### CHAPTER 1

# INTRODUCTION AND PROBLEM STATEMENT

#### 1.1 INTRODUCTION AND BACKGROUND

For centuries business was done without consideration for the environment. This resulted in damage to the natural resources. According to Welford & Gouldson (1993: 1) environmental issues have been a matter of public concern for over a quarter of a century. As knowledge relating to the cause and effect of environmental damage has become more complete, the pressure to change the ways in which we behave has increased. Much of this pressure has been targeted towards industry, which is often identified as the major source of pollution.

These days, companies have to respond to a wide range of environmental pressures. Consumers, prompted by environmental labelling, are exerting pressure through the marketplace, while environmental liability keeps investors interested. (Ward 1993:18). Companies operating in Europe are under increasing pressure to take their environmental responsibilities seriously. The European Union and individual member states are introducing tougher environmental regulations. Environmental groups, in their campaign for a cleaner, safer world, continue to uncover and publicise foul deeds. Failure to respond to the pressure could result in legal action, bad publicity, loss of market share, loss of investor confidence, the wrath of the local community and even jail for senior managers. (Fuller, Palframan & Tank 1995: 9.)

Environmental concerns have the capacity to affect both the short-run and long-term health of each firm. While this is particularly true with regard to those firms in heavy pollution industries, no firm or industry is immune from environmental risk. (Allen 1994: 1.)

During the 1970s and 1980s, the environmental disasters of Bhopal, Chernobyl, and the Exxon Valdez captured the public's attention. However, the environmental damage caused by headline catastrophes is small compared to the daily damage that society causes and that ecologically sound business practices can reduce. (Willits & Metil 1996: 28.)

Traditionally, environmental issues and concerns have been viewed as a constraint to businesses. This has resulted in environmental managers relying heavily on a reactive, compliance-based approach to justify change. Businesses are now recognising that efficient management in the environmental arena can benefit the entire company and open new opportunities for increased profits. (Metcalf, Williams, Minter & Hobson 1996: 7.)

According to David Davies, chairman of the UK's Advisory Committee on Business and the Environment, many businesses are finding that environmental attention brings rewards. Such rewards can derive from increased competitiveness through improved profitability, from "licenses to operate", whether from inclusion on important customers' lists of approved suppliers, or literally, from the regulatory agencies, and from a generally enhanced corporate image. (Jones 1996: 54.)

Competitiveness in the global marketplace increasingly depends on demonstrating effective environmental management and product design to purchasers of products and services, whether those buyers are secondary manufacturers, retailers, government agencies, or consumers. One key to future marketplace success, therefore, lies in developing mechanisms to evaluate environmental impacts, implement improvement strategies, and communicate environmental performance and improvements to stakeholder audiences. Companies stand to gain from these actions in real financial terms – through improved production and operating efficiencies, reduced liability exposure, enhanced customer relations, and increased business opportunities. (Brown, Ward & Titus 1996: 3.)

Environmental standards are the result of public concern over the impact industry has on the environment – both locally and globally. The general public is

demanding that companies all over the world take responsibility for their actions. ISO 14000 is an attempt to harmonise the environmental requirements for all industries throughout the world. It is a voluntary standard, but choosing not to meet the international standards may effectively create trade barriers. (Pratt 1997: 68.)

The International Standards Organisation (ISO) developed the ISO 9000 system to create a formal and consistent method of assessing standards in just about every aspect of business, from management to customer service and manufacturing. According to Kelvin Siu, controller for business development at the Hong Kong Quality Assurance Agency, many companies obtained ISO 9000 certification because they wanted to use it as a management tool to enhance efficiency. Others were forced to do it, but whether they got it voluntarily or under pressure from customers, they have found the value of ISO 9000: it can help achieve cost savings by reducing waste and the amount of re-working. While ISO 9000 took time to gain a foothold, ISO 14000 is likely to snowball as firms in the West respond to pressure from consumers to improve environmental standards. As major buyers embrace ISO 14000, they will demand that suppliers follow suit. (Parry 1996: 22.)

Organisations are developing a new green mentality. They are seeing green costs as investments that can eventually provide a profitable return. (Harrison 1993: 7). The new green mentality was initiated to a great extend by the Business Council on Sustainable Development (BCSD) with their 1992 manifesto "Changing Course". Due to the credibility of the companies that constitute BCSD's membership – including Dow Chemical, 3M, Northern Telecom, Ciba-Geigy, Volkswagen, Nissan, Mitsubishi, and many others – their message has had a substantial influence on the strategic thinking of company executives around the world. The BCSD's concept of eco-efficiency suggests an important link between resource efficiency (which leads to productivity and profitability) and environmental responsibility. (Fiksel 1996: 47.)

According to Marc J. Epstein, author of "Measuring Corporate Environmental Performance – Best Practices for Costing and Managing Effective Environmental Strategy", published by the Foundation for Applied Research, the research affiliate of the Institute of Management Accountants (in the USA), environmental reports in annual reports have increased tremendously. Three or four years ago there were not a dozen companies issuing separate environmental reports. Today at least half of the Fortune 500 companies are stating their position on the environment. These disclosures provide information on environmental liabilities, and, increasingly, evidence that corporate management is finding ways to increase profit by lessening environmental impact. (Cheney 1995: 12-14.)

In America the pressure for federal environmental regulations in the 1960s and 1970s came not just from green groups but from firms anxious that differing state rules were putting some of them at a competitive disadvantage. Now the same complaint is made on a global scale: many firms in countries where green rules are stringent say they will lose out unless poorer countries follow suit. In other words, even greenery's most vigorous opponents now direct a lot of their energy towards trying to influence how laws are written rather than whether they are written at all. (Anonymous 1995: 66.)

The Financial Mail published a special report on environmental auditing during October 1992. From this report it is clear that South African businesses agree that environmental auditing can be beneficial to bottom-line profits and to the environment, if conducted proficiently and for the right reasons (McCallum 1992: 45). According to Di Soutter, partner in Strategic Environmental Audits, benefits of environmental management (including environmental auditing) can immediately offset the costs of implementing the system, depending upon the situation. She also said: "In the long-term the question should rather be whether the business will survive if it fails to manage environmental impacts. The fact of the matter is that we are at the start of an 'environmental revolution'. Those businesses which do not react to the trend will ultimately be placed at a disadvantage, whether this be from a marketing or a legal standpoint." (McCallum 1992: 51.)

In May 1997 the Mail and Guardian quoted Nicky Robins, environmental manager for Nissan SA, saying that business has recognised that environmental considerations are a strategic necessity in a global industrial market. She said that a shift has definitely taken place during the last five years. While it could be argued that companies have jumped on to the environmental bandwagon for marketing purposes, the reality of the situation is that any company exporting to industrialised markets and countries must improve its environmental performance. (Karras 1997: B5.)

Internationally the integration of environmental impact into management decisions is increasingly being regarded as good for society and good for business. Those companies that do not now begin this integration will not only incur higher costs, they will miss out on potential revenues and competitive advantage (Epstein 1996a: 58). South African business has realised the importance of environmental responsibility. This is evidenced by the trend towards more environmental reporting (De Villiers & Vorster 1997: 37). However, South African business has not yet reached the point where it is regarded as essential to integrate environmental considerations into everyday business.

#### 1.2 PURPOSE AND IMPORTANCE OF THE STUDY

Most companies want to be seen as being environmentally responsible. Many companies have environmental management programmes in place, but the perception persisting is that looking after the environment does not pay corporate bills.

If it can be demonstrated that environmental responsible companies have higher financial performance (are more profitable) than companies not considering the environment, it would provide companies with a real incentive to be environmentally responsible. In the long-term the benefits of accepting environmental responsibility should be enormous for companies and the country as a whole.

#### 1.3 **DEFINITIONS**

### Eco-efficiency

Eco-efficiency relates to the most efficient use of resources with the least possible damage to the environment, e.g. by recycling materials in products, the use of raw materials and of energy to convert the raw materials are limited.

# Environmental reporting percentage

The environmental reporting percentage (ERP) is the measure calculated (based on the level of environmental reporting in annual financial statements) to indicate the level of environmental responsibility of a company.

#### Financial performance

For the purposes of this study financial performance of a company relates more to the profitability of that company than to the possible wider interpretation of financial performance.

#### Green

"Green" refers to matters relating to environmental responsibility, e.g. a green customer is a customer who wishes to support products that have been manufactured without damage to the environment.

#### 1.4 PROBLEM STATEMENT

The problem under investigation is whether there is a positive relationship between the environmental responsibility and the financial performance of South African listed companies.

In order to investigate the main problem, the following sub-problems need to be investigated as well:

University of Pretoria etd

Environmental responsibility

How should environmental responsibility of companies be determined and measured?

Financial performance

What measures of financial performance should be used?

Research methodology

How should the relationship between environmental responsibility and financial performance of South African companies be determined?

#### 1.5 HYPOTHESES

For purposes of this study the following hypotheses are stated:

Primary hypothesis

There is a positive relationship between the environmental responsibility and the financial performance of South African listed companies; i.e. the higher the environmental responsibility of a company is, the higher is the financial performance of that company.

Secondary hypotheses

The higher the environmental reporting percentage of a company is, the higher is the return on equity of that company.

The higher the environmental reporting percentage of a company is, the higher is the return on assets of that company. The higher the environmental reporting percentage of a company is, the higher is the return on capital of that company.

The higher the environmental reporting percentage of a company is, the higher is the economic value added (EVA) of that company.

The average financial performance measures are higher for the group of companies in a sector that are environmentally responsible (companies with environmental reporting percentages) than for the group of companies without environmental reporting percentages.

#### 1.6 LIMITATIONS

The following limitations are applicable:

Only publicly listed companies on the Johannesburg Stock Exchange are included.

A few companies' annual financial statements are not included, e.g. due to a change in year-end or a very late publication.

The use of an environmental reporting percentage based on the level of reporting in annual financial statements of companies may not be an actual reflection of the environmental responsibility of a company. It is possible that certain companies may act in a responsible manner as far as the environment is concerned, without reporting on it in their annual financial statements. Certain companies may report on action taken to benefit the environment, but their daily operations may cause considerable damage to the environment.

# 1.7 ORGANISATION OF THE STUDY

A review of the related literature will be provided in chapter 2. The theoretical foundation of environmental reporting will be investigated. This investigation will be based on fundamental accounting principles. The stakeholders interested in

environmental reporting will be identified. The influence of these stakeholders on the environmental information presented in annual financial statements will be examined. The costs or disadvantages versus the benefits or advantages of environmental responsibility will be explored. The findings of previous studies that examined the relationship between environmental performance and financial performance will be investigated.

"Environmental responsibility" will be examined in chapter 3. Environmental responsibility will be defined, taking previous researchers' definitions into consideration. The elements of environmental responsibility will be discussed, concentrating on the pressures towards environmental responsibility that companies experience and the progress made by companies. Previous studies will be used to identify the most appropriate measures to use when measuring environmental responsibility.

"Financial performance" will be examined in chapter 4. Profitability will be defined, as it is a key component of financial performance. Elements of financial performance will be discussed under the profit zone and causal factors. The measures most often used to measure financial performance will be identified from relevant literature.

The research design and methodology will be presented in chapter 5. The period investigated, as well as the criteria for the selection of companies will be stated. Based on previous research, measures of environmental responsibility will be selected. Data available to measure environmental responsibility (using the selected measures) will be identified. Financial performance measures will be selected based on the financial performance measures to be identified in chapter 4, as well as the financial performance measures used in previous research. The methodology based on previous research relating to correlation analyses will be presented, as well as the methodology for the sector trend analyses.

# University <u>Po</u>Pretoria etd

The results of the study will be analysed and discussed in chapter 6. The analyses and discussion will focus first on the correlation analyses and then on the sector trend analysis.

The conclusion of the study, together with possible suggestions will be presented in chapter 7.