human resources policy as part of business strategy, part of the goals has been introduced below in Figure 46.



Figure 46. HR policy (Gasum Oy annual report 2012, p. 47)

Gasum wishes to ensure a good operating environment for the gas market. The company provides decision-makers at all levels with information to support their decision-making. Gasum monitors local government level events closely and has taken action such as joining the City of Helsinki Climate Partners by making a commitment for reduced emissions and conducting a survey on municipal decision-makers' energy attitudes. Gasum organizes local events relating to its projects as well as regional seminars.

Gasum is a member of several interest representation organizations that aim to influence national decision-making. Gasum also became a member of the reformed Bioenergy Association of Finland in 2012. Gasum issues statements about draft legislation relevant to its operations, and Gasum representatives regularly meet with national-level decision-makers.

Gasum is a member of several international energy and gas sector organizations, such as Eurogas and the European Network of Transmission System Operators for Gas (ENTSOG), Gas Infrastructure Europe (GIE), International Gas Union (IGU), European Gas Research Group (GERG) and the European Pipeline Research Group (EPRG) as well as the International Flame Research Foundation (IFRF). Gasum is also a member of the Finnish Gas Association and the Bioenergy Association of Finland. Gasum has a steering group that monitors legislative and other regulatory amendments relevant to the company and formulates opinions concerning these.

National policy decisions important to Gasum include the national Climate and Energy Strategy and awareness of the benefits of natural energy gases in that context. EU support or national investment subsidies could also be utilized in many Gasum projects, such as the construction of a large-scale biogas refinery and LNG terminals. Terminal construction would accelerate the creation of the Baltic Sea LNG market.

Systematic approach and commitments to responsibility in Gasum:

Gasum has a certified integrated management system that includes a safety management system (SMS) as well as a quality and environmental system. Gasum is a signatory to the Finnish industrial energy efficiency agreement and a member of the Zero Accident Forum, which comes under the national industrial accident program and the Chemical Industry of Finland's Responsible Care Initiative. Gasum is also a member of the Baltic Sea Action Group (BSAG).

Gasum's biogas for traffic has also been awarded Nordic Ecolabel and Finnish key flag symbol.











Figure 47. Gasum's memberships and granted labels (Gasum internal material)

11 Gasum's CR reporting 2012 inquiry results

Inquiry via Webpropol to Gasum's customers. 13 respondents.

In this chapter only the average results are shown. More detailed results including the verbal feedback are available in Appendix 1.

Cover page of Gasum's CR report 2012



Picture 3. Cover page (Gasum's CR report 2012)

11.1 Summary of the inquiry results

Customer's answers related into the report's content, comprehensiveness, reliability and understandability, relevancy of objectives, ease to find information, report structure. Evaluation range 0-5.

Layout:	3.77
Content:	4.00
Contact frequency to stakeholders	4.15

Favorite contact channel in CR issues to Gasum, number of respondents:

Extranet customer service system	<u>7</u>
E-mail	5
Phone	3
Internet	2

Whom to contact in the CR issues in Gasum: 10 respondents knew and 3 did not.

CR information publishing form:

Self-contained, electrical CR version	8
Annual report, electrical version	4
Internet pages	4
Annual report, paper version	2
Self-contained, paper CR version	2

12 of 13 respondents answer that once a year is enough to get CR information, 1 would like to have the information more often.

All of the respondents see Gasum as a responsible company and also that Gasum follows its ethical principles. Everyone received new and/or useful information from the CR report. 10 of 13 were able to utilize the report for communication to their own customers, 3 could not. Overall assessment of the report was 4.31 (9 gave a grade of 4 and 4 a grade of 5). The overall opinion of Gasum's responsibility was 4.46 (7 gave a grade of 4 and 6 a grade of 5).

11.2 Gasum's CR SWOT analysis

Strengths and weaknesses should be considered from the point of view of the company. Opportunities and threats should be considered from the point of view of operational environment. Many times a threat can also be an opportunity or vice versa... same thing between strengths and weaknesses.... it depends from the perspective (authors comment).

Strengths	Weaknesses					
Environmental issues part of the company's strategy and employees' targets. Connection between the business strategy and CR. Wide business opportunities (especially in new business areas.) Strong know how in core business. Reliability of the delivery of gas. Overwhelming logistic for gas transmission. Commitments to responsibility initiatives. Gas is purest fossil fuel. Biogas' environmental advantages. Gas' lower emissions than other fossil fuels Nordic eco-label for biogas and Finnish key flag symbol granted. Business transparency. Corporate citizenship. Employer image. Skilled and affordable employees.	Market share decreasing Limited ability to influence customers decisions Narrow range of products. Gasum is not a well-known company. Gas is a fossil fuel. Social side reporting weaker than environmental side. Only one, Russian supplier. Pipeline constructions (challenges with landowners, communities etc.). No description of indirect affects incl. human rights. Geographical fragmentation of offices. Thinness of the organization in certain parts. Cost efficiency demands in certain business areas. A bit narrow resources for develop & maintain corporate relations to stakeholders.					
Opportunities	Threats					
The growing importance of energy and raw material availability and security of supply issues. Alternative for coal, oil and nuclear power. Political decision making supports renewable energy production. Long relationships to authorities. Long last presence. Innovations (e.g. development of new gas appliances like PtoG. gas/solar solutions, gas-fuelled heat pumps, etc.). Carbon Capture and Storage (CCS) and other new technologies. Emissions are low. Waste as a biogas source. Biogas production, by-products for agriculture. Gas fuelled vehicles vs. pollutions. Strategic NGO co-operation. Role in energy- & climate map 2050. EU objectives. Cleantech-sector. Wide market area through LNG and Bio gas.	Origin of the gas (social responsible) Uncertainty of the current regulation model validity and application. Energy policy and other political decisions. Changes in legislation. Environmental impact of change in society and the values. Using biomass as a gas source, competition with food production; monocultures; impacts on soil nutrition in forests (perception as well). Safety of pipelines, land transportation and use of gas in households (perception). Slow development of infrastructure (delivery network), technology (cars and vessels using gas) and change of peoples' attitudes (awareness and understanding). Operations in Russian and Middle East where human rights etc. can be an issue to impact. Only one supply source and seller. Questioning security of supply, lack of storage options. Global changes in energy business area, like pricing, supply channels, resources, etc.					

Table 4. SWOT analysis Gasum's CR (author)

CR risks: at least six types of corporate responsibility risks should be take into account when discussing responsibility issues:

Physical: damage to assets and supply chains from physical impacts such as storms, floods, water shortages and sea-level rise.

Competitive: impacts of fast-changing market dynamics and uncertainty of supply and price volatility of key inputs.

Regulatory: complex and rapid changes to the regulatory landscape.

Social: conflicts, social unrest, community and worker protests, labor shortages, migration, etc.

Reputational: damage to corporate reputation from being seen to do the wrong thing.

Legal: exposure to potential legal action, for example, over non-disclosure of environmental, social and governance information.

(The KPMG Survey of Corporate responsibility reporting 2013, p. 49)

Gasum has identified the following issues as the most influencing risks of CR:

- Changes of taxation or subventions, which may set natural gas to weaker position comparing to the other energy forms, for example of the impacts of legislative changes.
- Deterioration of the political acceptability of natural gas.
- Emphasis of natural gas as a fossil fuel.
- Possible problems of the integration to the European gas network.
- Limited opportunities to influence public decision making.
- Availability of the skilled staff.
- Difficulty of renewing the company and implementation of the strategy.
- Security of the production and other functions including the occupational safety.

A new method and tool for analyzing corporate responsibility is a sustainability SWOT (sSWOT) construction. One tool for SWOT analyzing is sSWOT which, in my opinion, seems to be a comprehensive and an advanced tool for CR analysis which is comparable to the basic SWOT analyzing tool. It is designed to help drive action and collaboration on environmental challenges which create real business risks and opportunities. I am going to recommend this to be introduced in Gasum's analysis.

The sSWOT tool examines a company's functionality through strengths, weaknesses, opportunities, threats with a special focus on sustainability. It translates for example environmental challenges, like climate change and resource scarcity, into business risks and opportunities. By utilizing this framework a company will be able to better assess and project sustainability plans, thus improving efficiency and effectiveness. The sSWOT is helping companies better identify their risks and illustrate new priorities for strategic planning in changing world. It incorporates sustainability into business framework. The World Resources Institute (WRI) created sSWOT to help companies take action on sustainability challenges. It pushes companies to explore collaboration with internal departments, as well as suppliers, customers, or other stakeholders on strategies to create and sustain long term value. (WRI 2014.)

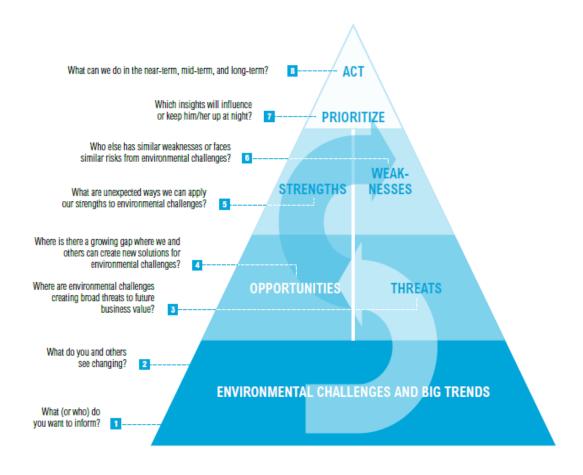


Figure 48. sSWOT construction (WRI 2014)

12 Analyzing the content of G3.1 reporting

This analysis is based on the evaluation of Gasum's CR report content against GRI G3.1 guidelines and the demands of Finnish government's corporate social responsibility policy and instructions. Analysis takes a position on the evaluation of three different perspectives which are: Strategic corporate responsibility, management of the corporate responsibility and reporting of the corporate responsibility.

In the GRI content comparison study we also take a look of how G3.1 indicators will change in G4 guidelines, marked "G4" in the worksheet. EUSS indicators are not included in G4 so there are left empty spaces under "G4". The amount of G4 indicators in the worksheet is not yet complete; there will become new indicators in the future which are now missing on this worksheet.

12.1 The content of current G3.1 report

Analysis results of three (3) perspectives of Gasum's corporate responsibility reporting, strengths and development targets. Perspectives are strategic, management and reporting issues.

A view point to Gasum's Strategic CR reporting

Strategic CR describes how a company implements responsibility as a part of its business planning. Strategic CR is focused to the future; it covers the risks and opportunities, sustainability challenges and long term objectives.

First some basic criteria which Strategic CR reporting should include are risks and business possibilities of the corporate responsibility (identified risks are often related to security, environment & management of the supply chain), long term objectives which are mainly related to security, energy efficiency and CO₂ emissions, and key figures concerning corporate responsibility, for example occupational safety, CO₂ emissions or energy consumption. CR as a management's rewarding instrument reporting the objectives that affect the rewarding of the management.

Identified strengths in Strategic responsibility reporting:

- Corporate responsibility is integral part of the strategy, described comprehensively.
- Practical responses to the challenges of sustainable development are described such as development of new services or business areas and the pursuit of business opportunities such as services for the customers.
- Long term objectives have been settled.
- Corporate responsibility issues are also set as a part of the performance metering and bonus system for the whole staff.
- Strategic work is clearly visible for public communication.
- Strategic goals which are introduced in the annual report, show very clearly
 the significance of the sustainable development component of Gasum's
 strategy, as well as the possibilities that sustainability development have

- brought. In addition to a strategy of sustainability development has been introduced separately.
- Gasum has been recognized widely the meaningfulness of sustainable development.

Identified development targets in Strategic responsibility reporting:

- There has been recognition of the risks of corporate responsibilities but the description of preparing for those risks should be more comprehensive.
- Setting long term objectives to the different sections of corporate responsibilities should be considered.
- Descriptions of the activities to respond to trends of sustainability development should be included as part of the communications strategy.
- Risk management and risks should be described from the point of view of sustainable development.
- The key figures of sustainable development should be determined and submitted in a collective format.

A viewpoint to Gasum's CR Management reporting.

CR management is the guiding of responsibility activities. Identification of essential issues creates the basis for responsible actions. Management covers controlling, objectives and the guiding principles and policies.

First some basic criteria which Management of CR reporting should include are materiality, operating principles and policies, organizing, monitoring and rewarding of corporate responsibility, objectives and results and supply chain management.

Identified strengths in responsibility Management reporting:

- Gasum has defined the essential themes of the corporate responsibilities and opened up a process how to achieve these themes.
- A person who is responsible for the corporate responsibility is a member of the board.
- Gasum's ethical principles are available on the corporate web sites.

- Setting of the objectives and reporting has been developed by all responsible corporate departments.
- Demands of the responsibilities has been set and described shortly.
- Relevant issues of the corporate responsibilities have been clarified and the process has been described.
- The qualitative and partly quantitative objectives have been reported in different parts (economic, HR and environment).

Identified development targets in responsibility Management reporting:

- Realization of the objectives should be described wider and clearly, for example table format which also present the objectives.
- Development of quantitative objectives such as social responsibilities, customer's satisfaction, supply chain and product safety.
- Realization of objectives should be reported openly.
- There is no description regarding the monitoring of the company's supply chain.
- There should be set for demands to suppliers and partners.

A viewpoint to Gasum's CR reporting:

CR reporting emphasize the coverage and balance of reported information as well as answering the stakeholder's expectations and informational needs. First some basic criteria which reporting should include; the coverage (comprehensive) and the balance of the report, interaction with the stakeholders, social, economic and environment indicators and independent verifying.

Identified strengths in the content of corporate responsibility reporting:

- Gasum has described the results of the interaction with stakeholders.
- Gasum reported in a balanced way the different parts of responsibilities.
- All of the departments whom are responsible of the CR issues in the company have been reported indicators.

Identified development targets in the content of corporate responsibility reporting:

- Gasum should consider the verifying of indicators to increase the reliability of the reported data.
- The results of measures and development work with stakeholders should be also described.
- The results and activities of interactions with stakeholders during the reporting period should be described.
- The reference data of all sections of responsibility should be reported at least from three years period and more widely.
- Shortcomings in HR indicators reported; more information focusing on the staff's welfare and satisfaction measures recommended.

13 Conclusions

13.1 Customer survey of reporting

In 2013 Gasum conducted a survey in which its customers assessed the 2012 Corporate Responsibility report and how it could be improved from the perspective of their own needs. The respondents comprised 13 representatives of customer enterprises of various sizes and sectors. In response to the research questions, we can say that reporting mainly fulfilled Gasum's customers' demands while the current level or state of reporting also satisfied them. The good points are the feedback and development suggestions that Gasum got from its customers. After all responsibility is dynamic and require continuous improvement. Gasum is not only reporting for itself but for its customers and other stakeholders. Below is a review of responses and some analysis of the report content.

All respondents reported that they were highly satisfied with the coverage of the report. The 2012 report contained the essential corporate responsibility themes determined on the basis of a survey among Gasum's stakeholders as well as the related indicators in accordance with the GRI guidelines. The reporting instructions provided by the Finnish State as a shareholder were also taken into

consideration in the report. The majority of the respondents reported that they were either highly satisfied or satisfied with the content and appearance of the report.

13.2 Positive feedback and development proposals

The report was regarded as clear and well-structured by the respondents. The content was found to illustrate the Gasum brand, current status and objectives well. Changes that some respondents did, however, hope to see included a summary of key changes during the previous year and a fresher visual appearance. The report was regarded as compact and the information easy to find. All respondents found the content and references easy to understand and reliable. More coverage of security of supply, safety, future outlooks of gas usage opportunities and human resources issues was hoped for by some respondents.

The respondents prefer to look for corporate responsibility information from an electronic corporate responsibility report, online annual report and the company's website. The extranet customer service system and email were regarded as the best ways to contact Gasum in corporate responsibility issues. The majority of the respondents also found that Gasum maintains sufficient contacts with its stakeholders. All of the respondents regarded Gasum as a responsible enterprise and found that Gasum operates in accordance with the ethical principles determined by it. Provision of information about responsibility issues were also rated as diverse and comprehensive.

13.2 Analysis of the current reporting content and future demands

Traditionally CR has been shared in three (3) pillars i.e. company's economic, social and environmental responsibilities. In the author's opinion, this kind of sharing is rather old fashioned way. A more meaningful way is to recognize the most essential themes of responsibility and concentrate to manage and improve them.

Time series shows the development of the actions, so companies should not just stay to admire their reports but to examine time series and improvement of the indicators. GRI recommend to report at least the information of the current year along with the two previous years. Also the target for the next year is good to report. When the targets have been settled and they are followed yearly, it commits and encourages the company to act responsibly.

The most important trend is improving the accuracy and reliability of the reports. A major company cannot produce reports in an ad hoc manner. Responsibility reports are more and more like financial statements, and that's good. More detailed analysis results (strengths and development targets) are presented in Chapter 14, but below is a summary of findings and development issues as well as next steps toward G4. In this summary, a brief overview of what things are in good condition in the current year, year 2012 responsibility report and what should be taken into account for coming reports.

What is good in Gasum's current reporting?

Gasum has described relevant issues of the corporate responsibilities. These issues are also reflected in the reporting and the themes which are treated in it. Reporting is divided into clear entities, the annual report and corporate responsibility report. The position corporate responsibility in Gasum's strategy and everyday activities was brought out very clearly. Corporate responsibility is demonstrated with practical examples. Gasum complies with GRI G3.1 guidelines at the level B.

What should be developed in Gasum's reporting in the future?

The reporting should present future objectives. The presentation of objectives in tabular format helps the reader to perceive Gasum's performance. Adding the reference data to the context of reported indicators might help the reader to understand Gasum's performance from year to year (reference data for example three year's period). The results and activities of interactions with stakeholders and how to respond to these expectations should be brought out better, more developing targets like goal orientation, i.e. what are the future goals, how and when they are going to be reached. Online transparency such as technological

communication channels (Social media) like Linked in, Facebook, Twitter, etc. should be taken in active use, because nowadays those channels are quick and efficient ways to communicate while serving to influence perceptions of stakeholders and the public.

14 Discussion of the future reporting (G4)

G3 and G3.1 are valid reporting models for the two upcoming year reporting periods, but after 31st of December 2015 reporting should be based on G4 model.

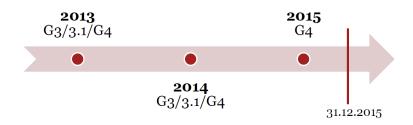


Figure 49. Timeline to G4 reporting (Tofuture Oy 2013)

GRI content comparison study based on the current state of G3.1 in Gasum's CR report 2012 GRI content index and partly by internal work from the part of G4 and GRI's overview of changes in standard disclosures from G3.1 to G4 (Appendix 1 GRI content comparison internal study), we also take a look at how G3.1 indicators will change in G4 guidelines, marked "G4" in the worksheet. EUSS indicators are not included in G4 so they are left empty in the table.

The amount of G4 indicators in the worksheet is not yet complete; there will come new indicators which are now missing on this worksheet. In summary of Gasum's capability to implement G4 as a new CR reporting seems rather easy. Gasum has already prepared for changes and its intent is to publish the 2014 CR report in G4 mode. On the following pages we take a brief overview of the future changes of responsibility reporting, "G4 world".

What is changing G3.1 vs. G4? The aim of G4, the fourth such update, was simple: to help reporters prepare sustainability reports that matter, contain valuable information about the organization's most critical sustainability-related issues, and make such sustainability reporting standard practice. Together with the aim of being more user-friendly than previous versions of the guidelines, G4 was developed to increase emphasis on the need for organizations to focus the reporting process and final report on those topics that are material to their business and their key stakeholders. This 'materiality' focus will make reports more relevant, more credible and more user-friendly. This will, in turn, enable organizations to better inform markets and society on sustainability matters. G4 has been designed to be universally applicable to all organizations, large and small, across the world. (G4 2014)

G4 includes references to other widely recognized frameworks, and is designed as a consolidated framework for reporting performance against different codes and norms for sustainability. This includes harmonization with other important global frameworks, including the OECD Guidelines for Multinational Enterprises, the UN Global Compact Principles, and the UN Guiding Principles on Business and Human Rights. (G4 2014.)

A clearer construction, emphasized in meaning of the materiality (defining material aspects and boundaries: identification, prioritization, validation), DMA (Disclosure on Management Approach) renewed, new demands for content (governance & ethics and integrity, supply chain disclosures, some changes in energy & greenhouse gas emissions). (G4 2014.)

In accordance with GRI Guidelines: the reporting extent application levels will be removed (A, B, C, +) and there are now two options for the reporting according GRI: Core or Comprehensive options, all companies can apply these options and materiality is emphasized in both options. G4 allows organizations to choose between two 'in accordance' options; Core or Comprehensive, based on which best meets their reporting needs and those of their stakeholders. The options do not relate to the quality of the report or to the performance of the organization; rather, they reflect the degree to which the Guidelines have been applied. (G4 2014.)

The applications of the options in GRI:

The core option including basic elements of the responsibility report. This option contains the essential elements of a sustainability report and provides the background against which an organization communicates its economic, environmental, social, and governance performance and impacts. Reporting on the organization's management approach (DMA) related to its material Aspects is an essential requirement. Under the Core option, an organization must report at least one Indicator for all identified material Aspects. (G4 2014.)

The comprehensive option should report all the Standard Disclosures. This builds on the Core option by requiring a number of additional disclosures about the organization's strategy and analysis, governance, ethics and integrity. Under the Comprehensive option, an organization must report all G4 emphasized in verifying of the reporting but it is not a demand "in accordance". (G4 2014.)

More about changes in GRI guidelines 3.1 and G4 is presented in Appendix 5.

G4-termilogy:

General Standard Disclosures (earlier standard content parts 1-4) are numbered from G4-1 to G4-58. Specific Standard Disclosures (earlier Performance Indicators) indicators by aspect: G4-EC, EN, LA, HR, SO, PR, disclosure for Management Approach. Management Approach (DMA), the Disclosures on Management Approach provide the organization with an opportunity to explain how it is managing its material economic, environmental or social impacts (Aspects), thus providing an overview of its approach to sustainability issues.

The DMA focus on three things: describing why an Aspect is material, how its impacts are being managed, and how the approach to managing this Aspect is being evaluated. (G4 2014.)

Sample of main terms in GRI terminology:

Aspect = list of subjects covered by GRI

Aspect Boundary = description of where impacts occur

Category = economic, environmental and social

Indicators = instructions about how to disclose information about a topic

Scope = range of aspects covered by in a report

Topic = any possible sustainability subject

(PricewaterhouseCoopers 2013)

In G4, guidelines are presented in two parts.

Part 1: Reporting principles and standard disclosures (90 pages)

Part 2: Implementation manual (262 pages)

The structure and format of G4

G4 is presented in two separate documents:



Picture 4. G4 reports cover sheets and structures (G4 2014)

Author's summary of the results of this study.

As earlier mentioned, the purpose of the study was to find out possible improvement issues and measure the quality of CR reporting based on the opinions of Gasum's customer's representatives as well as author's and Gasum's internal GRI comparison for the future demands and changes in reporting guidelines (from G3.1 to G4).

The first main objective of this study was to develop and specify the CR reporting of Gasum to better meet customer needs (with emphasis on the point of view of customers demand) as well as to analyze the current state of reporting and find out possible development needs for the future. The results of the study show that reporting fulfills the demands of the customer target group rather well. The satisfaction level was good, layout and content of the report was acceptable, and Gasum also got feedback and some development targets from customers for improving the reporting in the future. The results and feedback of this study and suggested improvements were also utilized and published in Gasum's 2013 Annual report.

The second purpose of this study was to analyze (evaluate) the current state of CR reporting in Gasum, the strengths as well as the targets to develop. The results of analysis gave information on the reported content that fulfilled reporting requirements and what should improve and develop in future reports. As a result, the analysis produced information from the current content of the Gasum's CR report (strengths and development targets) from three (3) different perspectives, which were strategic reporting, management reporting and reporting itself. These results can and will be utilized in the future CR reporting.

Thirdly, this study also compared how G3.1 indicators will change in G4 guidelines by 2015 as well as how Gasum's reporting indicators now fulfill future demands. The result of this comparison shows the pathway for Gasum's 2014 Annual report, which will be published in G4 format.

Overall, it can be said that the results achieved in this study are rather reliable, comprehensive and can be used to further develop the CR reporting process.

Study as a process, brief summary from the author's point of view.

From the author's point of view, studying was more demanding than I thought. As an adult student, there are many limitations to execute such a study. Daily work, family and all other things affect performance and cause a lot of time limitations, but at the end stands the prize and I am a supporter of lifelong learning as it keeps you refreshed. In the end, this was an interesting learning process and a journey into the world of responsibility. Special thanks to my family and also my employer Gasum Oy, who made this possible!

A suggestion for further research study could be an analysis of G4 reporting and international integrated reporting (IR), the framework which connected information about the organization's ability to create value. The International Integrated Reporting Framework's focus on value creation, and the 'capitals' used and influenced by business to create value over time, contributes to a more financially stable world. More information for a start is available in: The International Integrated Reporting Council (IIRC) website http://www.theiirc.org/ resources/ as well as in GRI's website https://www.globalreporting.org/reporting/g4/Pages/default.aspx (GRI on G4 and integrated reporting).



IR framework

IIRC yearbook

Emerging IR database

Picture 5. Cover pages integrated reporting. (IIRC)

Finally, last but not least, an example of how to handle responsibility issues.

What responsibility should mean to all of us according to PwC; "Responsibility means that we are all part of the development process which leads towards a sustainable future both in our operations and in our services that support the business and corporate responsibility of us as well as our customers".

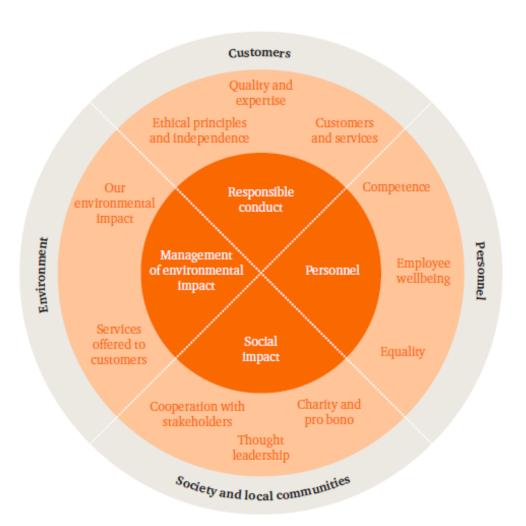


Figure 50. The framework of corporate responsibility (Adapted from PwC Finland – corporate responsibility review 2013)

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Annual report 2012 & CR report 2012, Gasum Oy.

Annual report of the State's ownership steering 2013.

Bruntland, G. 1987, Our common future: The World Commission on Environment and Development. Oxford University.

Carrots and sticks, KPMG 2013 edition. Available on: https://www.global reporting.org/resourcelibrary/carrots-and-sticks.pdf. Accessed on 21 April 2014.

CSR Europe. Available on: http://www.csreurope.org. Accessed 21st of October 2014.

Database. Available on: http://database.globalreporting.org/search/Gasum. Accessed 12th of August 2014.

Enterprise2020. Available on: http://www.csreurope.org/sites/default/files/ Enterprise2020%20-%20The%20Power%20of%20Collaboration%20-%20CSREurope%202012_0.pdf. Accessed 21st of October 2014.

EC Europa a. Available on: http://ec.europa.eu/enterprise/policies/ sustainable-business/files/csr/documents/competitiveness/101124_ csr_comp_final_report _long_version_final_en.pdf. Accessed 21st of May 2013.

EC Europa b. Available on: DOC-01-9_EN.pdf. Accessed 21st of May 2013.

FIBS. Available on: http://www.fibsry.fi/fi/. Accessed 31st of March 2013.

FIBS Sustainability in Finland 2014.

Finnish government's corporate social responsibility policy and instructions. Available on: http://vnk.fi/omo. Accessed 31st of March 2013.

Fogelberg a. Teresa Fogelberg, Deputy Chief Executive of Global Reporting Initiative. Available on: http://valtionomistus.fi/suomi/files/2014/05/Teresa-Fogelberg.pdf. Accessed 16th of October 2014.

Fogelberg b. Available on: http://ec.europa.eu/ environment/beyond_gdp/ download/fogelberg_presentation.pdf. Accessed 7th of February 2015.

Footprint network. Available on: http://www.footprintnetwork.org/en/index.php/GFN/. Accessed 21st of October 2014.

Global reporting a. Available on: https://www.globalreporting.org/information/policy/ Pages/EUpolicy.aspx. Accessed 21st of April 2014.

Global reporting b. Available on:https://www.globalreporting.org/information/sustainability-reporting/Pages/default.aspx. Accessed 27th of January 2013.

Global reporting c. Available on: www.globalreporting.org. Accessed 17th of February 2013.

Gopix. Available on: http://www.gopix.com. Accessed on 23rd of May 2014.

GRI. Available on: https://www.globalreporting.org/information/about-gri/whatis-GRI/Pages/default.aspx. Accessed 21st of April 2014.

G3.1-Guidelines-Incl-Technical-Protocol.pdf. Accessed 17th of February 2013

G4 a. Available on: https://www.globalreporting.org/resourcelibrary/GRI-An-introduction-to-G4.pdf. Accessed 1st of February 2015.

G4 b. Available on: https://www.globalreporting.org/reporting/g4/. Accessed 17th of May 2014.

Hueting, R. 2010. Why environmental sustainability can most probably not be attained with growing production. http://www.snihueting.info/EN/Publications/2010-Hueting-JournalOfCleanerProduction.pdf. Accessed 14th of July 2014.

Huomo Aki, HSEQ Manager, Gasum Oy.

IIRC. Available on: http://www.theiirc.org/international-ir-framework/. Accessed 10th of June 2014.

Juutinen-Steiner: Juutinen, S. & Steiner, M-L. 2010. Strateginen yritysvastuu, WSOY pro Oy, Helsinki.

Kauppalehti Optio, publ. 22nd of January 2015.

KPMG. Available on https://www.kpmg.com/dutchcaribbean/en/ Documents/KPMG%20_Expect_ the_Unexpected_ExctveSmmry_FINAL _WebAccessible.pdf. Accessed 18th of October 2014.

KPMG Survey of Corporate Responsibility Reporting 2013.

Laari-Muinonen. CSR course lecture material, L. Laari-Muinonen 2013.

Mediaplanet no 3/yritysvastuuliite, publ. 4th of November 2014.

MEMA: Aalto Pro MEMA training program lecture material 2014.

Pesonen. Lecture material of Professor Hanna-Leena Pesonen, Jyväskylä University, MEMA training program 2011.

PricewaterhouseCoopers: GRI G4 and integrated reporting, lecture 2013.

PwC's Corporate Responsibility Barometer 2013.

PwC yritysvastuubarometri 2014.

Sixsigma. Available on: http://www.isixsigma.com/methodology/total-quality-management-tqm/introduction-and-implementation-total-quality-management-tqm/. Accessed on 16th of January 2015.

Sustainability advantage a. Available on: http://sustainabilityadvantage.com/Accessed 15th of May 2013.

Sustainability advantage b. Available on: http://www.sustainabilityadvantage.com/products/ sustainadv.html. Accessed 15th of May 2013.

TEM a. Available on: https://www.tem.fi/en/enterprises/corporate_social_ responsibility_(csr)/key_guidelines_on_csr. Accessed 12th of November 2013.

TEM b. Available on: http://www.tem.fi/files/35134/ Government_Resolution _ on_ CSR_FINLAND.pdf. Accessed 12th of November 2013.

The State of Play in Sustainability Reporting in the European Union, Executive Summary 2011.

Tofuture. Lecture material of Tofuture Oy 2013, modified by the author.

TQM. Available on: http://totalqualitymanagement.wordpress.com/2009/03/12/stakeholders-and-corporate-social-responsibility/. Accessed 18th of April 2013.

Tuomaala Mari, Technology Manager, strategy & development, Gasum Oy.

WRI: available on: http://www.wri.org/publication/sswot. Accessed 22nd of October 2014. Sustainability_swot_user_guide.pdf p.2 publ. by world resources institute. Accessed 22nd of October 2014.

19 Appendices

The customer inquiry was conducted in Finnish, also respondents answered in Finnish language. Translation into English by author.

Appendix 1 customer inquiry

CORPORATE RESPONSIBILITY INQUIRY / SEPPÄNEN, BASIC REPORT

1. Customer sector and title

Customer sector	Title
Pulp, paper & board industry	Communication manager
CHP production	Production manager
CHP production	Operations manager
Pulp, paper & board industry	Power plant manager
Pulp, paper & board industry	Power plant manager
CHP production	Power plant manager
Local distribution	PR manager
Pulp, paper & board industry	Operations manager
Pulp, paper & board industry	Energy manager
Local distribution	Customer manager
CHP & local distribution	Production manager
Pulp, paper & board industry	Power plant manager
CHP & local distribution	Manager energy trade

2. The content of Gasum's corporate responsibility report is based on the inquiry to our stakeholders in 2010. This inquiry was the base which Gasum define the essential themes of corporate responsibility and the key indicators of these themes related to GRI instructions. In addition there has been noticed the reporting instructions of state ownership in the report content. What is your opinion of our current report, is it enough comprehensive?

Responders: 13



3. If not, what there should be enhance?

No responders.

4. Your opinion of the report:

Responders: 13

	1	2	3	4	5	In total	Average
Layout	0	0	3	10	0	13	3,77
Content	0	0	1	11	1	13	4
In total	0	0	4	21	1	26	3,88

5. Verbal feedback of the layout and content

- Clear, well structured.
- Subheadings are clear. Easy to caught interesting information.

- Content is OK, easy to read. Layout is a little bit too report-like; I wish to get there some new look in it.
- Comprehensive, lot of information. Clear.
- Comprehensive, lot of information, in my opinion too lot. Would it be a good solution that the key subjects that have been changed from the previous report should be compiled as well as the themes of the year?
- Lot of the text mass, even it has been animated with pictures and charts. Two different fonts in the headlines make me wonder what has been wanted to emphasize. Content is comprehensive.
- Pretty good looking, I cannot find anything to improve.
- In my opinion, content is comprehensive and describe well Gasum's current state and objectives.
- Layout follows well the Gasum brand; could the content be straight in accordance with GRI structure?
- Clear. Gives a good picture of what take into consideration in activities and how the company values it activities.

Gasum's key corporate responsibility themes and related objectives are openness, security of supply, the environment and safety and the current use and future of gas.

THE OPENNESS objectives determined by Gasum are that the company must be fully informed of the environmental impacts of the natural energy gas production and usage chains and make efforts to contribute towards emissions reductions through its own activities.

THE SUPPLY SECURITY of natural energy gases. Gasum's objective is to eliminate unforeseen interruptions in gas deliveries and take supply security overall to the best Finnish energy sector and European gas sector level.

SAFETY was regarded as such an important theme that two separate objectives were adopted. The first of these is to do with the gas system: Ensuring the safe use of natural energy gases and eliminating accidents in the gas transmission, distribution, and production and filling up systems. The occupational safety objective adopted by Gasum is zero accidents at work.

THE ENVIRONMENTAL objective is to systematically reduce greenhouse gas emissions from Gasum's operations.

6. Are the objectives mentioned above relevant things from the point of you or should they be something else totally or partly?



7. If not, what else?

Responders: 3

- If you put max. 30% one way or another produced gas, could it cause quality problems?
- Highlighting: secure of supply, safety and consumption of the gas now and in the future.
- Objectives are OK, but could it also include social and personnel point of view ... ?

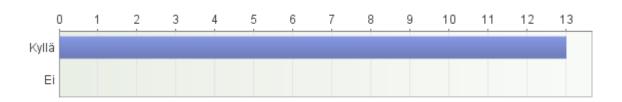
8. Ease of finding information

Responders: 13



9. Are the content and sources in the report well understandable and reliable from your point of view?

Responders: 13

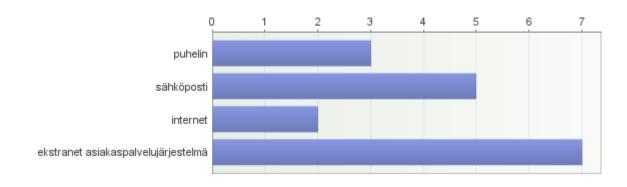


10. If not, why?

No responders.

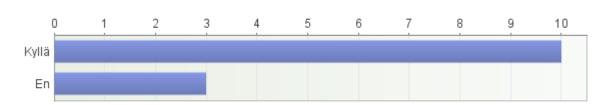
11. In which channel you would like to be in contact to us in corporate responsibility issues?

Responders: 13

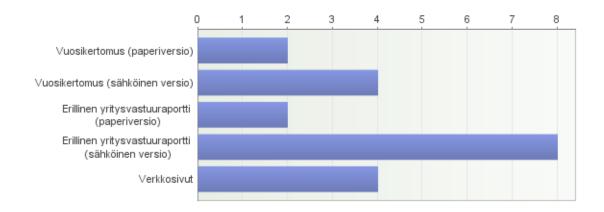


12. Do you know to whom you take contact in the corporate responsibility issues?

Responders: 13



13. In which form you would like to have information in corporate responsibility issues?



14. How often you would like to have information in corporate responsibility issues?

Responders: 13



15. Do you see Gasum as a responsible company?

Responders: 13



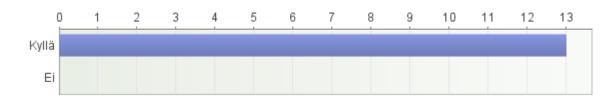
16. If not, why?

No responders.

17. Does Gasum follow its ethical principles like it has been defined them?

http://www.gasum.fi/vastuullisuus/yhteiskunta/Sivut/default.aspx

Responders: 13



18. Feedback of our ethicality

No responders

19. Your opinion: does Gasum contacts with the stakeholders often enough?

Responders: 13

	1	2	3	4	5	In total	Average
Is Gasum contacts with the stakeholders	0	1	0	8	4	13	4,15
often enough?							

20. Did you get new and/or useful information from the report?

Responders: 13



21. If not, what kind of information would you like to have?

No responders.

22. Can you utilize the report for communication with your own customers?

Responders: 13



23. If you have utilized the report, what data you have used?

- Consumption of the gas and dividing of the using between different gas users. Future outlook of the gas.
- Information which is related to security of the gas supply in our own events and presentations.

- I don't deal with natural gas actively in my job, but I get useful common information from the report.
- Pipeline network, carbon dioxide emissions,
- I have not utilized it, but the report is or could be useable also in the retailer's customer contacts.

24. If not, why?

Responders: 2

- Limited need. I get the information that I need in my job from other channels too.
- Customer base is limited.

25. An overall assessment of the report

Responders: 13

	1	2	3	4	5	In total	Average
Assessment	0	0	0	9	4	13	4,31

20. Did you get new and/or useful information from the report?

Responders: 13



21. If not, what kind of information would you like to have?

No responders.

22. Can you utilize the report for communication with your own customers?

Responders: 13



23. If you have utilized the report, what data you have used?

Responders: 5

- Consumption of the gas and dividing of the using between different gas users. Future outlook of the gas.
- Information which is related to security of the gas supply in our own events and presentations.
- I don't deal with natural gas actively in my job, but I get useful common information from the report.
- Pipeline network, carbon dioxide emissions,
- I have not utilized it, but the report is or could be useable also in the retailers' customer contacts.

24. If not, why?

Responders: 2

- Limited need. I get the information that I need in my job from other channels too.
- Customer base is limited.

25. An overall assessment of the report

	1	2	3	4	5	In total	Average
Assessment	0	0	0	0	4	13	4,31

26. An overall assessment of the Gasum's responsibility

Responders: 13

	1	2	3	4	5	In total	Average
Assessment	0	0	0	7	6	13	4,46

27. Your regards or comments regarding our corporate responsibility

Responders: 4

- I would like to have a summarized "quick guide" of the corporate responsibilities where I
 can find easily and quickly the most important and interesting issues
- My opinion is that Gasum's performance is convincing and credible
- Gasum has taken care of CSR issues in an exemplary way and informing has been diverse in every way (extranet, e-mail, seminars, etc.). Gasum's key persons keep also regular contacts to customers.
- All the best to Gasum and staff

Gasum

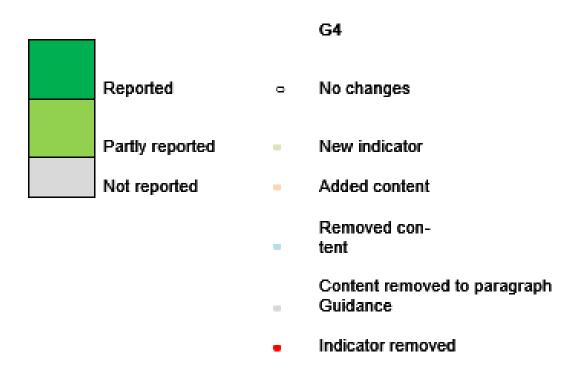
CLEANLY WITH NATURAL ENERGY GASES

Appendix 2 GRI content comparison

GRI content comparison study based on the current state of G3.1 in Gasum's CR report 2012 GRI content index and partly by internal work from the part of G4 and GRI's overview of changes in standard disclosures from G3.1 to G4 guidelines (https://www.globalreporting.org/resourcelibrary/GRI-G4-Overview-Tables-G3.1-vs-G4.pdf).

In the point of "G4" has been showed with colour code, how the G3.1 instructions indicator might change in becoming G4 instructions. EUSS indicators will not include in G4 version so this section has been left empty in G4.In addition of the indicators in table there will come more indicators to G4 which are not placed in this table.

Explanations of the marks in table:



	G4	2012
Statement from the most senior decision maker of the organization		
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Determining and description materiality	•	
Boundary of the report		
State any specific limitations on the scope of the report.		
Basis for reporting on joint ventures, subsidiaries, leased		
	can 。	
	State any specific limitations on the scope of the report.	File Name of the organization. Primary brands, products, and/or services Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures. Location of organization's headquarter Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report. Nature of ownership and legal form. O Markets served (including geographic breakdown, sectors served, and types of customers/ beneficiaries). Scale of the reporting organization Significant changes during the reporting period regarding size, structure, or ownership Awards received in the reporting period The volume of natural and biogas, transmission and distribution by regions. Energy production divided by energy sources The number of private- and business customers Location and length of distribution network Emission allowances of CO2 in accordance of the emissions trading system. Reporting period O Date of most recent previous report Reporting cycle Contact information for questions regarding the report Determining and description materiality Boundary of the report State any specific limitations on the scope of the report. Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period

3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estima- tions applied to the compilation of the Indicators and other information in the report	•	
3.10	Explanation of the effect of any re-statements of information provided in earlier reports	0	
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.		
3.12	Table identifying the location of the Standard Disclosures in the report.		
3.13	Policy and current practice with regard to seeking external assurance for the report		
Governance, comm	nitments and engagement		
4.1	Governance structure of the organization		
4.2	Status of the chairman of board	0	
4.3	Independency of the members of board		
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	•	
4.5	Compensations of management		
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	•	
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body	•	
4.8	Mission and vision of the organizations responsibility	0	
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of eco- nomic, environmental, and social performance, including relevant risks and opportunities, and adherence or compli- ance with internationally agreed standards, codes of con- duct, and principles.	•	
4.10	Processes for evaluating the highest governance body's own performance	•	
4.11	The precautionary principle	0	
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	0	
4.13	Memberships in associations and/or national/international advocacy organizations	٥	
4.14	Stakeholder groups of organization	0	
4.15	Basis for identification and selection of stakeholders	0	
4.16	Approaches to stakeholder engagement by type and group	0	
4.17	Key topics and concerns of stakeholder engagement, how the organization has responded to those key topics	•	

Economic			
Management description			
EC1	Direct economic value generated and distributed	0	
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	•	
EC3	Coverage of the organization's defined benefit plan obliga- tions.	0	
EC4	Financial assistance received from government.		
EC5	Range of ratios of standard entry level wage by gender com- pared to local minimum wage at significant locations of op- eration	0	
EC6	Policy, practices and proportion of spending on locally-based suppliers at significant locations of operation.	0	
EC7	Procedures for local hiring and proportion of senior man- agement hired from the local community at locations of sig- nificant operation.	0	
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit	0	
EC9	Significant indirect economic impacts, including the extent of impacts	0	
EU6	Ensuring the availability and security of the supply of natural and biogas		
EU7	Activities and plans of guiding the demand of energy and energy efficiency		
EU8	R&D		
EU9	Preparing of the decommissioning of nuclear power plants		
EU10	Planned electricity capacity compared to estimated demand in the long term spesified by energy sources		
EU11	Average heat production efficiency		
EU12	Percentage of the transmission and distribution losses com- paring to the total energy		
Environmental			
Management description			
EN1	Materials used by weight or volume.	0	
EN2	Percentage of materials used that are recycled input materi- als.	0	
EN3	Direct energy consumption by primary energy source.		
EN4	Indirect energy consumption by primary source		
EN5	Energy saved due to conservation and efficiency improve- ments.		
EN6	EN6 Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in ener- gy requirements as a result of these initiatives	•	
EN7	Initiatives to reduce indirect energy consumption and reduc- tions achieved.		
EN8	Water consumption		

EN9	Water sources significantly affected by withdrawal of water.					
EN10	Percentage and total volume of water recycled and reused.					
EN11	Location and size of land owned, leased, managed in or adja-					
	cent to, protected areas and areas of high biodiversity value	0				
	outside protected areas.					
EN12	Description of significant impacts on biodiversity					
EN13	Habitats protected or restored.					
EN14	Strategies, current actions, and future plans for managing					
FNIAF	impacts on biodiversity.					
EN15	Number of IUCN Red List species and national conservation	_				
	list species with habitats in areas affected by operations, by level of extinction risk	٥				
EN16						
EN17	Greenhouse gas emissions	-				
EN17	Other relevant indirect greenhouse gas emissions					
EN18	Initiatives to reduce greenhouse gas emissions and reduc- tions achieved	•				
EN19	Emissions of ozone-depleting					
EN20	NO, SO, and other significant air emissions	9				
EN21	Total water discharge					
EN22	Waste	0				
EN23	Total number and volume of significant spills.	0				
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous and percentage of transported waste shipped internationally					
EN25	Identity, size, protected status, and biodiversity value of wa- ter bodies and related habitats significantly affected					
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.					
EN27	Percentage of products sold and their packaging materials that are reclaimed	0				
EN28	Monetary value of significant fines and total number of non- monetary sanctions for noncompliance with environmental laws and regulations.	0				
EN29	Significant environmental impacts of transporting	0				
EN30	Total environmental protection expenditures and invest- ments	0				
EU13	Impacts to the biodiversity					
Social responsibilit	ty					
Labor Practices an	d decent Work					
Management						
description						
LA1	Total workforce by employment type, employment contract, and region	0				
LA2	Total number and rate of new employee hires and employee turnover	0				
LA3	Benefits provided to full-time employees that are not provid- ed to temporary or part-time employees					

LA4	Percentage of employees covered by collective bargaining agreements.	0	
LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements	0	
LA6	Health and safety committees	0	
LA7	Rates of injury, occupational diseases, lost days and absen- teeism	•	
LA8	Education, training, counseling, prevention and risk-control programs	0	
LA9	Health and safety topics covered in formal agreements with trade unions	0	
LA10	Average hours of training per year	0	
LA11	Programs for skills management and lifelong learning	0	
LA12	Performance and career development reviews	0	
LA13	Composition of governance bodies and breakdown of em- ployees per employee category and indicators of diversity.	0	
LA14	Ratio of basic salary and re-numeration of women to men by employee category		
LA15	Return to work and retention rates after parental leave	0	
EU14	Processes and processes to ensure the availability of a skilled workforce.		
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region.		
EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors		
EU17	Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activi- ties.		
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training.		
Human rights			
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	0	
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screen- ing and actions taken.	•	
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to op- erations, including the percentage of employees trained.	0	
HR4	Total number of incidents of discrimination and corrective actions taken	0	
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk and actions taken to support these rights.	۰	

HR6			
	Operations and significant suppliers identified as having sig- nificant risk for incidents of child labor and measures taken to contribute to the effective abolition of child labor.	•	
HR7	Operations and significant suppliers identified as having sig- nificant risk for incidents of forced or compulsory labor and measures to contribute to the elimination of all forms of forced or compulsory labor.	•	
HR8	Percentage of security personnel trained in the organiza- tion's policies or procedures concerning aspects of human right	0	
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	0	
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	0	
HR11	Number of grievances related to human rights filed, ad- dressed and resolved through formal grievance mechanisms.		
Society			
501	Percentage of operations with implemented local community engagement, impact assessments and development pro- grams.	0	
SO2	Percentage and total number of business units analyzed for risks related to corruption.		
503	Percentage of employees trained in organization's anti- corruption policies and procedures.	•	
504	Actions taken in response to incidents of corruption		
505	Public policy positions and participation in public policy de- velopment and lobbying	0	
SO6	Total value of financial and in-kind contributions to political parties, politicians and related institutions	•	
507	Total number of legal actions for anticompetitive behavior, anti-trust and monopoly practices and their outcomes.	0	
508	Monetary value of significant fines and total number of non- monetary sanctions for noncompliance with laws and regula- tions.	0	
509	Operations with significant potential or actual negative im- pacts on local communities.	0	
5010	Prevention and mitigation measures implemented in opera- tions with significant potential or actual negative impacts on local communities	0	
EU19	Stakeholder participation in the decision making process related to energy planning and infrastructure development		
EU20	Approach to managing the impacts of displacement.		
EU21	Contingency planning measures, disaster/ emergency man- agement plan and training programs and recov-		
	ery/restoration plans.		

Product resp sibility	on-		
PR1	Life cycle stages in which health and safety impacts of prod- ucts and services are assessed for improvement, and per- centage of significant products and services categories sub- ject to such procedures.		
PR2	Total number of incidents of non-compliance with regula- tions and voluntary codes concerning health and safety im- pacts of products and services during their life cycle, by type of outcomes.	0	
PR3	Type of product and service information required by proce- dures, and percentage of significant products and services subject to such information requirements	0	
PR4	Total number of incidents of non-compliance with regula- tions and voluntary codes concerning product and service information and labeling, by type of outcomes.	0	
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	0	
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion and sponsorship.	0	
PR7	Total number of incidents of non-compliance with regula- tions and voluntary codes concerning marketing communica- tions, including advertising, promotion, and sponsorship by type of outcomes	0	
PR8	Total number of substantiated complaints regarding breach- es of customer privacy and losses of customer data.	0	
PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.	0	
EU23	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services		
EU24	Practices to address language, cultural, low literacy and dis- ability related barriers to accessing and safely using electrici- ty and customer support services		
EU25	Number of injuries and fatalities to the public involving com- pany assets, including legal judgments, settlements and pending legal cases of diseases.		
EU26	Percentage of population unserved in licensed distribution or service areas.		
EU27	Number of residential disconnections for non-payment, bro- ken down by duration of disconnection and by regulatory regime.		
EU28	Power outage frequency		
EU29	Average power outage duration		
EU30	Average plant availability factor by energy source and by regulatory regime		

Appendix 3 GRI reporting guidelines G3.1

GRI Sustainability Reporting Guidelines G3.1- Reference Sheet

Principles for Defining Report Content

Principles for Ensuring Report Quality

Standard Disclosures: Profile

Strategy and Analysis

- Statement from the most senior decisionmaker or the organization (e.g., CEO, chait, or equivalent senior exsistent about the relevance of sustainability to the
- organization and its trainings.
 The statement should present the overall vision and strategy for the short-term, medium-term (e.g., 3-5 years), and long-term, puritosisely with regard to managing the law, philalenges associated with economic, environmental, and social performance. The statement should include:
- Strategic priorities and key topics for the short/ medium-term with regard to sustainability, including respect for internationally agreed standards and how they relate to long-term organizational strategy and success:

- Views on performance with respect to targets; Outlook on the organization's main challenges and targets for the next year and goals for the coming 3-5 years; and
- Other items pertaining to the organization's
- strategic approach.

 Description of key impacts, risks, and opportunities.
 - opportunities.
 Section One should focus on the organization's key impacts on sustainability and effects on stakeholders, including rights as defined by national laws and relevant internationally agreed standards. This should take into account the range
- Include:
 A discription of the significant impacts the organization has on sudainability and associated challenges and opportunities. This includes the effect on stakeholders' rights as defined by national last and the expectations is internationally agreed standards and norm;
- An explanation of the approach to prioritizing these challenges and opportunities;
- Kay conclusions about progress in addressing their topics and related performance in the reporting period. This includes an assessment of reasons for underperformance or overperformance; and
- Section Two should focus on the Impact of sustainability trends, risks, and opportunities on the long-term prospects and financial pertermance of the organization. This should concentrate specifically on information selevant to financial stabeleolem or that could become so in the financial stabeleolem or that could become so the financial stabeleolem or that could become so the financial countries. Section Two should include the following:
- sustainability trends; Prioritization of ikay sustainability topics as risks and opportunities according to their relevance for iong-term organizational stakegy, competitive position, qualitative, and if possible) quantitative financial value others;
- Table(x) summarizing:
- Targets for the next reporting period and mid-te objectives and goals (i.e., 3-5 years) related to ke risks and opportunities.

Organizational Profile

- Primary brands, products, and/or services. The reporting organization should indicate the nature of its role in prostding these products and services, and the degree to which it utilizes outsourcing.

- Number of operations: Net sales (for private sector organizations) or net revenues (for public sector organizations);
- Total capitalization broken down in terms of debt and equity (for private sector organizations); and Quantity of products or services provided.

- Breakdowns by country/region of the following:

- Imployers.

 Significant changes during the reporting period regarding size, structure, or ownership including:
- The location of, or changes in operations, including facility openings, dosings, and expensions; and

Report Parameters

- 2.2 Date of most recent previous report (if any).

- REPORT SCOPE AND BOUNDARY

 1.5 Process for defining report content, including:

 Determining materiality;
- · Prioritizing topics within the report; and Identifying stakeholders the organization expects to use the report.

- suppliers. See Gill Boundary Protocol for hurbor guidatero.

 Sale any specific limitations on the scope or boundary of the aport.

 If boundary and scope do not address the full range of material recovering, endomerability and social impacts of the agreement, and then being and projected stretches the providing complet coverings. Basis for seporting on pirit ventures, usballdaries, leaved facilities, cuchousred operations, and other entities that can applice and yellow comparability from period to period and the between organizations. Data measurement techniques and the bases of calculations, including assumptions and selviniques underlying estimation applied to the compilation of the Policulation and other information in the seport. Isolation and other information in the seport.

- Strategy and Analysis 1.1 1.2;
 Organizational Profile 2.1 2.10;
 Report Parameters 2.1 2.12;
- Governance, Commitments, and Ingagement 4.1 4.17;
- Core Performance Indicators;
 Any GRI Additional Indicators that were included;

ASSEANCE

2.13 Policy and current practice with regard to seeking external assumance for the report. If not included in the assumance report accompanying the sustainability report, explain he scope and bank of any setternal assumance provided. Also explain the relationship between the reporting organization and the assurance provider(s).

Governance, Commitments, and Engagement

- GOVERNMENT
 GOVERNMENT structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.

 - envisormental performance.

 Apport the prematings of individuals by gender within the organization's highest governance body and the committee, trained about 19 says group and ministry group membership and other individuals of alternity.

 Refer to definitions of age and ministry group in the Indianato Individuals of the Indianato Indianator (I Lara I and note that the Indianato Indianator (I Lara I and note that the Indianator Indianator (I Lara I and account referenced against that an operated for LATI.)

 Indicate whether the Chair of the highest governance body is alto an association of file of the Indianator (I minimal Indianation All Indianator I and I a

- State how to granutation defines 'independent' and hon-executive. This seement applies only for organizations that have unitary board structures. See the glossary for a definition of 'independent'.
- Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body. Include reference to processes regarding:
- identify topics related to economic, environmental,
- identify topics related to economic, environmental, and social performance raised through these mechanisms during the reporting period.

 Linkage between compeniation for members of the highest governance body, usefor managers, and executives linducing departure arrangements, and the organization performance (Including social and environmental performance).
- servicemental performance:

 4.5 Processes in place for the highest governance body to resure conflicts of histered are smolded.

 4.7 Process for determining the composition, qualification, and expertise of the highest governance body and the committees, including any consideration of gender and other indication of diversity.

 4.5 Internally developed statements of mission or values, codes of conduct, and principles relevant to exconnic, environmental, and social performance and the status of their implementation.
- - Are applied across the organization in different regions and department/units; and
- Relate to internationally agreed standards.

- and principles. Include Inequency with which the highest governance hody assesses sustainability performance. Processes for evaluating the highest governance body's own performance, particularly with respect is economic, environmental, and social performance.

- Explanation of whether and how the prec approach or principle is addressed by the
- organization.

 Article 15 of the Bio Principles introduced the precurationary approach. A regione to 4.11 count of advantage to operate the report of the required to the count of advants the organization's approach to risk management in operational planning or the development and introduction of responsible products. Saternally developed accornicit, environmental, and tooks of their principals, or of their initiatives to which the organization subscribes or encloses, behavior and took of their principals, or of the initiative to health and took of their principals, or on the initiative to the health and took of their principals, or on the initiative to the state of their production where applied, and the organization advantage to the initiative to the state of their principal country of their

- Has positions in governance bodie Participates in projects or commit
- Provides substantive funding beyond routine membership dues; or
- Views membership as strategic.

STARSHOLDER ENGAGEMENT

- ETALENCIALES EMAKEMENT
 The following Discourse Berrs roller to general stateholder engagement conducted by the organization over the course of the exporting period. These Discourse are not limited to stateholder engagement implemented for the purpose of

- Civil society;
- Shareholders and providers of capital;

- were worm to engage.

 This includes the organization's process for defining its stateholder groups, and for determining the groups with which to engage and not to engage, with thich to engage and not to engage.

 Approaches to stateholder engagement, including the process of engagement by type and by stateholder group.
- This could include surveys, focus groups, community panels, corporate advisory panels, written communication, management/union structures, and other websice. The organization whould indicate whether any of the engagement was undertaken specifically as part of the seport preparation process.



Source: Global Reporting Initiative— Sustainability Reporting Guidelines, Version 2.1.

The information in this document has been estimated from its original format to provide a summary of the GRI Califolines.

The complete source document can be downloaded for the all wave global proving any

Standard Disclosures: Performance Indicators

Categories (6)

ASPECTS

Tion Core indicators are those indicators identified

Environmental

DR1 Materials used by weight or volume.
DR3 Percentage of materials used that are recycled input

DNs Disect energy consumption by primary energy source.

DNs Indirect energy consumption by primary source.

improvements.

Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives initiatives in reduce indirect energy consumption.

Dits Location and also of land cerned, leaved, managed in, or adjacent to, protected areas and area of high blodhwenity to late cutride protected areas. Dits Description of significant impacts of activities, products, and services on blodhwenity in protected areas and areas of high blodhersity value outside protected areas.

EMISSIONS. EFFLUENTS. AND WASTE

Office Total direct and indirect greenhouse gas emissions
by weight.

DITS Offer relevant indirect greenhouse gas emissions by
weight.

Disc NO, 50, and other significant air emissions by type and weight.

and weight.

Dian Total water discharge by quality and destination.

DR22 Total weight of waste by type and disposal method. DR22 Total number and volume of significant splits.

PRODUCTS AND SERVICES

Size in initiatives to militague environmental impacts of products and services, and select of impact militagation.

Size increasing of products sold and their packaging maintain that are exclared by calegory.

Dias Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the world from

Human Rights

INVESTMENT AND PROCUREMENT PRACTICE Percentage and total number of significant

Investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.



other business partners that frave undergone human rights screening, and actions taken.

Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.

50b

Total number of incidents of discrimination and corrective actions taken.

PRISDOM OF ASSOCIATION AND COLLECTIVE BARDAINING

Hills Operations and significant supplies identified in which the right to essential hasdom of association and collective bargaining may be vollated or at significant risk, and actions taken to support these rights.

Operations and significant supplies identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.

FORCED AND COMPULSORY LABOR

Operations and significant supplies identified as having significant fish for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.

Percentage of security personnel trained in the organization's policies or procedures concernin aspects of human rights that are relevant to

rights of indigenous people and actions taken

Labor Practices and Decent Work

Liu Tota number and rate from employee hites and employee harnover by age group, gender, and region.

Lita Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation.

Return to work and retention rates after parental leave, by gender.

LARORIMANAGEMENT RELATIONS

LIAE Fectorizage of employees covered by collective barquiring agreements.

LiAe Minimum notice period(s) regarding operational charges, including whether it is specified in collective agreements.

stans for rigury, occupational deviate, lost days, and absentivetim, and number of worknobated babilities by region and by gender. Education, training, commissing, prevention, and risk-control programs in place to assist worldones members, their banilles, or community members regarding serious diseases.

TRAINING AND EDUCATION LATE Average hours of training per year per employee by gender, and by employee-calegory. 1.5.4. Ensemble with programment and fillings

Uses Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indication of diversity.

EQUAL RENUMERATION FOR WOMEN AND MEN LATE Ratio of basic salary and renumeration of women to

men by employee category, by significant local of operation.

Percentage of operations with implemented local community engagement, impact assessments, and development programs.

Pile Moretary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and

Economic

BCONDINIC PERFORMANCE

Direct economic value generated and distributed including revenues, operating costs, employee compensation, dorazions and other community investments, retained earnings, and payments to

capital providers and governments.

ICa Financial implications and other risks and apportunities for the organization's activities due to directe change.

ICs Coverage of the organization's defined benefit plan obligations.

ECA Significant financial assistance received from

significant locations of operation.

Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.

Procedures for local thring and proportion of serior management hitself tom the local community at locations of significant operation.

MOINTET ECONOMIC IMPACTS

Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, inkind, or probono engagement.

Guidance for using Indicators

In reporting on the Performance Indication, the foliose guidance on data compilation applies:

Reporting on Treeds Information should be presented for the current reporting posting lag, one young and at least the previous periods, as well as future targets, where they have been established, for the short- and medium-term.

Data aggregation Reporting organizations should determine the appropriate level of aggregation of information. See additional guidance in the General Reporting Notes section of the Guidelines.

Relates Reported data should be presented using generally accepted international metrics yar, slogs through a man and calculated using standard consistent through their and calculated using standard consistent lacks. Where specific international conventions eat-ying, CHG exphilatests, these are hybrially specified in the Indicator Protocols.

Standard Disclosures: Management Approach

50a Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.

CULTIMES HEALTH AND SAPETY
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
consortions.

PRODUCT AND SERVICE LABELING

Type of product and service information required
by procedures, and percentage of significant
products and services subject to such information

requitements.
Total number of incidents of non-compilance with regulations and voluntary codes concerning produced and service information and labeling, by type of

MARKETING COMMUNICATIONS

PN
Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.

Product Responsibility

mac and opportuness. The organization can influence to Disclosure(s) on Management Approach to cover the full range of Appets under a given Calinopor or grasp it in expones differently. However, all of the Appets associated with each callegory should be addresse regardies of the formul or grouping.

Goals and performance

- Policy Organizational responsibility
 Training and awareness*

Monitoring and follow up*
 Additional contentual information
 *not applicable to Economic #C; indication

Decision Tree for Boundary Setting



Appendix 4 EUSS reference sheet



★ Electric Utilities Sector Supplement—Reference Sheet

Principles for Defining Report Content

MATRIMATET The information in a report should cover topics and indicators that reflect the organization's significant economic, environmental, and social impacts, or that would substantively influence the assessments and decisions of stakeholders.

surnament. I'm comist. The report should present the organization's performance in the wider context of suntainability.

COMMATTRIANS Coverage of the material topics and Indicators and definition of the report boundary should be sufficient to reflect significant economic, environmental, and social impacts and enable stableoiden to assess the reporting organization's performance in the reporting period.

Principles for Ensuring Report Quality

BALANCE The report should reflect positive and negative aspects of the organization's performance to enable a reasoned assessment of overall performance.

COMMANDER TY Issues and information should be selected, compiled, and experted considerity. Reported information should be presented in a man that enables stateholders to analyze changes in the organization between the rime, and could support analyze in other organizations. Accounts The opported information should be sufficiently accounts and detailed for stateholders to ess the reporting organization's performance.

EXY TO SECTOR SUPPLEMENT CONTENT

CUES Denotes new indicator Protocol.

CLARITY Information should be made available in a manner that is understandable and accessible to stakeholders using the report.

BULLARLITE Information and processes used in the preparation of a report should be gathered, recorded, compiled, analyzed, and disclosed in a way that could be subject to exemination and that exhabithes the quality and materiality of the information.

Standard Disclosures: Profile

Introductory Section to EUSS

Strategy and Analysis

- Statement from the most serior dictionmaker of the organization (e.g., CTO, chart, or equivalent serior position), about the relievance of statisticality to the organization and its strategy. The statement should present the overall vision and strategy for the short-term, medium-term (e.g., 3-6 years), and long-term, particularly with regard to managing the key challenges structured by the content of the content of and social performance. The statement should include:
- Strategic priorities and key topics for the short/ medium-term with regard to sustainability, including respect for internationally agreed standards and how they relate to long-term organizational strategy and success; forunder to rends (e.g., macroeconomic or political) affecting the organization and influencing sustainability priorities; (key events, achievements—

- Views on performance with respect to targets; Outlook on the organization's main challenges and targets for the next year and goals for the coming 3-5 years; and
- her items pertaining to the organization's degic approach.
- Description of key impacts, risks, and opportunities.

The reporting organization should provide two concise narrative sections on key impacts, risks, and opportunities.

and opportunities. Section One whould focus on the organization's lay impacts on sustainability and effects on stakeholders, including rights as defined by national laws and relevant internationally appeal standards. This hould stake into account the range of mesonable espectations and interests of the organization's stakeholders. This section should include:

- a feech instant.

 A description of the significant impacts the organization has on sustainability and associathings and opportunities. This includes the effect on stakeholdern'rights as defined by national laws and the expectations in internationally-agreed standards and norms;
- An explanation of the approach to prioritizing these challenges and opportunities;
- Key conclusions about progress in addressing these topics and related performance in the reporting period. This includes an assessment of reasons for underperformance or overperformance; and
- A description of the main processes in place to address performance and/or relevant changes. address performance and/or relevant changes. Section Two should focus on the impact or sustainability hrends, risks, and opportunities on the long-learn prospects and financial performance of the organization. This should concentrate specifically on information relevant to financial stakeholders or that could become so in the future. Section Two should include the following:
- escription of the most important risks and ortunities for the organization arising fror sinubility trends;
- Prioritization of key scalarinability topics as risks and opportunities according to their relevance for long-term organizational strategy, competitive position, qualitative, and (if possible) quantitative financial value drivers;
- Targets, performance against targets, and leasons-learned for the current reporting period;
- Targets for the next reporting period and mid-term objectives and goals (i.e., 3-5 years) relate to key risks and opportunities.
- Concine-description of governance mechanisms in piece to specifically manage these risks and opportunities, and identification of other related risks and opportunities.

Organizational Profile

- Name of the organization.

 Name of the organization.

 Thinary brands, products, and/or services. The reporting organization should indicate the nature of its note in providing these products and services, and the degree to which it utilizes

- 22 Operational structure of the organization, including main divisions, operating compa subsidiaries, and joint ventures.
- subsidiaries, and joint ventures.

 A Location of organization's headquarters.

 Ramber of countries where the organization operates, and names of countries with either major operations or that any specifically selevant to the sustainability issues covered in the export.

 Nature of overenthip and logal form.

 Market's versed flockading geographic breiddown, suctions served, and types of customary-braneficiaties of, customary-braneficiaties of, suctions are proposed.

 Market's served flockading geographic breiddown, suctions served, and types of customary-braneficiaties of.

 Sale of the reporting organization, including-humber of employees;

- Number of employees;
- Total capitalization broken down in terms of debt and equity (for private sector organizations); and
- Quantity of products or services provided. in addition to the above, reporting organizations are encouraged to provide additional information, as appropriate, such as:
- Total assets;
- Breakdowns by country/region of the following: Sales/revenues by countries/regions that make up 5 percent or more of total revenues;
- Costs by countries/regions that make up 5 percent or more-of total revenues; and
- The location of, or changes in operations, including facility openings, closings, and expansions; and
- Changes in the share-capital structure and oth capital formation, maintenance, and alteration operations (for private sector organizations).

 Awards received in the reporting period.

- Installed capacity, broken down by primary energy source and by regulatory regime. Net energy output broken-down by primary energy source and by regulatory regime.
- and commercial customer (account)

 Length of above and underground transmission
 and distribution lines by regulatory regime.

 Micration of CDDs emissions allowances or
 equivalent, broken down by carbon trading
 harmwork.

Report Parameters

- 13. Reporting period (n.g., fiscal/talender year) for information provided.

 12. Date of most recent previous report (if any).

- 22 Reporting cycle (unnual, blennial, etc.)
 2.4 Contact point for questions regarding the report or its contents.

- Process for defining report content, including:
 - Prioritizing topics within the report; and
- Fronzieria uspectivement are report, and identifying utual-holden the organization expects to use the report.

 Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GBI Boundary Protocol for further
- supplien). See Gill Boundary Protocol for harth guidance. State any specific limitations on the scope or boundary of the report. Basis her specific limitations on the scope or boundary of the report. Basis her specific group on their services, such as the certification of constraints of specific services and the restillation to on significantly affect comparability from particular particular services of calculations, including assumptions and intervingias underlying estimations applied to the compilation of the indicators and other information in the report.

Explanation of the effect of any se-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergest acquitition, change of base years/periods, nature of business, measurement methods). Significant changes from previous reporting periods in the ucope, boundary, or measurement methods applied in the report.

Sector-specific Commentary is marked by red boxes.

- ON CONTENT INDEX

 2.12 Table identifying the location of the Standard
 Disclosures in the report. Identify the page
 numbers or web links where the following can be
 - Strategy and Analysis 1.1 1.2;
 - Organizational Profile 2.1 2.10;

 - Governance, Commitments, and Engagement 4.1 4.17;
 - Disclosure of Management Approach, per
 - Core Performance Indicators:
 - Any GR Additional indicators that were included;
 and
 - Any GRI Sector Supplement Indicators included in the report.

ATTRACE

2.12 Folloy and current practice with regard to seeking external assurance for the report. If not included in the assurance report accompanying the sustainability report, explain the scrape and basis of any external assurance provided. Also explain the satisfantish photome the reporting organization and the assurance provided(s).

Governance, Commitments, and Engagement

- Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational membries.

- State how the organization defines 'Independent' and hon-executive.' This element applies only for organizations that have unitary board structures. See the glossary for a definition of 'Independent'.

 **The Contract for "Associations and employment."
- The use of shareholder resolutions or other mechanisms for enabling minority shareholders to express opinions to the highest governance body; and
- body, and informing and consulting employees about the working relationships with formal representation bodies such as organization level work councils, and appresentation of employees in the highest governance body. Identify logics related to expresent estated through these mechanisms during the reporting powind.

Explain the degree to which these Are applied across the organization in different regions and department/units; and

- regions and department/units; and Relate to internationally agreed standards Insulate to Entitlementing agreements body by 4.5 Procedures of the highest governance body by ownseing the organization's identification and management of economic, endonomental, and social performance, including relevant risks and opportunities, and advances or complaines with internationally agreed students, codes of conduct, and principles.

- COMMITMENT TO EXTERNAL INITIATIVES

 4.11 Explanation of whether and how the
 precalizonary approach or principle is addressed
 by the organization.
 Article 15 of the Bio Principles introduced the
 precalizonary approach. A response to 4.11
 could address the organization's approach to
 risk management in operational planning or the
 development and introduction of new products.

 4.12 Externally developed economic, environmentally,
 and social charters, principles, or other initiatives
 to which the organization subscribes or endorses,
 include distort adoption, construction of the
- Memberships in associations (such as indu-associations) and/or national/international advocacy organizations in which the organization: Has positions in governance bodies;

 - Participates in projects or committees;
 Provides substantive funding beyond routin membership dues; or
 - Views membership as strategic

STARRHOLDER ENGADEMENT

THARMOLDER INFOADERS NY
The Indicating Disclosure litera roles to general
stateholder orgagement conducted by the
organization over the course of the reporting
period. These Disclosures are not limited to
stateholder organized implement and for the
purposes of propering a sustainability report.
4.34 List of stateholder groups organized by the
organization.
Examples of stateholder groups are:
Commenting

- - Communities;

 - Supplien; and Employees, other workers, and their trade unions
- stateholders with whom to engage.

 This includes the organization process for defining in stateholder group, and for determining the groups with which is engage and not to engage.

 4.55. Approaches to stateholder engagement, including frequency of engagement by type and by stateholder group.

 4.17 Ray topics and concerns that have been raised through stateholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.



The information in this document has been extracted



★ Standard Disclosures: Performance Indicators

Categories (6)

XXo1 Core Indicators are those Indicators identified in the GRI Guidelines to be of interest to most stakeholders and assumed to be material unless deemed otherwise on the basis of the GRI Reporting Principles.

ECONOMIC PERFORMANCE

ECONOMIC PERFORMANCE

Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments. Financial implications and other risks and opportunities for the organization's activities due to climate change.

Coverage of the organization's defined benefit plan obligations.

MARKET PRESENCE

Range of ratios of standard entry level wage
compared to local minimum wage at significant
locations of operation.

EC6 Policy, practices, and proportion of spending on locally-based suppliers at significant locations of

operation.

Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.

NDIRECT ECONOMIC IMPACTS

Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, inkind, or pro

public benefit through commercial, inkind, or pr bono engagement. Understanding and describing significant indirect economic impacts, including the extent

Management approach to ensure short and long-term electricity availability and reliability.

Demand-side management programs including residential, commercial, institutional and industrial programs.

RESEARCH AND DEVELOPMENT

Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development.

PLANT DECOMISSIONING

SYSTEM EFFICIENCY

Transmission and distribution percentage of total energy.

Environmental

MATERIALS

EN1 Materials used by weight or volume.

Percentage of materials used that are recycled input materials.

EN3 Direct energy consumption by primary energy

EN4 Indirect energy consumption by primary source.

EN8 Total water withdrawal by source.



EN11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected

EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.

Number of IUCN Red List species and national conservation list species and national conservation list species with habitats in areas affected by operations, by level of extinction risl

EMISSIONS, EFFLUENTS, AND WASTE EN16 Total direct and indirect greenhouse gas

emissions by weight.

Other relevant indirect greenhouse gas emissions by weight.

(EN18 Initiatives to reduce greenhouse gas emissions

and reductions achieved.

Emissions of ozone-depleting substances by

EN20 NO, SO, and other significant air emissions by

type and weight.

EN21 Total water discharge by quality and destination.

EN22 Total weight of waste by type and disposal method.

method.

EN23 Total number and volume of significant spills

EN26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.

COMPLIANCE

Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.

Significant environmental impacts of transporting products and other goods and materials used for the organization's operation and transporting members of the workforce.

Labor Practices and Decent Work

EMPLOYMENT

(A1 Total worldorce by employment type, employment contract, and region.

(LA2 Total number and rate of employee turnover by age group, gender, and region.

(1)2 Processes and processes to ensure the availability of a skilled worldorce.

Of a Mines workstree.

2015 Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category

and by region.

The States of the States of

LABORMANACEMENT RELATIONS

(DAA Percentage of employees covered by collective bargarianing agreements.

LAS Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.

CA7 Rates of injury, occupational diseases, lost days, and absenteeism, and number of workrelated

Rates of injury, occupational diseases, lost days, and absenteesim, and number of workrelated fatalities by region. Education, training, courseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.

TRAINING AND EDUCATION

LA10 Average hours of training per year per employee

by employee category.

Programs for skills management and lifelong learning that support the continued yability of employees and assist them in

managing career endings.

LA12 Percentage of employees receiving regular performance and career development revi

LA13 Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity. LA14 Ratio of basic salary of men to women by employee category.

Human Rights

INVESTMENT AND PROCUREMENT PRACTICES

Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human

rights screening.

Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.

Total number of incidents of discrimination and actions taken.

FREEDOM OF ASSOCIATION AND

COLLECTIVE BARGAINING

HRS Operations identified in which the right to operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.

Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor

FORCED AND COMPULSORY LABOR

Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.

SECURITY PRACTICES

INDIGENOUS RIGHTS

HR9 Total number of incidents of violations involving rights of indigenous people and actions taken.

Society

Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including

entering, operating, and exiting. UTS Stakeholder participation in the decision making process related to energy planning and infrastructure development.

USD Approach to managing the impacts of displacement.

Number of people physically or economically displaced and compensation, broken down by

Percentage and total number of business units analyzed for risks related to corruption.

 Percentage of employees trained in organization's anti-corruption policies and

504 Actions taken in response to incidents o

SOS Public policy positions and participation in public policy development and lobbying.

ANTI-COMPETITIVE BEHAVIOR

508 Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.

RESPONSE EU21 Contingency planning measures, disaster/ emergency management plan and training programs, and recovery/restoration plans. **Product Responsibility**

DISASTER/EMERGERNCY PLANNING AND

CUSTOMER HEALTH AND SAFETY

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

health and safety impacts of products and services during their life cycle, by type of

Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.

MARKETING COMMUNICATIONS
PRO Programs for adherence to laws, standards, and voluntary codes relate to marketing communications, including advertising, promotion, and sponsorship.

PRZ Total number of incidents of non-compliance with regulations and voluntary codes concernated in the communications, including communications, including assistentials or normalization and voluntary codes concernated in the communications of the communicatio

CUSTOMER PRIVACY

Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.

COMPLIANCE

Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.

Type Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services.

electricity and customer support services.

126 Percentage of population unserved in licensed distribution or service areas.

127 Number of residential disconnections for

non-payment, broken down by duration of disconnection and by regulatory regime.

PROVISION OF INFORMATION

Practices to address language, cultural, low
literacy and disability related barriers to
accessing and safely using electricity and

Standard Disclosures:

Management Approach The Disclosure(s) on Management Approach is intended to address the organization's approach to managing the sustainability topics associated with risks and opportunities.

with risks and opportunities.

The organization can structure its Disclosure(s) on Management Approach to cover the full range of Aspects under a given Category or group its responses differently. However, all of the Aspects associated with each category should be addressed regardless of the format or grouping.

Disclosures on Management Approach include

Goals and performance Policy

Organizational responsibility

Monitoring and follow up* Additional contextual information

A sustainability report should include in its boundary all entities that generate significant sustainability impact (a citual and potential) and/or all entities over which the reporting organization exercises control or significant influence with regard to financial and operating policies and practices.

Appendix 5 changes from G3.1. to G4 guidelines



+21 MAY 2012

OVERVIEW OF CHANGES IN STANDARD DISCLOSURES FROM G3.1 TO G4 GUIDELINES

CENERAL STANDARD DISCLOSURES				SPECIFIC STANDA	WD 05/105U83	
Gan	Ga	Gut		Ga	Gan	Ga
Standard Disclosures	Standard Disclosums	Standard Disc	loures	Standard Disclosures	Disclosures on	Dicksure on
STRATECY AND ANALYSIS	STRATEGY AND ANALYSIS	ASSURANCE		REPORT PROFILE.	Management Approach CATEGORY, ECDINOMIC	Management Approach
1.1	Gen	3.13		ASSURANCE Comm	Goals and Performance	Moved to Guidance
13	G+3	COVERNANCE		COVERNANCE	Relice	Moved to Guidance
		9.0		Cros Cros	Additional Contential	Moved to Guidance
ORGANIZATIONAL PROFILE	ORGANIZATIONAL PROFILE	10		C+-ra	Internation	
2.5	Gea	43		C+nx	CATEGORY-ENVIRONMENTA	L
23	C++	4.6		Genz, Genz, Genz	Goals and Performance	Moved to Guidance
2.3	G4-17 (Moved to Tdentified Material Assects and	4.0		Gean	Policy	Moved to Guidance
	Roundaries in Gry	14		Es-en	Organizational Reportability	Moved to Guidance
2.5	Gea	9.7		G1-10	Training and Assonners	Moved to Guidance
2.5	Gs-e	1.0		Gwas (Moved to Titrics and	Monitoring and Follow-up	Moved to Guidance
2.6	George Common Co	- 10		Integrity in Co. Co-ox, Co-ox	Additional Contestual	Moved to Guidance
2.7	G+a	530		C1-91	HOHESO	
23	Gee	_		Grea	CATEGORY, SOCIAL	
	Gr-no (Former Gr.n Indicato LAtr)			C+m	SUB-CATEGORY LABOR PRA	CTICES AND DECENT WORK
	Ge-11 (Former Ga.) Indicato LAm			Ca-so	Goals and Performance	Moved to Guidance
	Genz			Ge-su	Policy	Moved to Guidance
2.9	Ge-11			Corne	Organizational Responsibility	Moved to Guidance
2.10				Cons	Training and Association	Moved to Guidance
		_		C4-so	Monitoring and Follow-up	Moved to Guidance
REPORT PROFILE	REPORT PROFILE	_		Genz	Additional Contestual Information	Moved to Guidance
3.3	Ge-ox	_		Coren		
13	Seco	_		C+m	SUB-CATEGORY HUMAN BE	
13	G+-00	_			Goals and Performance	Moved to Guidance
3.5	Gear	COMMITMENTS TO	0	ORGANIZATIONAL PROFILE-	Policy	Moved to Guidance
		EXTERNAL INITIA	ITV65	COMMITMENTS TO EXTERNAL INITIATIVES	Organizational Risk Assessment	
REPORT SCOPE AND	DENTIFIED MATERIAL	9.00		G9-19	Impact Assessment	Moved to Guidance
BOUNDARY	ASPECTS AND BOUNDARIES	9.12		G+11	Organizational Responsibility	Moved to Guidance
13	Gens	5.13		Co-se	Training and Assonners	Moved to Guidance
	Ge-19				Monitoring, Follow-up and Remediation	Moved to Guidance
18	Georg Georg	STARSHOLDER		STAKGHOLDER	Additional Contential	Moved to Guidance
3.7		SNEAGEMENT 523		ENCACEMENT Great	Internation	
10		533		Gran	SUB-CATEGORY SOCIETY	
33		528		Gron	Goals and Performance	Moved to Guidance
3.10	G+33	537		Char	Policy	Moved to Guidance
331	G+21	There			Organizational Responsibility	Moved to Guidance
				ETHICS AND INTEGRITY	Training and Asconness	Moved to Guidance
GRICONTENT INDEX	REPORT PROFILE-CRI CONTENT INDEX			Cres	Monitoring and Follow-up	Moved to Guidance
3.52	Co-ss			Cher	Additional Contractual Information	Moved to Guidance
				Счи		
					SUB-CATIGORY PRODUCT R	
					Goals and Performance	Moved to Guidance
Legend					Policy	Moved to Guidance
Management in Street and Dis-	No change to Standard Disclosure New Standar		Data points added to Standard		Organizational Responsibility	
The second secon			Disclosure	Tolining and Asconness	Moved to Guidance	
	Content in Standard Disclosure Content from Stand		Shore	ford Disclosure deleted	Monitoring and Rollow-up	Moved to Guidance
has been reduced	has been reduced has been moved to Gui				Additional Contractual Information	Moved to Guidance
→ The G4 Guidelines are	-y The G4 Guidelines are free to download from the GRI web:			porting.org		G+DMA



OVERVIEW OF CHANGES IN STANDARD DISCLOSURES FROM G3.1 TO G4 GUIDELINES - CONTINUED

	SPECIFIC STANDARD DISCLOSURES						
Gus	<u> </u>	Ga.1	Ge	Gan	Ge		
Indicators	Indication	Indicators	Indications	Indication	Indicators		
CATEGORY ECONOMIC		Dian	G46Nts	SUB-CATEGORY, HUMAN RIGHTS			
RE1	GHID1	ENtro	GA4Nos	HRs	Gn-HBh		
REs	G+HCs	ENen	CnEllon	HR2	Gn-HRho		
ECo	Gelica	Dian	GnENos	HRa	GN-HRb		
SEN	GHECH	INto	GnENos	HDs	Gn-HRs		
ECa	GHES	Dita	GNENtor	HRs	Gn-HBh		
ECa .	GHEN	Diar	CA-ENcu	HBis	GAHRs		
ECT	G+HCa	ENton	GAENos	HRr	Gn-HBh		
ECX	G+4IC+ (Cata points moved	Dian	C+6Nto	HBx	GA-HRIr		
ECo	to Guidance; GHECs (Osta points moved	Disc	GAENin	HRb	Gn-HBs		
NC.W	to Guidance		CAENto	HPto	Cn-HDs		
			CAENtra		Ge-HRtm		
CATEGORY ENVIRONMEN	TAL.		CAENtre	HR11	Ge-HRho		
ENt	G+ENn						
ENa	G+4No	CATEGORY, SOCIAL		SUB-CATEGORY, SOCIETY			
ENn	Ge-ENs	SUB-CATEGORY, LABOR P	RACTICES AND DECENT WORK	501	GH501		
ENs	Ge-ENs	LA ₁	G+10 (Moved to	SDe	GH-50t		
	G+IN+		Organizational Profile in Gry	5010	Entire Indicator moved to		
	E+Rh	Uka	GAUA1	500	Cultimos Ge-SOs		
ENn	G+ENe	LA:	G+U/a	No.	GA-SON		
ENn	Ge-ENv	LAm	GHUAs	90s	GA-SOs		
ENa	G+ENe	Like	Grant (Moved to Organizational Profile" in Gra	90s	Into Indicato moved to		
ENa	G+ENs	Ua .	Gride		Guidance		
ENia	G+ENe	UAs .	GHAs	Sin	Ge-SOs		
ENto	G+4Mto	UA7	Grida	SOr	Gr-507		
ENtra	G+EM11			Sin	G+50s		
ENtra	Ge-EN12	LAx	GN-LAIr (Data points moved to Guidance)		Ga-90s		
ENtra	Ge-EN11	LAn	GAUA		Ge-50no		
ENtre	Entire Indicator moved to Guidance	LAno	Colde		Ge-5011		
EMns	Catilina	IAm	GeUA10				
Dhe	G+ENns, G+ENns	LATE	Galilin	SUB-CATEGORY, PRODUCT			
Dho	Ge-ENtr	LATE	GHIAto	FRh.	GN-PRh (Osta points moved to Guidanon		
	G+ENts	LAnn	G+UA11	FRb	Ge/Ro		
Dha	Ge-ENtre		Galilina	Pila	Ge-Pilo		
ENtry	Ge-ENoo		Galilats	Min	Co-Min		
ENtro	Ge-ENzn		GHAN	Ph	GN-PRo (Osto points moved		
				III-	to Guidancey		
				PSe	Ge-Min Ge-Mir		
				PRa	Cn-Pla		
				TSh:	Cn-PNs		

Legend		
No change to Standard Disclosure	New Standard Disclosure	Data points added to Standard Obscionare
Content in Standard Disclosure has been reduced	Content from Standard Disclosure has been moved to Guidance	Standard Disclosure deleted

+ The G4 Guidelines are free to download from the GRI website www.globalreporting.org