Environmental disclosures through financial reporting in Norway: Does it make a difference?

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by

Dr. Audun Ruud, Senior Research Fellow
Program for Research and Documentation for a Sustainable Society – ProSus
Center for Development and the Environment – SUM
University of Oslo
P.O.Box 1116 Blindern
0317 OSLO
Norway
e-mail: audun.ruud@prosus.uio.no

Abstract:

As the first country world-wide, Norway requires the Boards of Directors of all commercial firms subject to external auditing requirements to disclose specified environmental data on activities that may cause “a not insignificant impact on the external environment”. The intention of the Norwegian Accounting Act of 1998 is to extend the scope of environmental reporting from plant-specific issues to the life cycle of the products that are produced by the particular firm. This paper investigates whether this financial legislation is changing corporate environmental disclosures in Norway. Given how recent the act is, few conclusions can be drawn. Nonetheless, we have strong indications that the mandatory financial reporting requirements do not make any difference for the majority of firms operating in Norway.

These environmental reporting requirements are neither enforced by the Norwegian authorities nor financial auditors. Consequently, firms are more or less left to themselves to decide whether they want to comply, and the study finds that 65 percent of the firms surveyed fail to respond to the extended environmental reporting requirements. Consequently, the Board of Directors of these firms de facto violates the legal requests specified in accordance with §3-3, fourth section of the Accounting Act of 1998. This said, many firms have still done significant efforts. In this paper nine Norwegian firms are identified as “examples to be followed”.

Still the large majority of the firms - particularly pollution intensive industries - remain focussed on issues that reflect the traditional plant specific environmental reporting required by the state pollution control board. Consequently, firms are missing the total environmental perspective. Opportunities generated by a more thorough knowledge of current and future commercial activities can also be lost. Most relevant, however, is the fact that as long as firms do not extend their concerns into the life cycle of the products that are produced by the particular firm, the contribution of the Accounting Act to strengthened corporate environmental disclosures is not at all assured.

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1. Introduction

In 1998 Norway introduced environmental reporting requirements as part of its financial legislation. The issues to be reported extend far beyond the mandatory reporting schemes defined by the Pollution Control Act of 1981 and included in the Norwegian Pollutants Release and Transfer Register (PRTR).[1] Like the Toxic Release Inventory (TRI) of the United States, the PRTR requires managers of hazardous manufacturing plants to submit specific environmental emission data to the environmental authorities. In the US, the TRI, functioning as a right-to-know provision, is considered to be an effective means of reducing toxic pollution

The environmental reporting requirements pursuant to the Norwegian Accounting Act of 1998 extend the focus beyond the concerns of the TRI and the PRTR. In the fourth section of §3-3 referring to the annual report from the Board of Directors, the Accounting Act states: "Information concerning current activities including production inputs and products that may cause a not insignificant impact on the external environment shall be provided. The actual and potential environmental impacts of particular activities should be specified and the firm should specify efforts initiated to eliminate or reduce negative environmental impacts."[2] Through this provision, the Norwegian Accounting Act requires every commercial firm - whether or not the pollution control authorities have issued it a discharge permit requiring it to submit data to the PRTR - to provide information concerning production inputs, production activities, and final products that may cause a significant impact on the external environmental. This more wide-ranging legislation applies to a significantly larger number of commercial firms than have been affected before, requiring them to become more environmentally conscious. Each Board of Directors must include this environmental information in the company's annual report presented to the financial community.

Norway is the first country world-wide to introduce such a demanding environmental reporting requirement as part of its financial legislation.[3] Firm-specific emission data are

[1] Further details of the design and content of the Norwegian Polluntants and Transfer register can be found at: http://www.sft.no/bmi/main/english.asp
[2] My own translation. The original text is only available in Norwegian.
[3] According to Bjørn Sveen, the environmental director of the Confederation of Norwegian Business and Industries NHO, Sweden is considering a similar request, but has decided to limit the reporting requirements to pollution intensive firms having a discharge permit granted from the pollution control board.

easily available from the PRTR,[4] but this paper questions whether Norwegian firms and particularly their Board of Directors, are responding to the 1998 requirements. An increasing number of companies are producing environmental reports some of which seem at least partly to be influenced by the environmental legislation and the reporting requirements towards pollution-intensive industries. This paper is questioning the effectiveness and validity of the financial requirement that require corporate environmental reporting beyond traditional pollution control issues. Does the §3-3, fourth section of the Accounting Act make a difference? To answer this question the paper draws on a survey conducted among 103 firms operating in Norway.

2. Environmental data in financial reporting: beyond plant specific issues

In 1997, based on an official Norwegian report published in 1995, the government proposed a revised accounting act for commercial firms (NOU 1995:30). The original legislation-- the Accounting Act of 1977--merely requested Boards of Directors to include a vague and not very informative environmental statement. These statements were seldom of any use to concerned shareholders.[5] Several argued that more specific environmental disclosures ought to be presented to the financial community, a measure that even had the support of the Confederation of Norwegian Business and Industries (NHO).[6]

The legislative text proposal for a revised Accounting Act presented by the Ministry of Finance in 1997, suggested that the Boards of Directors of firms that directly polluted the external environment should disclose more information specific to combating problems at specific plant sites. Thus, the original proposal in the revised Accounting Act did not deviate significantly from the focus of the Pollution Control Act, which required emission reporting at the plant level. Any legal proposal, however, requires public input. Concerned stakeholders may comment upon a proposal before it is debated and passed in the Norwegian legislative assembly, the Stortinget. This “hearing process” is a democratic right defined in the Norwegian constitution. More than 50 organizations participated in the hearing process for the new accounting act. However, only the Ministry of Justice and Norsk Siviløkonom Forening (NSF), a professional body for those having the academic degree Master of Business Administration (MBA) in Norway, raised objections to the proposed revision of the

[4] According to Senior Engineer Harald Sørby of the State Pollution Control Board (SFT) few Norwegian firms are not complying with the mandatory reporting requirements specified by SFT in accordance with the Pollution Control Act.
[5] According to Senior Consultant Terje Kronen of Pricewaterhouse Coopers, Norway
[6] According to Bjørn Sveen, NHO op.cit

environmental reporting requirements. The legal department of the Ministry of Justice, headed by professor of environmental law Inge Lorange Backer, argued that the proposed environmental reporting requirement was too narrow. Citing the “cradle-to grave” principle the Ministry of Justice suggested that corporate environmental reporting requirements ought to cover any commercial firm and reflect inputs as well as output of its production processes, including the complete life-cycle of the product it manufactures. The “cradle-to-grave” principle later came to be known as “cradle-to-cradle”, since the proposal focused largely on reuse rather than final disposal (OECD 1998).

It is important to keep in mind that the objection made by the Ministry of Justice, was co-ordinated by the scholar most familiar with the Pollution Control Act and its limited relevance to life-cycle concerns. The NSF agreed with the Department of Justice that it was necessary to gain a clearer picture of the company’s environmental impacts. Corporate environmental concerns ought to be extended. If Boards of Directors were to disclose in detail the environmental consequences of the life-cycle of their products, environmental risks and liabilities would be more easily discovered. Beyond the risk minimizing concerns, it was even a hope that an extended reporting requirement could create new opportunities and move environmental issues into the core of the corporate decision-making process.[7]

The Ministry of Finance responsible for the law proposal did not have any particular knowledge or experience of environmental reporting. Thus, it asked the Ministry of Environment to suggest a reformulation of the legal text as well as to propose the accounting standards that would provide the environmental data legally required. The Ministry of Environment on the contrary had significant reporting experience pursuant to the Pollution Control Act of 1981. However, its expertise focused on plant-specific emission data - as illustrated with the PRTR. The cradle-to-grave consequences the Ministry of Justice wanted to reveal, required an approach geared to the entire life cycle of a firm’s products. While there is a considerable literature on life-cycle analysis for environmental management and policy referring to life-cycle analysis (Welford 1996, Roome 1998), as well as limited precedent for producers’ environmental responsibility extending into the consumption stage,[8] mandatory corporate reporting of consumption patterns had never been requested. Nevertheless, within a

[7] This argument has subsequently been underlined by Sigve Aasebø, GRIP - The Norwegian foundation for sustainable production and consumption. Aasebø is responsible for GRIP’s work related to finance and environmental reporting, and GRIP has collaborated with ProSus on the survey referred to in this paper.
[8] In Norway the Act controlling product and consumer services (Lov om kontroll med produkter og forbrukertjenester -produktkontrolloven) was revised in 2000 with an explicit aim to prevent health hazards and environmental impacts on eco-systems. As further stated in § 1, this act is further implemented to promote more

few weeks the Ministry of Environment presented a reformulated text which enabled a redrafting of the legal proposal that was then subsequently passed by the Norwegian Parliament. This new legislation represents a radical shift in the focus of legally driven corporate environmental disclosures in Norway, (as reflected in §3-3, fourth section)

2.1. Some concerns related to the extended reporting requirements

According to the revised Accounting Act of 1998, the mandatory statement from each board of directors must include a variety of issues.[9] As amended to reflect suggestions made during the hearing process, the law requests each board to report "current activities including production inputs and products that may cause a not insignificant impact on the external environment". While these new standards were widely supported, some harbor concerns. One controversy is related to the formulation in the legal text itself. The NHO and some branch organisations have expressed a concern about the clause; "… that may cause a not insignificant impact on the external environment…" According to the NHO this statement may create confusion, as it differs from equivalent legal formulations in other countries. Usually, as in the Norwegian Pollution Control Act, and environmental legislation in other countries like Sweden and Germany, a reference is made to "significant [environmental] impacts". Those formulating the text responded that the phrase "a not insignificant impact" more easily facilitates the adoption of a product life-cycle perspective.[10]

The business community is also concerned that making environmental disclosures an explicit and specified part of the statement of board of directors, will make the focus on environmental issues in the annual report disproportionate compared to other required financial issues. Other countries are not asking for similar disclosures. Actually, very few countries at all are requesting firms to include environmental disclosures in their annual reporting to the financial market.[11] The new accounting law will render complying Norwegian firms to disclose in their annual reports substantially more environmental information compared to the reports of foreign competitors. Some argue that foreign

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efficient energy use in products. For further information in Norwegian: http://www.lovdata.no/all/tl-19760611-079-0.html#1

[9] The section § 3-3 of the Accounting Act is specifying the content of the annual statement from the Board, including; 1. Type of business and localization, 2. whether business is active, 3. working environment, 4. **external environment**, 5 reference to financial results, 6. future prospects and, 7. the use of financial surplus.

[10] According to Hege Andenæs, Ministry of the Environment, op.cit.

[11] According to Bjørn Sveen, the environmental director of NHO.

investors and other external concerned parties may get the impression that Norwegian firms have more environmental problems than their “non-disclosing” competitors. [12]

The counterargument proposed by the Ministry of Justice and NSF during the legislative “hearing process” is that all relevant environmental concerns should be documented and reported. Firms operating in the same market as Norwegian companies complying with the law on environmental disclosure may be neglecting the impacts of their operations. Furthermore, proponents of ecological modernisation contend that the broadened focus of environmental reporting will not necessarily create new expenditures, but may, in fact, enhance profits. By producing and presenting a more thorough and valid picture of all relevant environmental concerns, firms with good records will gain the goodwill and patronage of customers and other environmentally aware stakeholders. Other firms may discover opportunities to improve their environmental and economic performance.

2.2 The legal strength of the new environmental reporting requirements

The Accounting Act was passed in 1998 and the specific standards officially implemented later that year. All commercial firms and certified auditors were requested to follow the new reporting requirements as per the financial year 1999. While these legislative measures represent a significant environmental achievement, the legal strength of these reporting requirements remains in question. The Act quite clearly requires that corporate accounts must be audited by a certified external auditor. The law specifies how the accounts are set up, and the Auditing and Accountants Act of 1999 further identifies what is to be audited. A careful reading of this legal text, however, reveals that certain parts of the statement from a board of directors are explicitly exempted from the auditors’ concern and responsibility. This includes the fourth section of §3-3 in the Accounting Act. According to the §5-1 of the Auditing and Accountants Act, the auditor shall only consider the information included in the statement from the Board of Directors related to financial results, conditions for continued operations, and the suggested use of corporate profits or coverage of loss.

The reporting requirements of the Accounting Act are clear; those violating the requirements may incur fines and imprisonment up to three years. However, the Auditing and Accountants Act of 1999 allows certified auditors to neglect whether firms actually are complying with the environmental reporting requirements requested in accordance with the Accounting Act of 1998. Thus, while reporting standards have been formulated, the law does not establish an authoritative body to control whether the firms actually are complying. The

[12] Stated by Bjørn Sveen, op.cit

interpretation of what is to be disclosed, in what manner, and whether this should be part of the annual statement from the Board of Directors, is left to the reporting firm and its shareholders.

The Ministry of Finance, responsible for enforcing the intentions of both Acts, has not expressed any particular concern about this anomaly. The only reference is a statement in the legal text that the intentions and efficacy of the laws shall be evaluated when the annual reports of 2001 have been presented.[13] In sum, the legal strength of the "mandatory" reporting requirement is apparently weak. Nonetheless, the environmental reporting requirements defined in the Accounting Act of 1998 remain clear and specific. The question is whether the firms themselves, given the loopholes in the auditing procedures, are complying with these requirements or not?

3. Are Norwegian firms complying with the mandatory reporting requirements? [14]

The Ministry of Finance has made no efforts to control whether firms are complying with mandatory environmental reporting requirements.[15] Others, however, have made efforts of documenting environmental reporting procedures among Norwegian firms. During the summer of 2000 the NHO commissioned a study on the 1999 environmental reporting practices of 219 Norwegian firms. [16] The report is unpublished but it documents that 21 percent of the 219 firms did not include environmental information or references at all in their annual reports. However, 40,6 percent had published a separate environmental report. The study indicated that merely eight of the total of 219 firms complied fully with the specified reporting standards of the Accounting Act.[17]

3.1 Financial requirements: Does it make a difference?

The study commissioned by the NHO focussed mainly on corporate environmental reporting procedures as such. This is not the concern of the Accounting Act. The explicit objective is to

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[13] Stated by Espen Knudsen of the Ministry of Finance, on August 10, 2001. Knudsen, who later left the Ministry of Finance, was partly responsible for the law making procedures leading up to the presentation of the Accounting Act proposal for the legislative assembly in 1998.

[14] The survey of 103 firms referred to in the this paper has been conducted by Olav Mosvold Larsen, a research assistant at ProSus.

[15] According to Espen Knudsen, op.cit. Requests made to the Ministry of Finance have not been responded to, indicating that the Ministry's concern remains weak.

[16] The report was prepared by a master student at the Norwegian School of Management and done as part of the current activities of their Centre for Environmental Management, co-ordinated by Professor Bjarne Ytterhus.

[17] The study analysed compliance as related to the following four issues: 1. environmental impacts caused by production or the use of energy or raw materials, 2 environmental impacts caused by the use of products, 3. potential environmental impacts and 4. planned environmental projects or initiatives. These four issues deviate slightly from the standards referred to in the legislation.

strengthen the environmental concerns of the Board of Directors – specified in §3-3 - through mandatory reporting on external environmental issues caused by the commercial activities throughout the financial year. This paper questions whether this legal requirement makes a difference for corporate environmental disclosures included in the annual report signed by the Board of Directors. To answer this question a survey was conducted of the largest firms operating in Norway.[18] The term "largest" is understood as those firms having the largest turnover in the year 2000. Beyond the inclusion of the largest firms in the sample, the most pollution-intensive firms were also studied. This includes even smaller firms, but all these firms are requested to submit specific environmental reports on plant specific environmental measures. Some of the largest firms are involved in banking, financial services and accounting. However, we also included a number of these firms beyond the largest one, to verify whether those asked to fund or to assist firms in strengthening environmental clean-ups themselves are complying with the legal reporting requirements.

A total of 103 firms operating in Norway are included in our survey. The total universe included in the initial requests was 130 firms. Of these 11 firms are merely operating off-shore with no reporting requirements in Norway. 3 more firms are affiliates to other firms included the top 100 list and no separate statement is made as their activities are included in the annual reporting from a joint Board of Directors. Still, several of the firms included are subsidiaries of other corporations included in our sample, and some of these firms are even evaluated by us as having disseminated satisfactory reports. Further 3 of the firms to submit information, refused to give any information and rather referred to the data base compiled by the authorities.[19] Further, 10 of the firms have either sent the wrong report or not answered our request. Consequently, out of the total sample of 130, a total of 27 firms are lacking. Still the survey includes the major firms operating in Norway, and we will argue that the conclusions drawn from our sample can be treated as a strong and valid indication on how the Board of Directors of firms operating in Norway, respond to the environmental reporting requirements specified in accordance with the Accounting Act of 1998.

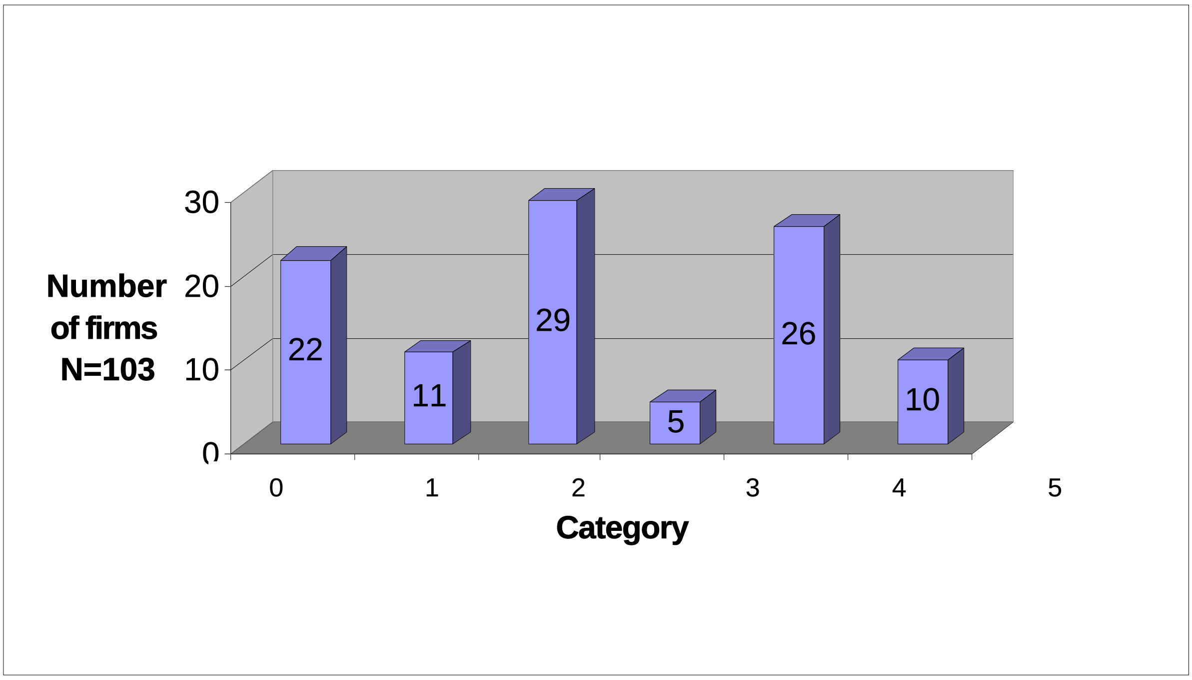
The environmental reporting performance of individual firms included in the survey has been classified in the following six categories;

Category 0: Missing reports,
Category 1: Very strong potential for improvements,

[18] The selection of firms was made in accordance with a classification provided by the Norwegian financial newspaper Dagens Næringsliv as of September 13, 2000.
[19] The Brønnøysund Register Centre is a government body under the Norwegian Ministry of Trade and Industry, and consists of several different national registers. These registers contain information and key data about more than 280 000 business enterprises . Details on the register can be found at: http://www.brreg.no/english/

Category 2: Strong potential for improvements,
Category 3: wrong sender,
Category 4: Satisfactory,
Category 5: Examples to be followed.

Still these six categories are not mutually exclusive, and the findings shown in figure are based on subjective judgment and doubts. Further, the classification is difficult as we have been forced to accommodate differences in type and diversity of business into these six categories.



The total number of firms included in the survey is 103. Among these as many as 67 firms representing more than 65 per cent of the sample, are grouped among the categories 0 through 3. According to our interpretation of the legal requirements, none of these 67 firms are fulfilling the reporting requirements. Consequently, the Board of Directors of these firms are violating the Accounting Act of 1998. Still there are differences among the sample. The degree of "violators" varies significantly from those bluntly neglecting the legal requirements to those whom we believe are not comprehending the legal text. The major finding, nevertheless, is the fact that as per the financial year 2000 less than 35 percent of the firms surveyed did not comply with the 1998 legal requirements.

Category 0: Missing reports

As indicated, this category includes firm that does not refer to external environmental issues at all in the annual report. According to the survey a total of 22 firms were included in this category. These firms do not refer to any negative environmental impacts caused by their corporate/commercial activities at all. Among the 22 firms as many as 14 merely included a statement that reflects the previous but obsolete reporting requirement defined in the Accounting Act of 1977. An environmental statement is made; that the firm is not polluting the external environment, but any reporting is missing. Among these 14 firms, 2 are actually among the potentially most pollution-intensive firms in Norway, and a discharge permit has been granted by the State pollution control board. An explanation for the missing reports may be that these two units still are at the planning stage. However, the legal reporting requirements also refer to potential environmental impacts. More importantly, the requirements demand the firm to specify the remedies taken or planned to combat negative impacts. This is not at all provided, as the report is missing. One of these cases includes a firm that plans to set up a gas cracker to produce electricity, a production which will generate substantial quantities of CO_2 emissions!

Some of the other firms included in this category, have modified the statements to accommodate the requirements of the Accounting Act of 1998. Still, only a limited statement is made – more or less equivalent to the traditional statement of not polluting the external environment. One example is a successful firm trading with cars and other vehicles. It is difficult to understand that such an activity does not trigger any negative environmental impacts insofar as the use of these cars sold by the thousands, generate a variety of hazardous atmospheric pollutants. Consequently, this firm as 21 others is categorised in this lowest category due to the lack of any environmental concerns expressed by their Board of Directors concerning relevant production and/or consumption patterns.

Category 1: Very strong potential for improvements

According to the survey a total of 11 firms were included in category 1. This refers to firms that do not make any thorough reference to the environmental challenges and/or do not substantiate negative impacts caused by their commercial activities. In contrast to category 0, these firms have acknowledged that negative impacts are created. However, the specific reporting on particular activities is missing. Among the 11 firms included, two are involved in off-shore oil and gas activities. None of these two have the operational responsibility, but as partners in projects involving extensive involvements both in hazardous exploration, production and transport activities, we question whether these activities do not demand any environmental reporting from the Board of Directors.

The Board of Directors of another firm involved in the import of fruits and vegetables, reports that “the firm has an active environmental policy and works for the reduction in the use of non-renewable resources”. As an importing firm, however, there are significant environmental impacts caused by transports of the goods imported, as well as the production and treatment of packaging materials. Despite the statements from the Board of Directors, this is not reported.

One pollution-intensive firm is also included in category 1. The Board of Directors refers to the discharge permit issued by the state pollution control board. Besides, references are made to the instalment of new measurement equipment to monitor atmospheric emissions. However, no information is granted on actual emissions generated by current production activities. Consequently, this firm as the other 10 has a very strong potential for improvement.

Category 2: Strong potential for improvement

According to our survey a total of 29 firms were categorised as having a strong potential for improvement. This refers to firms that make significant attempts of dealing with the environmental challenges as well as the specific external impacts caused by their corporate activities. It is still a strong potential for improvement as the corporate reporting made by the Board of Directors remains selective, fragmented and limited to only a portion of the total range of actual or potential environmental concerns associated with the firm in question.

Based on thorough reading of various annual reports written by the Board of Directors of these 29 firms, it is our impression that efforts are made to strengthen environmental disclosures. Still, however, there is work to be done. Among these firms, there are some of the potentially most polluting firms operating in Norway. If we should point to a common thread of what is missing in the environmental disclosures provided by the firms included in category two, none of the firms have disseminated any details on energy consumption and transport use.

Category 3: wrong sender

Only 5 of the firms surveyed were included in this category; wrong sender. We term it wrong sender as these firms have produced rather impressive environmental reports. However, this dissemination is not referred to by the Board of Directors in their annual report. Consequently, the firms are not complying with the legal requirements. These firms are making thorough efforts of strengthening environmental disclosures to the public. However, to comply with the legal requirements of the Accounting Act, these disclosures much be supported by the Board of Directors. Still these five firms are asking the wrong department – normally the environmental director or CEO to sign the environmental report. This is the wrong sender. As long as it is not supported by the Board of Directors, these firms will continue to violate the legal requirements specified in accordance with §3-3, fourth section of the Accounting Act.

Category 4: Satisfactory

According to our survey a total of 26 firms are considered to have done satisfactory environmental reporting in accordance with the requirements of the Accounting Act. This is the judgement because specific environmental references are made by the Board and/or the Board acknowledges the environmental challenges referred to in separate environmental reports. Still even among these firms – as with the case of firms being classified in category 2 - there are a lot of examples of “work in progress”. In contrast to the fragmented and unsatisfactory reporting examples among the firm included in category 2, however, these 26 firms of category 4 - being considered to have produced satisfactory efforts - are presenting more thorough and inclusive reports. The majority of these firms are pollution-intensive having discharge permits and they are already asked by the environmental authorities to submit an annual environmental report on plant specific measures. However, 8 firms are involved in trade and servicing activities. Still, we get a clear impression that strong environmental commitments are prevailing concerning the need to change current production and consumption patterns towards a more sustainable direction. One example is a commitment to strengthen waste management and recycling.

Category 5: Examples to be followed

10 firms were found to comply with the intention of the reporting requirements specified in accordance with the Accounting Act of 1998:

Examples to be followed:

Braathens,	http://www.braathens.no
COOP,	http://www.coop.no
Møllergruppen,	http://www.moller.no
NOAH,	http://www.noah.no
NSB,	http://nsb.no
Statoil,	http://www.statoil.no
Søral,	http://soral.no
Telenor,	http://www.telenor.no
Tine,	http://www.tine.no
Wilh Wilhelmsen	http://www.wilh-wilhelmsen.com

Among these firms there are varieties that can be understood beyond the differences generated by sector specific characteristics. However, in general all the ten firms have made clear environmental statement concerning their responsibilities and concerns as well as the specific environmental impacts. This is reported to an extent that goes well beyond the average of their respective sector. Some are even referring to eco-efficiency and sustainable development as illustrated with the case of Telenor to be presented subsequently. Despite the variety of sectors being represented in the best category, it is interesting to note that all the firms are Norwegian with corporate headquarters located in Norway.

3.2 What is actually reported; the case of Telenor?

Telenor is Norway's leading distributor of information, knowledge and entertainment through a broad range of modern communications services.[20] To illustrate one of the firms included in the best category of "examples to be follow", let me refer what the Board of Telenor's Directors have written in their annual report of 2000 under the heading "external environment":

> " Telenor's energy consumption in 2000 was 676 GWh. Electricity accounted for 73% of this consumption. Around 43% of Telenors energy consumption is for the operation of buildings, while 32% of the energy is for operation of the network and 12% is for the motor vehicle fleet. The remaining 13% is related to the employees' travel activities. The total discharge of CO2 was 46,500 tonnes, which represents 2,3kg per full-time equivalent employee, while the discharge of Nox was 152 tonnes, which represents 7,4kg per full-time employee.

[20] For further details; http://www.telenor.com/

> ICT[21] products/services have certain environmental disadvantages, such as a rapidly growing demand for energy and raw materials. In addition, inadequate sorting/recycling may be a problem. ICT services have, however, the potential of becoming a major contributor to the creation of a sustainable society in spite of the ICT industries' environmental challenges. It is assumed that the use of Telenor's core products can made a positive contribution to dematerialize a reduction in transportation and a decrease in energy consumption.
>
> A special environmental report for 2000 has been published, which will be available on the Internet only"

More specific information is provided in the environmental report that is referred to by the Board, but let us relate the information granted to the specific standards accompanying the legal text of §3-3, fourth sector.[22] The Board of Telenor has specified the type and quantity of energy consumed. Further, Telenor has specified the type and quantity of atmospheric emissions such as CO_2 and NO_x. Besides, these emissions are calculated per full-time employee. This is promising as it facilitates a specification of the relative change in Telenor's eco-efficiency (OECD 1998). However, still there are problems to understand to what extent the total environmental load caused by Telenor's commercial activities, is promoting a decoupling of environmental impacts from economic growth. Reference is only made to man-hours rather than total value-added. Waste generated by customers' changing or up-grading of their hard-ware could also have been specified more thoroughly. This said, it is worthwhile referring to the following statement; *"ICT products/services have certain environmental disadvantages, such as a rapidly growing demand for energy and raw materials. In addition, inadequate sorting/recycling may be a problem".* Among the firms studied, including some of those categorized as examples to be followed, very few are explicitly referring to disadvantages related to the products or services that are sold. What makes this statement particularly interesting is the extended concern into inadequate recycling. This clearly confirms the extended horizon expressed by the Board of Telenor's Directors of problematizing environmental challenges beyond plant specific issues. The calculation of CO_2 emissions includes activities that go well beyond traditional plant specific concerns, and the environmental disclosures provided by Telenor is definitely an example to be followed.

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[21] ICT stands for **I**nformation and **C**ommunication **T**echnologies

[22] The standards supported by the Norwegian Accounting Foundation - founded in 1989 with the purpose of developing accounting standards as well as interpreting disputed issues related to implemented accounting standards - are as follows: (1) Type and quantity of energy and raw materials consumed
(2) Type and quantity of discharges and emissions, also including noise, dust and vibrations
(3) Type and quantity of waste generated and deposited and the character of disposal sites and actual or potential contamination or run-offs.
(4) The risk of accident caused by current activities of the firm
(5) Environmental loads caused by transportation of production input and output

5. Is the business community complying with the reporting requirements of the Accounting Act?

The aim of the Accounting Act is to move firms' environmental focus beyond emission control. Telenor as some other firms are complying, but this paper indicates that the majority of firms operating in Norway still are not complying with the legal reporting requirements. The total number of firms included in the survey was 103. Among these as many as 67 firms representing more than 65 per cent of the sample are not complying. Ten firms were found to be examples to be followed. As an illustration, the report presented by Telenor's Board of Directors was presented. The statement is limited, but still impressive. Besides, explicit references are made to a separate environmental report that only is available on the Internet. NSB has also decided to disseminate the environmental report through the internet only. There are positive trends, but still there is a tendency even among some of the best cases that environmental reporting are limited to issue areas that represent win-win solutions for the firm in question.

Telenor acknowledges environmental disadvantages related to the growing use of information and communication technologies. However, in the same section the Board is referring to ICT as having; *"..the potential of becoming a major contributor to the creation of a sustainable society in spite of the ICT industries' environmental challenges. It is assumed that the use of Telenor's core products can made a positive contribution to dematerialize a reduction in transportation and a decrease in energy consumption"*. Perhaps such a statement can be explained by the simple fact that the environmental challenge of accepting tasks beyond traditional win-win reasoning, is not so much a challenge for ICT service providers like Telenor.

Selective reporting, however is to a much larger extent, a propensity among pollution intensive firms. This is the reason why many firms were classified within the second category. However, even among the best cases, there are examples of more selective reporting where disadvantages are ignored. This is particularly the case where win-lose situations (few financial gains from environmental efforts) are prevailing. One example is Sør Norge Aluminium (Søral). Telenor has calculated the CO2 emission per full-time employee, this is not made in the case of Søral.[23] During the 1980s Søral responded to traditional command and control measures, and hazardous atmospheric emissions like fluoride were reduced. The forthcoming environmental response even went beyond regulatory requirements. This was driven by perceived opportunities for enhanced financial gains through reduced expenditures on the use of raw materials through increased recycling. Thus, reduction in fluoride emissions created a win-win opportunity as the fluoride could be reused as a catalyst in the production process. Environmental improvements promoted the company's profits.

By the end of the 1980s economic instruments were perceived by the Norwegian government to be more appropriate policy instruments (Reitan 1998). However, with the current processing technology of using carbon as a reduction material, emissions of CO2 will grow proportionally to production volumes. A CO2 taxation would merely create additional costs and represent a win-lose scenario for the aluminium industry, and due to intensive lobbying some sectors - including aluminium firms like Søral - were exempted when the environmental taxes were introduced (Kasa 2000). Climate change issues and particularly efforts of reducing greenhouse gas emissions, are delicate for those manufacturers dependent on carbon as a reduction material. Challenges that do not represent win-win opportunities are often underreported or omitted from corporate environmental disclosures.

Still, Søral is an example to be followed. Among the pollution intensive industries in general, the picture is somewhat meager. Out of 25 firms studied, 15 are complying with the requirements and classified in the categories four or five. The reason for the compliance might be that these firms already are requested to submit an annual plant specific environmental report to the environmental authorities.[24] Perhaps even more important is the public access to this reporting.[25] Still, we conclude that even among these manufacturers complying with the legal requirements, an even broader approach could have been taken towards the inclusions of non-traditional sources of pollution generated.

Taken into account the requested environmental disclosures submitted to the environmental authorities, it is surprising that as many as 10 of the most pollution intensive firms did not comply with the reporting requirements specified in accordance with the Accounting Act of 1998. This is even stranger when we know that many of these firms do produce separate environmental reports.

Another surprising result of our survey is the fact that those firms actually controlling and verifying the quality of corporate environmental reports produced by other firms, do not

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[23] For further details see; http://www.soral.no/en/default.asp
[24] This report should include details in liquid discharges and atmospheric emissions, consumption of energy compared to production volume, ordinary and hazardous waste management and finally a self-evaluation of the compliance with respect the discharge permits granted.
[25] Further details – mainly in Norwergain, can be found at: http://www.sft.no/bmi/

create satisfactory results themselves. Five auditing and accounting firms have been surveyed, and none of them are complying with the legal requirements. If any environmental reporting is made, it is merely a statement reflecting the traditional concern requested in accordance with the obsolete Accounting Act of 1977; that the firm is not polluting the external environment. In one case, including a firm that actually have developed a guideline on environmental reporting, it is a pity that so-called experts do not “clean up” their own back-yard, while they profit on telling other firms how to behave.

We also included a focus on those firms capable of funding environmental clean-up; banks and other financial institutions. The sample is 12 firms. However only two of these are complying with the 1998 legislation. In one of these two firms the separate environmental report is quite impressive. However, as with the case of the other four firms included in category 3, it is a wrong sender. The Board of Directors did not refer to these efforts and the outcome in terms of our judgement, is negative. Out of a total sample of 12 financial institutions, as many as 8 were classified in category 0; missing reports!

6. Conclusion: Lack of corporate compliance must become subject to further debate

Most of the firms are not responding to the environmental reporting requirements specified in accordance with §3-3, fourth section of the Accounting Act of 1998. It is partly explained by the loopholes in terms of actual enforcement. Our survey documents that auditing firms are not always complying with the requirements. Equally important is the fact that they are not legally requested to control the published environmental data. Besides, there is no public authority in charge of supervising whether firms are complying with the environmental reporting requirements. The Ministry of Finance does not seem to be concerned with the functioning of this particular reporting requirement. The Accounting Act will be revised during the fall of 2002. Our documentation may trigger further debate. The remaining question is whether the firms are “lazy” or whether the legal requirements are too demanding.

As it stands today, the legal requirements stand in a limbo. By exempting corporate environmental reporting from third party verification, many of the concerns expressed by those objecting to the original proposal are not de facto taken into account despite that their concerns were formally included in the revised legal text of § 3-3, fourth section. Currently the limited legal strength of the Accounting Act prevents the development of private sector mechanisms and networks for implementation and enforcement of strengthened corporate environmental disclosures. Further, firms are not forced to extend their environmental horizons towards new sustainable solutions. Nor is the dynamic learning, which could take place if the private sector develops new competencies to take on this task, triggered.

However, is it necessarily the firms that are lazy? We may question the usefulness of including mandatory environmental reporting in financial legislation, particularly if the reports are exempted from mandatory auditing requirements. In contrast to the specific reporting schemes enforced by the environmental authorities under the Pollution Control Act, firms are more or less left to themselves to decide whether they want to comply. Despite thorough specification in their separate environmental report, even Telenor does not fully disclose all environmental hazards within the life-cycle of the communication services it offers. There are several reasons for non-compliance, but one, apparently, is that firms do not see any advantage in making detailed environmental disclosures about the company’s Greenhouse Gas emissions or the life-cycle of primary aluminium when it does not have to. Further, the motivation is weakened when the Board of Directors of foreign competitors are not requested to include similar concerns that may focus on negative aspects that can reduce the general goodwill and competitiveness in the market. This debate must be taken forward, both by the business community as well as politicians. The Ministry of Finance is responsible for a law that does not function. This much be taken into account when the legal revisions are made later this year.

As this paper has confirmed, extended environmental reporting has significant potential. The majority of firms included the survey do not extend their concerns into the life cycle of the products that are produced by the particular firm. Consequently, the contribution of the Accounting Act of 1998 to strengthened corporate environmental disclosures is not at all assured.

List of references:

Kasa, S. 2000. Policy Networks as Barriers to Green Tax Rreform: The Case of CO2-Taxes in Norway, *Environmental Politics* Vol 9, No 4 pp 104-122.

OECD. 1998. Eco-efficiency. Paris: OECD

Reitan, M. 1998. Ecological modernization and "realpolitik": ideas, interests and institutions. *Environmental Politics*, Vol. 7, no. 2, pp.1-16.

Roome, N. (ed.) 1998. Sustainable Strategies for Industry: The Future of Corporate Practice,.Washington D.C.: Island Press.

Welford, R. 1996. Corporate Environmental Management: Systems and Strategies. London: Earthscan.

URL references:

Telenor: http://www.telenor.com/

GRIP - the foundation for sustainable production and consumption:
http://www.grip.no/Felles/english.htm

The Norwegian Pollutants and Transfer register (PRTR): http://www.sft.no/bmi/main/english.asp

Legal Texts (Norwegian language only):

The Accounting Act of 1998: http://www.lovdata.no/all/nl-19980717-056.html

The Auditors and Accountants Act of 1999: http://www.lovdata.no/all/nl-19990115-002.html

The product Control Act of 1993: http://www.lovdata.no/all/tl-19760611-079-0.html#1