Lund University Master's
Programme in Environmental Science

SUSTAINABLE DEVELOPMENT AND CORPORATE REPORTING: STAKEHOLDER APPROACH

SYDKRAFT CASE

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Summary

The issue ”triple bottom line”, which focuses on company profit performance being balanced by demonstrated performance on delivering value to society while improving the ecological environment have recently emerged as a pressing, indeed crucial management issue.

In order to move towards sustainable development managing activities and reporting processes require new ways of assessing progress and communicating on it to the variety of interest groups. Today stakeholders demand unprecedented level of information disclosure from the corporations. Now as never before, communities, governments, businesses, international agencies and non-governmental organisations are concerned with establishing the means to assess and report on progress towards sustainable development. Performance Indicators are important tools in this process. This report examines how companies may be able to involve stakeholders in the process of developing performance indicators for corporate communications. The dialogue is important for understanding stakeholder aspirations and perceptions of organisational performance. This dialogue also provides a mean for the organisation to gather the most diverse collection of opinions, perspectives, and values from the broadest spectrum of the public, enabling the organisation to use those opinions and demands when making their decisions on reporting content. By engaging stakeholders into the reporting process companies should be able to develop more effective communication strategies. Next is examined to what extent stakeholder perceptions and demands can be taken into consideration while developing performance indicators for corporate reporting.

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List of Acronyms

CERES: Coalition for Environmentally Responsible Economies
CEPAA: Council on Economic Priorities Accreditation Agency
CSR: Corporate Social Responsibility
EMAS: European Community's Eco-Management and Audit Scheme
FEE: European Federation of Accountants
GRI: Global Reporting Initiative
DJSGI: Dow Jones Sustainability Group Index
ICC: International Chamber of Commerce
IISD: The International Institute for Sustainable Development
ILO: International Labour Organisation
IPRA: The International Public Relations Association
ISEA: Institute of Social and Ethical Accountability
ISO: International Organisation for Standardisation
NEF: New Economics Foundation
NGO: Non-governmental Organisation
MORI: Market and Opinion Research International
OECD: Organisation for Economic Co-operation and Development
UNEP: United Nations Environment Programme
WBCSD: World Business Council for Sustainable Development
WCED: World Commission on Environment and Development
WRI: World Resources Institute

In an ever more complex and competitive global economy,
those companies which fail to connect with their customers,
fail to harness the creative energy of their employees and suppliers,
and fail to respond to the needs of the wider community, will lose out.
Companies which do communicate, which do engage and which build
lasting commitment based on genuine involvement, will succeed[1].

1 INTRODUCTION

A number of initiatives are being taken by industry to address sustainable development and the role of industry in this development. Commitment to sustainable development and external pressure create new challenges for business to integrate sustainable practices into its operations, addressing three dimensions of sustainability, economic, ecological and social. Under the pressure from the public and other interest groups companies are being challenged not just to improve their performance by integrating sustainable measures into their activities, but also to communicate about it. The Swedish, as well as the European energy sector is in an especially particular situation. Deregulation of the European electricity market and lower electricity prices has lead to greater competition between companies and the dominance of short-term values. On the other hand, improved environmental performance of the sector is increasingly being demanded by stakeholders concerned with environmental problems associated with the energy sector, such as global climate change and nuclear safety. There is also an increasing realisation that electricity is a catalyst for development and that energy demand needs to grow in a sustainable manner whilst meeting developmental and societal needs.

With increasing public awareness of environmental issues and links between economic, environmental and social performance, the requirements from various stakeholders concerning corporate communication and reporting are increasing. Recent years have seen the emergence of a new path of corporate accountability and reporting. Communication on triple bottom line performance is an existing and rapidly developing area, where number of companies, such as Shell, Body Shop, BP Amoco, British Telecom, has already contributed by issuing separate or combined reports on their three lines performance. A likely scenario is that this trend will continue with involvement of more companies from different sectors. Although there have been several efforts made by industry and other organisations to create a framework for non-financial reporting, there are no commonly accepted reporting standards. In transition from environmental to sustainability reporting and within the underdevelopment of "sector specific" reporting standards extended stakeholder engagement would become an important issue for improving corporate reporting practices.

1.1 OBJECTIVES OF THE STUDY

The research objective is to investigate the possibilities of selecting performance indicators from stakeholder requirements while measuring and reporting on corporate environmental and social performance within the context of sustainable development. Answering the following research questions will help to explore the topic:

1. What are the drivers for corporate reporting?
2. Who are the stakeholders and what are their demands to corporate reporting?

[1] Wheeler D., Sillanpää M., 1997, p.348

3. How can stakeholder perceptions be used as a base for developing sustainable performance indicators?

1.2 SCOPE AND LIMITATIONS

The study aims to analyse the development of the corporate sustainability reporting process by focusing on the selection of environmental and social performance indicators from stakeholder requirements. Consideration of financial accountability is necessary in order to complete the picture of sustainability reporting. However, in view of more mature status of financial performance measurements, they are examined only when they are linked to social and environmental performance.

Using Sydkraft AB as a case study company the possibilities and constrains of selecting reporting indicators for the energy utility sector from stakeholder requirements are examined. The fact that subsidiaries are not included in this research might possess some limitation for presenting the whole picture. However, the results of the study examining Sydkraft AB as a head office of the Sydkraft Group that co-ordinates relationships with the stakeholders, provides them with information and decides the internal and external reporting format might be entailed to the other companies in the Sydkraft Group.

The diversity of opinions and as a consequence, stakeholder demands presented in the research has been limited partly because of time constraints and partly due to difficulties getting in contact with some of the representatives, such as with some suppliers, customers and media (from 14 journalists no one has answered the questionnaire). Other groups, such as industry associations and suppliers, although interested in Sydkraft's performance and information, do not have any specific requirements to the information provided by the company. Although the relationships of these target groups with Sydkraft AB are described they are not included in the final analysis of stakeholder requirements.

Proposed indicators do not completely reflect all stakeholder requirements. Indicators are selected according to their relevance to Sydkraft's activities, possibilities to develop them in a short and medium-term perspective as well as according to their quantitative measurability.

1.3 METHODOLOGY

The methodology undertaken for this thesis is based on the following:

- Conducting an academic literature review
- Reviewing publicly available Sydkraft's and other companies' documents, such as environmental and social reports, other documentation and web-sites
- Conducting the case study research
- Conducting interviews with Sydkraft's managers and personnel
- Conducting stakeholder interviews and surveys
- Carrying out a gap analysis and the selection of indicators.

The literature review was conducted to provide a theoretical framework and better understanding of the links between business, environment and society, the role of the industry in achieving sustainability and the role of corporate communication and reporting in this context. Secondary data from specialised literature, journals, statistics, reports and articles, was also used. The review of the

literature related to selection of indicators from stakeholder consultations was limited to few available and mainly pioneering works in this field, such as those of the Institute of Social and Ethical Accountability (ISEA), New Economic Foundation (NEF), Rob Gray and SustainAbility.

Review of companies' reports. The review of the stakeholder involvement practices of such companies as Traidkraft (UK) and Novo Nordisk (Denmark) was used as a supportive example. Sydkraft's reports, brochures, external and internal web sites and other publications and documentation as well as environmental and social reports of other companies', such as Vattenfall, Norsk Hydro, BP Amoco, Shell were examined to compare existing reports mainly in terms of indicators being used.

Conducting the case study research. Based on Sydkraft AB and its relationships with stakeholders, the main characteristics of those relationships and the main requirements of internal and external audience to the company's environmental and social information were investigated as well as the possibilities of selecting indicators from those demands were examined.

Conducting interviews with Sydkraft's managers and personnel. In order to define Sydkraft's stakeholders and understand the main features of the company's communication process with target groups interviews were conducted with Sydkraft's staff, mainly with those responsible for stakeholder communications. The interviews were made with representatives of Information, Environment/R&D, Sales and Marketing, Personnel departments, Risk management and with representatives from Sydkraft subsidiaries, such as Sydkraft Energy Trading AB, Sydkraft Elnät Malmö AB and Sydgas AB.

Conducting stakeholder interviews and surveys. In order to investigate stakeholder perceptions of Sydkraft's activities as well as their information demands interviews were conducted with representatives of the company's major external stakeholders, namely financial analysts, an insurance company, customers, consumers, suppliers, environmental NGOs, local authorities and an industry association[2]. In gathering stakeholder opinions a variety of methods was used. The main method used was the questionnaire, sent via e-mail, and adjusted to each stakeholder group. Interviews were conducted by phone. The employees survey was conducted, using a questionnaire, specially designed for the internal audience. The examination of about 300 feedback messages from students, consumers and other people interested in Sydkraft activities and energy issues in general, was also very helpful in understanding the wider public opinion and with regard to collection of primary data.

Carrying out a gap analysis and the selection of indicators. Data collected from the interviews and surveys was arranged by interest categories and main areas of stakeholder concerns were defined. Then a matrix that serves the two purposes was designed. It summarises the main areas of stakeholder concerns investigated during the research and provides some kind of gap analysis, by showing the degree of the fulfilment of stakeholder information requirements by Sydkraft. From the requirements that were not covered by Sydkraft information possible environmental and social indicators for the company's reporting purposes were extracted and their correctness, applicability and relevance to Sydkraft were discussed with the company's environmental staff.

[2] The full list of interviewers and questionnaire can be found in the appendix 1

2 THEORETICAL FRAMEWORK

2.1 THE CONCEPT OF SUSTAINABLE DEVELOPMENT

The World Commission on Environment and Development (WCED) has officially launched the concept of SD publishing Our Common Future (the Brundtland Report) in 1987, where SD was defined as "*Development that meets the needs of the present without compromising the ability of the future generations to meet their own needs"*[3].

As a result of the 1992 United Nations Conference on Environment and Development, sustainable development has become an internationally accepted policy goal. Sustainable development is not a stable state, a plateau we reach and say, *"We've made it, now we can turn to something else"*[4]. It is a process whose central aim is leaving future generations with an array of choices. Achieving this requires the bringing together of economic, ecological and social imperatives.

The **economic** imperative is to manage our resources efficiently while contributing to the prosperity of all by creating wealth.
The **ecological** imperative is not to exceed what the earth, the oceans, and the atmosphere are capable of providing and absorbing and to remedy already damaged systems.
The **social** imperative is to put humanity at the centre of our concern, with its value of equal opportunity, social justice and freedom[5].

Each of these three imperatives is independently crucial and interconnected. The extent of interaction among the three systems suggests that any attempt to address one system in isolation not only runs a risk of intensifying problems in the other systems, but also may give rise to rebound effects from the other systems which overwhelm the effects of the first intervention[6].

2.2 THE ROLE OF BUSINESS IN SUSTAINABLE DEVELOPMENT

If a sustainable society is to be achieved, what role must business play? Many argue that the concept of sustainable development is not appropriate to analysis at the corporate level. It is commonly argued that it can only be analysed and measured within a spatial dimension, since sustainability is a system property rather than an attribute of an individual company[7]. While that might be true it is nevertheless important to recognise that the business is central to the sustainable development process. Business will play a vital role in the future health of this planet[8]. Companies account for a large proportion of the world's economic activity, they control much of the world's resources, technology and innovation and they may wield a considerable degree of political influence. Therefore, we ought to be able to conceive a framework, in which the firm would be operating at least in a way that is consistent with moves towards sustainable development.

From the sources, such as the 'Responsible Care' Programme, the Public Environmental Reporting Initiative (PERI), the International Chamber of Commerce (ICC), the Coalition for Environmentally

[3] WCED, 1987
[4] Schrecker T., 1997, p.75
[5] DeSimone L.D., Popoff F., 1997, p.233
[6] Schrecker T., 1997, p.78
[7] Bennett M., James P., 1999 p.19
[8] Schmidheiny S, 1992, p.xi

Responsible Economies (CERES) and Agenda 21 the main four areas of sustainable industrial development derived as:

- ***Environmentally sound products, processes and services.*** This covers mostly conventional environmental management and requires that sustainable firms take responsibility for the environmental impact of their products and processes through their life-cycle.
- ***Integration of sustainable development and economic growth***. Particular activities in this group include technological innovation and social issues such as job creation.
- ***Reducing risk and hazards to human health and the ecosystem.*** It stresses environmental impact evaluation and reporting, including adopting not only national but a global perspective as well.
- ***Community/stakeholder participation in sustainable development.*** This group addresses the issue of public credibility and accountability.

Although sustainability is a relatively new concept, business and other social institutions have considerable experience in balancing economic, social and environmental factors into their decision-making processes[9]. There has been a considerable movement away form the unrestricted free market concept typified by Milton Friedman's famous statement, *"There is one and only one social responsibility of business – to use its resources and engage in activities to increase its profits"*[10]. Today business is increasingly required to address economic, environmental and social aspects related to its activities.

2.2.1 Corporate Environmental Responsibility

Environmental challenge for business is a reconciliation of economic growth and environmental protection. Environmental responsibility can be defined as involving a comprehensive approach to a company's operations, products and facilities that includes assessing business products, processes and services; eliminating waste and emissions; maximising the efficiency and productivity of all assets and resources; and minimising practices that might adversely affect the enjoyment of the planet's resources by future generations[11].

Many organisations have addressed the environmental responsibility of business. Following the WICEM II conference in Rotterdam in March 1991, the ***International Chamber of Commerce*** (ICC) launched the Business Charter for Sustainable Development which developed sixteen guiding principles for developing environmental management practices in different business sectors. Another initiative has been taken by the ***Coalition for Environmentally Responsible Economies*** (CERES). The ten CERES principles cover protection of the biosphere, sustainable use of natural resources, reduction and disposal of wastes, energy conservation, risk reduction, safe products and services, environmental restoration, informing the public, management commitment, and audits and reports[12]. The ***International Organisation for Standardisation (ISO) 14000*** is a series of voluntary guidelines designed to create uniform environmental standards among products, companies, industries and nations. ***European Union's Eco-Management and Audit Scheme*** (EMAS) is a site-based voluntary registration system designed for use throughout the European Union. The aim of the scheme is to promote continuous environmental performance improvements of industrial activities by committing sites to evaluate and improve their own environmental performance.

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[9] WBCSD: Sustainability Through the Market; 1999
[10] Friedman, cited in Gray R., et al., 1993, p.37
[11] Business for Social responsibility http://www.bsr.org/resourcecenter/index.html
[12] CERES: http://www.ceres.org

2.2.2 Corporate Social Responsibility (CSR)

Business has enormous power. However, power can not be viewed in isolation from responsibility, and it is this power- responsibility relationship that is the foundation for calls for corporate social responsibility[13]. There are various terms in use, such as corporate citizenship, eco-justice, business ethics and stakeholder relationships. The most widely used term is Corporate Social Responsibility (CSR). The concept of CSR emerged in 1940s, when Theodor J. Kreps first used the term social audit in relation to companies reporting on their social responsibilities[14]. The idea has been addressed by international government organisations, such as the International Labour Organisation (ILO) and the United Nations Environment Programme (UNEP), but become widely used and cited since the beginning of 1990s, involving also business in ethical issues.

The diverse corporate social responsibility literature has spawned many ideas, concepts and techniques and brought about both real and ephemeral change in organisations. However, it is not completely clear what social responsibility means. Does business have a social responsibility? If so, how much and what kind of? The answers should be placed carefully.

Carnegie, founder of U.S. Steel, articulated two principles he believed were necessary for capitalism to work. First, the charity principle required more fortunate members of society to assist its less fortunate members, including the unemployed, the disabled, the sick, and the elderly. Second, the stewardship principle required businesses and wealthy individuals to see themselves as the stewards, or caretakers, of their property. Carnegie's view was that the rich hold their money "in trust" for the rest of society. In the context of US charitable contributions and engaging in elements of social or philanthropic investment in the community represent corporate social responsibility. For many of the, particularly Northern European and Scandinavian countries, social responsibility has larger meaning and focuses on a wider group of constituencies, such as employees, their unions, consumers, government, etc[15].

Today there are three most widely employed theories of CSR: the stakeholder theory, the legitimacy theory, and the political economy theory. According to the stakeholder theory organisation owes accountability to all its stakeholders. Advocates of the legitimacy or "social contract" theory say: *"An organisation can only continue to exist if the society in which they are based perceive the organisation to be operating to a values system, which is commensurate with the society's own value system".* In the political economy theory the state has been chosen to impose some restriction on an organisation and set the rules of mandatory disclosure[16], which, however, does not consider voluntary information disclosure by the organisation.

According to the WBCSD "*CSR - the third pillar of sustainable development - requires continuing commitment by business to behaving ethically and contributing 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"*[17]. The WBCSD views CSR as an umbrella term for the following items: Human and Employee Rights; Community Involvement, Environmental Protection, Supplier Relations, Monitoring and Stakeholder Rights.

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[13] Carroll A.B., 1989, p.17
[14] Zadek S., 1997, pp. 16-17
[15] Gray R., 1996, p.100
[16] Clarkson M.B.B., 1998, p.79
[17] WBCSD, Stakeholder dialogue on CSR, 1998, http://www.wbcsd.ch/corp1.htm

Generally speaking, there are two extremes in the whole discussion on CSR: one is Milton Friedman's view of corporate responsibility only as profit maximisation; another is a view of business responsibility as an obligation to improve the welfare of the society as a whole[18]. For the purpose of this research CSR is used in reference to the WBCSD's definition as a means of incorporating both environmental and social issues, limiting, however, the social responsibility of business to its relationships with stakeholders, since the corporations manage their relationships with the stakeholder groups rather than with the whole society.

Concluding all mentioned above, one could say that social responsibility and environmental considerations could no longer be ignored in the context of a sustainable development. Increasingly, environmental issues, and social (ethical) issues become very important to the stakeholders as they begin to demand greater accountability and transparency. Although these issues are difficult to define, control and quantify, they will be increasingly important to firms that wish to project a positive profile of their activities[19]. Many corporations have made great strides toward improving environmental performance, working towards sustainability and socially responsible business practices. However, the question is how can multiple stakeholders know when the company is moving its policies, plans, products and processes in a direction of sustainable development? One of the possibilities for the stakeholders to assess organisational performance and for the organisation to demonstrate its performance is through corporate communication and reporting.

2.3 CORPORATE COMMUNICATION AND REPORTING

Communication may be defined as a process of exchange of information that involves both communicators and audiences and is achieved through effective message delivery, interactive listening and public discussion and debate. Communication is therefore all kinds of oral or written communication tools that concern specific issues[20]. It comprises reporting, employee communication, product-related information, public relations and marketing. There is a variety of communication methods used by companies to disseminate information, namely, Internet, media, newsletters, brochures, booklets, eco-lables, and face-to-face communication – round-tables, meetings, seminars, etc. This study concentrates only on corporate reporting. One needs to distinguish between reporting and a report. **Reporting** includes various means by which companies disclose information on their activities, while **corporate reports** are only one form of reporting defined as publicly available, stand-alone reports issued voluntarily or mandatory by companies on their economic, environmental or social activities[21].

The main purpose of reporting is to demonstrate the organisation's performance and how this performance relates to corporate values, objectives and targets. Another purpose, not less important, is to address stakeholder requirements.

Reporting has a number of primary benefits: it allows for the direct communication of important information to stakeholders; serves to demonstrate a corporate commitment to environmental protection and social issues; illustrates how environmental and social commitment can be translated into specific objectives, programmes and actions; and documents the results of those actions as indicators of corporate performance [22].

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[18] David K. and Blomstrom R.L., 1975, p.39
[19] Welford, 2000, p.29
[20] Industry and Environment; lecture; Cook K.
[21] Modified: Brophy and Starkey, cited in Welford, 1996, p. 175
[22] modified; GEMI, 1994, p. 13

Recent development in the field of communication has born the concept of "sustainable communication". The International Public Relations Association (IPRA), CERES, Institute for Social and Ethical Accountability (ISEA) focus on a facilitating (and even motivating) form of communication aligned with the sustainable development concept. They propose a new level of corporate communication - "sustainable communication" – communication that links environmental, economic and social aspects of corporate performance supported by indicators of sustainability and including life-cycle assessment and full-cost accounting[23].

The issue "triple bottom line", which focuses on company profit performance being balanced by demonstrated performance on delivering value to society while improving the ecological environment have recently emerged as a pressing, indeed crucial management issue. Apart from financial accounting two other standards of accountability have been identified to demonstrate sustainable business practices. These are environmental and social and ethical accounting and reporting[24]. The benefits of a corporate report as perceived by companies depend on the reason why companies produce such a report.

2.3.1 Driving forces for CSR, accountability and reporting

There are many external as well as internal factors that drive organisations towards sustainable development as well as towards greater transparency and accountability.

Increasing legal requirements and regulations

Authorities influence companies operations by imposing regulations and laws and setting up rules for behaviour. Usually these laws contain a minimum set of conditions for organisational behaviour and comprise two elements: responsibility for action; and responsibility for disclosure about action (accountability)[25].

Market pressure

The competition in the market and increasing attention to supply-chain management is another driver to improve organisational performance and report on it to interested parties. Information on a firm's economic and financial situation is the most valuable information required by the market, however, not the only one. The environmental and social costs of accidents, other environmental risks and failure to address social issues can affect the company's performance in a marketplace and finally bring to losing customers and profit. Today, companies are looking at new ways to leverage environmental and social performance in a marketing context. These include:

• targeting supply chain segments and consumers that place high value on environmental and social concerns;
• aligning with environmental advocacy groups to market products;
• developing products which are inherently "greener" than like products in the market[26].

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[23] "Sustainable communication" is a term originated by IPRA Environment Committee Chair E. Bruce Harrison, and is trademarked by the Harrison Company for commercial usage. IPRA Gold paper N9, p.11
[24] Walker Derek H. T., 1997, p.3
[25] The overview of European and Swedish environmental (related to the energy sector) and social legislation can be found in the appendix 2.
[26] Kinder Lydenberg & Domini, Co. , http://www.domini.com/DSEF.html

Some of the strongest opportunities to reap financial benefits from improved corporate performance lie in the realm of investor relations. Rapidly emerging investment trends such as creation of the Dow Jones Sustainability Group Index (DJSGI) and the rise of Socially Responsible Investing (SRI) now consider environmental performance and social issues in addition to standard economic criteria when evaluating companies.

Dow Jones Sustainability Group Index

Dow Jones has launched the Dow Jones Sustainability Group Index to evaluate the corporate SD process from the financial market perspective. To be considered for the DJSGI, companies are assessed on the basis of an in-depth, industry-specific questionnaire; an analysis of company policies and reports; stakeholder relations, etc. Companies are judged on how well they integrate economic, environmental, and social growth opportunities into their business strategies and these three criteria are equally weighted. Implicit in the DJSGI rating system – which also weighs the management of sustainability opportunities and risks – is how corporate communications touches virtually every criterion. In addition to direct points scored for "Quality of (Sustainability) Information"[27], it is difficult to ignore the underlying value of effective communications in other areas of evaluation. Besides the "quality of information" has sometimes been the factor that decided whether a particular company would be included in the Index.

Increased transparency

Elkington describes the modern world order as a "CNN world", when "*sharp, savvy media is adept at cutting through corporate puff*"[28]. For a company to operate it is necessary to be accepted by society and gain its legitimacy and credibility in the eyes of various stakeholders, such as its neighbourhood, NGOs, other interests groups, media, which can influence the company by mobilising public pressure. The public becomes more concerned with environmental and ethical issues and can influence the organisation's reputation acting against its unethical behaviour. If people who buy a company's products are concerned about the nature of the production and the trading process, then business survival may depend on whether and how the company is seen to respond to these concerns[29]. Reputation loss can affect the financial bottom line considerably, which is the main concern of an organisation. Some companies, such as Shell and Nike started to demonstrate their CSR because their activities in Nigeria and Asia were in the spotlight of public, media and NGOs.

Value shift

Business can evolve and take on different roles in society. Development of various "codes of conduct" and "charters" (ICC; CERES) and engagement in philantrophic relationships with society shows that business increasingly realises the benefits to proactively address emerging issues and take them into consideration when making their decisions. Business leaders are increasingly searching for new measures of success beyond the financial bottom line[30]. One area of focus has been highlighting the financial risk associated with poor environmental and social performance. Increasingly too, it is the report-makers themselves who are driving efforts to link corporate performance with company valuation. Environmental leaders such as Electrolux, who have made

[27] DJSGI, 2000; http://www.sustainability-index.com/
[28] Elkington,J., 1997, p. 140
[29] New Economic Foundation, http://www.neweconomics.org/
[30] Maignan I., Ferrell O., Journal of Business Ethics, 2000, p.283

considerable environmentally-related capital investments and incurred high levels of environmental expenditure, are keen to see their environmental leadership rewarded by investors and financial analysts. At best they would like to demonstrate that such investments could deliver competitive advantage, for example, in the form of new market opportunities[31]. Companies such Scandia and British Telecom have adopted the practice primarily to better manage their businesses, and are not responding, in contrast to Shell and BP to any significant, direct pressure to shift their basis of accountability[32].

For many companies, the original decision to report is sparked by a desire to enhance credibility with stakeholder groups, and many believe that voluntary reporting is one strategy to meet these expectations. However, the motivation for reporting is not likely to be based solely on duty or self-interest, but will contain elements of both, external pressure and internal values.

2.3.2 Stakeholders and their information requirements

The actual word ”stakeholder” first appeared in the management literature in an international memorandum at the Stanford Research Institute (now SRI International, Inc.), in 1963. The term was meant to generalise the notion of stockholders as the only group to whom management needs to be responsive. Thus, the stakeholder concept was originally defined as ”those groups without whose support the organisation would cease to exist”. The most cited in literature definition of stakeholders is the one given by Freeman, which defines stakeholder as any group or individual who can affect, or is affected by, the accomplishment of organisational purpose[33]. Each of these groups including employees, customers, consumers, suppliers, stockholders, banks, environmental NGOs, government and other has a stake in a corporation and can help or hurt it. A stake is any interest, share, or claims a group or individual has in the outcome of a corporation’s policies, procedures, or actions towards others. Stakes and claims can be based on legal, economic, social, moral, technological, ecological, or power interests[34]. It is essential to draw a clear distinction between influences and stakeholders: some actors in the enterprise (e.g. large investors) may be both, but some stakeholders (job applicants) have no influence, and some influencers (e.g. the media) have no stakes. While stakeholders may not exert either of these influences in a given situation, it is their ability to influence the organisation that is important. They can use different methods to exercise the pressure on the firms. Generally speaking customers, suppliers and competitors can affect companies through the market, government - using regulatory mechanisms, and environmental NGOs and interests groups - using the public pressure. However, it is not always so simple to divide the stakeholders by the factor of direct or indirect influence or by the certain type of pressure they can have on an organisational behaviour. Stakeholders not only can directly influence a firm’s activities, but may also be able to influence them indirectly, using other channels. For example, government’s main influence on an organisation is through the regulations and standards. It can also exercise its influence using market mechanisms, a variety of economic instruments, to encourage industry to make changes in its activities.

Business must balance the needs of all its various stakeholders. It cannot afford to ignore, nor to overindulge, any of them for too long. Corporate social responsibility is mostly seen by business as linked to its goals and principles, and a key to its “license to operate”[35].

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[31] UNEP, Engaging Stakeholders, 1997, p. 49
[32] Gonella C., et al, 1998, p.17
[33] Freeman E., 1984, p.25
[34] Weiss J.W., 1998, p.31
[35] WBCSD CSR, 1998, p.9

Each key stakeholder group will have its own particular concerns arising out of the impact that a company has, or could have, on them. The information needs and performance expectations of stakeholders are reflected in a wide variety of issues. These may include, but are not limited to: the organisation's values and governance, its regulations and controls, its operations, the impact of its products, services and investments, its impact on the environment, labour and working conditions and supply chain issues.

Owners, shareholders, investors and insurance companies

The financial community provides a company with finances and they are mainly interested in company's economic performance. Environmental performance is generally viewed by investors and financial analysts as a cost limitation rather than as a revenue generating opportunity. The analysts therefore view the role of environmental performance in terms of the costs associated with meeting current and future regulations and managing a company's environmental liabilities. Risks due to environmental factors, although considered, are not routinely assessed. For financial analysts companies compliance and liabilities are the most addressed environmental issues. At the same time, a growing number of investors, particularly those investing in "socially responsible" funds are seeking to balance financial performance with social performance in their investment portfolios. This call for needs to translate environmental information into financial terms.

The ethical and environmental fund analysts regard the environmental performance data, management issues and risk data as the three most important reporting areas[36]. In addition, many large institutional investors are increasingly concerned about social issues and are using their rights as shareholders to engage companies in social accountability. In some cases, these investor-company dialogues have led to companies increasing their disclosure or changing their policies to align with the social concerns and agendas of institutional investors. For example, Royal Dutch/Shell's 1998 annual report on "Profits and Principles" was the result of a shareholder resolution by British religious groups requesting more regular reporting on corporate social responsibility issues[37]. There is also an increasingly growing concern among individual investors and financial analysts in environmental and ethical performance. By simple reason of buying a share in an enterprise they want to receive more information about its activities than is available in an annual report. As recognised by both financial analysts and ethical and environmental analysts the barrier to use corporate environmental and social information is the lack of quantitative data and lack of standardisation and comparability between corporate reports[38].

Employees

Employees are a very important target group for corporate environmental and social information. Employees play an important role in achieving company's environmental objectives and targets. Ecological improvements in a products and processes can only be achieved if employees are actively contributing to the company's efforts. Employees are even a more crucial audience for corporate social information. It is no surprise that most companies producing social reports talk in some detail about the employment issues. Internal communication is important in strengthening of a company's culture, the workers motivation and innovation potential, from which the company would gain strategic advantage.

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[36] Utlands Rapport, 1998, p.23
[37] The Global Business Responsibility Resource Centre http://www.bsr.org/resourcecenter/index.html
[38] Utlands Rapport, 1998, pp. 15-25

Employees can on the other hand be the company's harshest criticisers. The feedback from them might be especially valuable for an organisation. Besides, employees are not only internal implementers of company environmental objectives they are external interpreters of an organisation's policies, efforts and achievements.

Communities

For many years, mainly in the USA corporate community involvement (CCI) was regarded as essentially a charitable activity. However, companies in European countries emphasise that their most important role in social cohesion is as the providers of employment. Local communities are also highly concerned with the local environment and affect of organisational activities on their health. Companies need to be accepted by the local community in order to be able to operate successfully in the area.

Increasingly, leading companies are recognising that it is smart to track, measure and report on their community activities for among others the following reasons:

1. Companies need to know how much they are spending, what they are spending it on, and with what results.
2. A 1997 MORI survey in the UK revealed that 81% of people feel that knowing about a company's activities in society and the community is important when judging that company[39].

Customers, Consumers

Consumers are first of all interested in price, product quality, brand or availability. However, waves of "green" and "ethical" consumers have demonstrated that it is no longer enough for high profile companies to claim that they are environmentally, socially and ethically aware- they may be called upon to prove it. Comprehensive environmental information about a company's environmental performance in order to support their purchasing decisions is requested. Industrial customers are increasingly asking for environmental information from their suppliers, as they are also required to report on their environmental impact, including use of materials from their suppliers.

But like all forms of reporting, information needs usually operate in two directions. Not only do customers want information about companies and their products, but increasingly companies are also seeing the benefit of exploring customer perceptions so that they can build long term relationships based on trust and shared values[40].

Suppliers

Supply chains are increasingly in the spotlight. Their environmental performance is being increasingly checked by their major customers. Besides, consumer ethical concerns, fuelled by media stories about poor labour standards associated with well known brands like Shell, Nike, Reebok, are forcing companies to look again at their supplier relationships. With increasing globalisation outsourcing has enabled companies to order products from overseas manufacturers without involvement in the running of these factories. And the trend is becoming more prevalent as many large companies are centralised and downsized, so many managers often simply do not know what subcontractors are doing. Business has responded to consumer concerns with codes of conduct, but it has been hard to tell to what extent these written commitments are backed up by

[39] MORI Corporate Social Responsibility research, http://www.mori.com/
[40] UNEP, Engaging Stakeholders, 1999, p.16

action. While companies with mainly Northern suppliers may address in their codes of conduct such issues as the number of products bought locally, and payment on time, those with Southern suppliers usually face additional concerns such as freedom of associations, child labour and working hours. Suppliers are using corporate information in order to understand the position of their major customers and anticipate their future actions.

Authorities

Companies also need to improve their communication with government. The main means of government in prompting companies to improve their environmental and social performance is imposing laws, regulations and standards. Regulations and legislation provide a minimum standard by which all companies must adhere to and thus act as important catalysts to industry organisational and informational responses. The authorities are usually quite specific in their requirements and demand precise and accurate information about firms' activities.

Environmental non-governmental organisations (NGOs)

Environmental NGOs form another target group for public communication. Some NGOs are strong enough to influence policymaking and market conditions and they have the ability to form public opinion. They are playing the role of watchdogs by members of the public who does not have the time to absorb or scrutinise the environmental information coming from many sources. There is a general desire among NGOs to have industry environmental performance measured and presented in a way which enable the public to make comparisons of performance over different periods of time, and between different companies. The information of interest of this group ranges from global environmental issues, such as climate change, ozone layer depletion, biodiversity and acidification, to more regional and related to specific industry, such as facing out of nuclear power, reducing chemical usage, increasing energy efficiency, etc.

Media

The media being a user of environmental and social information might be viewed as the "bridging" stakeholder. The media itself can not have a stake in the organisation's outcome, but it can influence the opinions of others that have this stake. The interests of the media usually cover all areas of corporate activities and performance.

Generally speaking, most stakeholders are interested in three types of corporate information: financial, environmental and social. Corporations have been issuing various reports in order to address these requirements.

2.3.3 Trends in development of corporate reporting

Financial Reporting

The reporting on financial data has been ongoing for 500 years[41] and it has always been the area of high priority for the companies and their financial stakeholders, which use economic and financial data to evaluate companies' financial performance. The standards have been set for accounting,

[41] UNEP, Engaging Stakeholders, 1999, p.3

auditing, content and presentation of information, and communication with stakeholders. Financial information is generally reported in companies' annual reports.

Environmental Reporting

Environmental reporting started at the beginning of 1990s, when some companies, like Norsk Hydro in Norway and Monsanto in the USA, started to report about their activities, impact on the environment and measures taken for mitigating this impact. The trend has widened out rapidly to embrace most sectors. Environmental reporting is defined as "the provision of information about the environmental impact and performance of an entity that is useful to stakeholders in assessing their relationship with the reporting entity"[42]. It refers to the environmental aspects and the impacts that are caused by the company and its products, as well as to the environmental strategies, the goals set and measures taken to alleviate those impacts. Many organisations, such as PERI, CERES, UNEP, to name a few, have issued more than 30 standards and guidelines for corporate reporting during the last decade. Although there is a dramatic increase in quality "most GERs today fail to meet the need for consistent, comparable and timely information"[43]. Besides the CER remains a "passive" form of stakeholder engagement[44].

Social Reporting

The history of social reporting started in the early 1970s, when some US and European companies, started to publish "social income statements and balance sheets", statements of compliance with standards and legislation; performance indicator reports, etc. In 1978 some kind of a benchmark survey was carried out (similar to that of the reporting practice of the Fortune 500), which highlighted the confident growth in both the quantity and quality of corporate social reporting[45]. Just two years later, however, the trend had entirely reversed, with a collapse in corporate social reporting. It started again in the late 1990s when mainstream companies began to issue social reports[46]. Some common threads are large companies that have operations in potentially controversial industries, and/or a significant impact on social life in particular countries or regions, for example, Shell and Nike.

The guidelines and indicators for social reporting have been developed by organisations, such as CERES, the Institute of Social and Ethical Accountability (ISEA), the Council on Economic Priorities Accreditation Agency (CEPAA) and the London Benchmarking Group. The common reporting issues developed by these organisations as standards are: human rights, child and forced labour, working environment, discrimination, equal opportunities, health and safety and supplier relations. As in other areas of corporate disclosure, diversity rules here too. There is no such thing as "standard" social report, because the nature of each depends upon: the variety of issues it covers; the range of stakeholders for whom it is intended; and what the reporting organisation is trying to achieve. This resulted in different approaches to social reporting such as capital valuation (Scandia) corporate community involvement (BP Amoco), ethical auditing (The Body Shop) and social auditing (Van City Credit Union)[47].

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[42] FEE, 1999, p. 9
[43] Cutter Environment; http://cutter.com/environment/index.shtml
[44] UNEP, Engaging Stakeholders, 1997, p. 44
[45] US Department of Commerce, 1979, p.10
[46] Bennet, M., James P., 1999, p.55
[47] Gonella C., et al., 1998, p.21

The reporting practices in the three areas are on the different stages of their evaluation. The table below summarises the current practise in corporate reporting.

Table 1. Sustainability measurement: an overview of current practice[48]

	Economic performance	**Environmental performance**	**Social performance**	**Integrated sustainability**
No. of initiatives	Accounting standards	Many	Few	Handful
Development stage	Mature	Moving towards standardisation	Infancy	Embryonic
Business penetration	Mainstream	Moving towards mainstream	Limited (niche)	Very limited
Public reporting	Mandatory	Mandatory and voluntary	Mostly voluntary	Voluntary
Linkages to other sustainability dimensions	None	Eco-efficiency	None	Multiple
Utility of information outside firms	Universal	Multiple	Narrow	Potentially large
Current focus	Company	Company, facility, product	Company, project	Company, product

Global Reporting Initiative (GRI) Guidelines being the only standard for sustainability reporting are described in more detail.

2.3.4 GRI Guidelines 2000

The Global reporting Initiative was established in 1997 by CERES in partnership with the United Nations Environment Programme (UNEP) and incorporated the participation of corporations, NGOs, consultants, business associations, universities, and other stakeholders around the world. The GRI's mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines for voluntary use by organisations reporting on the linked aspects of sustainability- the economic, the environmental and the social[49]. The Guidelines contain six core parts:

CEO statement
Profile of Reporting Organisation
Executive Summary and key Indicators
Vision and strategy
Policies, Organisation, and Management Systems
Performance

In order to allow benchmarking it is recommended that companies follow the order mentioned above in their reporting. At the same time, the sections are flexible in the presentation of the information within its different parts. GRI original three-part mission is:

- to elevate sustainability reporting to a level equivalent to that of standard financial reporting in terms of comparability, auditability, and generally accepted practices;

[48] Bennet M, James P., 1999, p. 478
[49] GRI, 2000, p.2

- to devise core metrics for all enterprises as well as customised metrics applicable to specific sectors, all reflecting the environmental, economic, and social dimensions of sustainability; and
- to create a permanent and effective institution to support such reporting.

The guidelines are intended to be applicable to any size and any type of enterprise that chooses to prepare a sustainability report. However, the guidelines do not provide industry specific indicators and the issue of how to address stakeholder reporting needs remains largely untouched.

2.3.5 Problems with environmental and social communications

Environmental and social communications are difficult because:

a) the subject of the environmental and social responsibility of business is relatively new;
b) there are conflicting views about these issues;
c) Identifying the information needs of stakeholders is not an easy task.
d) Versus to financial issues, environmental and social issues are difficult to measure, evaluate and communicate;
e) Data on environmental and social performance is not always available;
f) There are no agreed standards about the content of environmental and social reporting.

In the light of all mentioned above, a key issue for sustainability reporting is the development of indicators, complete and relevant to the organisation and its stakeholders, and at the same time comparable with those of other organisations.

2.4 ENVIRONMENTAL AND SOCIAL INDICATORS AND BENCHMARKING

"What gets counted, counts", is a familiar and much-quoted phrase. In understanding and managing an organisation's environmental and social performance, the data collected and measured must be chosen according to its ability to indicate the impact of a company's activities[50]. Indicators are presentations of measurements. They are bits of information that simplify complex phenomena, and make it possible to gauge the general status of a system. Two major functions of indicators are:

1. They reduce the number of measurements and parameters, which normally would be required to give an "exact" presentation of a situation.
2. They simplify the communication process by which the results of measurement are provided to the user[51].

"Commonly used indicators do not provide adequate indications of sustainability. Indicators of sustainable development need to be developed to provide a solid bases for decision making at all levels and contribute to the self-regulating sustainability of integrated environment and development systems"[52].

There are several frameworks around which indicators can be developed and organised. However, there is no unique framework that generates sets of indicators for every purpose. Besides,

[50] Gonella C., et al, 1998, p. 28
[51] The International Institute for Sustainable Development: http://iisd.ca/measure/faqcriteria.htm
[52] Agenda 21, ch.40.4, gopher://gopher.undp.org/00/unconfs/UNCED/English/a21_40

frameworks may change over time as scientific understanding of environmental problems increases, and as social values evolve[53].

Measuring and reporting on environmental and social performance is not as straightforward as the financial one. Companies have different social issues and environmental concerns, some of which can only be measured qualitatively rather than quantitatively. Qualitative information is usually needed to describe the company profile, environmental and social problems, policy, objectives and programmes, management commitment to improvements, certification of EMS, product information and engagement in various activities and projects. Qualitative information is also needed to put into a context and support the quantitative data which, in turn, is used for internal decision-making, communication and benchmarking. Measuring environmental and social performance is not easy, as it depends on country, on the company and its operations and on specific aspects, as well as on stakeholders involved.

As mentioned above many organisations have contributed to the development of environmental and social indicators. The main reporting areas that can be found in companies' reports by categories, aspects and examples of indicators are summarised below:

Table 2. Samples of performance indicators used by companies.

Category/ Stakeholder group	Aspect	Example indicator	Company
Environmental			
	Material (chemical) consumption	- Tons/year (by type)	Sydkraft, Norsk Hydro, Shell, BP
	Waste generated	- tons/year - radioactive waste tons/year	Shell, BP Sydkraft, Vattenfall
	Emissions to: air water	 - $KgCO_2$,(NOx,SO_2) /year; - m^3waste water/year - tonsOil/year	Shell, BP, Sydkraft Norsk Hydro Sydkraft Shell, Norsk Hydro Vattenfall
	Energy consumption	- Joules (GWh) consumed/year; - Fossil fuel type (GWh/year)	Sydkraft, Shell, BP Norsk Hydro
	Product information	- kg emissions/ production unit; - tons waste/ production unit	Sydkraft Shell
	Environmental taxes, and expenditures	- CO_2, NOx, Su SEK/year - investments in R&D SEK/year - Cleanup land SEK/year	 Vattenfall Sydkraft
Social aspects			
	Safety	- Incidents (fatalities) %/year - Injuries/employee/year	Shell Sydkraft Norsk Hydro
	Working hours and wages	- Working hours/week - Wage $/employee/ year	Shell
	Diversity and equal opportunities	- % of women in senior positions - % of employees with disabilities	Shell BP
	Employee training	- expenditures/ employee/year	BP
	Community investments	- Total community expenditures/year - % of net income after tax donated to social investments	BP Shell

[53] OECD 1993; p.5

2.4.1 Development of performance indicators for corporate reporting

There are different recommendations for the companies on how to select Key Performance Indicators (KPI) for communication purposes. There is a school of thoughts, represented by Professor Rob Gray at the Centre for Social and Environmental Accounting Research (CSEAR), that social accounting can be modelled on conventional accounting thinking – in which the sole reporting entity is the company itself. Gray calls this type of disclosure "silent accounting", and believes that the practice could form a template for truly benchmarkable corporate social reporting[54]. This approach, however, is very different from that adopted by New Economics Foundation (NEF), which tends to combine internal and external participant inputs, focusing on "voices" of stakeholder rather than that of the company[55].

Emergence of the so-called "social indicators" movement in the 1970s involved public, NGOs, researchers and organisations in the development and application of social performance indicators through stakeholder dialogue. For example, the US Department of Commerce saw some form of community consultation process as initiating the development or selection of relevant social indicators.

In establishing annual objectives for a corporate community affairs programme, a firm would first attempt to develop a quality of life profile for the community, using social indicators regarding unemployment, environmental quality, education, health and so on. Thereafter a firm could establish performance indicators for some or all of its own activities in relation to these indicators, establish priorities in relation to each other and then measure performance in relation to objectives and their assigned importance[56].

Community-based approaches to selecting indicators of social and environmental development have emerged as a major theme of community development in the 1990s, particularly following the historic signing of the so-called Local Agenda 21 at the Earth Summit in Rio in 1992.

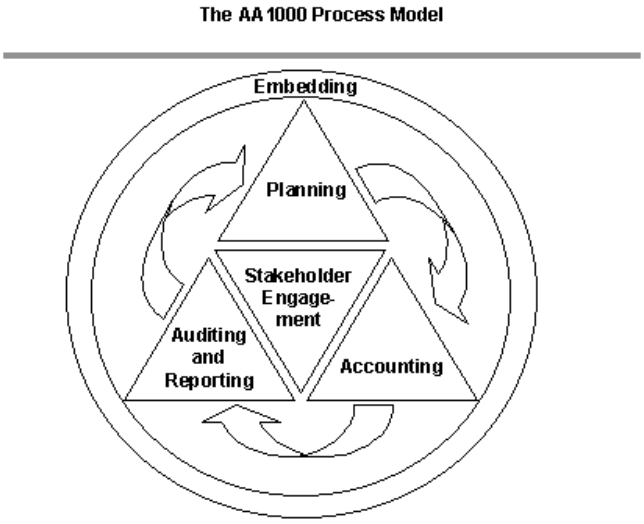
In the UK the social audit practice implies the active involvement of external participants in the preparation and evaluation of published reports[57]. One of the pioneering approaches to social accounting and auditing has been shown by the third world trading organisation, Traidcraft plc., in UK. Its approach to social auditing might be described as "a process of defining, observing and reporting measures of an organisation's ethical behaviour and social impact against its objectives, with the participation of its stakeholders, and the wider community"[58].

The Copenhagen Charter: a management guide to stakeholder reporting and the AA1000 process standard developed by ISEA emphasise the importance of stakeholder dialogue in identification and development of key performance indicators: "*the organisation and its stakeholders are brought together to work towards a common understanding of what matters about performance*"[59]. The crucial point here is that an organisation should engage in consultations with its stakeholders prior to the reporting process. Stakeholder engagement is at the heart of the standard, it is considered to

[54] Gray R., Owen D., Adams C., 1996, p. 113
[55] New Economic Foundation, http://www.neweconomics.org/
[56] US Department of Commerce, 1979, p.8
[57] Gray R., Owen D., Adams C., 1996, p. 265
[58] Zadek S., Evans, 1993, p. 7
[59] ISEA, Accountability, November 1999, p.4

be important not only for indicator selection, but for other steps of accountability process as well (figure 1.)

Figure 1. The AA 1000 process model[60]



GRI also suggested stakeholder consultations for identifying the organisation-specific indicators – economic, environmental and social. However, mentioned standards do not provide companies with any practical method for developing performance indicators in collaboration with their stakeholders.

Stakeholder concerns will obviously vary in intensity between different societies and also over time, so identifying those that will be reported on is a key decision. One method - favoured by non-profit advocates of social reporting - is by means of so called 'stakeholder surveys' and consultations.

2.4.2 Stakeholder consultations

Considering stakeholder involvement to be legitimate and strategically important requires more efforts than traditional public relations or information-sharing responses. New forms of collaboration are needed, including focus groups, advisory panels, forums for dialogue, and joint ventures. Building stakeholder involvement in the context of sustainable development extends the idea of corporate responsibility in time and space. Prosperous companies in a sustainable world will be those that are better than their competitors as “adding value” for all their stakeholders, not just for customers and investors[61].

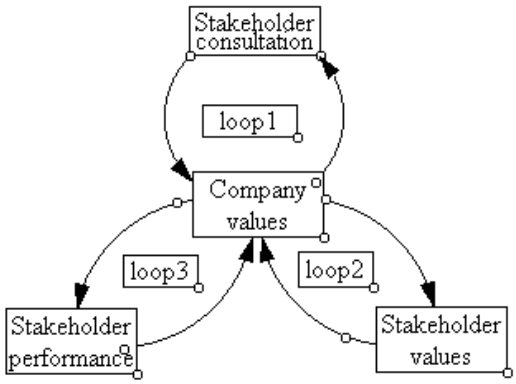
Consultation with stakeholders is not a new concept to most organisations. The main reason why companies report is to build – or rebuild – their credibility[62]. Simply because people are now seen as the key to organisational performance. A company reports to and learns from a stakeholder and the stakeholder is invited to assess the organisation’s performance and aspirations. A company is also able to influence the stakeholder, particularly where its own aspirations may be higher than that of some of its stakeholders’.

This dialogue is operationalised through the three assessment loops and shows a two-way flow of learning and accountability as presented in figure 2. At the centre of the assessment process are the core values of the organisation, made explicit in the organisation’s value framework, which is published and widely available. The extent to which the organisation is perceived to be adhering to these core values is determined through consultation with a range of stakeholders. Where company performance is perceived to be poor, it will be either because that action really is poor or because the organisation has not communicated its performance accurately or effectively. In either case,

[60] ISEA, Accountability, November 1999, p.17
[61] Schmidheiny S., 1992, p.86
[62] UNEP, Engaging Stakeholders, 1997, p. 42

actions to improve performance (or its communication) will have to be taken. Such actions may require some alteration of the organisation's values framework (loop 1). At the same time, the organisation compares its own core values with those of its stakeholders (loop 2). The process is firstly to define its stakeholders' values (again through consultation) and then to compare the organisation's performance against these stakeholder values.

Figure 2. Stakeholder consultation model[63]



The third loop involves action to influence stakeholders through the assessment of stakeholder performance against core values. Here we may find the situation where the organisation considers its values to be superior to those of its stakeholders. Through education and campaigning initiatives, the organisation takes action to influence stakeholders. Thus, stakeholders influence the organisation through their perceptions of company performance based on company's own values (loop 1) and through an assessment of performance based on stakeholders' own values (loop 2). The organisation, in turn, tries to influence stakeholders through an assessment of stakeholder performance against its own core values (loop 3).

There are two conceptual models that can be applied when deciding on the content and presentation of any kind of corporate reporting:

1. The Accountability Model assumes that stakeholders are not always adequately qualified to determine their own needs and/or that their needs are difficult to define. In this case, reporting recommendations are based largely on a normative interpretation of "what users should know about".

2. The Users' Needs Model makes the opposite assumption: i.e. that, through a process of discussion and involvement, the information needs of a range of potential users can be identified adequately in advance of the reporting process, and can also be defined in terms of appropriate accounting disclosures (based on relevant recognition and measurement techniques)[64].

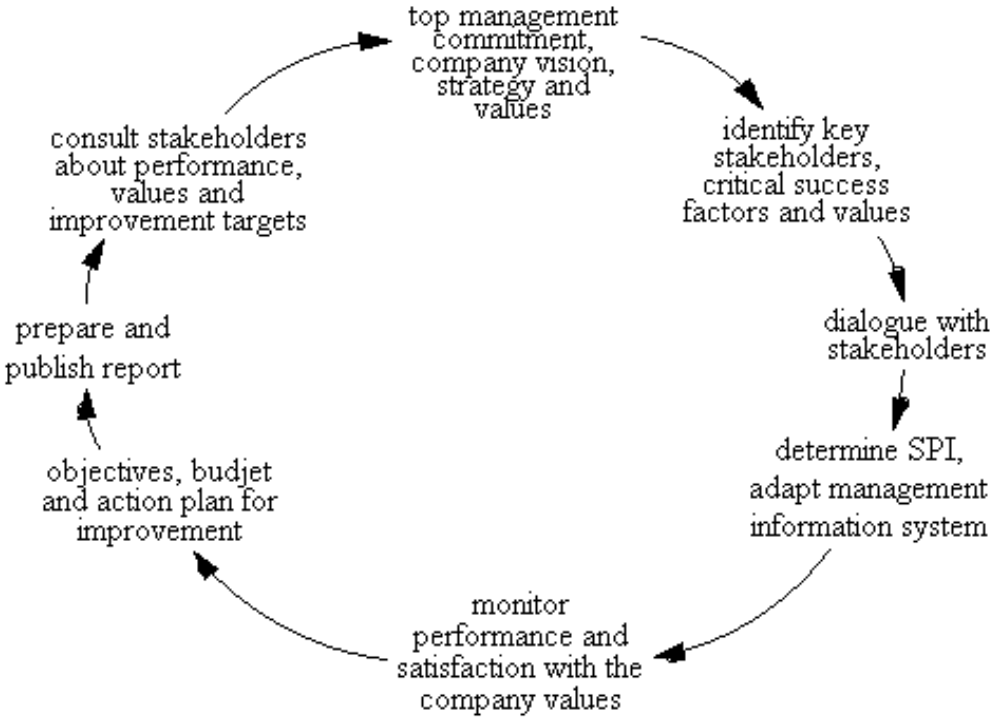
2.5 MODEL FOR ANALYSIS

Many companies have established reporting practices and performance indicators. Some of them are engaged in a dialogue with the stakeholders in order to understand their perceptions of the company's activities. However, the conventional "consulting" approaches to exploring stakeholders' perspectives repeatedly fail to uncover, predict, or effectively respond to the deeper environmental and social concerns[65]. Companies usually decide by themselves what and how to report and set themselves reporting boundaries. They control both the content of communication and communication channels. By contrast, there is a growing expectation that stakeholders should be involved much earlier in the process (figure 3). In moving from measures of inputs to the assessments of outputs and outcomes, there is growing realisation that people's perceptions and

[63] Welford R., 2000, p.103
[64] Bennet, M., James P., 1999, p.318
[65] Gonella C, et al., 1998, p.12

experiences within and outside a particular organisation will need to be measured. In this sense, the drive for indicators is not separate from developments in the field of stakeholder dialogue. They often grapple with the same set of events and the same types of assessment methods, with indicator development requiring inputs from the stakeholder dialogue process. Furthermore there is a need for quantitative indicators to provide summary views of the quality of, and the outcomes from, any dialogue processes[66].

Figure 3. Sustainability reporting cycle[67].



The "users' needs model" of corporate reporting will be examined further in order to understand what stakeholder requirements to a particular company are and how stakeholders can contribute to the development of indicators and corporate reporting practices. Would it be possible to close the "credibility gap" [68] between companies' information and stakeholder needs by involving stakeholders into the indicator selection process?

On the other hand with regard to standardisation and comparability a key issue in sustainability reporting evolution is the development of "performance indicators", complete, comparable and credible. How well does the stakeholder approach to selecting indicators suit to this goal?

[66] Gonella C, et al., 1998, p.12
[67] The Copenhagen Charter, 1999, p.3
[68] UNEP/SustAnability "Engaging Stakeholders", 1997, p. 56

3 CASE STUDY – SYDKRAFT

3.1 ENVIRONMENTAL CONCERNS OF THE ENERGY UTILITY SECTOR

Growing knowledge of the greenhouse effect caused by carbon dioxide emissions has resulted in intensive international work in the climate field and in the drawing up of the Kyoto Protocol. The European Union's commitment under the Protocol is to reduce greenhouse gas emissions by 8% by 2012. The Community, as a signatory of the Protocol, has the responsibility to ensure that member states' actions are consistent with the Treaty and that their obligations are met under the Protocol and also under the EU burden-sharing agreement adopted by the Council of Ministers in June 1998[69]. According to the Swedish climate policy Sweden must stabilise the carbon dioxide as well as other greenhouse gas emissions at the 1990 level by year 2000[70]. While the energy sector is one of the main sources of total greenhouse gas emissions (32%) in the EU[71], in Sweden electric power generation accounts only for a small proportion of atmospheric pollutants. This is due to the fact that 90% of electricity in Sweden is produced by nuclear and hydropower (one of the highest rate among OECD countries). However, emissions can vary from year to year depending on the availability of hydropower.

Another concern for the energy sector is nuclear power that was seen by people and government in the 1960s as a solution to future electricity needs. In the late 1970s the first opinion against nuclear power began. The accidents in the Three Mile Island nuclear power plant and later in Chernobyl have contributed to changing of the attitude towards nuclear and risen concerns about nuclear safety. The Riksdag decided on new energy policy guidelines in June 1997. According to the decision, nuclear power would be phased out by the year 2010 at the latest. The decommissioning started by closing down one reactor of Barsebäck nuclear power plant and the intention is to close Barsebäck 2 in June 2001. The pace of decommissioning will depend on the results of electricity conservation measures, the supply of electricity from environmentally acceptable energy sources, and the scope available for maintaining internationally competitive electricity prices.

Environmental impact of the energy sector is presented in the table below.

Table 3. Environmental impact of the energy sector

Atmosphere	Global warming, ozone depletion, toxic releases, acid rain, air pollution	*****
Water	Aqueous emissions, toxic releases, groundwater contamination	**
Soil	Spills and contamination, toxic releases, landfill waste	**
Biodiversity	Effect on genes, species and ecosystems, including human health (electromagnetic fields)	*****
Deforestation	Loss of carbon fixing capacity, loss of habitat, desertification	**
Natural resources	Impact on renewable and nonrenew-able resources, water & energy use	*****

(Key: *-***** = low to high impact)

[69] EEA Report, 1999, p. 5
[70] Carlen B., Climate report 1994, p.3
[71] EEA Report, 1998, p. 84

3.2 SOCIAL CONCERNS OF THE ENERGY UTILITY SECTOR

There is also an increasing realisation that electricity is a catalyst for development and that energy demand needs to grow in a sustainable manner whilst meeting developmental and societal needs. Some social problems in electricity sector have been recently discussed on EU level. It is mentioned that the image of the sector is conservative due to the recruitment policy, low representation of women and high age profile, as a consequence of low personnel turnover. The project on Equal Opportunities for Women and Men (ENEQO), as a result of these discussions, emphasises the necessity of sector restructuring by adopting a pro-active recruitment and selection policy. This mainly means encouraging young specialists to work in the electricity sector, increasing flexibility of working time and enhancing equal opportunities for men and women[72].

3.3 ENERGY MARKET SITUATION

The deregulation of European and consequently also the Swedish electricity market has changed the institutional framework and created new conditions for the development of the sector. Electricity will become an energy raw material that can be traded and delivered across national borders. Strategic investments are being made by the large power utilities in the northern European countries, with the aim of increasing their market shares on a future common electricity market. According to the New Electricity Act, a prerequisite for effective competition is that network operations should be economically separated from trading in and generation of electricity[73]. The purpose of the reform is to introduce greater competition on the electricity market, to increase the freedom of choice for consumers, and to create conditions necessary for efficient pricing by open and expanded trade in electricity. *"The electricity networks throughout the country must be open to all players in the electricity market who have paid a connection charge somewhere in the country. All consumers have the right to choose freely the supplier of the electricity they use"*[74].

Many critics of the electricity industry indeed see the current energy mix as unsustainable in the long term. Fossil fuel is still in use while the share of renewable energy sources is small. The production of energy for example in Sweden has been prevailing over the consumption during the last decade (production – 142.2(1990), 146.7 TWh (1999); consumption - 139.7(1990), 144.4 TWh (1999)[75]. Yet, at the same time, the trends toward deregulation and lower prices force companies to focus on short-term issues. Today environmental performance of many energy companies is especially attracting stakeholder attention. Acquisition of new companies in Eastern Europe for example, would affect the performance of purchasers by rising the level of their environmental burden. On the other hand, improved environmental and social performance of the sector is being demanded by stakeholders and utility customers who are increasingly asking their electricity suppliers for environmental performance data as they, too, are pursuing a more environmentally responsible brand.

3.4 IMPORTANCE OF ENVIRONMENTAL AND SOCIAL COMMUNICATION AND REPORTING

Like other industrial sectors, the energy sector needs to understand environmental and social expectations and in return, to describe what it stands for and how it will operate in the spirit of continuous improvement. It needs to develop tools and approaches to improve performance across

[72] ENEQO, 1998, p.6
[73] New Swedish Electricity Act, 1997:857
[74] Swedish Electricity Market 1998, p.4
[75] Swedish Electricity Market 1998, p.8

the three elements of sustainable development and to integrate sustainable measures into daily operations. Targets need to be set, progress measured and reported.

Communication on environmental and social aspects by the energy sector will play a crucial role in the context of increased regulations, stakeholder requirements and competition in the market. However, what are the important issues that should be reported by energy companies in the sustainable development context? What kind of information would satisfy stakeholder needs in a better way? And at what extent should stakeholder requirements be taken into consideration when reporting on corporate performance?

3.5 SYDKRAFT

3.5.1 History, environmental problems and performance

Sydkraft was formed in 1906 under the name of Sydsvenska Kraftaktiebolaget to exploit hydroelectric power on the Lagan watercourse and supply electricity to the main urban centres in southern Sweden. In 1999, the Group had a total of 6,526 employees in approximately 125 locations around Sweden. Today the Sydkraft Group comprises four business areas consisting of some 70 operating companies, 30 of which have their own personnel. In 1991 business sectors- Electricity, Heating, Gas and Services were replaced by new business sectors: Marketing and Sales, Production, Distribution and Consulting and Contracting, which combine with Electricity Trading to form a complete energy group. The Group includes companies, which supply electricity, natural gas, heating, LPG and solid fuel, and also provides computer, electrical installation, measuring, telecom and consulting services. The Sydkraft Energy Group is managed by the company Sydkraft AB. Sydkraft AB's top management is comprised of the CEO and Vice Executive Directors. The management group includes the business development controller, business development for heat, finances, the Research & Development/Environment (R&D/E), the Future Centre, Company audit, Information and Society, IT, the Group controller, Corporate Law, HR and Business development, production and Strategic Business Development.
The company's electric generation is supplied by nuclear (43%), hydroelectric (39%), thermal power (10%), natural gas (8%)[76].

Table 4. Sydkraft's environmental impact

Production	**Impact**
Fossil fuel combustion	Air emissions, GHG emissions, acidification, resource conservation, energy supply
Nuclear power	Ionising radiation, radioactive wastes, risk and safety, resource conservation
Hydropower	Changing the landscape, biodiversity, fisheries and open-air activities.
Wind power	Changing landscape pattern, noise
Heat pump	GHG emissions, ozone layer depletion
Biofuel	Small amount of emissions to air, odour, acidification
Distribution	
Electricity	Human health; biodiversity, energy supply
Heating	Energy supply
Gas-fired	Energy supply, risk and safety
Transportation	Air emissions, GHG emissions, acidification, resource conservation, risk and safety
Fuel and chemicals handling	Harmful substances, ionising radiation, risk and safety

[76] Environmental report, Sydkraft, 1998, p.45

To ensure that the environmental aspects are taken into account in all decision-making an Environmental Committee, which is chaired by the head of the R&D/Environment Department and include representatives from the four business sectors, the environmental controller and the head of Group staff Information and Public Affairs, is responsible for the environmental work of the whole Group. At the same time, the management of each Sydkraft's subsidiary is responsible for its own environmental work, since the decision has been taken that environmental responsibility should correspond to operational responsibility. Monitoring and co-ordination of subsidiaries' environmental work is carried out by Sydkraft's centrally located environmental controller[77].

The need to address social aspects is also increasingly recognised by the company's top management. Sydkraft's social policy (1999) consist of four "fundamental values": customer orientation, joint participation of all employees in achieving the company's goals and objectives, continuous performance improvements and co-operation with other companies and stakeholders[78].

Environmental and social measures implemented by Sydkraft during the last decade are summarised in the table below.

Table 5. Environmental and social measures implemented by Sydkraft [79]

Environmental measures	**Social measures**
EMS & other Environmental measures - Initiation of Environmental Management System (EMS) (started in 1993) - Conducting Life-Cycle Analysis (LCA) for different types of electricity production (1997, 2000); - Conducting of Environmental Audit (EA) at subsidiaries prior to introduction of EMS (1998); - EPD for wind power and hydropower; - Improvements in handling of environmental risk; - Hazardous chemicals replacement; - Recycling of waste - Suppliers audit; - Working with customers and consumers on increasing of energy efficiency -"Energy Loop" (1998); "Kraftkväll för kvinor" (1999); - Increasing integration of environmental aspects into investment decisions	***Work environment*** - Radiation protection measures, gas safety and electrical safety; - Reducing accidents and incidents; - Employees rehabilitation programmes; - Employee training programmes; - Taking care of redundant employees (Sydkraft Kraftcentrum AB established in 1999); - Equal opportunities Council (1994) - Special development programmes for women; - Training programmes in equal opportunities; - Publishing materials, seminars, women networks - Trainee programme; - Scholarships for students
Participation in national and international charters, initiatives and projects:	
- International Chamber of Commerce (ICC) and INEM (International Network for Environmental management); - SAME project (sustainable energy system); - Projects in areas such as fuel cells, gasification of biofuels, electrically powered and gaspowered vehicles (in co-operation with the City of Malmö and Göteborg), landfill gas and windpower; - Development of standards within the ISO 14000 family within Swedish working groups;	- EU project on Equal opportunities (ENEQO)- since 1997; - Project BO01(Malmö 2001): sponsoring an exibition; - Sponsoring cultural and sport events; - Working with customers and consumers on increasing of energy efficiency -"Energy Loop" (1998); "Kraftkväll för kvinor" (1999);

[77] Annual report 1999, p.61
[78] Sydkraft Annual Report, 1999, p. 70
[79] data collected from Sydkraft's annual and environmental reports as well as from personal interviews

- ISO TC207 work on the development of international standards for environmental management systems, environmental audit, environmental performance evalluation, life-cycle analyses, etc. - Joint Nordic Project, NORDEPE (developing a methodology for compiling key environmental data); - Project BO01(Malmö 2001): development and establishment of closed system for local energy supply.	
Future policy and measures	
Environmental policy 2000: - contribution to sustainable development further integration of environmental consideration into daily activities; -reduction of environmental impact and natural resource use	Strengthening of social policy to: - Enhance equal opportunities; - Use women competence; - Attract young competent employees; - Improve communication with the stakeholders

3.5.2 Current stage of Sydkraft's communication and reporting

Communication both internally and externally is recognised by the company's management as an important part in the process of creation of a strong brand and supporting company's values. "A brand is developed through communication and its strength is dependent on the total organisation behind it. All employees must have the same perception of the brand's importance, share the same philosophy, the same goal and the same recognition of the core values and key message upon which it is based. Successful brands are developed out of operations that share strong and clearly defined values for all parties with an interest in the brand. Accordingly, corporate communication activities will focus on maintaining a constant dialog with all parties having an interest in the Sydkraft brand"[80].

Sydkraft has been producing an Environmental Report for three years from 1996 to 1998 included. However, last year the decision was made by the company's management not to produce a separate environmental report, but include environmental information in the Annual report instead. This decision was strongly supported also by the new amendment to the Swedish Årsredovisningslag (SFS 1995:1554) that makes provision of environmental information compulsory. The law states that from the year 1999 onwards every company that needs permission for its operations must provide environmental information to the authorities and this information should be included in its annual report. Thus, making provision of environmental information by large companies to the public compulsory, regulation has specified the minimum set of issues that have to be reported. As a substitute for an environmental report Sydkraft has published the brochure "Sydkraft and Environment" (Sydkraft och Miljö). It presents Sydkraft environmental impact according to national objectives set up by the Swedish Government, and contains the environmental balance sheet placed in the appendix. Since the year 1999 Sydkraft's Annual report has also included some social information, related mainly to company's personnel policy. The indicators used by Sydkraft to report about its environmental and social performance are summarised in table 6.

[80] Annual report, 1999, p.6

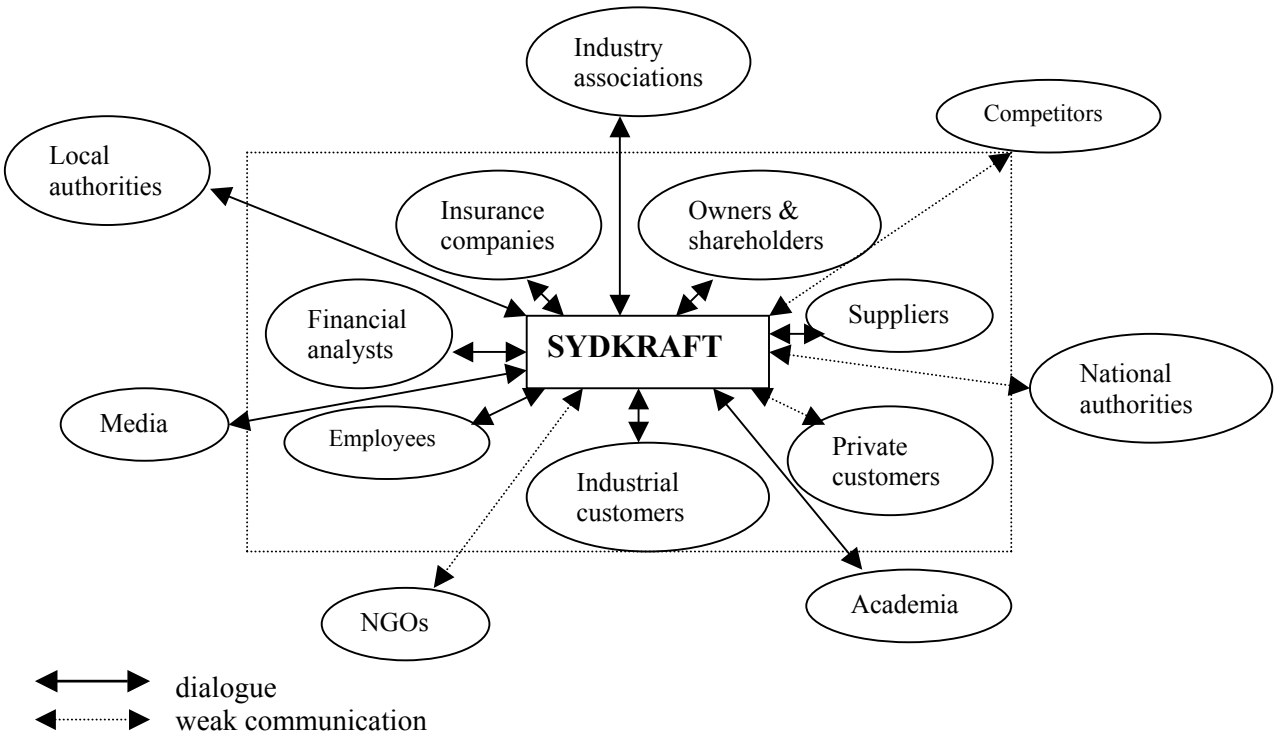
Table 6. Existing environmental and social indicators[81]

Environmental indicators	Social indicators
Energy production by type (GWh/year) (electricity, heat, cooling, gas, etc)	Average number of employees (#/year)
Electricity production by type (nuclear, hydro, wind power, etc) (GWh/year)	Proportion of women and men (%/year)
Heat production by type (GWh/year)	Age structure (%)
Fuel consumption by type (GWh/year)	Personnel turnover (%/year)
Internal energy consumption by type (GWh/year)	Total remuneration including social welfare contribution (SEK/year)
Fuel used for transportation by type (MWh/year)	Training costs (SEK/year)
Chemicals consumption (by type) (tons/year)	Absence due to sickness (%/year)
Water consumption for production type (m^3/year)	
Material consumption (tons/year)	
Air emissions from production (tons/year)	
Ozone depleting substances (CFCs,HCFCs, etc.)	
Waste (radioactive, hazardous, residual, other) (tons/year)	

3.5.3 Stakeholders and their information requirements

"Stakeholder satisfaction" is closely linked to communication, as their satisfaction depends very much on whether their information needs are covered. Stakeholder requirements vary. Some of them are asking detailed quantified environmental information, with a high level of standardisation. Others are trying to gain a picture of the ethical stance of a company by looking for information on investment policies, ethical business practices and community involvement activities.

Figure 4. Stakeholder model.



[81] indicators are taken from the "Sydkraft and the Environment" 2000 and the Annual report 1999

Sydkraft's communication process generally can be characterised as a strong dialogue with some interest groups, namely shareholders, financial analysts, employees, suppliers, media, industry associations, industrial customers and universities, and weak communication with others, such as private customers, authorities and NGOs. However, within these two groups there are variations as well. For example, although the dialogue with the media and suppliers is well established, these groups do not have any specific requirements concerning the information offered by Sydkraft. In this case they can be viewed as passive users of provided information. For this reason the media, suppliers and industry associations are not considered during the indicator selection process. Competitors are not considered as well, since their requirements to and opinions about Sydkraft are confidential[82]. On the other hand, although the dialogue with the private customers and public is not very strong, these groups are active in giving feedback on the company's activities and information quality.

Banks and financial analysts

As any financial institutions, Swedbank and ArosMaizels Equity Research that among other financial organisations are dealing with Sydkraft are mainly interested in the company's financial performance. The most useful information for analysts is that in a company's balance sheet, which is used for right share valuation[83]. The role of environmental information is viewed mainly in terms of costs and potential risk. Although special metrics used by financial analysts contain some environmental and social criteria these issues are not considered among extremely important in the total valuation process. "*We do not usually go too deep into details of environmental information, unless there are evident environmental problems, such as emissions exceeding legal standards (particularly land contamination), and which can lead to increasing payments*"[84]. The minimum requirement for the companies is to comply with the standards. At the same time, "*good environmental reputation, which is especially important for Sydkraft because of nuclear power and use of coal, is also important*"[85]. Of particular interest to analysts is whether the company's management has adequate procedures and systems for managing environmental risk and performance. Information on companies' potential liabilities and environmental expenditures is also reviewed. Employee information, such as data on working conditions and employee-training programmes are also among the criteria in the valuation process[86].

Insurance companies

In contrast to financial analysts insurance companies are paying more attention to environmental issues. The main interest for insurance companies is whether the customer represents a risk to them. Mainly they are interested in specific information, such as risk management programmes, EMS, compliance issues, liabilities, waste management etc. The insurance company FOLKSAM and the financial newspaper Finanstidningens have developed a special Environmental Index (Miljöindex 2000), in order to analyse the impact of Swedish companies on the environment. The main purpose is to develop quantitative environmental performance indicators that can be used to benchmark companies. The Miljöindex deals with 4 problems:

- Climate change (greenhouse gas emissions)
- Biodiversity (forests use)

[82] Garpås Lars, Birka Energy, interview, 23.09.00
[83] Sivander Johan, ArosMaizels Equity research, interview, 17.09.00
[84] Andersson Per, Swidbank, interview, 15.09.00
[85] Sivander Johan, ArosMaizels Equity research, interview, 17.09.00
[86] Andersson Per, Swidbank, interview, 15.09.00

- ozone depletion (ozone depleting substances)
- water resources (water consumption)

The whole impact should be presented completely and data should be built on real facts. The Sydkraft's answers for the year 1999 were not complete. The information on CO_2 emissions from goods and personal transportation as well as the company's impact on biodiversity (amount of paper using in the office) has not been provided[87].

Employees

Employees are the most informed Sydkraft audience. This is not surprising, since the amount of internal information is considerable and supports the possibilities for employees to update their knowledge constantly[88]. However, according to the employees' survey (22 answers from 46), the amount and quality of financial information prevails on the environmental and social one. From thirty-four offered environmental and social items the following acquired the most votes:

- hazardous chemical use - 58%
- emissions - 50%
- radioactive waste – 40%
- climate change - 50%
- renewable energy sources - 66%
- projects related to environmental improvements - 66%
- LCA - 100%
- Human resource management - 66%
- health and safety - 41%
- opportunity for professional development- 50%
- equal opportunities - 41%
- fair trade practices with the partners and suppliers – 47%
- suppliers ethical performance - 50%

Customers

Main industrial customers are reporting on their environmental impact, and for this purpose they are asking Sydkraft as a supplier for specific information usually through the Sales and Marketing department, since the information they require is not fully available in Sydkraft's reports. Some of the customers are more information demanding some are less. Customers like Skanska and Volvo are asking for very detailed environmental information, by sending special checklists containing the following aspects:

- compliance with environmental legislation,
- internal control for the working environment
- handling of waste and chemicals
- information about chemical content in product delivered to Skanska. Product should not contain chemicals, listed in company's black list, i.e. that are forbidden for use, such as CFCs, HCFCs, Hallons, Cr, Hg, Lead, Cadmium, etc.
- type of diesel, used in transportation
- environmental policy
- EMS certification according to ISO 14001or EMAS

[87] Nilsson Jesper, Folksam, interview, 14.09.00
[88] Andersson Berrit, Sydkraft AB, interview, 14.08.00

It is also stated in the list that the customer organisation has a right to make an audit of the supplier, to make sure that all its requirements are fulfilled [89].

Some customers like Novo Nordisk in addition to environmental requirements have increasingly started to pay attention to ethical performance, employment policy and stakeholder relationships of their suppliers[90].

Consumers are mainly interested in the price. However, there are so-called "green consumers" which are willing to pay more for environmentally friendly electricity, although the percentage of this group is not very high and they are mainly interested in information on renewable energy sources and energy efficiency[91].

Local communities

People living next to production sites are mainly concerned with the effects of the company's activities on their health and local environment. They worry about the noise from Sydkraft's plants, the odour problems from biofuel handling, fishery-related issues and electromagnetic fields. People living next to the plants make their complaints through local authorities, for example Malmö Sanitary Board, which in turn contacts Sydkraft. Among community's social concerns the main is the job creation issue[92].

Authorities

The main environmental requirement of authorities is compliance with the legislation and standards that are usually not very high and reporting on this compliance. The Sydkraft Group conducts some 50 operations that are the subject to notification or permit in accordance with the Swedish Environmental Code[93]. The company has to report every year on its environmental impact to the local authorities. Miljöforvatningen (Malmö), for example, is supervising companies operating in the Malmö region and checking their compliance with the environmental standards established by the law. Required information: production (quantity and source), environmental measures taken, state of the environment, external audit (and deficiencies), fuel consumption (solid fuel, coal, peat, wood), emissions to air, water, land, chemicals use, fuel consumption (class 1–to 5), including natural gas, solid fuel, coal, peat, wood and other; noise control and waste (hazardous and other)[94].

The organisation is collecting this information also to monitor environmental situation in the Malmö region including biodiversity, air pollution and human health issues[95].

National legislation related to health and safety, discrimination and equal opportunities in a work place requires corresponding actions form the companies. For example, according to the Swedish law on equal opportunities, companies that have more than ten employees are requested to provide a yearly plan and describe their actions and objectives to promote equal opportunities[96].

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[89] Skanska Checklista-inköpsavtal
[90] Tang Peter, Novo Nordisk, interview, 23.10.00
[91] Bergström Ulrika, Sydkraft AB, interview, 03.07.00
[92] Reepalu, Ilmar, Malmo Stad, interview, 20.09.00
[93] Sydkraft Annual report, 1999, p.16
[94] Miljöförvaltningen, Enkel Miljörapport
[95] Norpen Lars, Miljöförvaltningen, interview, 13.09.00
[96] Dahlström Per-Åke, Sydkraft AB, interview, 14.08.00

Suppliers

Mainly it is Sydkraft that has information requirements to its suppliers. When possible Sydkraft is checking its suppliers' environmental performance when purchasing products or making contracts. When purchasing electricity in the market (Nord Pool electricity exchange market) it is not always possible to check its origin. On the contrary, Printing House that e.g. printed Sydkraft's Environmental Report-98 has been reviewed and approved by Sydkraft's Environmental Controller prior to the contract. The supplier of natural gas – Vattenfall Naturgas has recently been checked on EMS certification according to ISO 14001 by Sydgas (Sydkraft), and been approved as a supplier. *"In contrast to the policy to our suppliers, we can not put any strict requirements to our customers, since we depend on them financially",* said Mr. Ivalu[97]. Although suppliers do not have any strict information requirements to Sydkraft, they need to understand the environmental policy of their customers. "*Since Sydkraft is our major customer we have to understand and take their requirements into consideration. Carefully examined information as well as personal contacts help us to be advanced and to take measures before our customers check us*" [98]. This downstream environmental control has considerable impact on the supply-chain.

Industry associations

Sydkraft is co-operating with associations such as Swedish Power Association, Svensk Energy, and Swedish District Heating Association. The main purpose of Industry associations, like the Swedish Industry Association, Industriförbundet is to help Swedish industry in various questions, and to support co-operation among companies for the prosperity of the whole national industry. Much of the political lobbying in Sweden (as well as in the whole Europe) is carried out by such associations. The associations can hardly exercise any pressure on organisations related to environmental or social issues, but rather have an advisory role. Although no specific environmental or social information is required from the companies, all publicly available information is carefully examined. The Industriförbundet is engaged in standardisation work within ISO and GRI, and experts on environmental and ethical issues consider that companies need to improve their communication and provide more information including ethical issues in their reports[99].

Media

The media can be viewed as a bridge between the company and its stakeholders and between stakeholders as well. The dialogue with the media is well established by Sydkraft. There are about 200 press-releases /year[100]. Sydkraft recent activities– starting operations in Eastern Europe and the housing project BO01 among other issues - have gained much attention from the media. The media usually does not have any specific requirements concerning the company's information. In most cases it is usually Sydkraft that initiate discussions with the journalists. For example, when there is an incident (oil spills, fire, etc) in some of Sydkraft's plants, the Information department immediately gives out a press release about the accident and about measures taken to remedy the damage[101].

[97] Ivalu Ulaf, Vattenfall Naturgas, interview, 17.10.00
[98] Ivalu Ulaf, Vattenfall Naturgas, interview, 17.10.00
[99] Nurjen Jöran, Industriförbundet, interview, 28.08.00
[100] Aspegren Johan, Sydkraft AB, interview, 29.08.00
[101] Claesson Stieg, Sydkraft AB, interview, 04.06.00

Environmental NGOs

"*It is not so easy to build good relationships with NGOs, since there are not friendly to Sydkraft*", said Stieg Claesson, the head of the Information department. The main accusation of Sydkraft by Nordic Greenpeace, for instance, is nuclear power and fossil fuel use, providing "biased" information and unethical behaviour showed by Sydkraft when trying to influence government decisions to close Barsebäck. "*This is not only environmental or ethical problem, but rather democracy problem, that shows how big private companies can act against government decisions*"[102]. The claim is also that "*Sydkraft has possibilities to develop renewable energy sources, substitute nuclear power by renewables and increase energy efficiency*"[103]. The last one implies finding a substitute for heat production instead of using electricity and saving electricity in-house.

Also Sydkraft is criticised for bad relationships with the consumers. "*Sydkraft is taking care of their shareholders and is paying little attention to their consumer needs*"[104]. NGO requires the company to provide consumers with "honest" information about how electricity is produced and from which sources to allow people choosing between different kinds of electricity and between companies. This information is actually provided by Sydkraft, every year in its reports. Representatives of an environmental NGO, Naturskyddsföreningen i Skåne, are mainly concerned with the effect of Sydkraft's operations on biodiversity and using renewable energy sources. "*The impact on diversity may be hard to measure but it is a strong reason not to exploit our last big rivers. We want the power companies to produce and sell renewable energy (not fossil and not nuclear). In the long run we want 100% renewable energy. We want to be able to buy "Bra Miljöval"-labelled electricity. We want to know how much electricity is produced from renewable sources, for instance, by wind turbines. Information can be distributed by mail /e-mail or Internet*"[105].

Feedback messages (Sydkraft web-site) and last opinion poll's results

The opinion poll carried out by Sydkraft Information department in 1996/97 among industrial customers, suppliers and consumers showed that the company's image has increased compare to 1993 from 20 to 75 %[106]. However, in some aspects Sydkraft performance was viewed as poor. The main information requirements derived form the last opinion pool and some feedback messages (Sydkraft website) are listed below. Stakeholders would like to see information on:

- renewable energy sources,
- products and services and their impact on the environment
- Sydkraft's operations in Eastern Europe
- environmental scholarships
- energy efficiency
- radioactive waste and other environmental risk
- Sydkraft's environmental impact and its affect on human health
- Sydkraft relationships with suppliers and other companies
- Sydkraft employment policy

The main stakeholder demands are summarised in table 7.

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[102] Halaand Tarjei, Greenpeace, interview, 22.08.00
[103] Halaand Tarjei, Greenpeace, interview, 22.08.00
[104] Halaand Tarjei, Greenpeace, interview, 22.08.00
[105] Neideman Christer, Naturskyddsföreningen i Skåne, interview, 01.11.00
[106] Eftermätning 96/97, Sydkraft, p.73

Table 7. Interview results

Stakeholder group	Concern	Environmental indicators	Social (ethical) indicators	Preferred inform. source
Financial analysts	Standardisation of environmental information	Environmental liabilities and potential liability data; compliance; environmental risk, environmental expenditures and costs (cleanup contaminated land), investments in R&D and EMS	Social policy and employee data: working conditions and training programmes	Annual report Additional information-meetings, phone calls
Insurance company	Standardisation of environmental information, environmental risk	Environmental performance regarding: Climate (CO_2 emissions) Biodiversity-use of forests Ozone layer-use of ozone depleting substances Fresh Water Consumption		Annual and Environmental reports Additional information-questionnaire meetings
Employees	Job security, safety, pay/benefits, pride in organisation, working conditions	Hazardous chemicals, emissions, radioactive waste, climate change, renewable energy sources, projects on environmental improvements, LCA	Equal opportunities; employment structure; H&S, opportunity for professional development, suppliers ethical performance, stakeholder relations	Intranet Annual and Environmental reports Internal newsletters Internet
Customers	Product cost Product safety Product liability Product environmental performance Toxic chemicals	Environmental policy, audit, compliance with regulations, staff environmental education, EMS certification, renewable energy, waste handling, chemical usage, emissions, oil spills, ozone depletion, acidification	Accidents and incidents in a workplace; ethical performance; stakeholder relationships	Internet Corporate Reports Additional information-questionnaire
Consumers, Feedback messages, survey)	Product cost Product safety, Emissions, waste	Electricity production form renewable energy sources; radioactive waste; emissions; nuclear safety	Accidents and incidents, ethical policy to conducting business	Internet, Annual and Environmental reports
NGOs	Global warming Ozone depletion Energy efficiency Biodiversity	True information on company's activities: electricity production by source, energy efficiency, resource use, waste management, nuclear power/safety, renewable energy sources, biodiversity	Creation of value for consumers and other stakeholders, not only for shareholders	Environmental reports, Internet
Local community	Health and local environment	Air pollution, hazardous waste, noise, odour, emissions, electromagnetic fields and emergency response plans.	Job creation	Internet, Site-reports
Government (national and local)	Compliance with legislation; Environmental degradation; Health and safety; social policy	Production, environmental measures, state of the environment, external audit, fuel consumption, including natural gas, solid fuel, coal, peat, wood and other; noise control; waste (from energy production); waste water treatment; hazardous waste; emissions to air & water, noise	Policy on equal opportunities and disabled employees	Annual and Environmental reports Internet

4 RESULTS OF THE CASE STUDY AND DISCUSSION OF FINDINGS

The following matrix serves two purposes to make some kind of gap analysis of information required and information provided, and to present stakeholder interests and concerns, from which indicators for sustainability reporting might be derived.

Table 8. Matrix of indicators and the information gap analysis

Key audience/ Aspect	Indicators	Financial analysts	Insurers	Employees	Customers	Community	Authorities	Feedback, poll	NGOs	GRI
Qualitative indicators:										
CEO statement										
Profile of enterprise										
Executive summary and Key Indicators										
Vision and strategy										
Policies, Organisation, and Management systems	Mission, values statements, codes of conduct, Economic, environmental and social policy									
	Organisational structure and responsibilities									
	Membership in associations									
	Precautionary principles									
Management systems	EMS certification									
	employee environmental training									
	environmental auditing									
Product &services	LCA									
	product/service innovation (projects on renewable energy, etc)									
	Handling environmental risk									
Suppliers	Supply chain/outsourcing, suppliers selection criteria									
Stakeholder involvement	Feedback on report and activities, stakeholder relations									
Quantitative indicators										
Energy generation and fuel consumption:	Production of electricity (by source)									
	Fuel consumption (by type)									
Material consumption:	Total									
	By material type									
	Chemicals consumption by type									
	hazardous chemicals substituted with less hazardous									
Waste	Total waste									
	Radioactive									
	Hazardous									
	Other waste									
Waste to land	Oil spills									
Air emissions	GHG – CO_2 eq.									
	Ozone depleting compounds CFCeq.									
	CO_2 and other GHG emissions									
Effluents to water	Oil and other toxic substances									
	Odour, noise									
Transport	CO_2 from goods transportation									
	CO_2 from personal travelling									
Biodiversity	Impact on biodiversity									
	Use of forest resources									
Environmental costs and liabilities	Future liabilities									

	Land cleanup									
	Compliance with regulations									
	Environmental Investments (EMS)									
Social indicators:										
Employment	Health &safety									
	Treatment of unemployed workers									
	Equal opportunities									
	Employee training									
	Age structure									
Community relations	job created									
	social investments (social welfare)									

Information is provided by Sydkraft and publicly available
Information is not provided by Sydkraft

4.1 INDICATORS DERIVED FROM STAKEHOLDER REQUIREMENTS

The matrix shows that environmental requirements of stakeholders are covered better than the social ones. One of the reasons among others (ex. environmental information has been required by the authorities) is that environmental indicators are developed and used, while social are at the beginning of their evolution. Analysing the areas of stakeholder concerns that are not covered by the information provided by Sydkraft several indicators applicable to Sydkraft are selected and presented in table 9.

Table 9. Proposed indicators

Environmental indicators	Social indicators
1. Biodiversity: a) Tons (kg) paper consumed/year b) % of protected areas to total area of forests	***5. Employment and employment conditions data:*** # of job created/year/turnover # of accident/incidents/year # of occupational injuries and illnesses/year
2. Climate change a) GHG emissions - CO_2 equivalent. b) Tons CO_2/km travelled (goods transport) c) Tons CO_2/km travelled/passenger (personal transport)	***6. Training:*** # of employees trained/year # of hours/employee/year
3. Oil releases into water a) Kg oil/year (or plant running period)	***7. Equal opportunities:*** % of women in senior managerial positions
4. Environmental expenditures: Maintenance of EMS/total turnover Potential liabilities SEK/year/total turnover	*8. Suppliers selection criteria*
	9. Stakeholder interaction - number of complaints

Biodiversity indicators

The purpose of the biodiversity indicator, requested by the Folksam insurance company, is to keep track of forest resources as a main source for biodiversity. Sydkraft is requested to provide the information on paper utilisation. This is not easy, since there are different types of paper in use and the calculation of paper consumption would be a new task for the company. However, at least two source of this information might be used: the registration of purchases and data requested from the suppliers. Other concerns on biodiversity, expressed by environmental NGOs and ordinary people, might be covered by providing qualitative information about measures taken to preserve biodiversity affected by Sydkraft's operations. These concerns are partly covered by provided information on fish protection measures[107]. Another indicator that might be used in this case is the

[107] Sydkraft and the Environment, 1999, p. 12

'% of protected areas to the total forest area'. Sydkraft has created the number of protected areas (total - 140 hectares) that account about 10% of 1500 hectares of Sydkraft forests[108]. This might be a good indicator to show the endeavour and measures taken by the company to protect biodiversity.

Climate change indicators

This category contains information on the amount of carbon dioxide emitted form Sydkraft's transportation. To provide this information for all vehicles and personal travelling Sydkraft has to calculate the distance of delivery and the distance of personal travelling considering the mode of transportation used. Data on CO_2 emissions according to transportation type might be asked from the vehicle suppliers. Some companies such SAS, Lufthansa, Volvo, Saab, etc provide the information on the CO_2 emissions from their transportation modes per passenger and per kilometre travelled. However, the most problematic is the statistics on the total number of Sydkraft employees having travelled and kilometres they have travelled that needs to be collected and calculated within the company. This would require some time and efforts. But this information has to be reported, as a part of the company's total CO_2 emissions.

Some Sydkraft plants in Karlshamn, Halmstad, Örebro, Heleneholmsverket (Malmö) and Vindön (Landskrona) that have conducted a LCA for the electricity production from nuclear, hydro, wind power, as well as from burning of oil and coal, have published their GHG emissions expressed in CO_2 equivalents. It might be feasible to provide this information for the whole group in the near future.

Toxic (oil) releases into water

Since the amount of releases into the water is very small, Sydkraft has decided not to provide this information for the year 1999. However, there are concerns about oil spills that might occur from the equipment used in hydropower plants. The amount of oil in the system can be systematically measured during the running period of the system (oil consumption/running period) and the leakage to water identified according to the decreasing amount of oil in the system.

Environmental expenditures and liabilities

This is probably one of the underdeveloped areas in the environmental reporting framework. Certainly, many guidelines recommend that companies report environmental expenditures and liabilities, but provide no guidance on how this is to be done. To provide this type of information is highly problematic. In part, this is because it is difficult to differentiate environmental activities from other business activities. Some environmental costs - CO_2 and sulphur taxes, water treatment costs are included in operational costs and not published separately by Sydkraft. At this stage it seems satisfactory to those that mainly use monetary environmental data, however, in the future the company might be asked to provide this information together with other environmental costs. Other areas of concern are the management of environmental risks and future liabilities, as well as environmental investments, such as investments in implementation and maintenance of an environmental management system. The last can be measured and presented in relation to the total turnover. This indicator would be more informative then that showing total yearly spending. The provision of future clean-up, decommissioning or restoration costs can be estimated based on previous reported annual liabilities.

[108] Peil Niklas, Skogssallskapet, interview, 31.10.2000

Employment and Employment conditions indicators

Providing an employment is one of the main social functions of business. By creating workplaces companies are contributing to the society well being. Every time when buying a new plant or starting up new activities Sudkraft is creating new workplaces. This also generates new income. By showing the number of yearly jobs created in relations to the company's total turnover would be more informative than the 'number of jobs created per year', an indicator commonly used by companies that provide such kind of information. The indicators on accidents and occupational illnesses (or their absence) provide essential data on basic employment conditions. This information is important for the employees as they can better be aware of their working environment and also can feel that these issues are important for the company's management. Reporting employment conditions is also of interests to potential employees, insurers, regulators, and increasingly financial analysts, and shareholders, since safe and good working environment and employee satisfaction leads to improved company profitability. This is useful information not only to stakeholders but to the company's management as well, as monitoring employment data is a part of evaluating company progress. The evolution of a new European social law provides a base for the further development of reporting on employee-related matters. Such reporting may also aid the achievement of the European Union's goal of harmonisation of employment conditions across the EU[109]. Ensuring adequate employment conditions is in respect of the ILO Occupational Health and Safety Recommendations (1981) according to which members should "*issue or approve regulations, codes of practice or other suitable provisions on occupational safety and health*"[110]. With respect to this as well as to stakeholder demands companies should ensure safe working conditions, and develop indicators to reflect these issues. The nuclear safety issue relevant to Sydkraft might result in a deeper disclosure and more detailed indicators on health and safety. On the whole, measures of health and safety performance tend to be negative ones, such as accident rates and trend data showing changes is very helpful. Any data on positive variances, such as lower than average rates of accidents or illnesses amongst employees compared with the general population (this indicator might be used in the future) would be most interesting, as it would point to the overall effectiveness of company's health programmes.

Employment diversity indicators

These indicators reflect company's employment structure. Since Sydkraft's ethnical structure is mainly homogenous, and there are no disabled employees in the company, present employment diversity might be expressed by gender mix and age structure indicators. The equal opportunities would be considered in this category as well. As mentioned before the energy sector is viewed as conservative, partly due to little representation of youth and women. Thus, from an external perspective information for example on the '% of women in senior managerial positions' would be useful for company's ethical and innovative image assessment. The data on employment diversity in general is likely to be used by company's management to picture existing employment structure as well as to anticipate future trends. This might also help in indication of inequities that might occur, for instance, differences in salaries between men and women for equal work that would require salaries correction measures.

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[109] Work Council Directive 95/45(1994)O.J.L254/64

[110] ILO, 1981, Occupational Safety and Health Recommendations, cited in §4, SA8000, http://www.cepaa.org/sa8000.htm.

Training is important for employees' professional development and well-being as well as for the progress and benefit of Sydkraft, since the knowledge and intellectual capital might be the most important capital of any company. To the existing indicator - 'total expenditures on employee training' other indicators, such as 'the number of employees trained per year' and 'total hours per year per employee trained' might be added to provide a full information on possibilities for professional development, provided by Sydkraft to its employees. These indicators together with the employee feedback could be used by a company to track the progress and assess the usefulness of training and carrier development as a result of the training programmes.

The direct information costs of producing such a social account reflecting all social indicators mentioned above would be negligible for Sydkraft, since the employment data already exists and it is simply a matter of rearranging it.

Supplier relations

The information on suppliers' environmental and ethical performance should be presented qualitatively rather than quantitatively. However, providing such information might be limited for Sydkraft by the possibility of checking for example the origin of electricity or fossil fuel bought in the market and consequently the environmental as well as ethical performance of suppliers of those products. Sydkraft is mainly dealing with European suppliers, some of which, for example, oil suppliers as BP, Shell[111], have their operations in third world countries. Suppliers' unethical behaviour in developing countries might affect the company-customer ethical performance. As with suppliers' environmental performance their ethical performance will attract much attention in the future. However, the question is, how the supply-chain issues should be presented, especially by such a big organisation as Sydkraft? GRI, for example, requires from reporting companies monitoring and reporting on 'the number and types of incidences of non-compliance with prevailing national and international standards'[112] of their suppliers. However, this is hardly expectable that any organisation would monitor so deeply its suppliers' performance. Which is more likely is that company would require suppliers to comply with its own standards and rules. Thus, the interest from customers, employees, as well as suppliers themselves could be satisfied by information on ***supplier selection criteria.***

Stakeholder involvement

This issue is the least quantifiable of all discussed above. At the heart of this issue lies the question: How do the stakeholders feel about a company's performance? To answer this question public opinion polls, interviews and other methods could be used. One quantitative indicator that might be used by Sydkraft at the present stage is the number of complains received by the company from stakeholders during the year. In future other indicators might be developed to show (or even calculate) Sydkraft's relationships with groups that have any interest in the company. For example, a new methodology has been developed by Frank Figge (sustainability consultant at Pictet, a private Swiss bank) in collaboration with the UNEP to assess how much value is created – or destroyed – by companies' stakeholders. The new methodology quantifies the benefits of the stakeholder relationship against the costs (such as payroll or tax payments) of stakeholders. This figure can then be compared to the industry average. "*We can measure how much is returned for every euro spent on personnel – we use the same logic as in measuring returns on investments*"[113].

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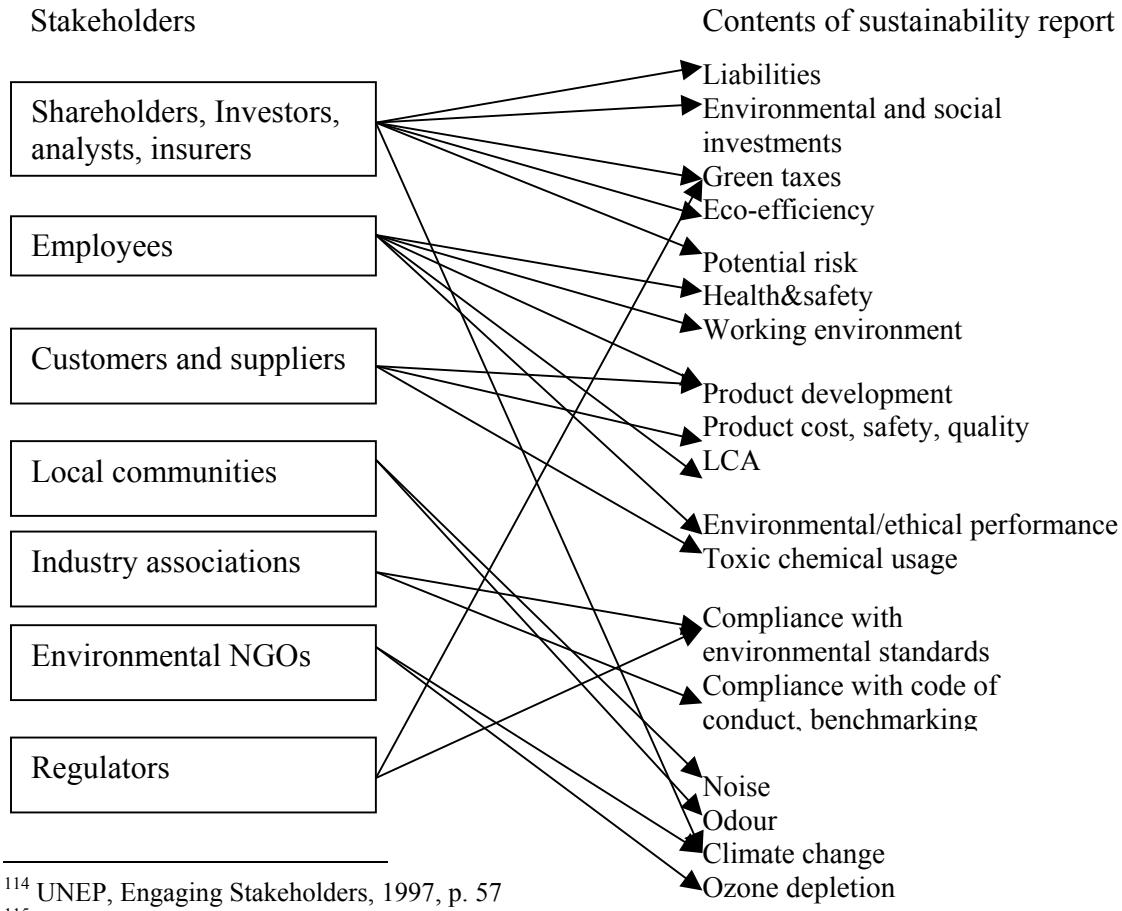
[111] Dahlberg Rannie, Sydkraft Energy Trading, interview, 12.09.00
[112] GRI, 2000, p.32
[113] Environmental Finance, September 2000, p.9

5 ANALYSIS OF RESULTS

5.1 THE GAP BETWEEN CORPORATE REPORTING AND STAKEHOLDER REQUIREMENTS

At present, there is undoubtedly a gap between what companies report on their corporate social responsibility activities and what some stakeholders are asking to know[114]. The main reasons for this gap is the general trend among reporting companies to satisfy the needs of two main groups: regulators and financial stakeholders. Companies are producing financial reports on their economic performance oriented on the financial market and non-financial reports to satisfy reporting requirements established by the government that serves only one purpose – to present facilities' compliance with emission limits. Concurrent with these developments was the recognition that information on compliance is simply not adequate to portray a company's complete environmental performance[115]. Then too, compliance reporting is generally limited to "lagging indicators," that is, to what has already taken place. Leading indicators - information on environmental management systems, policies, and product stewardship that gives stakeholders a basis for assessing future performance - is usually lacking. As a rule, government-reporting requirements do not cover this type of information, nor has there been much indication that they will do so in the future. Another reason for the existing gap between expected and provided information is the fact that companies are reporting on their performance based on principle of "what stakeholder should know about". As long as the rules and boundaries of reporting are determining solely by report-makers – the corporate reports are unlikely to deliver the kind of credibility that reporting companies seek. Although it is not possible and not necessary to satisfy all needs, the organisation should take into consideration stakeholder information requirements when preparing their corporate reports.

Figure 5. Stakeholder information demands



[114] UNEP, Engaging Stakeholders, 1997, p. 57
[115] White A., 1999, p.36

Due to increasing availability of information on organisational activities and increasing awareness of the impact these activities might have on the environment and society, stakeholders demand higher standards of behaviour and greater transparency from an organisation (figure 5).

With so many stakeholder segments asking for environmental and social information of all types, corporate strategists are advised to take a proactive, big-picture perspective on the role that corporate performance – and the communication of that performance – plays in their company's overall financial well being. The challenge for an organisation is that it should keep abreast with changing stakeholder expectations and requirements, and adequately respond to these expectations, providing comprehensive and high quality information. Moreover, organisations are encouraged to go beyond the requested information as necessity to achieve a more complete and balanced picture of their operations and performance.

5.2 APPROACHES TO INDICATORS SELECTION AND DEVELOPMENT

The shift from environmental reporting to integrated sustainability reporting will require entirely new types of metrics and indicators, as well as unprecedented level of stakeholder engagement[116]. Relevant standards and measures of performance are mature in the financial area and becoming established for the environment. They are fragmented and inadequate in the social dimension. A key question, which will face any company deciding how to respond to the sustainability agenda focuses on which of the two following options to adopt:

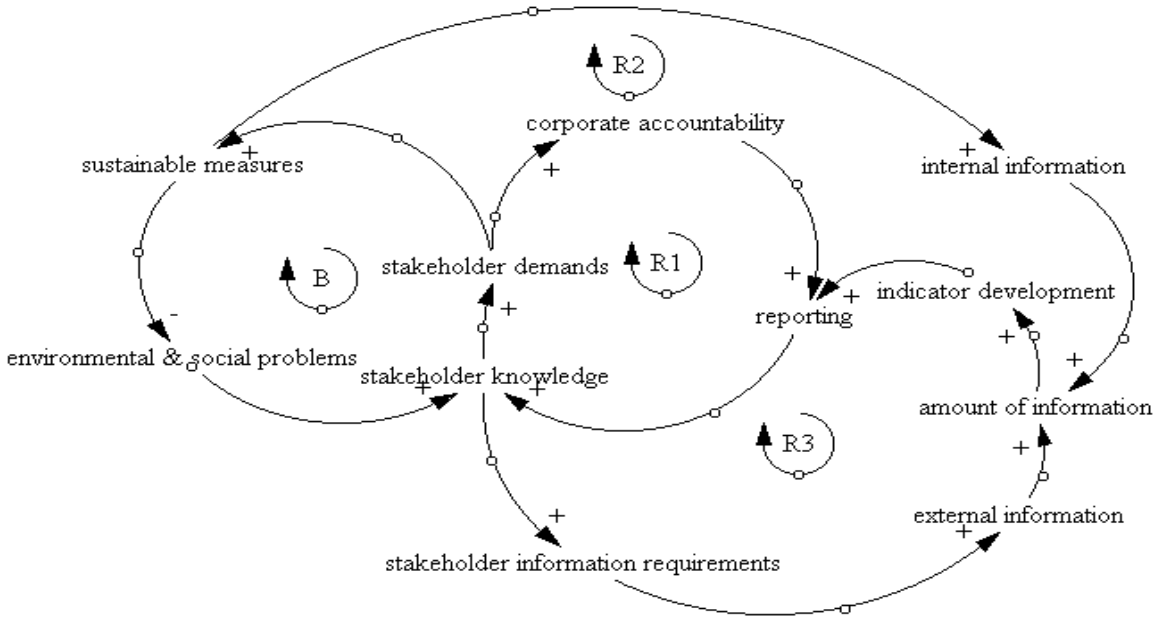
- An accountability process largely driven by stakeholder-defined targets and indicators of performance or
- A triple bottom line process focusing on targets and indicators relevant to the business – and specifically designed to build competitive advantage and long-term shareholder value[117].

Some companies will follow regulator requirements. Others will use methods proposed by NGOs and consultants. Next come decisions on what to measure and which indicators to use. With environmental management systems, companies decide on their own "significant environmental effects" or "aspects" and report against these. Some argue that significant environmental and social effects can be identified in this way, while others advocate a stakeholder-led approach, with an organisation's stakeholders highlighting areas they think should be measured. Stakeholder needs should determine the external report's content[118].

Public participation has been referred to as a method recommended for the identification of sustainable development indicator sets. Theories described in chapter 2.4.1 advise companies to develop a comprehensive set of indicators through stakeholder dialogue, so that the indicators reflect the value systems of the organisation, stakeholder group and society[119]. Talking about stakeholder dialogue, and selection of indicators from this dialogue, these theories, however, do not provide any technique of how this dialogue could be explored by companies to gather the information, and how to convert this information into meaningful indicators. There is a need for guidelines on how to obtain and manage stakeholder (including critics) input.

[116] UNEP, Engaging Stakeholders, 1997, p. 42
[117] Hardi, P., Barg, S., IISD, Occasional paper N17, November, 1997, p.13
[118] GEMI, 1994, p.9
[119] Gonella C., et al., 1998, p.28

Figure 6. Stakeholder involvement into the reporting process



The process of the stakeholder involvement can be described through the **Causal Loop Diagram** (figure 6) that consists of four loops, one balancing and three reinforcing. The balancing loop describes the situation, when increasing stakeholder awareness due to the emerging environmental and/or social problems exercises a pressure on the companies to introduce changes (sustainable measures) into their operations, which in turn ideally contributes to a decrease of existing problems. Loop R1 shows the rising of corporate accountability due to increasing stakeholder demands. Through this continuous development of both demands and responses evolution of reporting takes place, and stakeholders' knowledge increase as well. Increased knowledge leads to rising of the stakeholder information requirements that are collected by a company, and together with internal data about introduced measures and achieved improvements can enlarge the amount of information that is proceed by the internal information system, in order to develop indicators and report them to the stakeholders (R2 and R3). The increased and different information will tend to influence the behaviour of not just the recipient of the information (e.g. society) but also the creator and transmitter of the information (e.g. company management).

The main source of indicators is undoubtedly an organisation's internal system, simply because the main environmental and social aspects are known, as well as handled, better within the organisation. "*Change always comes from within – gets things right internally, then these basic values will expand outwardly to the relationship between the company and its stakeholders*"[120]. Performance Indicators are the logical basis for setting targets and driving continuous improvement across companies' operations and for developing standards for reporting. Stakeholder views are also important in the process, because indicators must be critical to the business and relevant to the concerns and expectations of those, who have an interest in companies' progress. Besides being a method, public participation is also an indicator itself, measured and reported by various companies.

Identification of stakeholder requirements might be helpful in identifying areas of reporting and areas where performance needs improvement. The feedback process can serve to improve the quality of the indicators and increase the degree of consensus surrounding them. It is possible to start from developing a few indicator categories that are important for both the organisation and its

[120] Tomorrow magazine, March-April, 1997, Elkington J, Stibbard H.,

stakeholders and to discuss with key stakeholders. This would help to improve established and create new indicators. Received suggestions can than be systematically recorded, analysed and categorised using a series of screening criteria. While defining some indicators might be difficult, it should be possible to agree on key indicators. Working with the stakeholders to develop indicators that can be used to measure and report on progress in company's commitments to sustainable development might be utilised by companies to drive their own activities in indicator development.

Each stakeholder concern needs to have at least one measure or indicator, which is quantifiable in numerical terms and for which data is capable of being collected at reasonable cost. In some cases the stakeholder concern may have several facets and separate indicators are needed to capture performance on each. Ideally data on each of the performance indicators should be available from an existing corporate information system, such as employment data that is usually existing in the personnel department.

5.2.1 Stakeholder identification and dialogue

The process of engaging into stakeholder dialogue requires clarity as to where a company stands on key issues. It is likely that a company's views will change as the stakeholder process evolves, but the debate is more valuable to all sides, if opening positions are clearly articulated. Only in this case will reports be credible and useful[121].

For the convergence of opinions to occur, relevant user groups need to be identified and encouraged to express their information needs. Since those, who are affected by the action of business, have a right to information about those actions, they should be given the information, on which to make personal judgements as to the sustainability or otherwise of the organisation. The idea then is to enable stakeholders to express their choices about critical environmental and social or wider, sustainability issues. Thus an integrated approach for dealing with multiple stakeholders on multiple issues is needed. For each major strategic issue companies must think through the effects on a number of stakeholders, and therefore, thus, need processes, which help take into account the concerns of many groups. At the same time, the accounting process must be practical and it is often the case that all stakeholder groups can not be included at once. It would be more practical to start from the dialogue with the key stakeholders – those that are most important and have the greatest influence on company activities. This might be done on the basis of an interest/influence matrix as shown in figure 7.

Figure 7. Shift in interest and influence

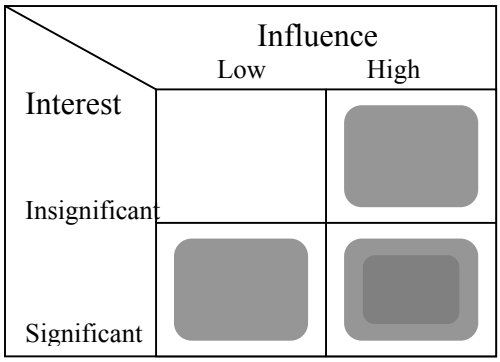


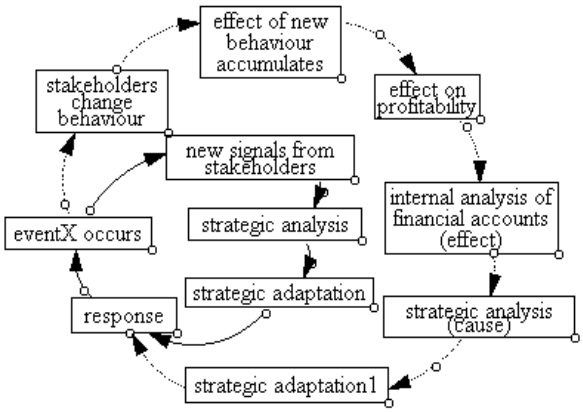
Figure 7 also illustrates that management should identify not only the obvious "significant interest/high influence" stakeholders, but also for example, those who have high influence but low interest – such as special interest groups, and the media. Following identification of key stakeholders, management must determine which of the key stakeholder groups to include in the present dialogue and reporting cycle. Reporting efforts should be focused on the chosen key stakeholder groups' main areas of interest relating to the company's activities. These areas can be determined in dialogues with stakeholders, using focus group interviews or other well-established dialogue methods. For example, most organisations will carry out some level of stakeholder survey,

[121] UNEP, Engaging Stakeholders, 1997, p. 56

such as employee attitude surveys or customer surveys. Various companies have established different levels of stakeholder relationships. Some companies like BT have convened advisory panels of various stakeholders to elicit feedback and gain new insight into stakeholder perceptions and concerns. Others, such as the Co-operative Bank and Novo Nordisk have a practice of regularly consulting their stakeholders on ethical and environmental issues through the Internet.

Organising meetings, surveys and advisory panels might demand significant amounts of time, money and other resources. Companies can use less expensive ways to understand stakeholder perceptions and collect their opinions. The possible solution is to organise consultations via corporate web-sites. Almost all companies have established relationships with the key stakeholders and it is possible to communicate with them on a daily basis. Meetings with investors, customers, suppliers, press releases are also organised by virtually every company. All these channels can be used for the collection of primary data for further indicator development. Taking into consideration stakeholder requirements in the reporting process creates external values for the company in the form of stronger stakeholder relationships and an improved corporate reputation.

Figure 8. Faster response time[122]



This gives the company a competitive advantage in attracting the best employees, building customer loyalty, and securing access to investor capital. It can also be an "early warning" system. It provides management with a set of strategic tools and indicators to allow for a fast response to potential opportunities and conflicts (figure 8). The inner loop in figure 8 describes how an improved information system allows the company to react faster to events in its surrounding environment. Relying on traditional financial accounting as information systems, as illustrated in the outer loop, there is a risk that the management cannot react to changes in stakeholder behaviour until these changes show up on the bottom line.

5.2.2 An integrated approach to indicators selection and development

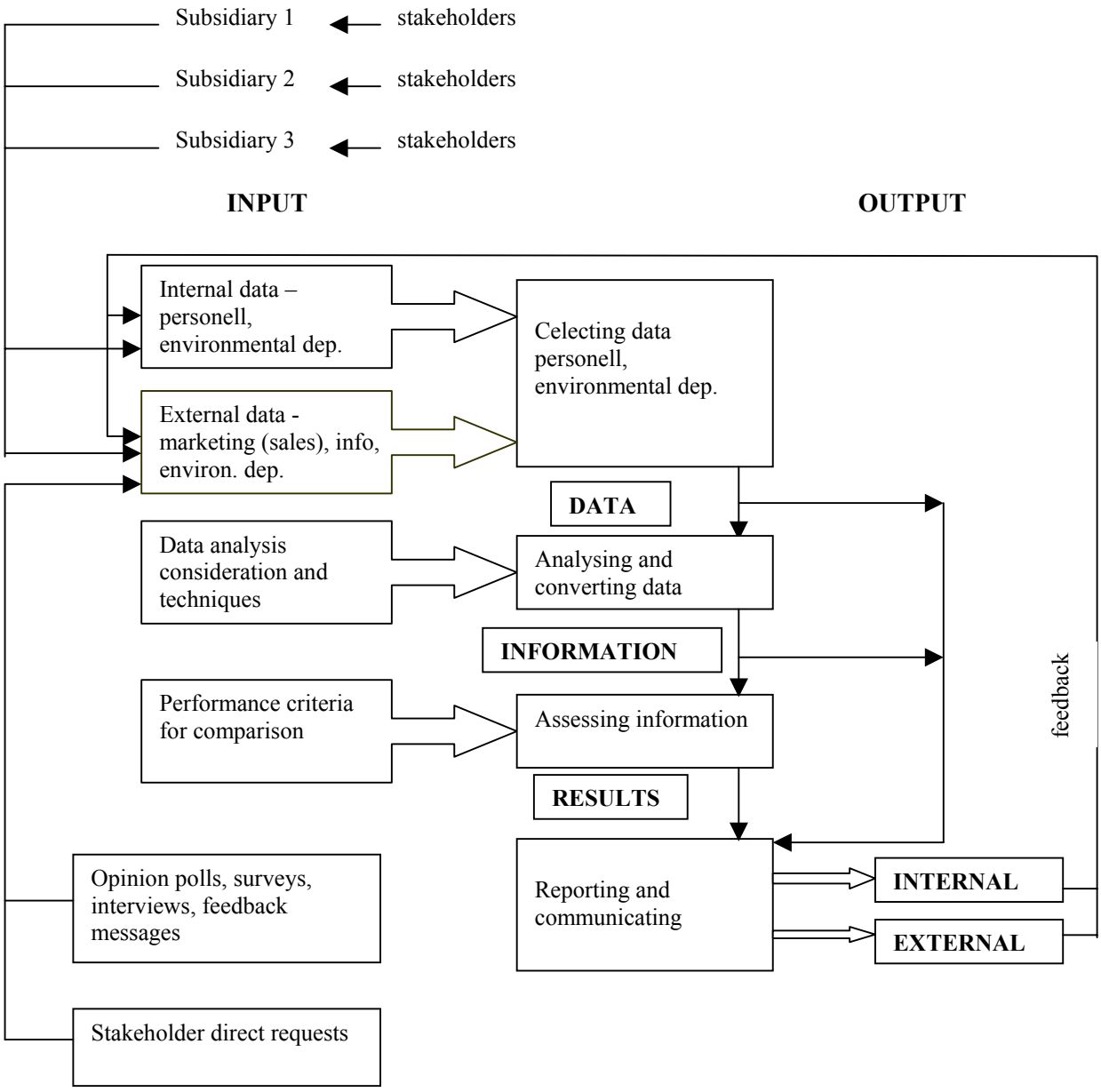
When an organisation defines the content of the message based purely on its own perceptions and values, this might fail to satisfy user interests. At the same time an organisation can not build its communication solely on stakeholder perceptions and undermine the organisation's own values and initiatives. Given the differences in interpretation of sustainable development and the preferences of various stakeholders, it is not possible to agree on and accept all suggestions. A consensus should be achieved on the most crucial issues. The scope of the indicators derived form stakeholder consultations might be limited by the objectives of the organisation. These indicators should be incorporated where there is a direct causal link with the company's activities.

The principle of inclusivity can also be understood as the equivalent of the standard accounting principle of materiality. That is, the right of stakeholders to choose performance indicators associated with their interests – in conjunction with the right of the organisation to measure its performance against its own mission statement – is part of what secures information that is not only accurate but also relevant and material.

[122] The Copenhagen Charter, 1999, p.4

The best option for selecting indicators would be a case of both/and, rather than either/or approaches. Performance indictors are likely to include a mixture of views and opinions, and quantitative measures. The former can be derived from a combination of focus group sessions and questionnaires, whereas the latter will come from business management systems[123]. The model presented in figure 9 for selecting and developing of indicators, although the design is based on Sydkraft and the ISO 14031 standard, might, be applicable in some variations to other organisations as well.

Figure 9. Indicators selection and development



Data collection: data should be collected from internal as well as external sources to provide input for selecting indicators. The stakeholder information could be collected regularly and then processed together with internal data by company's internal information system to support the full

[123] Sustainability Council http://monticello.avenue.gen.va.us/Gov/TJPDC/sustain.html

disclosure. Results of surveys, interviews, feedback messages on companies web-site can be summarised, analysed and most important issues from them extracted. The external data could be collected from all departments that are dealing with external stakeholders (customers, suppliers, media, environmental groups, etc.) in their every day business. The task here for example, for Sydkraft (can be valid for other companies as well) is to improve the communication among all departments, dealing with stakeholders, so that information can flow easily within the organisation and can be collected and analysed in an integrated and centralised manner.

Analysing and converting data: collected data should be analysed and converted into information describing the company's environmental and social performance, expressed as indicators. The challenge in this step is to translate stakeholder requirements into meaningful indicators that could be used for reporting. Data analysis may include consideration of the data quality, validity, adequacy and completeness necessary to produce reliable information.

Assessing information: the information derived from analysed data, expressed in terms of performance indicators, should be compared with the organisation's own performance criteria. This comparison may indicate progress or deficiencies in company's environmental and social performance. The stakeholder feedback might be very helpful in this assessment.

Reporting and communicating: the environmental and social performance is communicated to the stakeholders inside and outside the organisation. The feedback on reports from stakeholders allows management to test that the mission, vision and values of the company match the expectations, demands and values of stakeholders.

The preparatory stage of indicator selection is primarily expert driven. Experts are necessary to supply comprehensive understanding, perspective on the development of the system over time, knowledge of what data are available, realism about what can be measured, and credibility to the process. Experts are also needed in order to keep scientific characteristics of indicators that are simplified and adapted to user needs. Non-experts are needed to make the indicator relevant and understandable. The non-expert may be more open than the expert to creative linkages and syntheses, more likely to capture the "big picture" and more likely to assure that a diversity of interests are represented. The indicator selection process works best with a combination of expert and stakeholder participation"[124]. The priority issues selected from the stakeholder consultation process could be incorporated in a framework developed by experts.

5.2.3 Problems with indicators and indicators selection criteria

Indicators are no*t the real system.* They can not completely describe and measure a complexity of real life. They may miss many of the subtleties, wonders, warnings, diversities, possibilities, or perversities of the real system[125]. Their presence or absence, accuracy or inaccuracy, use or non-use, can change the behaviour of a system, for better or worse. Their selection and use are full of pitfalls. They carry different messages to different minds. Indicators are hard to define. This limitation becomes quite clear in the social dimension, where many of the variables, such as equity, stakeholder relationships, suppliers' ethical performance are hardly quantifiable and cannot even be defined in physical terms.

[124] Meadows D., 1998, p.14
[125] Meadows D., 1998, p.11

These difficulties don't mean, however, that we shouldn't use indicators. We have no choice. The world is too complex to deal with all available information. Indicators quantify and simplify phenomena and help us understand complex situations. As a consequence, the size of a set of indicators and the amount of detail contained in the set need to be limited. A set with a large number of indicators will tend to clutter the overview it is meant to provide. Too few or even a single indicator, on the other hand, may be insufficient to provide all the necessary relevant information. In addition, methodological problems related to weighting tend to become greater with an increasing level of aggregation.

Whether an indicator is useful or not depends very much on its context. Indicators are as varied as the types of systems they monitor. However, there are certain characteristics that effective indicators have in common. Indicators can be selected if they are generally recognised as important, understandable, and corporate in nature. A careful selection process is needed to determine what is a relevant indicator in a given context. During the screening process indicators are selected based on context-specific conditions and **general selection criteria,** according to which indicators should be:

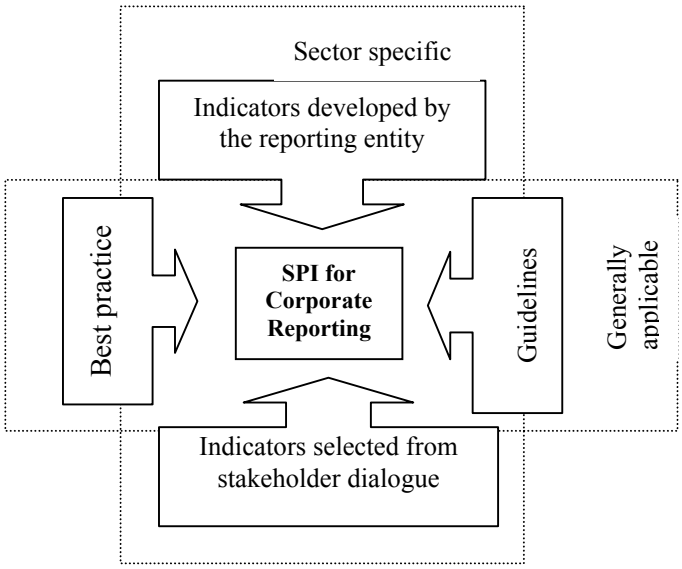
- ***Relevant and meaningful*** with respect to protecting the environment and human health and/or improving the quality of life and should be directly related to the current and foreseeable future situation.;
- S***imple/Understandable*** – indicators and the units of measurement used need to be clearly expressed in such a way that they are simple and understandable to both users and readers.
- ***Comparable*** – indicators must allow performance to be tracked over time and across departments, firms and companies;
- ***Consistent*** – in order to facilitate comparison, indicators should be developed with the same data collection criteria, data source and comparable units.
- ***Measurable/Quantifiable*** – indicators should be measurable without involving significant cost, time and resources.
- ***Available*** – it is preferable to develop indicators based on existing data inventory[126].

Two perspectives on performance are adopted – an internal one, which assesses performance against stated organisational objectives and an external one, which utilises comparisons with other organisations' behaviour and norms. From this point of view, the challenge is to translate stakeholder requirements into meaningful indicators that could be communicated and used for benchmarking. Stakeholder dialogue would better serve to identify organisation or sector specific issues. In terms of comparability, this approach would hardly be utilised. In this case the pure constituency-based approach to selecting indicators would open the door to a complementary approach to the selection process, through identification of "best practice" or "conventionally used" indicators and benchmarks. At any time there are key issues for which there exist performance indicators that are widely acknowledged as an appropriate and essential part of any performance assessment and disclosure process. For example, any report on the issue of gender within an organisation would today be quickly criticised, if it failed to report either the number of men and women in different positions within the organisation, or data regarding wages and salaries in order to test the 'equal pay for equal work' proposition. Similarly any corporate environmental report without information on its statutory compliance record would be challenged in today's environmental- compliance sensitised world[127].

[126] ISO14031, 1999
[127] Zadek, S., et al. 1997, p.39

The fact that 'stakeholder' indicators are not suitable for comparability among firms should not undermine their value and drive companies to refuse from listening to their audience. These indicators are especially crucial within an absence of internationally agreed indicators for corporate reporting. Environmental and social impacts are extremely diverse and often depend on a company's individual circumstances: activities, level of impact, stakeholder involvement, etc. This fact is recognised by the number of guidelines and standards for non-financial reports that are establishing mainly "generally applicable" indicators, leaving identification of sector specific indicators to companies and their stakeholders[128]. Companies should use the input of various stakeholders for developing performance indicators related to their activities. This method can be used as a supplementary to other methods of developing indicator.

Figure 10. Indicators selection for sustainability reporting



The right balance should be found here to align different approaches for selecting indicators for corporate reporting. In establishing performance indicators the major criteria are that the environmental and social implications of an organisation's aim are taken fully into account, key stakeholders are consulted and external comparisons over time are made. Thus, all sources should be used by the organisation for developing indicators. This practicable and potentially achievable mixture of current 'best practice' and additional mechanism to move current accounting to more accountability centred focus is presented in figure 10.

5.2.4 The advantages and disadvantages of stakeholder approach to indicators selection

Concluding all mentioned above and basing on the experience form the case study the following advantages and disadvantages of stakeholder engagement into indicator development process can be summarised:

Advantages

- Dialogue with stakeholders helps to identify areas where corporate performance needs improvements
- In the absence of established reporting standards this method might become a helpful tool in establishing meaningful indicators for corporate reporting
- The transparency engendered by the accountability can have the effect of bringing the organisation and the results of the actions of the organisation into closer conjunction.
- The method provides variety of views, opinions and a holistic perspective on sustainable performance

Disadvantages

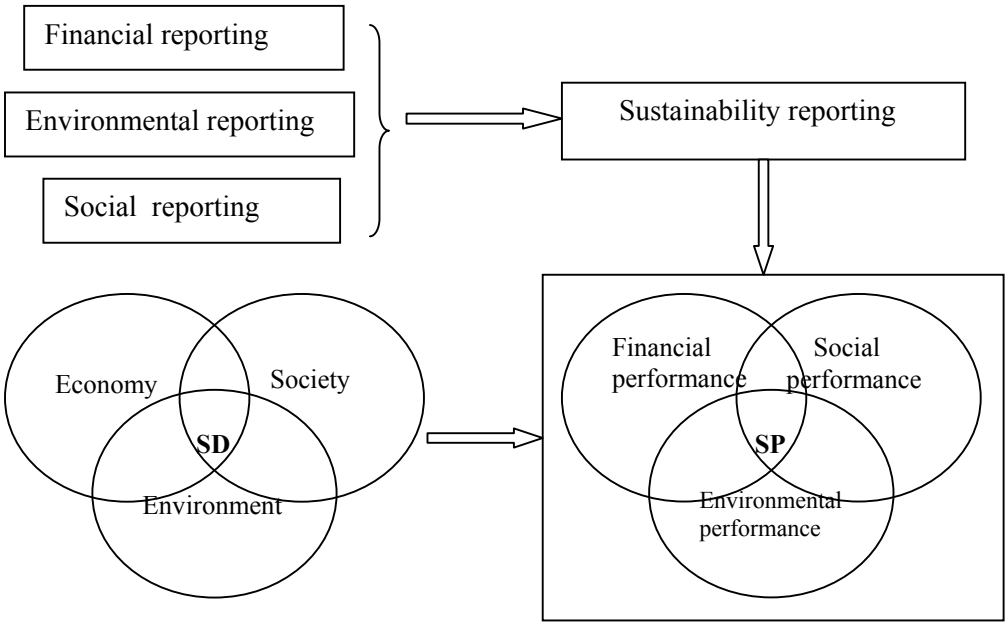
- Stakeholder requirements are changing
- Stakeholders are not always explicit in expressing their needs
- It is difficult to establish a real dialogue with some groups
- It is not easy to translate stakeholder requirements into meaningful and comparable indicators

[128] CRI, 2000, p. 9

5.3 CORPORATE REPORTING EVOLUTION AND FURTHER DEVELOPMENT OF INDICATORS

According to SustainAbility/UNEP "5-stage model" the reporting structure will gradually evolve towards a 'sustainability' approach, which will link the three elements of sustainability as they apply to an organisation.

Figure 11. Development of corporate sustainability reporting



A deeper look at the world reveals many relationships and component systems that are important to the operation and the viability of the total system, even though they are not immediately obvious. These issues are not fully defined. As a result, decisions about what to measure must be based on judgements about what is important, in the absence of full knowledge. These judgements differ according to the situation and because people use differing definitions of sustainable development. While it would sound more logical to agree on a definition before deciding what to measure, in practice both discussions are going on simultaneously. This reflects the real need for measurement tools, especially ones that help deal with uncertainty.

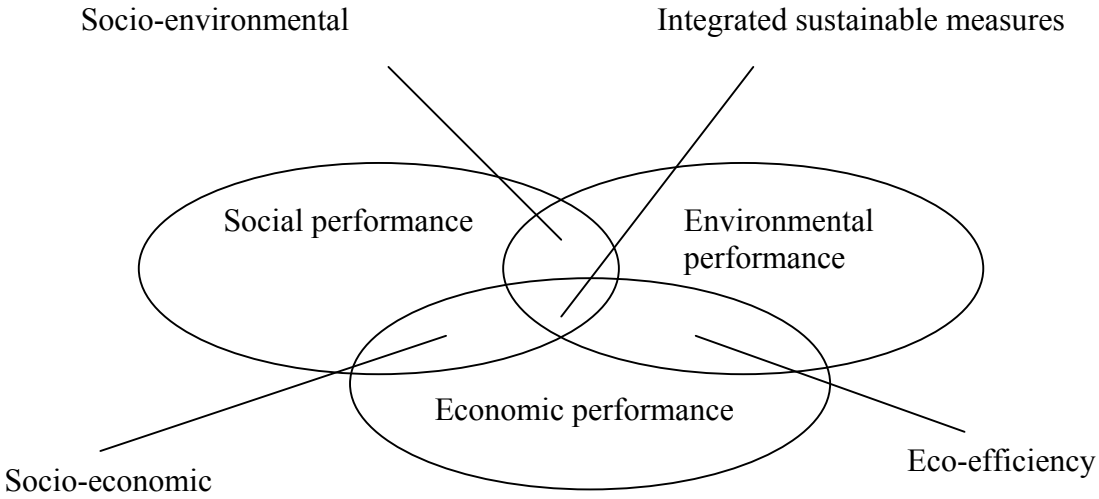
The interlinkages between society and environment are complex, and difficult to measure and report on in an integrated way. Air quality, water quality and materials used for production have an effect on health. They may also have an effect on stockholder profits. Health problems, whether due to general air quality problems or exposure to toxic materials, have an effect on worker productivity and contribute to the rising costs of health insurance. The question of fair price for the product reflects both economic and ethical imperatives. A firm's compliance with environmental legislation combines environmental and ethical issues, and accidents can damage the environment and people's health and lead to financial liability for an organisation. Isolating "social issues" as separate from the economic impact, which they have, and conversely isolating economic issues as if they had no social effect, misses the mark both managerially and intellectually[129].

[129] Freeman, 1984, p. 40

Complex problems of sustainable development require integrated or interlinked sets of indicators, or an aggregation of indicators themselves. Indicators of sustainability, then, must relate to the dynamic system in which we live.

The sustainability measurement and reporting, as well as the next generation of sustainable performance indicators should focus on critical elements and interconnections of performance areas. Such indicators should be designed for using in the long-term perspective and should be scientifically valid and economically feasible.

Figure 12. Sustainability measurement schematic[130]



Socio-environmental: effects of production discharges on human health, employee training and environmental protection measures;

Socio-economic: employment creation, equitable description of wealth, investment in employee education and corporate donations.

Environmental-economic (eco-efficiency): materials efficiency, energy efficiency, and economic value-added per environmental footprint (ex. reduction of waste or emissions generation contributes to financial savings).

In the circumstances of globalisation of the economy it is the market share and financial performance that will dominate other measures of success of the company. Whatever the market structure, therefore, success is measured first and foremost on principles of financial management, and environmental and ethical consideration are sidelined. However, analysts and investors will pay greater attention to environmental issues, when they are shown the connection between environmental strategies and margins, markets, and growth, and how these strategies can directly contribute to increased earnings and multiples[131]. This will inevitably require from the organisations incorporating of environmental dimensions into their accounting and financial systems. Full Cost Accounting (FCA) will be necessary in the case of measuring environmental costs and liabilities and establishing a link between environmental and financial performance.

[130] Bennet, M., James, P., 1999, p.477
[131] WBCSD, 1999, p.16

To count social values is an even more challenging issue. Although there is such a practice developed by some companies, counting social value is not commonly accepted. AB Volvo, for example, has developed a social accounting model capable of providing a preliminary account of the economic and social effects of personnel turnover and absenteeism. Scandia has regularly disclosed process of measuring of various forms of its capital, intellectual, environmental, social, financial, organisational, etc.

A systems view is, therefore, required for capturing and understanding essential relationships. This requires a process of aggregation and condensation of available information, and the directed search for missing information needed for a comprehensive description of the system[132]. There is a need for further development work in the field of SPIs that can lead to aggregated measures of the stability of the whole system. The SPIs need to be identified at least on an industry-based basis. Companies have started to develop such indicators by themselves (eco-efficiency matrices, measurements of social capital or stakeholder value, mentioned above), but they need to be supported. In this sense stakeholder views might greatly contribute to the future development of SPIs. The development of sustainable performance indicators would likely be based on a variety of views and opinions, and would require co-operation of many actors. This development could be achieved by combining, for instance, environmental and financial data, environmental performance indicators with indicators of environmental and human health developed on local or national level. Thus, a more holistic perspective will be needed and this can be ensured by contribution of all interested parties.

6 CONCLUSION

Whatever is the form and content of reporting one of the main purposes of it is to improve the relationships between the interested parties. Many companies have established relationships with their stakeholders. However, often this dialogue serves only for receiving a feedback on corporate activities. Stakeholders should be identified and involved in the process from the beginning, before a company decides what kind of information on its performance to disclose. A variety of views and opinions might be very useful in identifying improvement targets in corporate performance and indicators for reporting. Instead of being a treat to organisational performance, stakeholders should become partners of the firms that are willing to communicate on a new level. Any approach to monitoring and measuring corporate performance must be open to a generally flexible application.

Convergence of various stakeholder opinions on the desired content and quality of sustainability reporting can contribute greatly to the status and value of this communication instrument, both for its producers and its users. Although the method of stakeholder involvement into the indicator selection process has some deficiencies, the acknowledgement of the existence of differentiated goals, opinions and views could enhance the positive outcomes of stakeholder participation and could contribute to the development of indicators that would reflect interests of corporations, stakeholders, and society.

[132] IISD; Indicators for Sustainable development; Balaton Group

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DJSGI; http://www.sustainability-index.com/
ISEA, http://www.accountability.org.uk/B1.htm
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MORI Corporate Social Responsibility research, http://www.mori.com/
New Economic Foundation, http://www.neweconomics.org/main/work/
Sustainability Council http://monticello.avenue.gen.va.us/Gov/TJPDC/sustain.html
The Global Business Responsibility Resource Centre http://www.bsr.org/resourcecenter/index.html
The IISD: http://iisd.ca/measure/faqcriteria.htm

Appendix 1. Questionnaire and interviews

Interviews:	**Interviews Questionnaire**
Sydkraft AB ***Information department:*** Stieg Claesson; Johan Aspegren ***Sales & Marketing dep.:*** Ulrika Bergström, Andreas Bergman, ***Environment/R&D dep.:*** Rolf Henriksson, Maria Suner ***Personnel dep.:*** Per-Åke Dahlström, Berit Andersson ***Risk Manager:*** Bengt Svensson **Sydkraft ServicePartner AB** Agneta Hansson: consultant (information dep.) **Sydkraft Energy Trading** Ronnie Dahlberg **Sydgas** Göran Tillberg **Sydkraft Elnät Syd AB** Bengt Martinsson **Swedbank:** Per Andersson ArosMaizels Equity Research: Johan Sivander **Folksam Insurance company:** Jesper Nilsson, Jenny von Bahr **Vattenfall Naturgas:** Ulaf Ivalu, **MalmöStad:** Ilmar Reepalu, Maria Kellerman **Miljöförvaltningen:** Lars Norpen, Ulf Imander **Novo Nordisk** (Denmark): Peter Tang **BirkaEnergi:** Lars Garpås **LundsEnergi:** Stieg Brozen **Industriförbundet:** Jöran Nuren, Ingerd Strömdahl **STEM:** Gudrun Knutsson **NGO**- Greenpeace - Tarjei Haaland **Naturskyddsföreningen i Skåne** Christer Neideman **The International Institute for Sustainable Development** – Peter Hardi **KPMG** (Sweden) – Lars-Olle Larsson	1. Name of the person (company), position. 2. When forming an opinion about potential company you are dealing with which criteria do you usually use? (can you rank the importance of each for your assessing company's performance, competitiveness, etc.: high, average, low) - financial performance - environmental performance - social (ethical) performance 3. Do you (your organisation) have any specific requirements or demands to environmental activities of energy company, such as Sydkraft? 4. If you use environmental or social performance information what type of information do you usually use and why? 5. What kind of information on these activities is the most useful for you (your organisation)? 6. In your assessment of companies, do you in any way account for the potential benefits from good environmental and/or ethical performance? If so, what information do you use? 7. Are there any specific performance indicators you use to assess and compare companies? If yes, could you, please, specify? 8. Do you use specific environmental and/or social indicators for energy sector? 9. How do you perceive the communication process between your organisation and Sydkraft? (one-way communication; dialogue) 10. In what degree does environmental and/or social information provided by Sydkraft satisfy your interests? 11. Are there any specific indicators (environmental and social) you would like to see but are not communicated by the company? 12. What sources of information do you usually use to get information about the company you are dealing with? (corporate reports, meetings, web-sides, etc.) 13. Do you usually need extra environmental and social information from Sydkraft? If yes, how do you usually get this information?

Appendix 2. European and Swedish legislative documents

EU regulations:	Swedish regulations:
Environmental regulations	
Kyoto Protocol (reduction of greenhouse gas emissions by 8% by 2012)	
EU Electricity Market Directive "on collective rules for the common market for electricity" (December 1996).	Ellag (1997:857) The new Swedish Electricity Act
Ffifth Environmental Acton Programme "Towards Sustainability"n (1993:EC)	15 Swedish National Environmental Quality Objectives (1997).
647/2000/EC Directive on energy efficiency (SAVE)	New energy policy guidelines (June 1997); Nuclear Power Decommissioning Act (December 1997)
	Miljöbalk (1998:808) Swedish Environmental Code
646/2000/EC Directive on promotion of renewable energy sources	Spring Economic Bill (1997) with three objectives: protection of the environment, efficient use of energy and other natural resources
1999/25/Euratom: relating to the nuclear safety and safe transportation of radioactive materials	
Environmental Information disclosure:	
Free access to Environmental Information and Data (Council Directive 90/313/EEC), Agenda 21, Chapter 40	Årsredovisningslag (1995:1554). Law of accountants)
Social regulations	
Preamble to the Agreement o the European Economic Area (1992) and Treaty on European Union (1992, Article 129 A, EEC) on consumer protection	Konsumenttjänstlag (1985:716) Produktsäkerhetslag (1988:1604) Konsumentköplag (1990:932) Produktansvarslag (1992:18) Konsumentkreditlag (1992:830) Marknadsföringslag (1995:450)
European Works Council Directive (1995:EU)	Arbetsmiljölag 1977:1160 (health&safety in a workplace)
OECD guidelines for Multinational enterprise (27 June 2000)	
Universal Declaration of Human Rights ILO Conventions relating to labour rights (1949-1999).	Lag (1999:130) om åtgärder mot etnisk diskriminering i arbetslivet Lag (1999:132) om förbud mot diskriminering i arbetslivet av personer med funktionshinder Lag (1999:133) om förbud mot diskriminering på grund av sexuell läggning
Council directive 75/117/EEC on the approximation of the law of the member states relating to the application of the principle of equal opportunity for men and women	Jämställdhetslag (1991:433)- Law on Equal Opportunity Equal opportunity ombudsman
Council directive 93/104/EC on organisation of working time	Arbetstidslag (1982:673)
Council directive 96/34/EC on agreement on parental leave	Föräldraledighetslag (1995:584)
Council directive 97/80/EC on the burden of proof in cases of discrimination based on sex	Jämställdhetslag (1991:433) Lag (1999:133) om förbud mot diskriminering på grund av sexuell läggning
EU Social Action Programme (1998- 2000)	
Social Information Disclosure:	
Companies Act 1989, s234 (UK) mandatory disclosure of social information (ex. charitable donations, employment data, employee share ownership schemes); Bilan Social (France)- mandatory employee reporting	