

**Employee awareness of environmental performance at FNB
Business Inland**

John George Harris

**A field study submitted to the UFS Business School
in the**

Faculty of Economic and Management Sciences

in partial fulfilment of the requirements for the degree of

Magister in Business Administration

at the

UFS Business School

University of the Free State

Bloemfontein

Supervisor: Dr Liezel Massyn

November 2014

DECLARATION

I declare that the Field Study hereby submitted for the Magister in Business Administration at the UFS Business School, University of the Free State, is my own independent work and that I have not previously submitted this work, either as a whole or in part, for a qualification at another university or at another faculty at this university.

I also hereby cede copyright of this work to the University of the Free State.

Name: John George Harris

Date: November 2014

ACKNOWLEDGEMENTS

First, I would like to thank my heavenly Father for providing me with a sound mind, opportunity and resources to complete this field study and degree.

I would like to thank the following people who made this research study possible:

My wife, Liza-Marie Harris, for the patience, love, support and encouragement she gave me during the three years of completing the MBA and field study.

Dr Liezel Massyn, my supervisor, for sharing her knowledge and for providing me with guidance and assistance during the completion of this field study.

Frik Cochrane, my mentor, for being actively involved in my mentorship and motivating me to remain on track to complete the degree.

FNB Business, for providing me with much-needed financial support to complete the MBA.

My parents, for their encouragement, motivation and support.

Our MBA group and fellow students, for their support and encouragement.

Duduzile Ndlovu, for her assistance with the statistical analysis.

ABSTRACT

The primary objective of this study is to measure employee awareness of environmental performance at FNB Business Inland. An overview of environmental performance was included and the measures available to measure environmental performance were discussed. Finally, areas where environmental performance can be improved in FNB Business Inland were identified and discussed.

The study made use of quantitative research methods. Respondents were required to rate the organisation on various categories relating to environmental performance. An awareness level variable was created using specific items relating to environmental performance and the awareness levels for various biographical groups were measured and tested for validity. Finally, one open-ended question was included to determine any areas where FNB Business Inland may improve to enhance its environmental performance further.

The overall majority (90.32%) of the respondents perceived that FNB Business Inland performed well with regard to environmental performance and indicated that high levels of environmental performance and awareness existed in the organisation. The majority (96.13%) of respondents also indicated that the organisation considered the environment during the development of new products and processes.

The respondents, however, identified areas such as communication and continued innovation, which should be considered as key instruments to maintain the high levels of environmental performance achieved and to distinguish the business from other organisations in the financial industry.

Table of Contents

DECLARATION.....	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF FIGURES.....	viii
LIST OF TABLES.....	ix
CHAPTER 1	1
1.1 Background.....	1
1.2 Problem statement.....	7
1.3 Objectives	8
1.3.1 Primary objective	8
1.3.2 Secondary objectives.....	8
1.4 Preliminary literature review.....	8
1.4.1 Terminology associated with environmental performance.....	9
1.4.2 Media and history on environmental difficulties.....	9
1.4.3 Brief outline of general South African environmental legislation applicable to corporate organisations.....	11
1.5 Research methodology	14
1.5.1 Research design.....	14
1.5.2 Sampling.....	15
1.5.3 Data collection method	15
1.6 Ethical considerations	15
1.7 Demarcation of study	16
1.8 Layout of the study.....	17
1.9 Conclusion	18
CHAPTER 2	19
2.1 Introduction	19
2.2 Terminology associated with environmental performance	19
2.3 Legislation governing environmental performance.....	21
2.3.1 International legislation	22
2.3.2 South African legislation	24
2.4 Methods used to measure environmental performance	28
2.4.1 International methods	29

2.4.2	South African methods.....	33
2.5	Difficulties associated with achieving high levels of Environmental Performance	38
2.5.1	Natural environment.....	39
2.5.2	Social environment	39
2.5.3	Economic environment	41
2.5.4	Institutional influences.....	43
2.6	Effective practices implemented in the banking sector to promote environmental performance in the banking sector	44
2.6.1	International practices.....	44
2.6.2	South African practices	47
2.7	Conclusion	49
Chapter 3	51
3.1	Introduction	51
3.2	Research design	51
3.3	Sampling	53
3.4	Data collection method.....	54
3.4.1	Method.....	55
3.4.2	The questionnaire	56
3.4.3	Scales.....	57
3.5	Ethical considerations	58
3.5.1	Voluntary participation	59
3.5.2	No harm to respondents	59
3.5.3	Anonymity and confidentiality.....	60
3.5.4	Permission obtained	61
3.5.5	Minimisation of potential misinterpretation of results	61
3.6	Conclusion	62
Chapter 4	63
4.1	Introduction	63
4.2	Response rate.....	63
4.3	Data analysis from questionnaires	64
4.3.1	Section A – Biographical data.....	64
4.3.2	Section B – Environmental performance	71
4.4	Organisational performance	82
4.5	Employee awareness.....	83

4.6	Section C – Feedback.....	87
4.7	Conclusion	89
Chapter 5		90
5.1	Introduction	90
5.2	Study objectives and conclusions	90
5.2.1	Primary study objective.....	91
5.2.2	Secondary study objectives	91
5.3	Recommendations	92
5.3.1	Maintain the high levels of environmental performance achieved.....	93
5.3.2	Improve internal communication of environmental projects	94
5.3.3	Improve checking controls on internal policies	94
5.3.4	Revisit the farm valuation process to identify new financing opportunities.....	95
5.3.5	Continue to support innovative methods to improve environmental performance and efficiency.....	95
5.4	Limitations of the study	96
5.5	Future research possibilities.....	96
5.6	Conclusion	97
Reference List.....		98
Appendix A.....		105
Appendix B.....		109

LIST OF FIGURES

Figure 4.1 Age of respondents.....	65
Figure 4.2 Highest academic qualification.....	67
Figure 4.3 Employment level.....	68
Figure 4.4 Area.....	69
Figure 4.5 Tenure within the FirstRand Group.....	70
Figure 4.6 Organisational development and the environment.....	72
Figure 4.7 Reporting of environmental performance issues.....	74
Figure 4.8 Competition.....	75
Figure 4.9 Equator principles.....	76
Figure 4.10 Institutes governing environmental performance.....	78
Figure 4.11 FirstRand Ltd. Policy.....	79
Figure 4.12 Environmental performance terminology.....	80
Figure 4.13 General.....	81

LIST OF TABLES

Table 3.1 Total population for the study.....	54
Table 4.1 Cross-tabulation [Age vs. Importance of high levels of environmental performance].....	66
Table 4.2 Organisational performance.....	82
Table 4.3 Employee awareness variable.....	84
Table 4.4 Employee awareness variables by category.....	85
Table 4.5 Anova.....	86

CHAPTER 1

1.1 Background

Over the past decades, dramatic changes in the worldwide climate have occurred and immediate action is required to ensure that the repercussions do not become too serious to breach. The earth's atmosphere is deteriorating, resulting in droughts, floods and the rise of sea levels (ELC, 2008: 1)

The latest studies indicate that by 2047, the average temperatures across much of the planet will rise to higher levels than have been experienced by humans today (Walsh, 2013: 1). These studies estimate that average temperatures will be approximately two degrees Celsius higher, compared to the hottest temperatures experienced by the human race to date. This effectively means that our hottest days today may be considered 'cool' when compared to the estimated temperatures for the middle of the twenty-first century (Walsh, 2013: 1-3).

There are many theories why, or why not, global warming exists. Scientists have found some form of common ground on the topic, which indicates that global warming is a threat to the human population and the earth (Benefits of Recycling, 2014: 1-2).

According to the ELC (2008: 1-2), global warming, if not contained, may result in the rising of sea levels, melting of Arctic sea ice, increase of ocean temperatures, development of more frequent natural disasters, and adverse human health implications.

It is a commonplace belief among laymen that the past two centuries of global warming resulted from an increase in greenhouse gas emissions (Fabius Maximus, 2012: 1).

The statement above is confirmed by Temple (2013: 1), who states that the root cause of climate change is due to an increase of greenhouse gas emissions.

Human activity is not believed to be the sole cause of global warming; however, it is believed that human habits fuel global warming, as well as the tempo at which the average earth temperature increases by (Benefits of Recycling, 2014: 2).

Below, a brief history on how greenhouse gas emissions became known, as well as the key events, claiming to have caused the increased tempo in global warming, is given:

During the period 1800–1870, the level of carbon-dioxide gas in the atmosphere was approximately 290 parts per million and the mean global temperature between 1850 and 1870 was about 13.6 °C (Weart, 2012: 1).

The first industrial revolution started during this era as coal, railroads and land clearing sped up greenhouse gas emission, as opposed to the improved agriculture and sanitation, which sped up worldwide population growth (Weart, 2012: 1).

Rifkin (2008: 26) has made a similar statement some four years earlier when he writes that the first industrial revolution was marked by the introduction of coal-powered steam technology and printing presses.

A common denominator of these machines is that they allow carbon-dioxide gas to be released into the atmosphere, contributing to global warming (Rifkin, 2008: 26).

Weart (2012: 1) further claims that the second industrial revolution between the era of 1870 and 1910 further accelerated growth by means of fertilizers, chemicals and electricity, as well as improvements in public health.

According to Rifkin (2008: 27), first-generation electrical forms of communication (the telegraph, telephone, radio, television, electric typewriters, calculators) converged with the introduction of oil and the internal combustion engine became the communications command and control mechanism for organising and marketing the second industrial revolution.

The burning of oil, as well as gases released by the internal combustion engines commonly found in vehicles today, generate carbon-dioxide gas, which places the atmosphere under more pressure (Rifkin, 2008: 1).

During World War I, governments learned to mobilise and control industrial societies. During World War II, military grand strategy was largely driven by the struggle to control oil fields, which have become a critical natural resource due to its widespread and common use (Rifkin, 2008: 1).

According to Weart (2012: 2), Keeling accurately measured the carbon-dioxide levels in the earth's atmosphere during 1960 and detected an annual rise. At that point in time it was claimed that the level of carbon-dioxide gas was 315 parts per million and that the mean global temperature had increased to 13.9 °C.

Technological advancements and worldwide population growth since the 1960s have increased dramatically. Humans live in more comfort and utilise cars, planes, ships and railway lines for a way of transport all over the world. In short, the burden placed by the human population on "mother earth" has been increasing at an exponential rate and despite the efforts by individuals and corporate citizens, it is believed that societies all over are fighting a losing battle (Weart, 2012: 1).

According to Seung-soo (2012: 94), millions of lives have been uplifted and positive transformation has benefited societies across the globe due to quantity-orientated, factor-intensive and fossil-fuel-driven growth models.

By contrast, however, Seung-soo (2012: 94) claims that the model described above has failed to account for ecological considerations and therefore engendered a new transformation: climate change.

Weart (2012: 8) claims that controversial "attribution" studies have found that recent disastrous heat waves, droughts, extremes of precipitation and floods were aggravated due to the effect of global warming (climate change) on the earth's climate.

The level of carbon dioxide in the atmosphere reached a high of 394 parts per million by 2012, and the mean global temperature rose to 14.6 °C in the same year, which is considered the highest in hundreds and probably thousands of years (Weart, 2012: 8).

Coley (2007: 10) claims that the climate revolution would be "the" biggest change for businesses since the industrial revolution. He further states that procurement rules as well as energy and material costs have changed, but that legislation and customer expectations have already begun to change and would continue to change.

In the end, the planet and environment provide the means for our survival. However, the ever-increasing human population is placing an increasing burden on the

environment, ecosystems and resources. Currently, mankind only has finite amounts of resources at its disposal to ensure that environmental products, services and resources are sustained (Seung-soo, 2012: 95).

As legislation and customer expectations increase, businesses will be more successful if they manage to develop innovative abilities to create solutions to environmental challenges, while being able to implement these new practices (Coley, 2007: 1).

During 1994, the King Report on Corporate Governance (King I) was published by the King Committee on Corporate Governance, headed by former High Court Judge, Mervyn King S.C. King I incorporated a Code of Corporate Practices and Conduct, which was the first of its kind in South Africa and was aimed at promoting the highest standards of corporate governance in South Africa (IOD, 2002a: 2).

Over and above the financial and regulatory aspects of Corporate Governance, King I advocated an integrated approach to good governance in the interests of a wide range of stakeholders. Although King I was groundbreaking at the time, the evolving global economic environment, together with legislative developments, lead to the King I Report being updated and superseded by the King II Report in 2002 (IOD, 2002a: 2).

The King II Code was the first South African code to address environmental sustainability and social responsibility with the introduction of the triple-bottom-line reporting mechanism (IOD, 2002a: 2).

The King II Code was further superseded by the King III Code in 2009, which is the current code on Corporate Governance in South Africa (IOD, 2009a: 2).

According to KPMG (2009: 2), the King III Code dictates that the board of directors, of any listed South African organisation, need to ensure that the organisation is perceived to be a responsible corporate citizen on an ethical, social and environmental level through sustainable practices.

Corporate governance stipulates that one should consider what impact one's day-to-day businesses have on the sustainability of the environment around one where organisations transact. It will become more common for individuals to expect

corporate organisations to operate on environmentally sustainable levels (IOD, 2009: 11).

Seung-soo (2012: 95) indicates that climate change does not affect all global economies equally, but that developing countries are the most vulnerable to its effects, as their “bills” for climate adaptation would be estimated at tens of billions of dollars annually.

According to Seung-soo (2012: 95), much potential for green growth exists in developing countries, as these countries are not locked into a carbon-intensive economic infrastructure.

Although slight taxation in the motorcar industry and some policies has been introduced in third world countries, individuals and corporate citizens should become pro-active, in countries like South Africa, in combating climate change.

Climate change should not only be dealt with to comply with legislation; it should become a habit and lifestyle for both individuals and corporate citizens. “If today’s business leaders are not environmental leaders, we will risk being like the outpost of a dying empire – history tells us exactly how painful that can be” (Coley, 2007: 10).

According to Seung-soo (2012: 95), it is crucial to harness the resources of both the public and private sectors through enhanced public-private partnerships for green growth to address the requirements needed for change effectively.

FirstRand Ltd. is the holding organisation of various financial institutions ranging from banks to insurance organisations and more. FNB is a division of FirstRand Ltd. and is one of the “big” four banks in South Africa. FNB Business is known as the business division of FNB, which caters for the banking needs of South African businesses that have an annual turnover of between R10 million and R500 million rand per annum.

FNB Business is split into four provincial areas, Gauteng, Natal, Cape and Inland. FNB Business Inland is represented by sales hubs from the following South African provinces: the Free State, Limpopo, Mpumalanga, Northern Cape and North-West.

It is expected by legislation as well as public opinion that organisations like FNB Business contribute positively to global warming and sustain high levels of environmental performance.

FNB (2014: 1) claims that awareness of environmental issues and the impact these issues have on the environment have increased greatly. The immediate and the potential threats posed by global warming and other environmental issues are recognised by FNB, and FNB has taken steps to minimise the impact it has on the surroundings in which it operates.

FNB has environmental policies in place that cover two broad areas: (1) the direct environmental impact of their own daily operations, which is governed by their Environmental Health and Safety Policy, and (2) the bank's direct impact on the environment in terms of responsible lending and business development, governed by their Environmental Risk Policy (FNB, 2014: 1).

At FNB they have started the "Greenfields" approach, which is an initiative to comply with and support the King II Code, JSE SRI Index, principles of the UN GRI Index, UN Global Compact and a Carbon Disclosure Project (FNB, 2014: 1).

According to FNB (2014: 1), FirstRand Ltd. has an environmental committee that discusses relevant issues and reports to various committees as well as to the Board of FirstRand Ltd. Furthermore, the bank also has a Group Environmental, Health and Safety manager who manages environmental issues for the bank.

FNB has a compliance officer in every business unit. The compliance officer needs to report on any non-compliance issues. FirstRand Internal audit conducts audits in relation to environmental legislative requirements and group sustainability, as all these aspects are important for the organisation's environmental focus (FNB, 2014: 2).

According to FNB (2014: 1), FNB's Environmental Health and Safety representatives have to undergo formal training. The formal training includes modules on environmental management. All new employees receive an online manual about the importance of environmental management and FNB's environmental initiatives.

FNB's environmental awareness and initiatives have been recognised through awards such as the Deloitte and Touche Award for Sustainable Development and the Mail and Guardian Greening Future Award for the organisation with the most improved environment performance (FNB, 2014: 4).

According to FNB (2014: 2), the nature of their business is paper concentrated. Paper-saving initiatives are necessary and FNB continuously looks for new ways to minimize and manage the use of paper. Over the past years, FNB has introduced new practices in an attempt to reduce the organisation's carbon footprint. These initiatives include a migration to electronic bank statements, utilisation of recycled paper, energy-saving initiatives, the usage of biodegradable chemicals, water care and the screening of products purchased from third-party suppliers.

1.2 Problem statement

Although FNB recognises the immediate and potential threats of global warming to the business, the problem is that without sufficient employee awareness the effective implementation of policies and procedures in the business may become problematic.

If FNB Business remains unable to ensure that its employees adopt an environmental efficient ("green") mind set, the organisation will endure continuous difficulty to lower its carbon footprint, as employees will not understand the importance of the topic and therefore will not contribute positively to policies and initiatives implemented by the organisation.

This may lead to FNB experiencing increased pressure from legislative bodies once corporate governance legislation further increases, ultimately resulting in penalties and the potential loss of customers.

On a larger scale, FNB Business will be environmentally non-efficient, resulting in a negative contribution to climate change, which may contribute to more frequent natural disasters like floods, droughts, temperature increases and the rise of sea levels.

The above problems raise the following questions:

- 1.2.1 What measures are available to measure environmental performance?
- 1.2.2 Do employee awareness levels on environmental performance coincide with that of FNB Business?
- 1.2.3 Which areas within FNB Business can be improved to optimise the organisation's environmental performance levels?

1.3 Objectives

1.3.1 Primary objective

The primary objective of this study is to analyse employee awareness of environmental performance at FNB Business Inland.

1.3.2 Secondary objectives

The secondary objectives of this study are to:

- Provide an overview of environmental performance;
- Determine the measures that are available to measure environmental performance;
- Determine employee awareness levels on environmental performance in FNB Business Inland; and
- Identify areas where environmental performance can be improved at FNB Business Inland.

1.4 Preliminary literature review

The preliminary literature review was undertaken to survey the following areas:

- Terminology associated with environmental performance and business;
- Media and history on environmental difficulties;
- Brief outline of general South African environmental legislation applicable to corporate organisations.

1.4.1 Terminology associated with environmental performance

Walls, Berrone and Phan (2012: 891) define *environmental performance* as the outcome of a organisation's strategic activities that manage or do not manage the impact the organisation has on the natural environment.

Furthermore, Walls *et al.* (2012: 891) point out that these activities can vary substantially, from beyond-compliance proactive approaches that require organisations to build specific capabilities and recourses, to reactive solutions that minimally meet or fail regulatory standards.

Delmas, Etzion and Nairn-Birch (2013: 256) claim that environmental performance is multidimensional and strong correlations exist between each dimension and financial performance.

However, Delmas *et al.* (2013: 256) theorise that little consensus exist in literature on what each dimension represents and thus claim difficulty in determining what corporate social responsibility ratings actually measure.

1.4.2 Media and history on environmental difficulties

The world climate is under increasing pressure due to carbon-dioxide and other greenhouse gases that are not stabilised. If these gases are not stabilised, it may become too late to save the environment (Quiggin, 2013: 4).

According to Quiggin (2013: 4), the purpose of reducing emissions of carbon-dioxide and other known greenhouse gases is to mitigate the increase of temperature in the global climate, which may be summarised as the increase in global mean temperatures.

Emphasis has been placed on the negative impact that climate change has on business. Investing in infrastructure and technology to adapt to the impact of global warming will be a necessary component of society's climate change strategy. One needs operating organisations that are doing something about these challenges of global warming (Temple, 2013: 2-3).

According to environment.co.za (2014: 1), the demand for environmentally friendly products and businesses has increased over the years. It is further stated that both

large corporations and small businesses have responded well to this shift, but it does not guarantee that every aspect of a organisation is green.

According to Temple (2013: 3), a rapidly growing Dutch engineering organisation, Arcadis, with expertise in water management, has worked with the Bay Conservation after Hurricane Sandy on early plans for dealing with sea level rise on the San Francisco Bay.

In the motorcar industry, Toyota introduced their first mass-market electric hybrid car, the Prius, in 1997 to attempt to be more environmentally efficient (Weart, 2013: 5).

HP have seen benefits of going green and claims that it does not hinder an organisation's ability to increase revenues (HP, 2007: 177).

HP has been serious about environmental issues for many years and has been recycling products since 1987. Global citizenship is one of the seven core elements of HP's corporate objectives and HP developed their Designed for Environment policy in 1992 (HP, 2007: 177).

HP entered into a joint initiative with the World Wildlife Fund US (WWF-US) to reduce its greenhouse gas emissions from its operating facilities worldwide. The initiative has led to HP reducing carbon-dioxide emissions from HP-owned and HP-leased facilities worldwide (HP, 2007: 177).

According to Bihari (2010: 82), an increasing number of green technologies are finding their way into various functional areas, including banking, industries and organisations that are bound to be affected by strict environmental policies.

Banks and other organisations find it essential to go green and play a proactive role to take environmental and ecological aspects as part of their principles. The new generation banks and financial institutions are particularly embracing environment protection with every passing day (Bihari, 2010:82).

Furthermore, Bihari (2010: 82) states that governments across the globe are highly concerned about the climate change problems. Organisations will have to adopt stringent regulations to cap greenhouse gas emissions by different organisations. Banks can thus provide innovative financial products and capacity-building measures

to the organisations. These organisations must also have policies in place for environmental safety.

The following paragraphs detail some initiatives implemented by banks to demonstrate sustainable banking practices, which, in return, has paid off positively.

Congressional Bank encouraged their customers to do paperless banking because of the increased security it gives them and the benefits to the environment. Furthermore, Congressional Bank has benefited economically and morally by offering customers the option to go paperless (Motley, 2012: 15).

According to O'Neill (2009: 23), Atlantic Stewardship Bank (ASB) has offered online banking transactions for nine years with e-statements being the latest addition to online banking. Banks have a strong financial incentive to encourage reduction of paper-based banking and other green practices. Efficient paperless banking can free up customer service representatives for better things.

There is a growing concern for organisations to go green and reduce their carbon footprint. It has become the responsibility for most organisations to reflect their respect for the environment. In South Africa, 53% of businesses have a positive green attitude, and subtle increases in green mind sets can be seen and also expected to continue (Brands and Branding Intelligence, 2010: 85).

1.4.3 Brief outline of general South African environmental legislation applicable to corporate organisations

In an attempt to ensure that South African corporate organisations attempt to achieve environmental efficiency, this topic was first introduced with the release of the King II Report and later enforced by the King III Report. The following items are similar tools introduced in South Africa to achieve this objective:

1.4.3.1 King II Code

The King II Report on Corporate Governance encouraged organisations to use the triple-bottom-line reporting as a method of doing business (JSE, 2014: 1).

According to the IOD (2002b: 6), the purpose of the King Reports was and will remain to promote the highest standards of corporate governance in South Africa.

The IOD (2002b: 6) claims that the King Report goes beyond the financial and regulatory aspects of corporate governance in that it advocates an integrated approach to good governance in the interest of a wide range of stakeholders, having regard for the fundamental principles of good financial, social, ethical and environmental practice.

1.4.3.2 JSE SRI Index

By making use of triple-bottom-line performance of organisations in the FTSE/JSE All Share Index, the SRI Index offers an aspirational sustainability benchmark, recognising those listed organisations that have incorporated sustainability principles in their everyday business practices, which serve as a tool for investors to assess organisations on a broader base (JSE, 2014: 1).

1.4.3.3 UN Global Compact

According to the NBI (2011: 1), the UN Global Compact has ten principles in the areas of Human Rights, Labour, the Environment and Anti-corruption. Three principles focus on the environment and are listed below:

- Principle 7 – Business should support a precautionary approach to environmental challenges;
- Principle 8 – Undertake initiatives to promote greater environmental responsibility; and
- Principle 9 – Encourage the development and the infusion of environmentally friendly technologies.

Ten NBI principles have led to a share index on the Johannesburg Stock Exchange called the UN GRI Index.

1.4.3.4 Carbon Disclosure Project (CDP)

The CDP is a partnership approach between business and government, which aims to find solutions to major national challenges at both a systems and policy level, as well as through the implementation of strategic projects.

According to the NBI (2011: 2), success has been achieved with cooperation between the carbon disclosure project and the national business initiative, as

business leadership has been mobilised to measure the risks and opportunities associated with climate change. This has led to an increased measurement of greenhouse gas emissions and business strategy on climate change.

As countries develop, the burden humans and organisations place on the planet to sustain life increases. First-world countries have done more research in trying to achieve a healthier carbon footprint and sustainability, compared to third-world countries. However, claims are still made that first-world countries live as if they have five to seven planets to deplete before human existence will become extinct (NBI, 2011: 3).

For the reasons above it is vital for developed as well as developing countries and organisations worldwide to ensure that organisations and countries have policies and procedures in place, in an effort to ensure that developing corporate citizens grow effectively and attempt to limit their carbon footprint during growth periods by implementing these policies and procedures effectively.

Social responsibility requires organisations to demonstrate responsible citizenship through taking into account the social and environmental impact of their decisions and activities. It is becoming more common for organisations to communicate their performance on environmental and social issues by means of external reports to all stakeholders (Correia, Langfield-Smith, Thorne & Hilton, 2008: 826).

Organisations make use of triple-bottom-line reporting to report on the environmental performance achieved by a given organisation. Triple-bottom-line reporting was first introduced by John Elkington in 1994, who advised that no organisation had one defined single goal of adding economic value, but that organisations had a responsibility towards adding social and environmental value as well (Henningfield, Pohl & Tolhurst, 2006: 26-27).

Reporting on triple-bottom-line reports is done by all the key South African banks; however adding true value may only be achieved when organisations compete with one another to become more socially and environmentally focused, rather than merely reporting from a compliance point of view.

Environmental performance is a multi-dimensional measurement that benchmarks the efficiency with which the processes and procedures within organisations contribute positively or negatively to the environment.

On a continual basis organisations are measured and monitored to determine how well they perform in terms of the environment. The literature review identified various successful green initiatives that have been implemented in the past and proved to be beneficial to the organisations that implemented these initiatives.

In South Africa, the King III Code stipulates that all listed organisations have a responsibility towards the environment and these organisations are required to report back by making use of triple-bottom-line reporting methods.

1.5 Research methodology

The purpose of this study was to apply the knowledge obtained from the literature review and to determine the effectiveness of the implementation of environmental policies at FNB Business. The perceptions of employees regarding the effective implementation of the organisation's environmental policies played a crucial part in determining how effectively these policies have been implemented in the organisation.

1.5.1 Research design

The empirical study was based on quantitative research in the form of electronic questionnaires that were distributed to the recipients.

It was attempted to retrieve sufficient quantitative data from the electronic questionnaires to determine what employees at FNB Business Inland perceive environmental performance to be as well as to evaluate how well the organisation has performed with regard to environmental performance.

1.5.2 Sampling

The study was completed by making use of a non-probability comprehensive sampling method and the electronic questionnaires were distributed to the entire population of employees for FNB Business Inland, totalling 301 employees at the time the study was completed.

FNB Business Inland is represented by employees ranging from junior clerks to senior managers as well as directors and therefore the questionnaires were aimed to represent all levels of employment within FNB Business Inland.

1.5.3 Data collection method

Electronic questionnaires were distributed to all FNB Business Inland employees by making use of Survey Monkey, an online survey tool. The questionnaires were designed to obtain quantitative data by making use of a four-point Likert scale.

1.6 Ethical considerations

Responses received on the questionnaires distributed to the employees were dealt with anonymously and the necessary controls were put in place to ensure that employees only submitted questionnaires once.

Cooper and Schindler (2011: 32) define ethics as follows:

Ethics are the norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others.

Cooper and Schindler (2011: 32) inform the reader that ethics remains vital during research as it ensures that none of the respondents is harmed or experiences any suffering or adverse consequences from the practised research activities.

Cooper and Schindler (2011: 33-36) theorise that the following five concepts are key to ethical research:

- *Objectivity*

By utilising the statistical programme IBM SPSS, the researcher avoided bias in the experimental design, data analysis and data interpretation of all quantitative data.

- *Voluntary participation*

Participation to this study was voluntary and no respondent was forced to participate or respond to the distributed surveys. Measures were taken to ensure that respondents were not tricked into participating in the study. Respondents were also granted freedom to exit the study at any time without any obligations.

- *Informed consent*

All voluntary respondents were informed what the purpose, process, rights and objectives of the study entailed. All respondents were requested to tick an electronic consent that they understood and accepted the process and purpose of the study prior to responding to electronic questionnaires.

- *Confidentiality and respect*

The researcher ensured that all respondents remained anonymous and that their responses to the questionnaires remained confidential.

- *Data integrity*

The researcher made use of a data integrity system to ensure that ethical protection of the respondents during and beyond the data collection phase was achieved.

1.7 Demarcation of study

This study was done on FNB Business Inland, represented by 301 employees who were in sales hubs across the Free State, Limpopo, Mpumalanga, the Northern Cape and North-West provinces in South Africa.

The population of the study included all the employees working for FNB Business Inland in the regions indicated above. These employees were represented by all the employment levels issued by FNB Business, ranging from junior to senior and ultimately director levels.

Electronic questionnaires were utilised to obtain the quantitative data required in order to achieve the objectives set out by the study.

Although the study was undertaken in the banking environment, the literature, problem statement and objectives are closely related to the field of Corporate Governance.

The corporate citizen, FNB Business, is required to perform sustainable business practices relating to corporate governance, as set out by the King III Code of Corporate Governance for South Africa.

1.8 Layout of the study

Below is a roadmap of what will be discussed in further chapters:

Chapter 2 contains a literature review that focuses on identifying all terms related to the study on the environmental performance of organisations, and specifically, the triple-bottom-line report.

Chapter 3 presents the research methodology, including research design, sampling and data collection.

Chapter 4 contains the results of the empirical study, as well as a discussion thereof. All the questionnaires and factors that were distributed and received back were taken into consideration and were discussed and analysed.

Chapter 5 contains the conclusions, findings and recommendations.

1.9 Conclusion

The objective of this study is to analyse employee awareness levels on FNB Business Inland's environmental performance. The study includes a literature review to provide a comprehensive overview of environmental performance. The various methods on how environmental performance can be measured are discussed in the following chapter and possible areas where FNB Business Inland's environmental performance can be improved are highlighted in Chapter 5, the final chapter of the study.

The next chapter represents a literature review focussing on identifying all terms related to the study of environmental performance of organisations.

CHAPTER 2

2.1 Introduction

The primary objective of this study was to analyse employee awareness of environmental performance at FNB Business Inland. In order to address this objective it was evident that there should be a good understanding of all the terms that relate to environmental performance.

Therefore, this chapter, the literature review, will provide an overview of terminology associated with environmental performance, and the legislation governing environmental performance internationally and in South Africa will be addressed in the literature review.

A discussion of the measures that are used to measure environmental performance internationally and domestically will be discussed during the course of this chapter. Difficulties associated with achieving high levels of environmental performance are identified at natural, social, economic and institutional levels.

In addition, a discussion will follow on effective practices implemented in the banking sector to promote environmental performance. This discussion will focus on international as well as South African practices.

Terminology associated with environmental performance will be discussed next. By making use of these terms, the concept of environmental performance will be defined.

2.2 Terminology associated with environmental performance

When discussing environmental performance it is important to be aware that key terminology and driving forces exist in this field of study, which play a critical role in the implementation, development and sustainability of environmental performance practices. Some of these key points are set out below to clarify terms used pertaining to environmental performance.

According to Beukes (2003: 28), *performance measurement* can be defined as the process of quantifying the efficiency and effectiveness of action. Performance management programmes also include dynamic procedures that encourage improvement in quality environmental schemes.

According to Wingard and Vorster (2001: 318), *environmental soundness* or *environmental sustainability* can be defined as meeting the needs of the current generation without compromising the needs of future generations.

A *sustainable business* is an economic development that, while saving the environment for future generations, also generates wealth and meets the needs of the current generation (Daft, 2008: 154).

Smith and Perks (2009: 4) define a *green business* as a business that uses fewer natural resources to complete its tasks. Green businesses use sustainable methods and materials and these methods can include recycling or the use of materials, which include sustainable products such as recycled or organically grown products.

The *ecological footprint* of a organisation represents the equivalent area of productive land or water that is necessary to produce the resources used and to absorb the wastes produced by a building development (Barker, Hill, Bowen & Evans, 2004: 7).

A *green business activity* is any activity that is performed in a manner that has either some degree of reduced ecological impact or that directly benefits the natural environment in which it takes place (Gilbert, 2007: 1).

By applying the definitions associated with environmental performance above, one is able to define environmental performance:

- Firstly, performance measurement, in general, is associated with how efficient an organisation performs by quantifying the efficiency and effectiveness of actions taken by the organisation and displaying it in a format that is understood by employees or stakeholders.
- Secondly, environmental sustainability or environmental soundness is associated with the resources that are used to achieve current needs without compromising the ability for future generations to meet their needs.

- In environmental business terms, a sustainable business is an economic development that has the ability to produce profits and growth, while saving the environment for future generations.
- Lastly, as indicated above, a green business can be defined as a business that uses fewer natural resources to complete its tasks.

Environmental performance can therefore be defined as a quantifiable measurement that measures the ability of a given organisation to achieve its goals, by sparingly making use of resources to such an extent that it does not have an adverse effect on the environment or the ability of future generations to achieve its goals.

This does not require any organisation to compromise on its goals or reduce output, but is rather associated with how effective processes are implemented and resources utilised by an organisation, which will ensure that the given organisation's output is achieved by making use of the minimum required resources.

According to Wingard and Vorster (2001: 314), South African organisations have realised the importance of environmental responsibility. This is evident when one looks at the trend towards better environmental coverage. The higher the level of environmental responsibility of a organisation, the better the organisation's financial performance becomes.

2.3 Legislation governing environmental performance

According to Peart (2001: 5), environmental regulation can be defined as a strong motivating force behind the enhanced environmental performance of organisations. Environmental regulations give managers the advantage to persuade others in the organisation to make environmentally friendly investments.

The management team of an organisation decides to follow a certain strategy according to their environmental responsibility; the strategy will be determined by the level of environmental performance the organisation wishes to accomplish. This level of environmental performance can range from mere fulfilment of legal requirements to the following of sustainable development principles (Wingard & Vorster, 2001: 318).

Most environmental policies strive to achieve sustainable development, as mere compliance with policies will not suffice to achieve long-term goals.

Wingard and Vorster (2001:314) define environmental standards as the result of public distress regarding the impact that any given industry has on the environment, locally and globally.

Environmental authorisation can be defined as a written order, document or certificate that may be issued by a competent person or place of authority to an applicant to grant this applicant permission to perform certain acts or activities that may have an impact on the environment (Kotze, 2007: 477).

2.3.1 International legislation

According to CIPS (2008: 1), sustainability is one of the hottest topics and seems only to have been superseded by the credit crunch in recent years. CIPS (2008:1) dictates that organisations usually only think about meeting compliance once legislation becomes law; however, CIPS warns that organisations need to be aware of forthcoming as well as current legislation in order for these organisations to take advantage of the opportunities to mitigate identified risks.

It is generally recognised at an international level that economic instruments do increase the efficiency, flexibility and cost effectiveness of an environmental policy (Barker *et al.*, 2004: 6).

The United Kingdom (UK) is one of the leading countries to focus on sustainability (CIPS, 2008: 1). UK government, including the Scottish Government, Welsh Assembly Government and the Northern Ireland Executive, has agreed to a set of five principles believed to provide a basis for sustainable development.

According to CIPS (2008:1), it is believed by these countries that in order to have a sustainable environmental policy, the policy should address living within the environmental limits, achieving a just society by means of sustainable economy, good governance and sound science.

During 1996 the UK Landfill tax was introduced as a mechanism to enable the UK to meet its targets set out by the Landfill Directive for the disposal of biodegradable

waste. It is indicated that more recently the European Union (EU) proposed, and later implemented legislation, which relates to the reduction of CO₂ emissions for light-duty vehicles, which is measured as the amount of carbon, in grams, released by a vehicle into the atmosphere per kilometre (CIPS, 2008: 1).

According to Rosencranz, Kibel and Yurchak (1999: 3), *The Clean Air Act, the Clean Water Act, The National Environmental Policy Act* and *The Endangered Species Act* are the more widely known environmental laws in the United States (US). The National Environmental Policy Act (NEPA) only applies to the actions of the US Government; however, in the US the Clean Air Act and Clean Water Act are used to regulate the polluting activities of private enterprises.

Up to 1993, the environmental governance framework in the Netherlands consisted of a number of media-specific and sectorial environmental acts. The Netherlands had the idea that they would introduce environmental legislation for each of the different environmental elements or media, as it was believed that a comprehensive system of environmental protection could be achieved (Kotze, 2007: 481-482).

Furthermore, Kotze (2007: 482) indicates that there was a clear requirement for a more integrated legislative basis and a more flexible, simple and integrated authorisation procedure in order to achieve more comprehensive environmental protection. Environmental authorisation is widely used in the Netherlands as an instrument to regulate the environmental pollution. They have a principle that aims to either avoid or, where possible, keep pollution as low as reasonably achievable; this principle is the ALARA principle (Kotze, 2007: 489).

According to Kotze (2007: 504), one of the primary objectives of environmental governance efforts should be the achievement of sustainable governance results. This ideal is espoused in the European and Dutch environmental law systems.

From the information above it can be concluded that first-world countries like the UK, EU and US have adopted environmental policies that are legislated and monitored by the regulatory bodies in these countries.

As a business, FNB will be required to comply with the legislative demands that have been set out in South Africa as well as in any of the other countries where the bank is represented.

Below is a breakdown of what is required in South Africa in terms of environmental performance.

2.3.2 South African legislation

South Africa has made noteworthy progress with environmental management by implementing laws and strategies that focus on sustainable development and green issues. In spite of this, some businesses do not recognise the need to become green. Going green in a business indicates that the business will use products and methods that will not have a negative impact on the environment through pollution or the depletion of natural resources. Strategies need to be put in place to reduce the environmental impact caused by products and services (Smith & Perks, 2009: 3).

According to Peart (2001: 2), government policies have emphasised a regulatory approach, with permits required for the discharge of waste into the air or water, in order to reduce industrial pollution. This approach, however, has proved to be ineffective due to poor enforcement capacity and insufficient laws.

The *White Paper on Integrated Pollution and Waste Management*, also includes proposals for revised legislation, economic incentives, education, capacity building, public participation and increased availability of information. The new pollution policy provides a broader framework for addressing pollution and waste production and effectively implementing such a policy requires the understanding of the effect that organisations have on the environment (Peart, 2001: 2).

An alarming concern, according to Peart (2001: 4), is that there is no environmental charge for waste disposal into fresh water, nor any environmental charge for dumping waste into the air or into the marine environment.

Peart (2001: 4) further indicates that there does not seem to be any government proposal to introduce these charges; however, if industries discharge into municipal treatment works, costs should be charged for the treatment.

Since the transition to a new democratic government, there have been reviews of environmental policies. New national policies have been developed in different areas such as agriculture, water, environmental management, minerals, waste management and pollution management. Furthermore, Parliament also passed new

legislation in the form of the *National Environmental Management Act 107 of 1998*, the *National Water Act 36 of 1998* and the *National Forest Act 84 of 1998*. It is believed by Peart (2001: 5) that organisations will face tougher environmental regulations in future.

Barker *et al.* (2004: 6) indicate that the above-mentioned policies may be enforced by command and control approaches, but there is growing support for the belief that market-orientated policies can be more effective to achieve the goals of sustainability.

Smith and Perks (2009: 2) point out that sustainability in South Africa has been addressed in the King III Report in terms of the triple-bottom-line concept of economic, social and environmental sustainability. Large and small businesses are governed to adhere to the principles of the King III Report (PWC, 2009: 2).

The IOD (2009: 18) highlights that an organisation has the responsibility to protect its reputation in addition to its operational and financial responsibilities. King III further dictates that the triple-bottom-line enables an organisation to be relevant to the society and natural environment where it operates and advises that it is essential for any business enterprise to be economically, socially and environmentally sustainable.

According to the guidelines set out in the King III Report, the board of any organisation should ensure that the organisation demonstrates responsible citizenship. The board of an organisation is, in addition to being responsible for performance, also responsible for the triple-bottom-line of the organisation (IOD, 2009: 18).

KPMG (2009: 2) points out that, in terms of King III, the board is responsible to ensure that sustainability is seen as a business opportunity as well as to establish internal control to cover financial, operational, compliance and sustainability.

Finlay (2000: 81) points out that a South African organisation is responsible for the Eco Management and Audit Scheme and that this scheme requires businesses to obtain certification from a third party. The South African organisation responsible is Green Business R.

Businesses can thus enhance their competitiveness through improvements in environmental performance in order to comply with environmental regulation, also to address the environmental concerns of customers and overall to reduce the impact of its products and services (Smith & Perks, 2009: 2).

Although the King III Report on corporate governance is applicable to all listed and non-listed South African organisations, other initiatives have been implemented to try and assist with the development of environmental sustainability in South Africa.

According to Wingard and Vorster (2001: 316), the environmental legislation in South Africa is not as strict as in the US.

Barker *et al.* (2004: 6) state that government policy and legislation remains the most powerful mediator of change, ensuring that environmental issues are a high priority in South African organisations.

As indicated in the preliminary literature review, the CDP is a partnership approach between business and government that aims to find solutions to major national challenges at both a systems and policy level, as well as through the implementation of strategic projects.

According to the CDP (2014: 2), this is the sixth consecutive year where the CDP has sent out requests to the CEOs of South Africa's top listed organisations requesting them to measure and disclose what climate change means for their businesses.

During 2013, a response rate of 78% percent was achieved from the top hundred listed South African organisations. This figure may be slightly lower than the previous year's figure of 83%, but this is mainly due to the new organisations entering the JSE 100 sample, which have chosen not to participate in their first year amongst the JSE top 100. The CDP questions whether the lack of participation by first year JSE 100 organisations may be an indication that minimal reporting takes place on climate change outside the JSE top one hundred. The lack of participation by these organisations may have led to a perception that minimal controls have been implemented by these organisations to monitor and measure their environmental performance (CDP, 2014: 2).

According to the CDP (2014: 2-3), there have been improvements in the disclosure, accompanied by improvements in climate change governance, risk management and performance.

Furthermore, the CDP (2014: 2-3) advises that a general increase in ratings in terms of carbon performance bands, as well as an increase in the number of organisations who have qualified for the Carbon Performance Leadership Index (CPLI), is evident. The following organisations have now qualified for the CPLI during 2012, showing an increase of four organisations:

- Anglo American PLC
- Barloworld
- FirstRand Limited
- Gold Fields Limited
- Mondi PLC
- Woolworths Holdings Ltd

The NBI (2014: 2) indicates that success has been achieved with cooperation between the carbon disclosure project and the national business initiative as business leadership has been mobilised in measuring the risks and opportunities associated with climate change. This has led to an increased measurement of greenhouse gas emissions and business strategy on climate change.

Environmental Governance in South Africa is institutionally, legislatively and procedurally fragmented (Kotze, 2007: 472).

According to Josipovic (2005: 20), in South Africa, environmental legislation has been transformed, with many duties overlapping across more than one governmental department. He further states that the South African environmental legislation has become too complex for non-professionals. This calls for a review in order to develop guidelines or manuals to rationalise compliance.

2.4 Methods used to measure environmental performance

According to Beukes (2003: 28), if organisations are interested in finding out how they are performing in terms of environmental operations, they need to allow environmental performance measurement and evaluation.

Many voluntary initiatives such as the Organisation for Economic Cooperation and Development (OECD) Principles, the UN Global Compact, the IFC (World Bank Group), the International Corporate Governance Network, and more encourage organisations to integrate social aspects in their governance practices and assist organisations to recognise that the organisation's environmental, social and governance responsibilities are integral to its performance and long-term sustainability (Walls *et al.*, 2012: 886).

The evaluation of environmental performance is necessary for the following reasons (Beukes, 2003: 29):

The activities of a business have an impact on the ecology, on society and on the economy. The responsibility of environmental remediation costs increasingly lies with the organisation, as deducted from regulations and penalties. Environmental management often results in improvements to the bottom line as an outcome of cost reductions and an increase in goodwill. The cost of capital increases for organisations with a poor environmental performance, because the stakeholders demand higher risk premiums. Additional costs arise in order to rectify the situation created by pressure group campaigns to damage the reputation of polluting organisations. The allocation of scarce corporate resources to environmental policies requires evidence of adequately measured information. More and better environmental information for the making of decisions and monitoring thereof is needed by lower management as they become more empowered. The quality of management is increasingly measured by the quality of environmental management.

Furthermore, Beukes (2003: 30) advises that environmental damage could also be assessed in terms of the levels of water and air pollution, the amount of hazardous and soluble waste, the amount of soil ruin and the loss of biodiversity.

According to Nel and Wessels (2010: 50), environmental tools are classified in the subsequent broad categories: classical command and control-based instruments; alternative enforcement tools, such as market based instruments, civil-based instruments and agreement-based or commitment-based instruments.

Throughout the world, different methods are used to monitor environmental performance. Some are legislative and other are pure recommendations by voluntary initiatives that promote environmental efficiency. In the next section, some international methods are discussed that are used to monitor environmental performance.

2.4.1 International methods

Selecting meaningful and effective tools for the measurement of environmental performance are showing increased importance due to the increased costs of environmental operations, market, international standards such as the International Organisation for Standardisation (ISO) 14001, and regulatory and public pressure, such as the International Chamber of Commerce Business Principles for Sustainable Development (GEMI, 1998: 1).

In some countries, non-financial indicators are attached to individual components. These components include aspects such as the number of complaints from customers and the quantities of waste produced in terms of kilograms or litres in order to determine environmental performance (Beukes, 2003: 31).

The following ways indicate how organisations will measure environmental performance (Schneider, 2011: 1543):

2.4.1.1 Mandatory and voluntary reporting

Schneider (2011: 1543) indicates that two main approaches exist to measure environmental performance: mandatory reporting and voluntary reporting.

According to Schneider (2011: 1543), PriceWaterhouseCoopers conducted a two-part survey during 1992, which indicated that 62% of respondents had known exposure to environmental costs but did not record these costs in their financial results.

Regulation S-K is a prescribed regulation under the US *Securities Act of 1933*, which outlines the reporting requirements for various Securities and Exchange Commission filings used by public organisations. Regulation S-K requires the disclosure of environmental liabilities if they exceed ten percent of assets. If organisation reports indicate changes in environmental liabilities from year to year, environmental performance could be incidental. It is thus possible to determine an organisation's relative environmental performance from its voluntary reporting (Schneider, 2011: 1543).

In order to compare environmental performance between organisations by creating a quantifiable measure, organisations require coding in detail the quality of each organisation's voluntary environmental disclosures sample (Schneider, 2011: 1544).

2.4.1.2 The Toxic Release Inventory (TRI) and cluster rules

As a benchmark for an organisation's environmental performance, the TRI is used. TRI came about in the US, in response to the Union Carbide disaster in India. It requires that toxic chemicals that are released by US facilities above a given threshold must be reported to the Environmental Protection Agency (EPA) (Schneider, 2011: 1544).

TRI has allowed the US to identify its largest polluting facilities clearly and easily. TRI was originally developed due to environmental concern over the chemical industry (Schneider, 2011: 1545).

According to Nel and Wessels (2010: 50), there are certain environmental tools that may be directed by very broad-based strategic principles that drive behaviour or the adoption and use of generic requirements that are widely recognised, such as the United Nations Global Compact (UNGC) and the Ceres Principles.

Furthermore, Nel and Wessels (2010: 51) state that agreement and commitment-based enforcement measures may range from commitments by a single organisational unit to commitments made by or on behalf of business-sectored groups.

Allet (2011: 1) indicates that a new tool was proposed to measure environmental performance: The Microfinance Environmental Performance Index (MEPI). The

MEPI is based on management performance indicators that have been tailored to support the specificities of the microfinance sector.

The Global Environmental Management Initiative (GEMI) is a non-profit organisation of leading organisations dedicated to nurturing environmental, health, and safety excellence worldwide. Various tools or indicators exist to measure environmental performance such as (GEMI, 1998: 1-7):

Lagging indicators, which are most commonly used, may measure the outputs for example the pounds of pollutants emitted or discharged. On the other hand, GEMI (1998: 4-6) indicates that *leading indicators* (in-process indicators) measure the implementation of practices/measures which are expected to lead to improved environmental performance. The major advantages of leading indicators are that corrective actions can often be taken before deficiencies result in reduced performance.

A good example of such an indicator may be an internal compliance or safety audit where the root cause of a given deficiency can be identified and rectified, which will in turn lead to a reduction in lagging indicators, fines and violations (GEMI, 1998: 6).

According to GEMI (1998: 7), leading indicators may be either quantitative or qualitative. The following are examples:

Quantitative indicators:

- Number of voluntary initiatives participated in;
- Raw material use;
- Number of community outreach activities;
- Number of internal self assessments completed;
- Number of environmental, health and safety reviews completed; and
- Regulatory issues identified proactively which have been resolved.

Qualitative indicators:

- Adoption of corporate policy on self assessments;
- Implementation of a program to improve community outreach efforts; and
- Certification under ISO 14001.

Most organisations use a mix of these indicators and each type of indicator has its own strengths and weaknesses (GEMI, 1998: 6-8).

2.4.1.3 ISO 14000

The ISO 14000 is a leading indicator that measures the elements of an environmental management system in place. The elements of the ISO 14000 include environmental policy, planning, implementation and operation, checking and corrective action, and management review (GEMI, 1998: 8).

2.4.1.4 Environmental Performance Index (EPI)

Another useful way of measuring environmental performance is the EPI. An EPI usually consists of one number or a score that represents an aggregation of the environmental performance of all of a organisation's operations. An EPI can consist of four broad categories: compliance, environmental releases, resource consumption and environmental remediation (GEMI, 1998: 11).

From the information above it is evident that an organisation can report on environmental performance by making use of mandatory or voluntary reporting. Mandatory reporting legislation is usually implemented once voluntary methods have proved to be effective. The information above also indicates that voluntary initiatives are believed to be more effective when compared to mandatory reporting requirements.

Some international reporting methods are the Toxic Release Inventory (TRI), the ISO 14000 and the Environmental Performance Index (EPI). When the correspondence of these environmental performance measurement tools are considered, it is noted that all of these measures have a common purpose, which is to report on environmental performance and all environmental issues that could affect the environment. These tools, however, do not necessarily make use of the same approach to monitor levels of environmental performance.

By interpreting the ISO 14000 measurement system, it appears that it measures the elements of an environmental management plan in place. This also contributes to the reporting on environmental performance and environmental issues. An effective management plan is essential in order to have effective environmental reporting.

The TRI furthermore contributes to reporting on environmental performance and environmental issues, because this performance measurement measures the organisation's environmental compliance, consumption, releases and remediation.

The EPI usually consists of a single number or score that represents an aggregation of environmental performance of all the organisation's operations.

There are also various indicators to measure environmental performance, which can include quantitative and qualitative indicators.

A challenge concerning most measures of environmental performance is the fact that organisations require coding in detail of the quality of each organisation's voluntary environmental disclosures samples.

In the end, all of these measures have one common goal, which is to measure environmental performance of organisations.

In the following section, the South African methods used to measure environmental performance of organisations will be discussed. Few of the international methods used to measure environmental performance of organisations that coincide with that of South African methods, such as the ISO 14000.

2.4.2 South African methods

Environmental Impact Assessment (EIA) is a collectively accepted management tool, which seeks to concentrate on the potential harm that can be caused by industrial development to the socioeconomic state of communities (Tshautshau, 2013: 1). EIA involves the process of some systematic changes, such as the screening, scoping, assessing and evaluating of environmental impacts. EIA also recommends that the following be used: alleviation measures, reporting, reviewing, and decision-making and the Environmental Management Plan (EMP).

According to Beukes (2003: 31), the International Standards Organisation provides a framework for the measurement of environmental performance through ISO 14000 standards. The ISO 14000 addresses the following categories: environmental management systems, environmental auditing, environmental labelling,

environmental performance measurement, life-cycle assessment and environmental aspects in product standards.

Other environmental management tools were also developed by ISO/TC 207. These include the ISO 14004. The ISO 14004 was developed in order to complement the ISO 14001, and it complements the ISO 14001 by providing additional guidance and useful explanations (ISO, 2009: 5).

Furthermore, the ISO 14031 provides guidance on how an organisation can evaluate its environmental performance. The standard addresses the selection of suitable performance indicators in order to assess performance against criteria set by the management. The information collected can then be used to do internal and external reporting on environmental performance (ISO, 2009: 6).

The ISO 14001 not only addresses the environmental aspects of an organisation's process, but also the environmental aspects of its products and services. The ISO/TC207 has therefore also developed additional tools to assist in addressing such aspects (ISO, 2009: 6).

The Lifecycle Assessment (LCA) is a tool that can be used to identify and evaluate the environmental aspects of products and services (ISO, 2009: 6).

Furthermore, ISO (2009: 8) states that the entire ISO 14000 family of standards was designed to be equally supportive, but in such a way to be used independently to achieve environmental goals. The ISO 14000 standards provide management equipment for organisations to manage their environmental aspects and to assess their environmental performance.

These tools can provide significant solid economic benefits. The benefits can include the following: the reduction of raw material and resource usage, a reduction in the energy consumption, improvement in process efficiency, the use of recoverable resources, and the reduction of waste generation and disposal.

The ISO 14000 assists to improve compliance with environmental laws, regulations and standards, the reduction of environmental liabilities, prevention of damage due to pollution and waste, and to improve public image (Beukes, 2003: 31).

In South Africa, financial and non-financial performance measures are balanced. Together they form a system of multidimensional performance measurement (Beukes, 2003: 33).

According to Wingard and Vorster (2001: 319), the following studies were considered in South Africa in order to determine how environmental responsibility should be measured:

- A social involvement disclosure scale based on a content analysis of annual reports;
- An analysis to measure the content of each organisation's environmental disclosure;
- An indexing procedure to evaluate the contents of the annual report for environmental disclosure; and
- An assessment scale that was developed to assess the quality of the environmental information which was gathered.

The Environmental Management Toolkit includes tools of eco-mapping, eco-questionnaires and eco-checklists as well as verbal interviews and visual observations. This toolkit is considered to be elaborate enough to fulfil specific tasks but also easy enough to be completed by an individual. The toolkit is an essential action for those wanting to implement any measures for improved environmental performance or management (Josipovic, 2005: 19).

As mentioned in 2.2.2 above, according to the guidelines set out in the King III Report, the board of any organisation should ensure that the organisation demonstrates responsible citizenship. The board of an organisation is, in addition to being responsible for performance, also responsible for the triple-bottom-line of the organisation (IOD, 2009: 18).

Triple-bottom-line reporting requires an organisation to be responsible towards its shareholders and all stakeholders. It is a comprehensive reporting process aimed at a broader range of stakeholders, including various environmental and social interest groups (Correia *et al.*, 2008: 826).

Stakeholders comprise all the shareholders, employees, customers, suppliers and anyone else who is affected by the actions of the business (Thornton, 2009: 1).

The triple-bottom-line reporting method is a useful tool to determine the expenditure any organisation has made toward environmental obligations, or it can feature as a measure of exposure an organisation has towards its environmental obligation.

Thornton (2009: 1) indicates that triple-bottom-line reporting is a popular form of accounting used by many organisations and industries, including mining organisations, energy producers, service organisations, non-profit organisations and governmental organisations to show commitment to social responsibilities.

As highlighted earlier, organisations intend to comply with the rules and regulations of environmental sustainability as it is seen as an opportunity to ensure that the organisation's reputation is promoted.

One such internal regulation at organisation level is the implementation of the ESRA (Environmental and Social Risk Assessment) principles at FirstRand Ltd.

Socially responsible investment and governance relies heavily on transparent rules that impose obligations on financiers to publicly disclose investment and lending policies and to adhere to general corporate sustainability standards (Nxasana, 2012 quoted in FirstRand Ltd, 2012: 1).

Environmental performance transactions are structured project-finance activities, which are defined by Basel II, where the capital costs associated with the projects exceed US\$ 10 million (FirstRand, 2012: 2).

According to FirstRand (2012: 2), the organisation became part of the Equator Principles during July 2009 and has since developed a common framework for financial institutions to address environmental and social issues arising from projects that these organisations finance. The principles used are based on the International Finance Corporations' environmental and social safeguard policies and guidelines.

During a relevant credit application, the ESRA process includes an in-house environmental and social risk assessment, which categorises the transaction in a certain category ranging between Category A (High-risk) and Category C (Low-risk),

which is then used to determine at what level a given credit application needs to be authorised by the organisation (FirstRand, 2012: 2).

FirstRand (2012: 2) further indicates that an internal list of international illegal activities that relate to environmental and social risk have been internally discussed and identified as activities of which FirstRand will limit the extent of its financing or refuse financing for various reasons.

The above information indicates that the main methods used by South African organisations to measure environmental performance are; Environmental Impact Assessments (EIA), The ISO 14000, Life Cycle assessment (LCA), The Environmental Management Toolkit, triple-bottom-line reporting and the ESRA principles.

The similarities between these measures are that all of the above-mentioned measures were put in place to measure an organisation's environmental performance. These measurement tools, especially the ISO 14000, furthermore developed other management tools to complement the ISO 14000 further in providing additional guidance and useful explanations on environmental performance measurement.

The EIA is a collectively accepted management tool that focuses on potential harm to the state of communities. The ISO 14000 provides information on how an organisation can evaluate its environmental performance, thus assisting in the organisations' attempt to measure their environmental performance effectively.

The ISO 14000 and the Life-Cycle assessment (LCA) share a likeness that both of these tools can be used to identify and evaluate the environmental aspects of products and services. Additionally the environmental management toolkit is considered to be very user friendly and to elaborate enough to fulfil specific tasks.

Triple-bottom-line reporting is a useful tool, which not only measures the economic performance of an organisation, but also the social and environmental performance of an organisation.

Initially the King Report was proposed to act as a guideline for organisations in South Africa, but the latest King Report, King III, is a mandatory requirement for all JSE-listed organisations to comply with.

FirstRand Ltd.'s ESRA principles are good examples of internal regulation at an organisation level. The ESRA principles include in-house environmental and social risk assessments.

Many similarities can be seen between the methods used in South Africa to measure environmental performance, compared to the discussed international methods utilised. All the methods meet the key function of measuring an organisation's environmental performance in order to promote environmental sustainability over the long run.

With any aspect related to the achievement of high levels of environmental performance there will always be difficulties in achieving these high levels and for this reason some of these difficulties will be discussed in the next section.

2.5 Difficulties associated with achieving high levels of Environmental Performance

According to Peart (2001: 2), some external factors influence environmental performance of organisations in South Africa. Levels of waste production are very high; there is no widespread use of clean technology and there are only a few facilities for recycling and waste exchange.

Many factors potentially influence the environmental performance of organisations negatively. These factors can be located within the organisation, related to how a organisation is structured and operates, or may be represented in its external environment (Peart, 2001: 2).

Correia *et al.* (2008: 855) indicate that recognising and measuring the environmental and social impact of an organisation may become problematic, for instance: future ecological and social issues are not known yet, many costs and benefits occur outside the organisation and many costs and benefits are difficult to measure in financial terms, due to its qualitative nature.

According to Peart (2001: 2), the external influences that influence environmental performance of organisations operating in South Africa are grouped in four categories: natural, social, economic and institutional influences.

2.5.1 Natural environment

Peart (2001: 2) states that South Africa is a water-scarce country and it is anticipated that if current water usage patterns continue, the remaining surface water resources available to meet national needs will only be adequate until 2030. A shortage of fresh water and the limited water available for organisations will mean that there is reduced capacity for the disposal of liquid waste and its assimilation by rivers. All nine provinces are predicted to have an overall shortfall in waste disposal capacity.

In terms of the banking sector, many funds are borrowed to individuals and corporate businesses to develop new buildings or businesses, and banks have minimal input or control on how these funds will be dispersed or implemented. According to FirstRand (2012: 3), whenever restrictions or covenants are placed on a loan, due to the ESRA policies, regular feedback will be required from the customer to ensure that adequate systems have been put in place to ensure that environmental sustainability is adequately addressed.

However, this may result in a timeous and labour-intensive process where information received from the relevant party may be inadequate to understand the environmental impact truly; furthermore, there are time and cost restrictions associated with this approach.

2.5.2 Social environment

Organisations' environmental performances can be influenced by the society through imposition of social norms, the development of consumer preferences, the pressure organised communities place on organisations to clean up, and the level of education and skills of workers. These factors contribute to the workers' environmental management initiatives (Peart 2001: 2).

The social environment as an external influence can be divided into the following sub-influences: social norms, consumer preference, community pressure and workers' educational and skills levels (Peart 2001: 2).

According to Peart (2001: 2), the social norms can be defined as what is generally considered by society to be acceptable behaviour by a organisation. Social pressures help to define a organisation's corporate culture. It seems that South Africans place significant importance on the natural environment. This, in effect, would make one think that they would have high expectations of environmental performance.

KPMG-IEF (1997: 2) advises that the environmental awareness decreases at middle management level of a organisation, with the lowest levels of environmental awareness amongst the non-managerial employees.

Organisations particularly concerned with their environmental status may be unwilling to deal with environmentally unfriendly organisations. Due to the low income of the majority of the South African population, it seems unlikely that there is a large body of green consumers. The community pressure has been identified as a significant force motivating organisations to improve their environmental performance (Peart, 2001: 3).

According to Hartman, Huq and Wheeler (1997: 20), the level of community pressure also increases with community income and education. Furthermore they indicate that pressure on organisations in South Africa is narrowed by the low income and educational levels of many people living in close proximity to industrial areas as a result of poor planning during the apartheid era.

Workers' educational and skill levels also have an effect on the environmental performance of organisations. The level of technical skills in a organisation determines how quickly new and cleaner technology can be adopted. South Africa has a poorly trained workforce with a mean educational level of 7.1 years; furthermore, South Africa only spends 1% of their payroll on training (Peart, 2001: 3). The rigid way in which many organisations are organised raises the question whether there is room for support to employees in taking responsibility for improving their organisation's environmental performance.

The cost associated with up-skilling employees in the organisation can become a costly exercise due to potential travelling and training costs as well as a short term

loss of productivity due to employees required to attend training resulting in them being out of the office during training sessions.

According to Kroski (2012: 1), there are benefits for employees to complete online training such as reduced costs, flexibility of when and where the training will be completed.

One of the cheaper methods to complete environmental training is computer-based training, as even fairly low-powered computers have the ability to deliver uniform textual information and simple pictures to perform repetitive drills. These computers can deliver training to a large number of people on a flexible schedule and track the employees' success without an instructor present (GEMI, 1995: 27).

Computer-based training is considered a more cost-effective technique to provide training, given that the organisation has developed an adequate training programme.

Another area that creates difficulties for an organisation to maintain a high level of environmental performance is the economic environment in which the organisation operates.

2.5.3 Economic environment

The economic environment can affect an organisation's environmental performance by the extent to which the costs of environmental impacts are internalised by the organisation. It can also be affected through the responsiveness of capital markets to environmental performance. Furthermore, it can affect an organisation's environmental performance through the influence of the economy on the organisation's profitability and investment patterns. The economic environment can influence the achievement of high levels of environmental performance in the following ways: internalisation of environmental costs, capital markets, market structure and economic climate (Peart, 2001: 4).

The internalisation of environmental costs can influence the environmental performance by either improving or not improving (Peart, 2001: 4). Therefore, the environmental performance improves when its environmental costs are internalised and met by the organisation itself. However, many environmental costs in South Africa are external to the market system, thus encouraging poor environmental

performance. Environmental management of mines have been poor, resulting in severe environmental consequences, which can include water and air pollution.

Eskom, South Africa's principal electricity generator, supplies the world's cheapest electricity to high load users, thus not taking into account the environmental costs of producing electricity. In South Africa, the pricing of water also does not take into account the full financial cost of water supply. A further concern is that there is no environmental charge for waste disposal into fresh water or into fresh air (Peart, 2001: 4).

Peart (2001:4) argues that capital markets may be one of the main important factors conditioning corporate behaviour. When one looks at capital markets, it is evident that management looks at short-term profitability rather than long-term potential. This makes it difficult to obtain funding for investment in environmental improvements. A South African study (2000) found that there is a low awareness among auditors, accountants and users of financial statements of the probable financial impact of environmental issues on organisations. The influence of capital markets on the environmental performance of organisations may increase in future.

A highly competitive market will discourage good environmental performance, because competition encourages organisations to cut costs and to embark on unethical behaviour in order to stay ahead of rivals (Peart, 2001: 5).

The economic climate is thought to have an effect on improvement and the implementation of new technologies and the environmental performance of organisations. A poor economic climate can lead to significant restructuring of organisations as they struggle to survive in the more competitive environment. Management's attention is diverted away from long-term strategic goals, such as environmental management, because of poor economic climate and then redirected to short-term survival. Restructuring can further lead to the employment of new managers that are not abreast of environmental friendly initiatives. Less staff can also result in less time to spend on complex environmental assessments (Peart, 2001: 5).

In addition to the effect of the economic climate, institutional influences may also enhance difficulty for organisations to achieve high levels of environmental performance.

2.5.4 Institutional influences

Peart (2001: 5) suggests that the institutional setting strongly affects the environmental performance of organisations. The institutional setting strongly affects the environmental performance through the spread and enforcement of environmental regulations and the accessibility of information on organisation performance.

The institutional influences are characterised by the environmental regulation as well as the availability of information. The environmental regulation in South Africa is characterised by a multiplicity of fragmented and uncoordinated laws and poorly resourced environmental management institutions, as well as weak enforcement in particular industrial pollution. High levels of environmental performance cannot be achieved when workers have a poor awareness of environmental laws. A survey found that if future legislation were introduced, the majority of respondents would reduce impacts to meet requirements and a small portion indicated that they would ignore them because government might be unable to enforce environmental legislation (Peart, 2001: 6).

An important role for government, is to mobilise the economic and social forces that put pressure on organisations to clean up. This can be achieved by government through a range of actions including making accurate information publicly available about an organisation's environmental performance. Corporate environmental reporting can also be used to make environmental performance available to the public (Peart, 2001: 6).

The above-mentioned factors can cause great difficulties with achieving high levels of environmental performance. Fortunately, over the years, effective practices have been implemented in various markets around the world to promote improved environmental performance.

In the next section some of the effective practices that have been implemented in the banking sector, both internationally and domestically, will be discussed.

2.6 Effective practices implemented in the banking sector to promote environmental performance in the banking sector

In order to promote environmental performance it is important to understand the following effective practices that have been implemented in banking sectors worldwide.

No one tool or category of practices will offer a comprehensive solution to environmental performance challenges. There is no universal portfolio or tool that guarantees successful environmental performance in all situations. Two important stakeholders, namely government and civil society, need to be engaged in the enforcement process of these practices to promote environmental performance (Nel & Wessels, 2010: 54).

2.6.1 International practices

Environmental performance is becoming an increasing concern for all businesses and the banking sector is no exception (Allet, 2011: 1).

As mentioned previously, a new tool was proposed to measure environmental performance of the banking sector, namely The Microfinance Environmental Performance Index (MEPI). This tool measures the environmental performance along five areas: environmental policies, ecological footprint, environmental risk assessment, green microcredit and environmental non-financial services (Allet, 2011: 1).

According to Allet (2011: 9), the banking microfinance institutions use five main strategies to enhance environmental performance: adopting environmental policies; reducing the internal ecological footprint, managing portfolio environmental risks, providing green microcredit, and providing environmental non-financial services.

InecoBank (Armenia) have appointed managers to be in charge of environmental issues. ACLEDA Bank (Cambodia) is focused on achieving strong, sustainable financial returns, while respecting the environment and community in which we live.

ACLEDA Bank is committed to the concept of triple-bottom-line reporting and has developed an Environmental, Social and Community policy (Allet, 2011: 9).

Allet (2011: 10) indicates that the following European banks; ACLEDA Bank, K-Rep Bank, MiBanco and XacBank have set up specific objectives. They also monitor their levels of energy use closely. These banks also monitor their levels of water consumption, paper use and carbon emissions.

Some banks, including ACLEDA Bank and ProCredit, have an exclusion list defining all types of activities that the institution will never finance. The activities that are screened out are all activities that are illegal under national and international standards and also activities that present high environmental and social risks, for example the production and trade of hazardous chemicals or ozone-depleting products (Alett, 2011: 10).

According to Alett (2011: 11), MicroCred adopted an environmental risk-categorization list in order to measure environmental performance of the organisation. This environmental risk categorization list ranks different activities according to their level of environmental risks. The list consists of different categories, ranging from Category A (high-risk), Category B (medium-risk) and Category C (low-risk). MicroCred will then only allow a certain percentage of the loan to be allocated to a Category A, high-risk activity.

Another Bank in Bosnia makes use of a twenty-question form where the client needs to complete the form that consists of various environmental questions. The client needs to obtain a certain score in order to qualify for the loan (Allet: 2011: 12).

According to Delmas and Blass (2010: 251), corporate environmental performance indicators are usually divided into three main categories. These categories include environmental impact such as the toxicity, emissions and energy use, regulatory compliance such as non-compliance status, violation fees and number of audits and organisational processes such as environmental accounting, audits, reporting, and environmental management systems.

Furthermore, Delmas and Blass (2010: 256) have identified the following practices implemented to measure environmental performance:

The Toxic Release Inventory (TRI), the US EPA TRI publishes annual data on releases and transfers of toxic chemicals from US industrial facilities.

Risk Screening Environmental Indicators (RSEI), the RSEI software, which is developed by the US EPA and based on the TRI data, calculates the health risks associated with the toxic releases.

Regulatory Compliance, the following information is used to calculate regulatory compliance: quarters in non-compliance, informal enforcement actions and formal enforcement actions.

Reporting and Transparency are often used by socially responsible investors as an input measure to complement environmental performance data.

The Plan-Do-Check-Act (PDCA) forms the basis for total quality environmental management (GEMI, 1998: 17).

The Plan-Do-Check-Act consists of the following:

1) PLAN

Understand the gaps between the customers' expectations and what the organisation delivers, set priorities for closing these gaps and develop an action plan to close the gaps.

2) DO

Implement the necessary changes and collect data to determine if gaps are closing.

3) CHECK

Observe the effect of the change or test. Analyse the data and pinpoint any problems.

4) ACT

Study the results and redesign systems to reflect learning. Change standards; communicate the changes and retrain, if necessary.

Step 5 would be to repeat Step 1 (PLAN) with the new knowledge. Step 6 would be to repeat Step 2, with the new knowledge, and so the cycle continues (GEMI, 1998: 17).

2.6.2 South African practices

According to Van der Merwe (2012: 1), the banking sector in South Africa measures and monitors direct impacts on the environment and improvement targets are set. Each of the banks has sustainability officers. If there is no sustainability officer present, no-one is promoting environmental sustainability.

The banks in South Africa are aware of the need to analyse and shield against potential risks. Therefore the banks see environmental sustainability as a risk management issue (Van der Merwe, 2012: 1).

Furthermore, Van der Merwe (2012: 2) advises that financial institutions approach the Minister of Environmental Affairs for a special consideration exempting them from environmental liability, through the Banking Association of South Africa (BASA).

South African banks make use of the following practices to promote environmental performance:

Through BASA, Business Unity South Africa and the National Business Initiative banks engage with government on issues of national environmental law, policy and strategies in order to promote environmental performance (Van der Merwe, 2012: 2).

Banks in South Africa have also signed the BASA code of environmental conduct on environmental issues and the banks work together with the Bank SETA to give bankers environmental and social training (Van der Merwe, 2012: 2).

The voluntary Code for Responsible Investing in South Africa (CRISA/Regulation 28) launched in July 2011 is also used by the banking sector. This code promotes responsible investing and encourages institutional investors to integrate environmental, social and governance issues formally into their investment decisions (Van der Merwe, 2012: 2).

Furthermore, Van der Merwe (2012: 3) states that banks also make use of environmental background checks for large transactions.

South African banks are signatories to the Equator Principles (EPs). The EPs are a voluntary set of standards modelled on the World Bank and International Finance Corporations' (IFCs) method of determining, assessing and managing social and

environmental risks. Through these EPs, banks are pushing their clients to improve their environmental standing. Banks give their clients the chance to improve and to comply with environmental regulations (Van der Merwe, 2012: 4).

According to the IISD (2013: 1), effective practices in the banking sector to promote environmental performance have taken two key directions:

- Environmental initiatives such as recycling programmes or improvements in energy efficiency, and social responsible initiatives such as support for cultural events, improved human resource practices and charitable donations;
- The integration of environmental and social considerations into the following areas of the bank: product design, mission policy and strategies.

For example, the development of new products that provides environmental businesses with easier access to capital and the integration of environmental criteria into lending and investments strategies.

The IISD (2013: 1) indicates that banks also developed mechanisms to assess the environmental risk exposure of their customers and thereby protect themselves from impending losses. Banks adapted their lending and investment decisions because of their growing concern about their clients' environmental performance.

The environmental assessment toolkit developed by Micky Josipovic (2005) is an example of a mechanism that can be used by financial institutions or small and medium enterprises to identify concerns within an organisation.

2.6.2.1 Environmental assessment toolkit

According to Josipovic (2005: 23), his environmental assessment toolkit has been applied in two South African small and medium enterprises. The assessments and discussions revealed areas of concern and motivated stakeholders to assess concerns in detail. This toolkit is used to assess the analysis of the appropriate legislative framework, a review of the business self-regulation in the form of the widely accepted international and regional standards of environmental management, and the analysis of existing toolkits and their adaptation for South African conditions.

2.6.2.2 ISO 14000

According to ISO (2009: 6), the ISO 14001 principles are the world's most recognised framework for environmental management systems. This system helps organisations to manage and better the impact that activities have on the environment and helps organisations to manage sound environmental management.

2.6.2.3 Environmental Management Plan (EMP)

According to Nel and Wessels (2010: 69), the Environmental Management Plan is recognised by the Department of Environmental Affairs and Tourism as the tool of choice to exhibit what impacts are indeed monitored and managed and which developers have made suitable provision for improvement of environmental impact. The EMP integrates various environmental management tools such as setting objectives and targets, clarifying roles and responsibilities, establishing environmental ability on a site, and setting the relevant time scales during the project's life cycle.

2.7 Conclusion

In this chapter, the key factors associated with environmental performance of an organisation were discussed. A discussion of all the terms that relate to environmental performance took place and a definition was coined by making use of the terms associated with environmental performance.

Environmental performance was defined as a quantifiable measurement that measures the ability of a given organisation to achieve its goals, by sparingly making use of resources, to such an extent that it does not have an adverse effect on the ability of future generations to achieve its goals.

A discussion about legislation governing environmental performance at an international and domestic level was discussed and the measures which are used to measure environmental performance were elaborated on.

The similarities between international and domestic methods were discussed and it transpired that South African organisations make use of some of the international methods to track environmental performance.

Difficulties associated with achieving high levels of environmental performance were identified at natural, social, economic and institutional levels.

In contrast to the difficulties identified, effective practices implemented in the banking sector, both internationally and in South Africa, were identified and discussed that may potentially assist with promoting environmental performance in the banking sector.

The challenges that are faced are whether the measurement tools and legislations, implemented by government and organisations, comply with legislation, or whether there is a belief and culture to promote environmental sustainability in order to preserve resources for future generations. Various difficulties associated with achieving high levels of environmental performance will need to be resolved, as economic, social and natural challenges all bring specific challenges to organisations trying to maintain high levels of environmental performance.

It was, however, seen from the literature review that organisations that are able to achieve high levels of environmental performance usually perform well economically as well.

In order to achieve the objectives of this study, employees working for FNB Business Inland will need to be tested on the methods that can be used and concepts pertaining to environmental sustainability, which will be an indication of how well the environmental policies of the organisation have been implemented.

In the next chapter, the focus will be on the research methodology, including research design, sampling and data collection in order to determine the employee awareness of environmental performance at FNB Business Inland.

Chapter 3

3.1 Introduction

In Chapter 2, the literature review, the key terms associated with environmental performance of an organisation were discussed. The terms, which all relate to environmental performance, were used to define the term *environmental performance*.

In order to address the primary objective of this study, to analyse employee awareness of environmental performance at FNB Business Inland, it was required to elaborate on how the information of the study was obtained. Chapter 3 contains the research methodology that was used for the study.

Chapter 3 focuses on the research design, sampling, data collection methods and ethical considerations for the study. The first section contains the research design of the study.

3.2 Research design

According to Cooper and Schindler (2011: 727), research design can be defined as the proposal for achieving research objectives and answering questions.

Bryman and Bell (2003: 32) advise that research design provides a framework for the collection and analysis of data, as well as that the choice of research design reflect decisions about the priority given to a range of dimensions during the research process.

There are two major aspects of research design, although the special details will vary according to the aim of the study. The two major aspects of a research design are to (Babbie, 2013: 89):

- Be specific in terms of what the study aims to investigate, and
- the researcher must determine the best way to find this out.

Furthermore, Babbie (2013: 89) states that the research design will help the researcher to make observations and to interpret all that has been observed.

Research design is about having a plan or approach before the researcher can observe and analyse.

Bryman and Bell (2003: 14) conclude that one of these approaches, positivism, can be seen as an epistemological position that promotes the application of the methods of the natural sciences to the study of social reality and beyond.

Nickles (1980: 34-36) claims that from a positivistic point of view, systematic inquiry only becomes possible after a definite theory is available, for only here directives exist.

Meheus (1999: 83) argues that there is something more to Nickels' theory, as it is commonly accepted that the positivistic approach to discovery is also related to the conception of methodology. He further claims that positivists adopt the hypothetico-deductive method.

This study was completed by making use of a positivistic approach; as a positivistic approach to research is based on knowledge gained from positive verification of observable experiences, rather than introspection or intuition (Nightingale, 2012: 1).

Positivistic approaches rely on experimental and manipulative methods and these methods ensure that there is a distance between the subjective biases of the researcher and the objective reality of the study (Nightingale, 2012: 1).

The positivistic approach is based on the assumption that 'the truth is out there'. Quantitative methodology, which is derived from the positivistic paradigm, aims to improve validity by careful sampling, appropriate instrumentation and the appropriate statistical treatment of quantitative data (Cohen, Manion & Morrison, 2007: 47, 133).

According to Bryman and Bell (2003: 573), quantitative research is research that usually emphasises quantification in the collection and analysis of data. As a research strategy, it incorporates a natural science model of the research process, influenced by positivism. This research strategy is deductivist and objectivist.

Statistical methods were used to analyse the data received from the respondents, making the study quantitative by nature. The study tested the perceptions of FNB Business Inland employees in the field of environmental performance.

The study has, in other words, been conducted from a positivistic paradigm utilising a quantitative design. All the employees of FNB Business Inland received questionnaires and all the responses received from the respondents were analysed and statistically manipulated to draw conclusions for the study.

The next section identifies the sampling process.

3.3 Sampling

Sekaran and Bougie (2010: 266) denote sampling as the process where a sufficient number of elements from a population have been selected in order for a study to be completed, which would assist in obtaining a general understanding of the characteristics of the total population.

Cohen *et al.* (2007: 110) indicate that there are two main types of sampling, known as probability sampling and non-probability sampling.

The difference between the two methods is that in a probability sample, the chances of members of the wider population selected are known; as opposed to a non-probability sample where the chances of members of the wider population being selected for the sample are unknown (Cohen *et al.*, 2007: 110).

According to Parker (2014: 1), non-probability sampling is usually associated with respondents returning questionnaires on a voluntary basis.

For the purposes of this study, the researcher relied on respondents to return questionnaires that had been distributed to all the employees of FNB Business Inland and therefore non-probability sampling was used for the purpose of this study. At the point of distribution, 301 employees were employed by FNB Business Inland.

FNB Business Inland is represented by employees ranging from junior clerks to senior managers as well as directors, and therefore the questionnaires were aimed to represent all levels of employment within FNB Business Inland.

The table below indicates the representation of employees at the time of survey distribution:

Table 3.1 Total population for study

	Employment Levels				Total
	Band B	Band C	Band D	Band E	
FNB COO Office Inland	3	5	1		9
Free State	2	51	57	1	111
Northern Cape	1	15	11		27
North-West	1	25	19		45
Mpumalanga	1	31	27		59
Limpopo	2	24	24		50
Total	10	151	139	1	301

As mentioned earlier, data were collected from electronic questionnaires, which were completed by the respondents from the total population set out above. More detail will be provided on the data collection method that was utilised in the following section.

3.4 Data collection method

The data collection method can be defined as the method that was used to gather information regarding the study (Robinson & Reed, 1998: 23). The information that was gathered by making use of the data collection method was to describe or explain the employee awareness of environmental performance at FNB Business Inland better.

The data collection method used in this study was electronic questionnaires.

Robinson and Reed (1998: 86) state that questionnaires are instruments used to deliver a series of well-formulated written questions, distributed in person, electronically or by mail. Questionnaires are normally used to gather large amounts of data in wide-ranging samples whose members are somewhat inaccessible or expensive to reach for purposes of interview.

Bryman and Bell (2003: 141) confirm the above by clarifying that self-completion questionnaires can be presented in different formats, such as postal or mail. Closed

questions are preferred over open-ended questions, as carefully formulated questions will assist with coding responsibilities (Bryman & Bell, 2003: 153).

Furthermore, Bryman and Bell (2003: 142) indicate that some of the main advantages of using questionnaires are the cost and time benefits of administering questionnaires, compared to other known methods.

3.4.1 Method

Due to the fact that the employees working at FNB Business Inland are spread across the Free State, Northern Cape, North-West, Mpumalanga and Limpopo, a self-administered questionnaire was distributed by making use of an online survey tool to collect data.

Bryman and Bell (2003: 142) list five main advantages of using self-administered questionnaires, which are indicated below and applied to the study:

Cheaper to administer – the cost of interviewing can be expensive and self-administered questionnaires are advantageous if the sample is geographically widely dispersed.

Quicker to administer – questionnaires can be sent out via post or else it can be distributed in very large quantities at the same time; a thousand questionnaires can be distributed by the click of a button.

Absence of interviewer effects – the characteristics of interviewers may affect the answers that respondents provide.

No interviewer variability – Self-completion questionnaires do not suffer from the problem of interviewers asking questions in a different order or in different ways.

Convenience of respondents – Self-completion questionnaires are more convenient for respondents, because they can complete a questionnaire when they want and at a pace they prefer.

The researcher benefited from making use of the questionnaires, as travelling to the five regions were avoided, consistency of the questions were maintained and the questionnaires were quicker to administer, as indicated above.

The study benefited from the use of the electronic questionnaires, as there were no interviewers present that could have influenced responses directly or indirectly, as well as the fact that the consistency and the sequence in which the questions were presented were exactly the same for each respondent.

The respondents' main benefit was that they could complete the questionnaires in their own time and at their own desired pace and comfort.

3.4.2 The questionnaire

The researcher used a self-administered questionnaire (Appendix A) that was based on a questionnaire from another study, which was completed in 2010 on environmental performance, by Enslin. The questionnaire was adjusted to suit the requirements of this study and the organisation currently researched. The researcher used the literature review to formulate additional questions, which were added to the questionnaire.

The perceptions of environmental performance of employees working at FNB Business Inland were tested and therefore some questions pertaining directly to recent activities and initiatives introduced in the organisation were included in the questionnaire.

The questionnaire was divided into three sections:

Section A: Included six biographical questions regarding the age, gender, academic qualification, level of employment, tenure within the organisation and demographic location of the respondents.

Section B: Included 27 questions relating to the perceptions of employees on the topic of environmental performance.

Section C: Featured one open-ended question that requested employees to advise what initiatives could be implemented by the organisation to improve the environmental performance of FNB Business Inland in future.

The average time for employees to complete the questionnaires was estimated at 15 minutes.

Each section's questions featured different scaling methods, as the various scaling methods each have different statistical significance, which is addressed in the following section.

3.4.3 Scales

For the questions in Section A of the questionnaire, a nominal scale was utilised to analyse the data.

According to Sekaran and Bougie (2010: 148), nominal scales are always used to obtain personal data such as gender or department in which a respondent may work. Sekaran and Bougie (2010: 141) further indicate that nominal scaling is used to assign respondents to specific categories that have no intrinsic value, are mutually exclusive and collectively exhaustive.

An example of a nominally scaled question is the following:

At what employment level are you employed at FNB Business Inland?

- A – Band B
- B – Band C
- C – Band D
- D – Band E

In the instance of employment levels, the categories that were obtained by making use of nominal scaling assisted the researcher to determine what levels of employment had the most and least awareness of environmental performance at FNB Business.

The questions contained in Section B of the questionnaire were scaled using the basis of interval scaling, as opposed to ordinal scaling.

A four-point Likert scale was used in the questionnaire in Section B. Likert scales can be ordinal or interval by nature. Sekaran and Bougie (2010: 148) indicate that ordinal scales provide some information by rank ordering the categories of nominal scales. Interval scales not only rank, but also provide the researcher with information on the magnitude of the difference in the variables.

According to Sekaran and Bougie (2010: 147), interval scales are very useful when responses to various items that measure a variable can be tapped on a five-, seven- or more-point scale, which can thereafter be summated across items. Sekaran and Bougie (2010: 147) also indicate that this type of sampling lends itself to more sophisticated data analysis.

The researcher chose the use of a 4-point Likert scale, as no midpoint could be chosen by the respondents when completing the questionnaires; thereby preventing respondents from selecting neutral choices and alleviating the error of central tendency (Cooper & Schindler, 2011: 297).

Below is an example of a question used in Section B, by making use of a four-point Likert scale:

Using the scale below, please indicate your response to each of the items that follow, by circling the number that best describes your feeling.

Strongly Disagree	Disagree	Agree	Strongly Agree	
1	2	3	4	
I have completed training on environmental efficiency at FNB Business	1	2	3	4

Section C of the questionnaire featured one open-ended question in an attempt to determine any additional implementations FNB Business Inland could consider to improve further on the organisation’s environmental performance.

The following section describes the ethical considerations that had to be considered with the design and distribution of the questionnaires.

3.5 Ethical considerations

Cooper and Schindler (2011: 32) define ethics as the norms or standards of behaviour that guide moral choices about people behaviour and people relationships with each other.

Cooper and Schindler (2011: 33-36) advise that objectivity, voluntary participation, informed consent, data integrity, and confidentiality and respect formed five key concepts that are required to perform ethical research.

In an attempt to ensure that the data obtained from the respondents were unbiased, attention had to be given to five key ethical considerations by the researcher, which are set out below, as explained by (Babbie, 2013: 62-70), and is closely aligned with the concepts provided by Cooper and Schindler above.

3.5.1 Voluntary participation

Voluntary participation entails that no respondent should be forced to participate. Social research often requires that people reveal personal information about themselves, information that may be unknown to their friends and associates. It is thus important that all respondents participate voluntarily (Babbie, 2013: 62).

No employees were forced to complete the questionnaires and the total population was informed in the cover letter that participation in the survey should be done on a voluntary basis.

3.5.2 No harm to respondents

According to Babbie (2013: 63), social research should never harm the people that were studied. It is, however, possible for subjects to be harmed psychologically in the course of the study, but the researcher must always be aware of hidden dangers and guard against them. Harm may indicate emotional or psychological distress, or physical harm.

The cover letter advised the total population that no harm would come to respondents. The categories included in the questionnaire, such as age, employment level and demographic area were only included for statistical purposes. The questionnaire itself did not contain any private or sensitive questions that which could influence the employees' reputation or employment conditions with FNB Business adversely.

3.5.3 Anonymity and confidentiality

A respondent is considered anonymous when the researcher cannot identify a given response with a given respondent (Babbie, 2013: 65).

The demographic, age group and employment level fields in the survey were only included for statistical purposes, as items could be cross-referenced to determine whether certain age groups or employees of a certain employment level were more aware of environmental performance and practices within the organisation.

In almost all instances, the employment number for each employment band in the region made it nearly impossible for the researcher to tie a specific response to a specific employee and therefore ensured that the respondents remained anonymous. The only exception was the Band E and Band B employees.

Babbie (2013: 66) states that a confidential survey is a survey in which the researcher is able to identify a given person's response, but essentially promises not to do so publicly.

The cover letter advised the total population that even if it were able to link a specific response to a certain employee, the respondent's response would be treated as confidential and no information would be made known or included in the research if a link could be established between a specific employee and a response received.

The following example is included to understand the difference between anonymity and confidentiality better. Questionnaires are anonymous when a researcher sends them out and, upon return, there are no identifiable numbers/names on the questionnaires. Questionnaires are confidential when a researcher sends them out and, upon return, the researcher knows exactly whom it came from, but an agreement was reached on the confidentiality of all the contained information.

For the purposes of this study, both anonymity and confidentiality were exercised.

3.5.4 Permission obtained

Another ethical criterion that needed to be addressed was informed consent. Informed consent stresses the importance of both accurately informing your subject or respondent as to the nature of the research and obtaining his or her verbal or written consent to participate (Babbie, 2013: 70).

The questionnaires were distributed to the entire population of FNB Business Inland and it was made known that participation would be on a voluntary basis; therefore, participation would indicate that the respondent has given permission for the data to be included in the study, given that the anonymity and confidentiality criteria were complied with.

Official permission was also required from FNB Business as the perceptions of environmental performance of the organisation's human capital were tested for the Inland province.

To achieve this, the researcher forwarded a request to obtain permission to the COO of FNB Business Inland, who is also considered the head of compliance matters for FNB Business Inland.

This request was motivated by the COO and forwarded to the Head of HR, as the research tested human capital within the organisation for the topic and permission was obtained via a signed-off letter, attached as Annexure B to the study.

3.5.5 Minimisation of potential misinterpretation of results

Having made use of the internet-based survey tool, Survey Monkey, the completion of surveys and survey questions could not be manipulated by the researcher. Survey Monkey also provided a summary of the data that were returned by the respondents.

An independent researcher employed by the University of Free State: Economic and Management Sciences was also consulted, who assisted the researcher in ensuring that the correct statistical methods were applied to the data obtained from the respondents. The independent researcher made use of IBM SPSS Statistics 22 to process the results and assist with the drawing of conclusions.

Furthermore, the questionnaires went through a two-step authorisation process, prior to distribution, as the researcher had to submit a draft questionnaire to the Free State Business School for first approval and thereafter to the independent researcher who assisted with the statistical analysis for final signoff.

3.6 Conclusion

This chapter outlines the quantitative positivistic research design and methodology that was used for this study. The study was descriptive by nature, which was supported by design. A comprehensive non-probability sampling design was chosen as sampling method and all FNB Business Inland employees received an equal opportunity to complete the questionnaire.

The ethical considerations were also discussed in the chapter, which ensured that the study was completed in an unbiased, ethically sound manner with any possible errors having been kept to a minimum.

The results that will be obtained from the research methods will be presented in the following chapter.

Chapter 4

4.1 Introduction

In Chapter 3, the research design and methodology used for the purpose of the study were discussed. The ethical considerations applicable to the study were also elaborated on and adhered to during the distribution of the surveys.

By making use of the research design and ethical consideration guidelines set out in the previous chapter, the researcher designed and distributed the questionnaires.

As indicated in Chapter 3, the questionnaires were designed and built on Survey Monkey and then distributed to 301 recipients, all the employees working within FNB Business Inland. In essence, the entire total staff complement of FNB Business Inland received equal opportunity to complete the survey online.

The results have been combined and with the assistance of the researcher, mentioned in Chapter 3, the descriptive and inferential statistics were extracted from the responses. This chapter will elaborate on the results received from the respondents.

The next section will indicate the response rate of the questionnaires that were distributed.

4.2 Response rate

In total, 177 respondents completed the questionnaires online; however, the researcher had to discard 22 returned questionnaires, as these 22 questionnaires were only partially completed by the respondents. All 22 of these respondents exited the questionnaire after only completing the biographical data sections.

In essence, 155 responses were received out of the potential 301, thus indicating that 51.5% of all distributed questionnaires were fully completed and have therefore been used for analysis.

This is an acceptable response rate, according to Sekaran and Bougie (2010: 250). An acceptable response rate for questionnaires distributed electronically is the same

for questionnaires that have been distributed by mail. An acceptable response rate for questionnaires distributed by e-mail, and therefore PC medium, is a response rate of 30% or more Sekaran and Bougie (2010: 237).

The response rate of 51.5% is therefore adequate for the study.

The following section describes the biographical data that were received from the respondents.

4.3 Data analysis from questionnaires

The following three sub-sections provide results and findings that have been retrieved from the 155 questionnaires included in the data analysis.

4.3.1 Section A – Biographical data

Section A included six nominally scaled questions, which allowed the researcher to make use of cross tabulation, average scores and Anova tests to determine whether certain demographical items had an impact on the perceptions or awareness of employees on the topic of environmental performance, and to determine whether the responses received biographically represent the employee complement of FNB Business Inland.

4.3.1.1 Age of Respondents

Age was selected as one of the biographical items, as more emphasis has been placed on environmental performance in recent years. Age may indicate that older respondents (aged 55 to 64) may have different opinions on environmental performance, compared to younger respondents (aged 25 to 34).

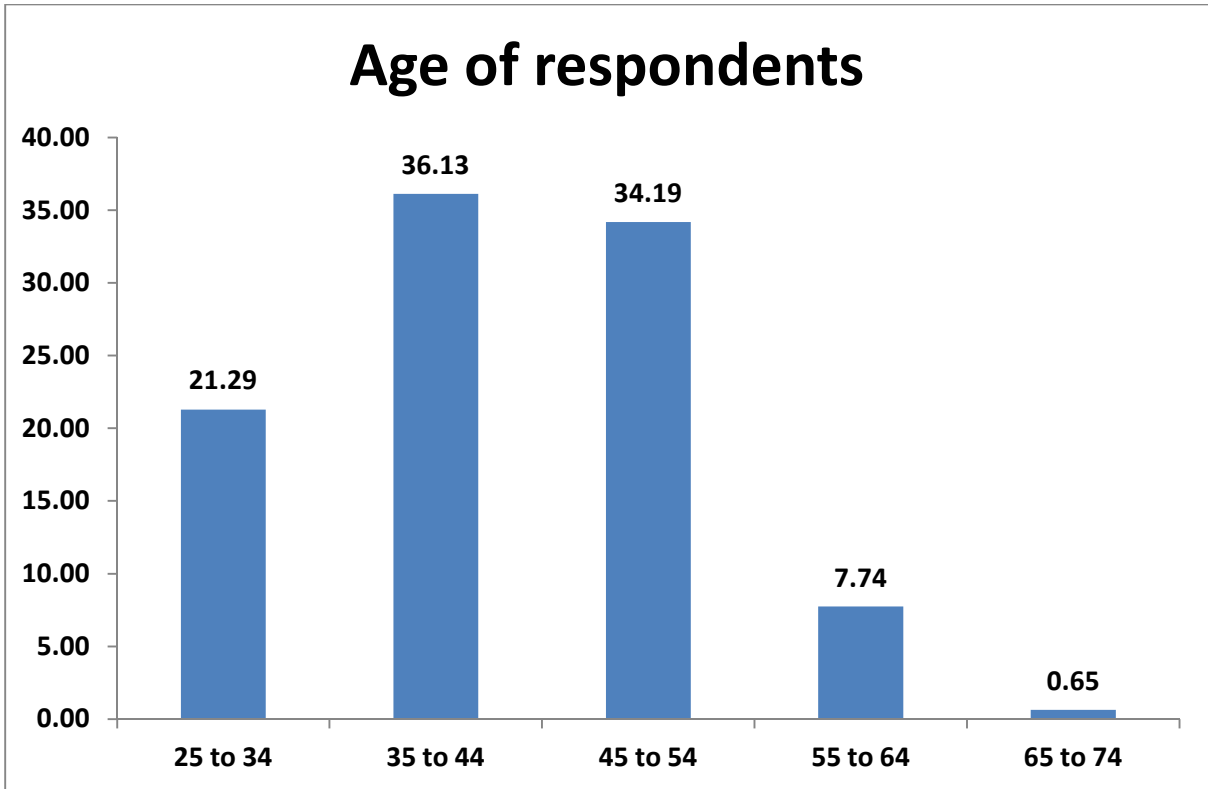


Figure 4.1 – Age of respondents

Figure 4.1 indicates that the majority of the respondents (70.32%) were aged between 35 and 54, with another 21.29% of the respondents aged between 25 and 34. The above totals indicate that close to 92% of the respondents were aged between 25 and 54, which could be expected, given that the retirement age of the organisation is 60, with many officials going on early retirement (55) in recent years.

By making use of cross tabulation, the researcher was able to determine whether various age groups had different opinions on the importance of environmental performance.

Table 4.1 – Cross-tabulation [Age vs. Importance of high levels of environmental performance]

		It is important for organisations to achieve high levels of environmental performance.	
		Overall Disagree	Overall Agree
Age	25 to 34		100.0%
	35 to 44		100.0%
	45 to 54	1.9%	98.1%
	55 to 64		100.0%
	65 to 74		
Total		0.6%	99.4%

The table above indicates that almost all the respondents unanimously agree that it is important for organisations to achieve high levels of environmental performance.

The results of the cross tabulation indicate that age does not have an impact on perceptions whether employees consider environmental performance to be important or not. It may also be an indicator that the organisation has reiterated the importance of environmental performance at an acceptable level to all age groups within the organisation.

4.3.1.2 *Academic qualifications*

The second biographical category that was included was the respondent’s highest academic qualifications.

The purpose of inclusion of academic qualifications was to determine if any direct link could be established between education and knowledge or perceptions of environmental performance of the respondents.

Figure 4.2 below indicates the results obtained from the respondents. The bar chart is skewed to the left, which could be explained due to the historical employment requirement of Grade 12 versus the more recent employment requirement of NQF Level 5, due to stricter compliance legislation governing the banking sector.

In total, 49.68% of the respondents have either a national diploma or a national certificate. If one considers that the 25.81% of Grade 12 respondents may be

historical employees who have been employed prior to new requirements, the results obtained are as expected, with a majority (75.49%) of officials having qualifications ranging from Grade 12 to a national diploma level.

The remaining 24.51% of respondents have bachelor's degrees or postgraduate qualifications, which will typically be the more senior or specialist officials within the organisation.

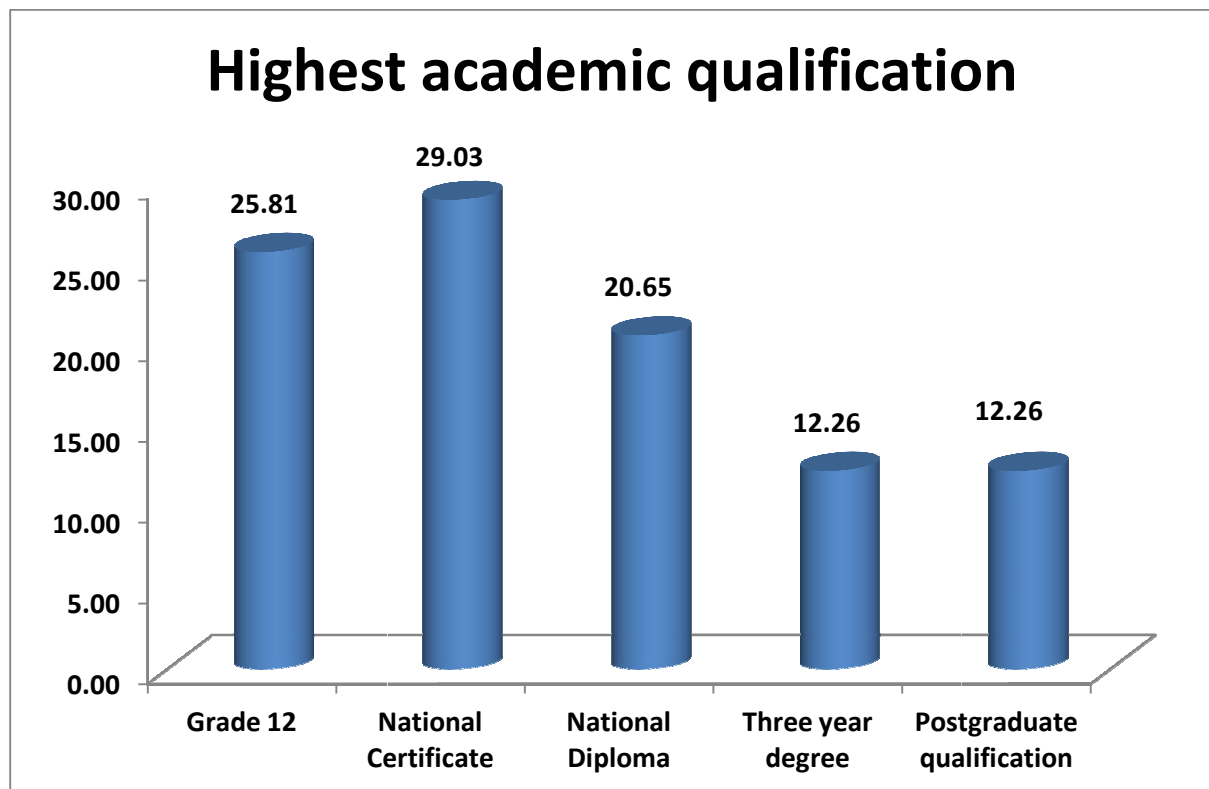


Figure 4.2 – Highest academic qualification

4.3.1.3 Employment level

Employment level was also included in the questionnaire, as compliance officers and risk managers have roles that are more senior within the organisation. Ultimately, management remains responsible for all areas of the business and therefore it was expected that senior officials should have more insight into environmental performance, compared to junior officials. By making use of an Anova test, the results could be obtained and are indicated in Section 4.5 of this chapter.

The pie chart below indicates the employment level of the respondents.

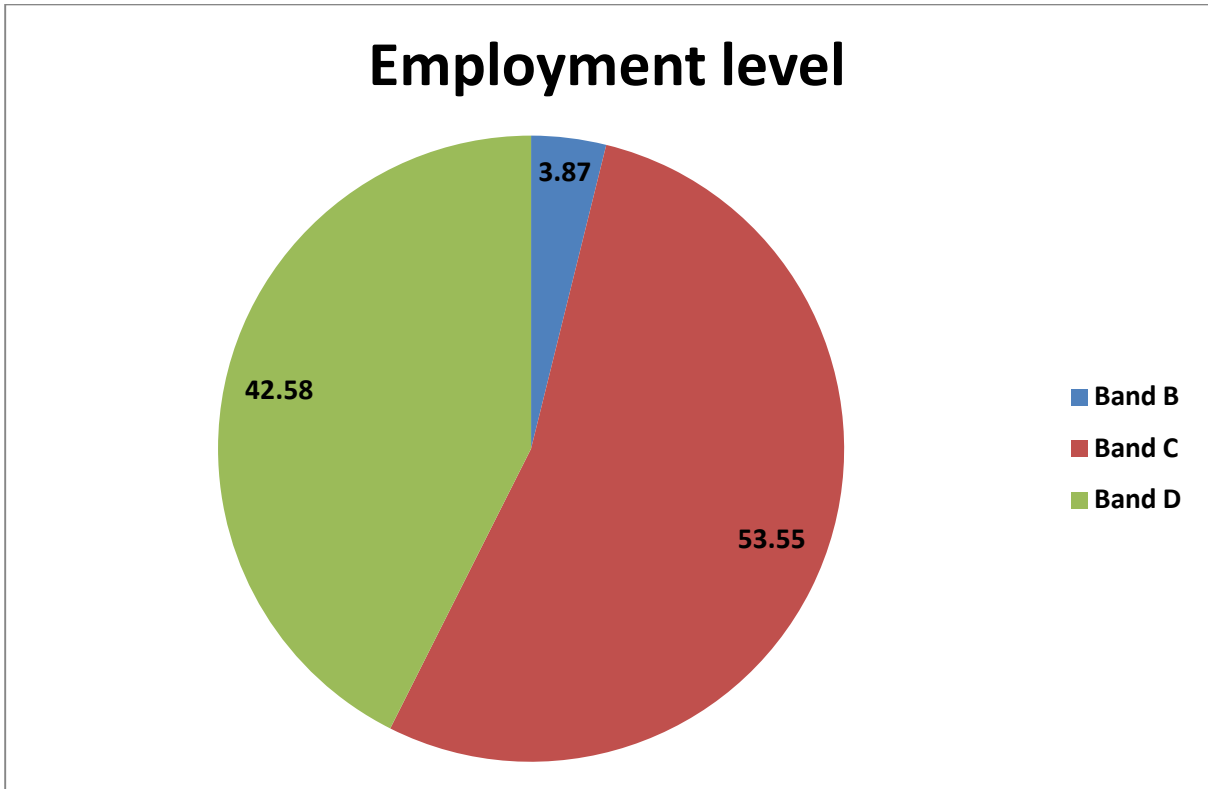


Figure 4.3 – Employment level

The results indicate that the majority (53.55%) of the respondents are employed in a middle management salary band, Band C.

This is consistent with the business model of FNB Business Inland, as the business operates on a relationship model, with each portfolio having a Relationship Manager who visits customers. Larger portfolios have analysts as well. There are other areas such as the Legal and Collateral Support department, and Credit department that have analysts in the junior management salary band (D), which would explain the 42.58% of Band D respondents.

The area that was reviewed has fewer senior management positions available in the organisation. This is also confirmed by the pie chart above indicating that 3.87% of the respondents are senior management (Band B) officials.

4.3.1.4 Demographic location

The researcher also requested the demographic location to be completed by the respondents, as this may be an indication that some areas implement environmental

performance more actively when compared to other areas. This is discussed in Section 4.5 of this chapter.

The bar chart below indicates that 45.16% of the respondents were located in the Free State. This is also confirmed by the business model as the Free State has the largest agriculture credit book within the organisation and is the only region with a credit and LCS (legal and collateral support) team in the region which is not centralised.

Respondents from Gauteng only constituted 3.87% of the responses, which is equal to the Band B (Senior Management) result in Figure 4.3 (Employment Level) above. This can be substantiated by the fact that the Senior Managers are generally located in Johannesburg.

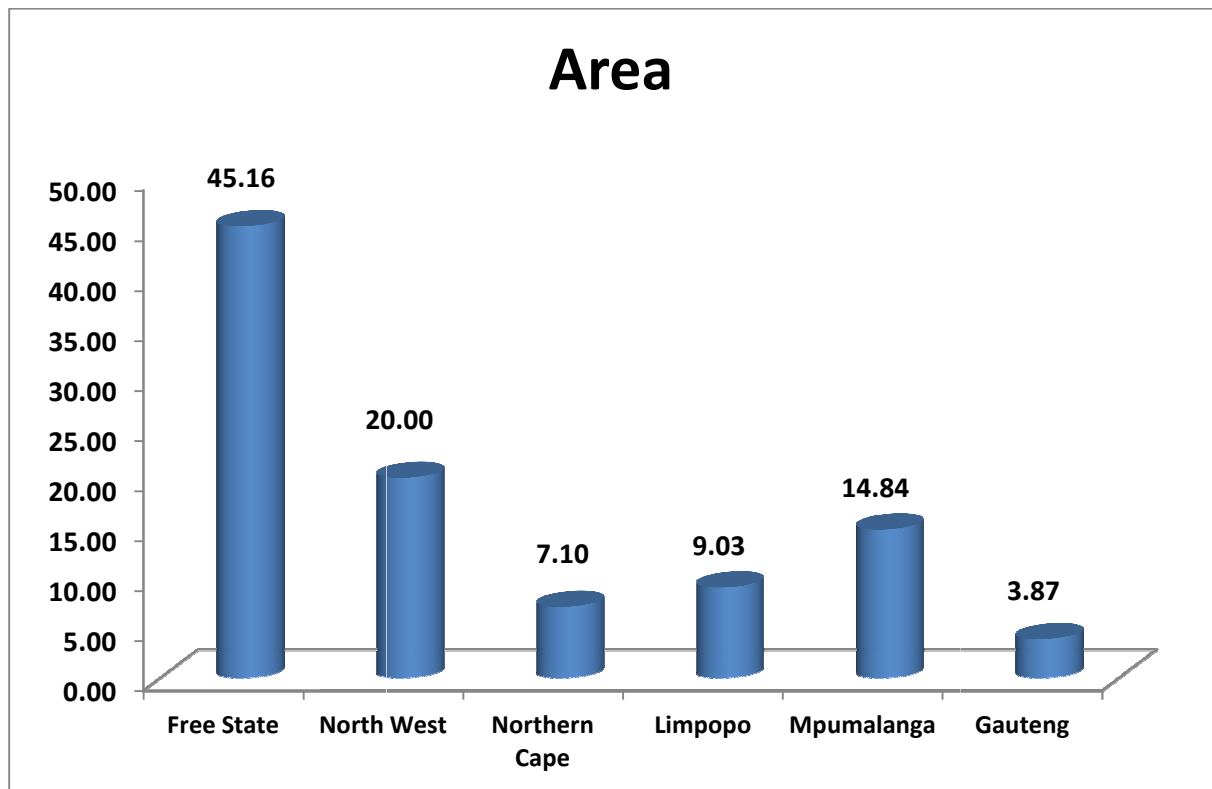


Figure 4.4 – Area

4.3.1.5 Tenure of respondents

Tenure was the final biographical item that was included in the questionnaire. The results are indicated in Figure 4.5 below.

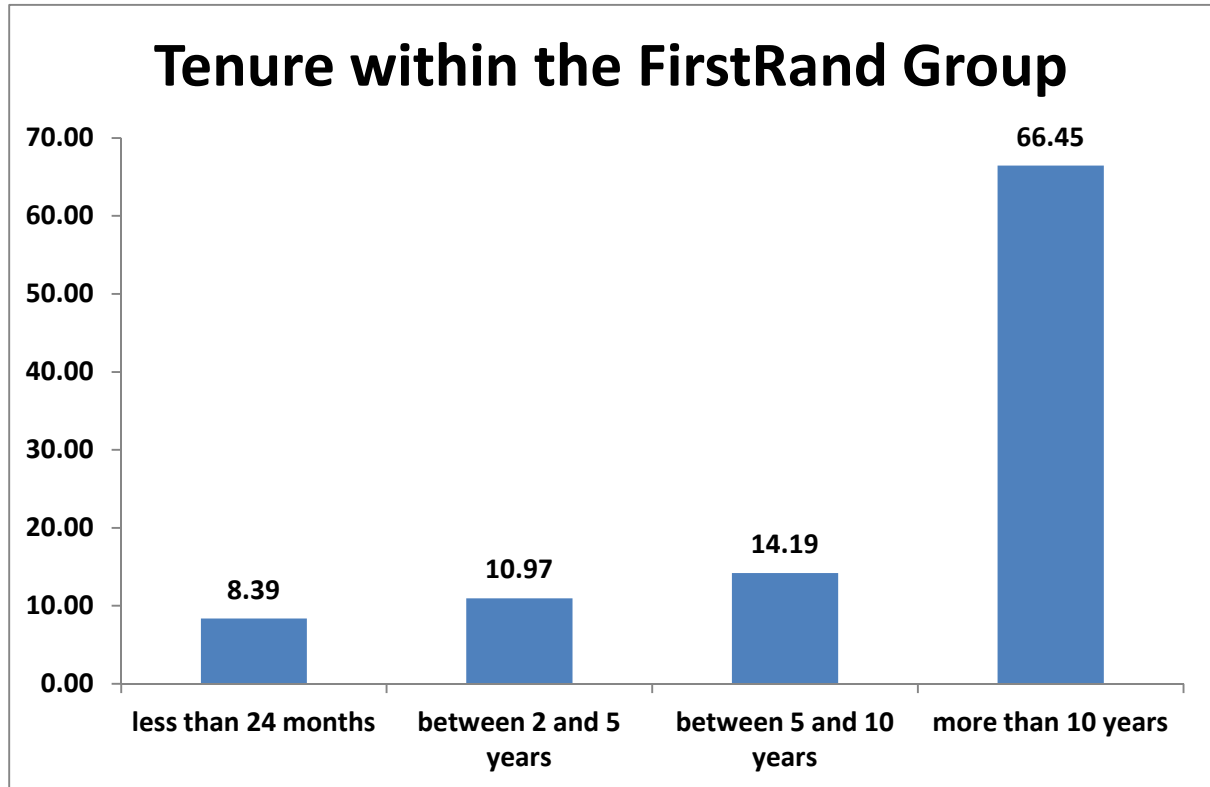


Figure 4.5 – Tenure within the FirstRand Group

The results above indicate that 66.45% of the respondents have been employed by the FirstRand Group for longer than 10 years, with 80.64% of respondents employed for more than 5 years.

This is accurate, as the FirstRand Group generally starts out employees in the Banking Channels environment where the majority of employees are clerks within the branch environment. As they develop banking experience and credit knowledge, they move up the corporate ladder and occupy more senior positions, generally within FNB Business.

As mentioned during the discussion of Figure 4.3, the majority of FNB Business Inland employees are middle management. It takes time to move up the corporate ladder and therefore it can be expected that the majority of employees working at FNB Business Inland will have vast working experience.

The next section focuses on the questions that relate directly to environmental performance.

4.3.2 Section B – Environmental performance

Section B consisted of 21 four-point Likert-scale questions; ranging from *Strongly Disagree* (1) to *Strongly Agree* (4). The responses by the respondents were added and then divided by the number of respondents, thereby calculating the mean value ranging from 1 to 4, with 2 being the middle value and mean. As the researcher worked with categorical values, the mean could not be interpreted as is, therefore the mean had to be changed to a factor value (FV). The FV was then calculated as $2/4 = 0.5$ (or 50%).

The researcher classified the *Agree* (3) and *Strongly Agree* (4) responses together in order to create an overall agreement FV. The difference between the FV and 1 would indicate the disagreement FV.

For the purpose of the study it was accepted that responses with an agreement FV <0.5 ($<50\%$) would be regarded as that the majority disagreed to a statement and an agreement FV >0.5 ($>50\%$) would indicate that the majority of respondents agreed to a statement.

Questions relating to various sub-sections of environmental performance were grouped together to constitute eight sub-sections that are discussed individually below.

The first sub-section discussed is Organisational development.

4.3.2.1 Considering the environment during organisational development

In Chapter 1, the researcher highlighted that FNB claims that awareness of environmental issues and the impact that these issues have on the environment have greatly increased. Furthermore, it was indicated that the organisation had implemented policies to enhance the awareness of the direct environmental impact, in terms of the organisation's daily operations, as well as the environmental impact in terms of responsible lending and business development. The latter is governed by the FirstRand Environmental Risk policy.

Three questions relating to the development of the organisation were positioned together in order to test whether the respondents perceived the organisation to consider the environment during the development of new policies, products or processes (processes relating to the organisation’s carbon footprint).

The figure below indicates the results pertaining to development:

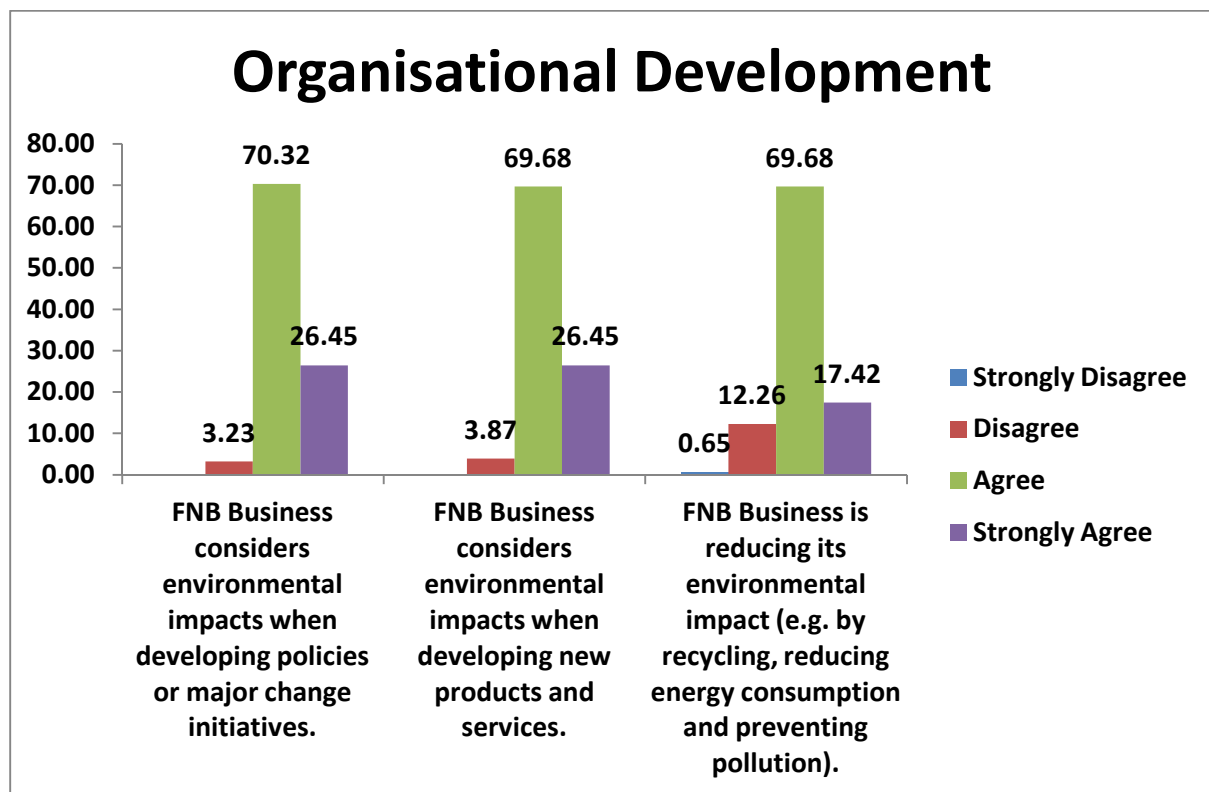


Figure 4.6 – Organisational development and the environment

For each of the questions included in the questionnaire under the sub-section Organisational development, the overall perception of the respondents was that the organisation considered the environment during development.

96.77% of respondents indicated that they *Agree* or *Strongly agree* (overall agree) that FNB Business considers the environmental impact during the development of new policies or major change initiatives.

Almost unanimously, 96.13% of the respondents indicated that the organisation considered the environment during the development of new products and services.

In terms of reducing the organisation's overall environmental impact, 87.1% of the respondents agreed that the organisation is lowering its environmental impact, by means of recycling, preventing pollution, energy consumption, etc.

During the literature review, it was highlighted that a sustainable business considers the impact on the environment in order to save the environment for future generations, while meeting the needs of the current generation. This is achieved when a business chooses to use products and methods that would not have a negative impact on the environment through pollution or the depletion of natural resources.

The literature review indicated that organisational management would implement a strategy according to the environmental responsibility and/or strategy the organisation wishes to accomplish. This may range between mere complying with legal requirements to following sustainable development principles.

The results above therefore indicate that the respondents perceive FNB Business Inland to encourage the development and the infusion of environmentally friendly technologies, which is aligned to Principle 9 of the UN Global Compact during development.

The following section refers to the reporting of environmental performance.

4.3.2.2 Reporting of environmental performance issues

During the literature review, it was indicated that the King III Report on corporate governance states that both large and small businesses are governed by the principles contained in King III.

It was also indicated that the IOD highlighted that organisations had the responsibility to protect its reputation in addition to its operational and financial responsibilities. The triple-bottom-line reporting mechanism enables organisations to be relevant to the society and natural environment within which it operates.

The literature review also indicated that the board of an organisation is responsible for the triple-bottom-line of the organisation.

Below are the results of the questions relating to the reporting of environmental issues.

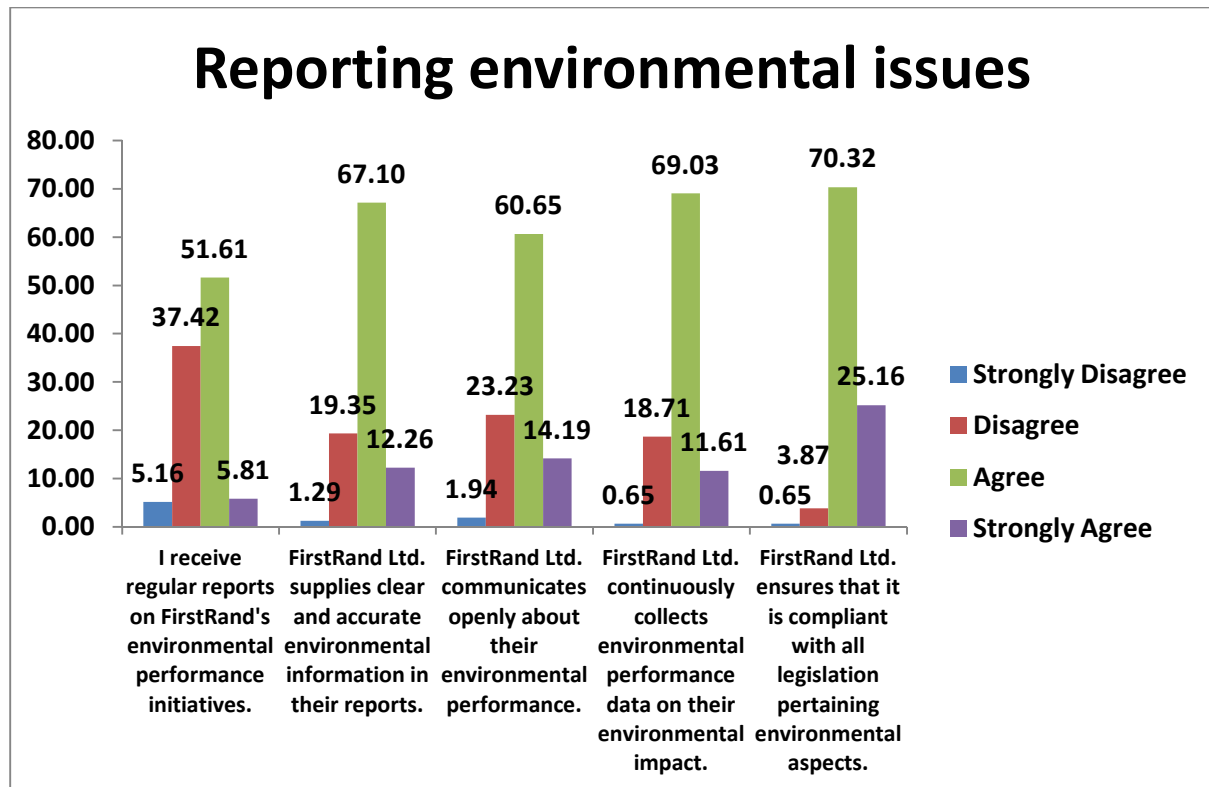


Figure 4.7 – Reporting of environmental performance issues

A marginal majority of respondents (57.42%) reported that they received regular reports/updates on FirstRand environmental initiatives. 74.84% of respondents indicated that FirstRand communicated openly about environmental performance, which were the lowest and second-lowest scores for this sub-section.

In total, 79.36% of the respondents reported that when FirstRand reported environmental information, it was reported in a clear and accurate method.

The majority of the respondents agreed that FirstRand continuously collected data on its environmental impact as well complied with legislation relating to environmental aspects.

Overall, it seems that the respondents believe that the organisation complies with its reporting requirements.

4.3.2.3 Competition

The researcher included two questions relating to competition, as some contradicting literature in Chapter 2 indicates that:

- A highly competitive market may discourage good environmental performance, as competition encourages organisations to cut costs and embark on unethical behaviour; and
- Businesses can enhance their competitiveness through improvements in environmental performance in order to comply with environmental regulations and thereby address the environmental concerns of their customers to place an overall reduction on its products and services.

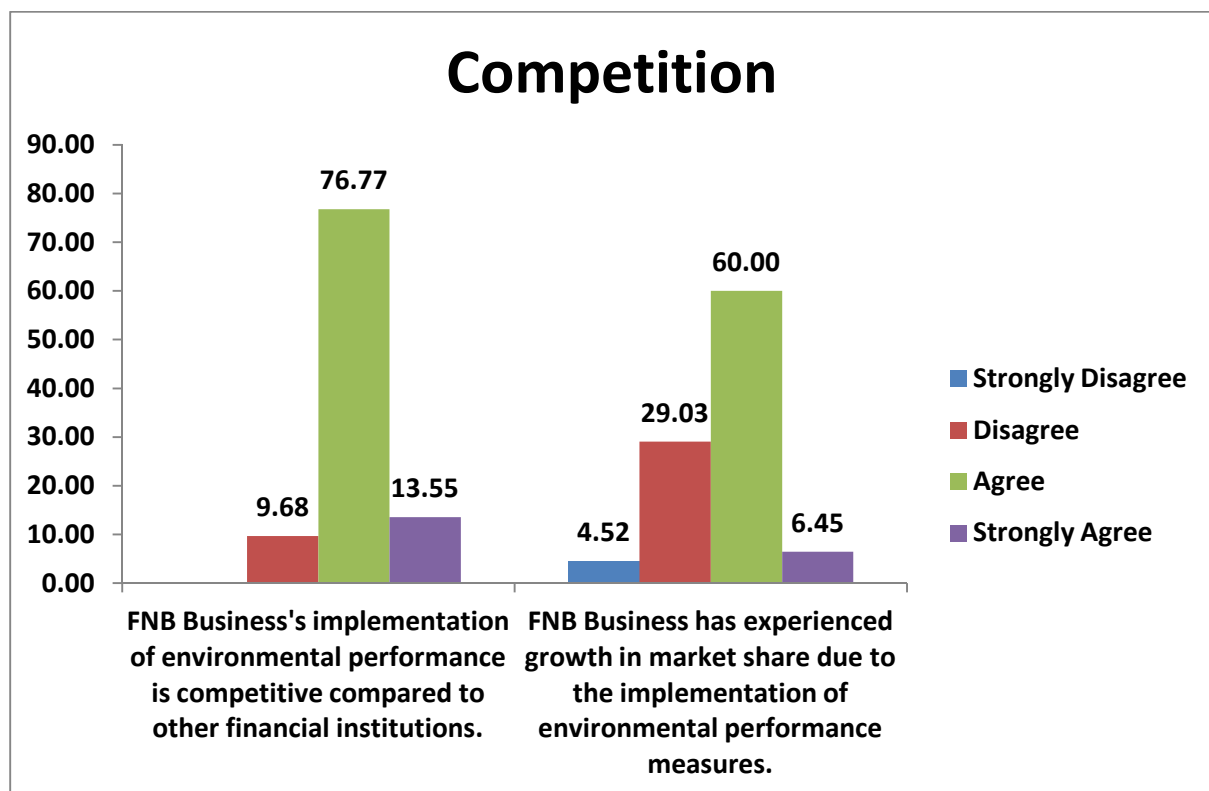


Figure 4.8 – Competition

The majority of respondents (90.32%) agree that FNB Business Inland is competitive with the implementation of environmental initiatives when compared to other financial institutions.

However, a significantly lower number of respondents (66.45%) believe that FNB Business has obtained market share growth because of these initiatives.

Although it is perceived by the respondents that FNB Business implements the correct environmental practices, the question may remain whether customers will actually change from one bank to another, given that the second bank has better environmental policies in place.

4.3.2.4 Equator principles

The literature review informed that South African banks are signatories to the Equator Principles, with FirstRand becoming a part of the Equator Principles in July 2009. The Equator Principles is a voluntary set of standards to determine, assess and manage social and environmental risk.

Four questions were included in the questionnaire relating to Equator Principles and the results are illustrated below:

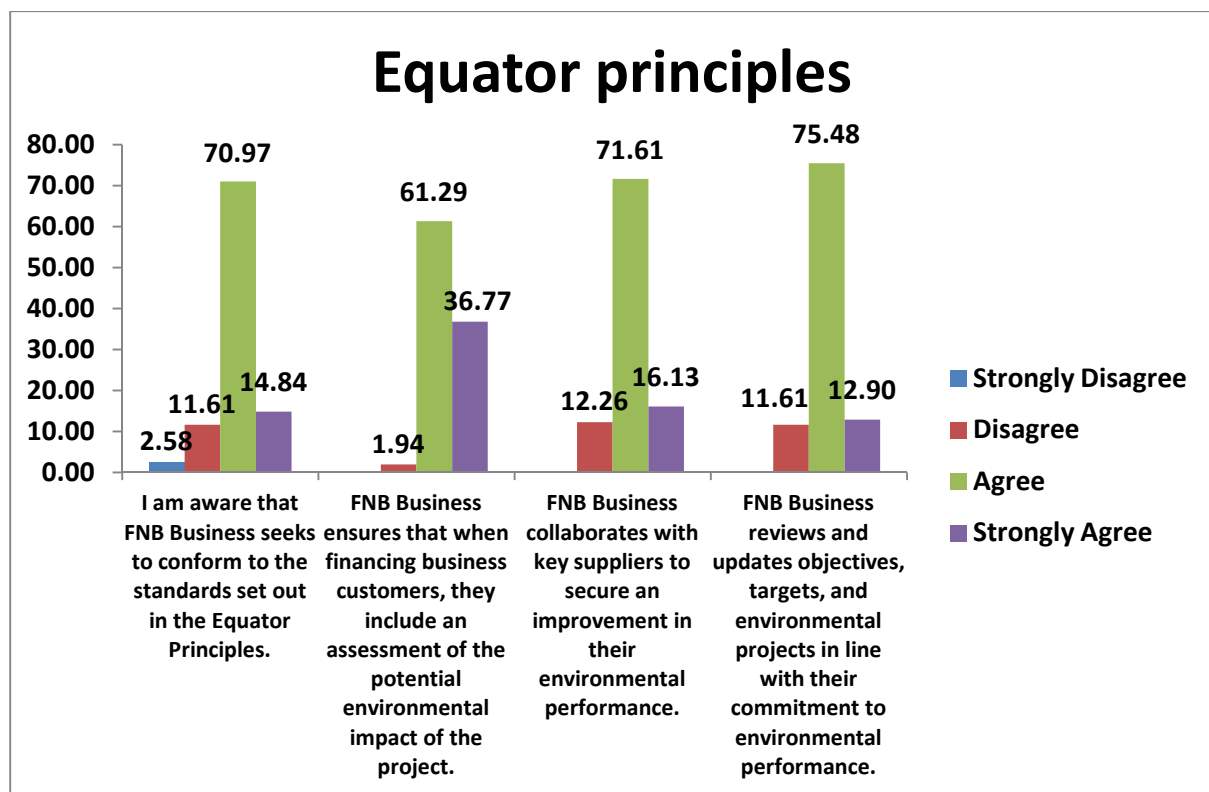


Figure 4.9 – Equator principles

The majority of respondents (85%) “overall agreed” to all four statements relating to equator principles. This is an indication that the respondents are of the opinion that FNB Business Inland complies with the voluntary standards set out in the Equator Principles.

The literature review also indicated that FirstRand has developed a common framework for financial institutions to address environmental and social issues arising from projects these financial institutions finance. This framework was called ESRA.

The second question in this subsection relates directly to the ESRA framework and 98.06% of the respondents indicated that FNB Business ensured that an environmental assessment was completed during financing applications for business customers. This result was also the highest “overall agree” rate achieved in this subsection, which indicates that FirstRand has implemented the framework it developed effectively.

4.3.2.5 Institutes governing environmental performance

As mentioned in the section above and the literature review, the Equator Principles are a voluntary set of standards to assist in determining, assessing and managing social and environmental risk.

The literature also indicated that both voluntary and mandatory reporting is required. Organisations in South Africa are governed by the King III principles and the ISO framework is widely used in South Africa as a leading indicator to measure the elements of an environmental management system.

The researcher included two questions relating to the ISO and King III institutes in order to determine whether the employees in FNB Business Inland believed that the organisation complied with these two institutes.

Figure 4.10 below indicates that the majority of respondents (62.58%) are informed that FirstRand is an ISO 14001 registered organisation.

89.03% of the respondents believe that FirstRand complies with the governing practices as set out in the King III Code of Corporate Governance.

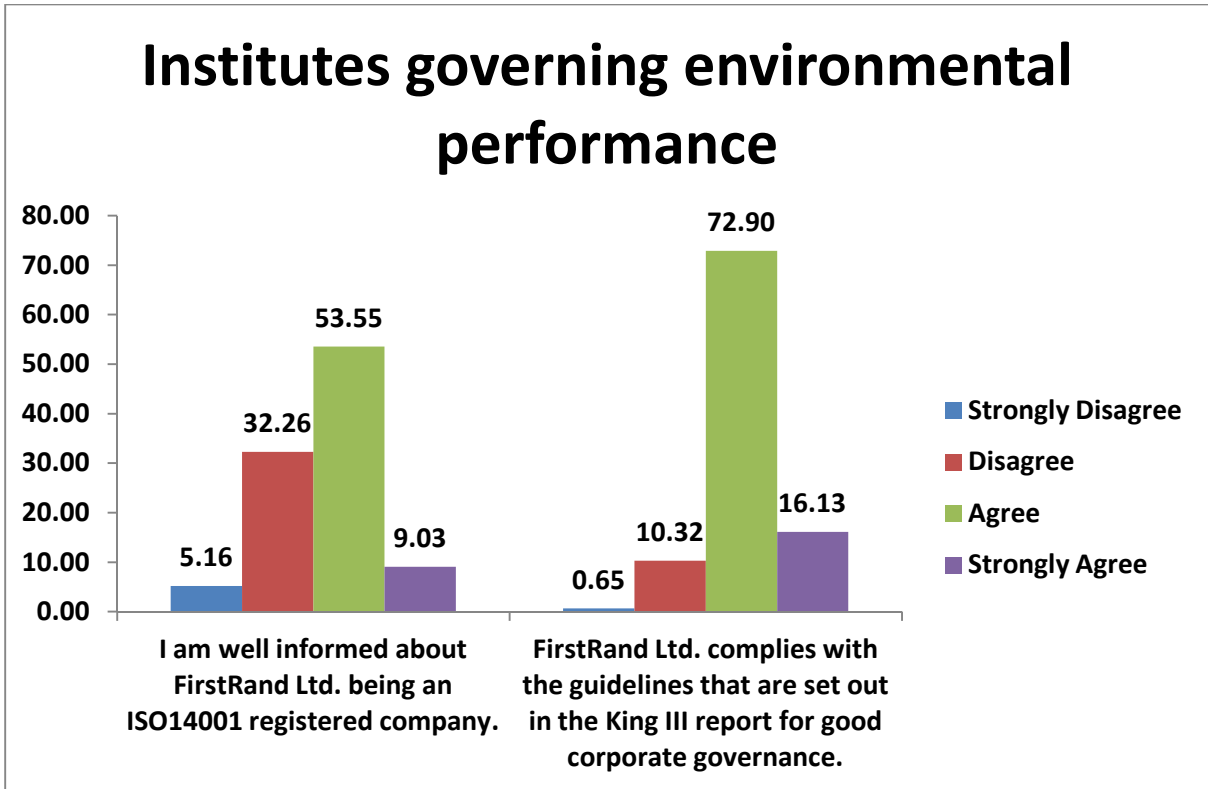


Figure 4.10 – Institutes governing environmental performance

4.3.2.6 *FirstRand Ltd. Environmental Policy*

The FirstRand Environmental Policy not only focuses on the employees in the organisation and the organisation itself, but also includes a culture where the organisation’s customers should be moved to more efficient environmental products.

Three questions relate to the FirstRand policy and are displayed in Figure 4.11 below:

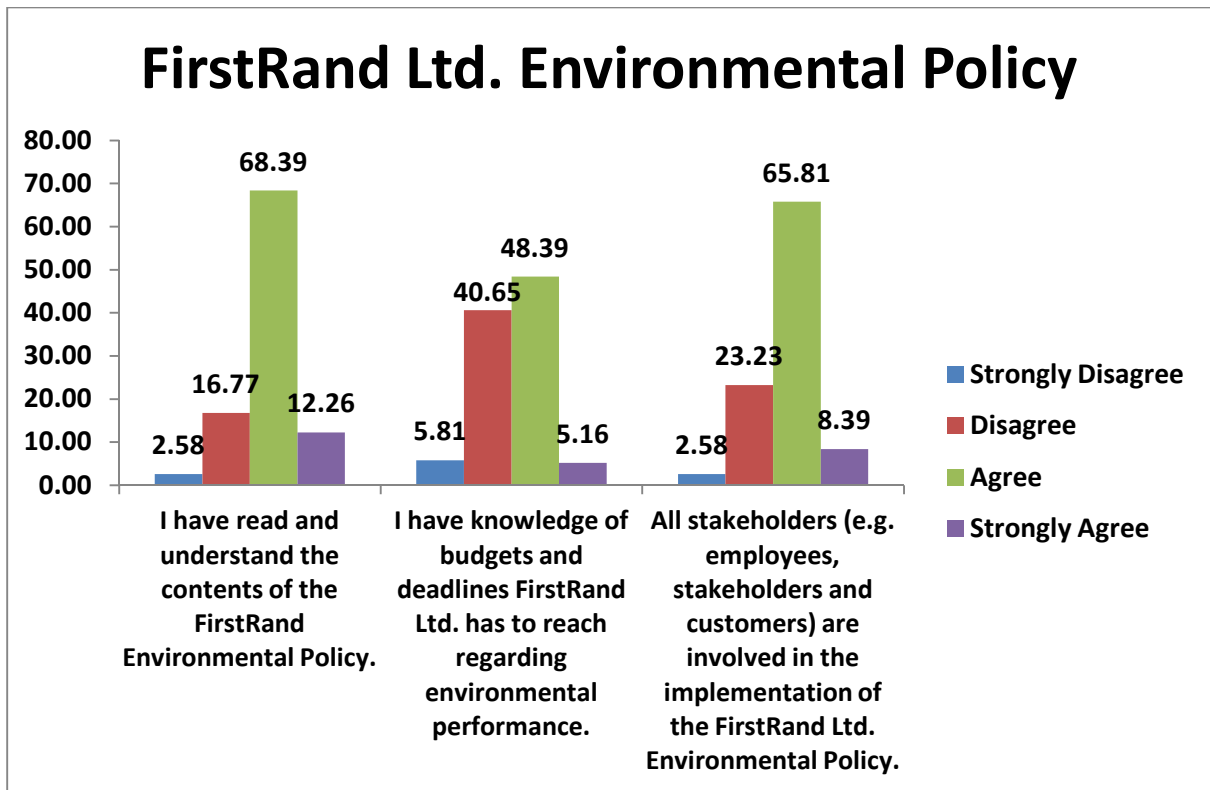


Figure 4.11 – FirstRand Ltd. Environmental Policy

The majority of the respondents (80.65%) have read and understood the FirstRand Environmental Policy. Although this is a high success rate, it is alarming that the score is not higher. It is compulsory for all employees at FirstRand to read and understand the environmental policy within six weeks of employment and to acknowledge this electronically. This may be an indication that there are not sufficient checks in place to monitor whether compulsory policies have been read or not by new and existing employees.

A borderline majority of respondents (53.55%) had knowledge about the budgets and deadlines FirstRand needs to comply with. This might be in line with the organisational structure as only management, compliance officials and credit employees will have detailed knowledge of such requirements.

74.19% of the respondents agree that all stakeholders, internal and external, are involved in the implementation of the FirstRand Environmental Policy. Most external stakeholders will not have a choice, as vendors are required to provide “green” initiatives and business customers seeking credit facilities are required to go through the ESRA process.

4.3.2.7 Environmental performance terminology

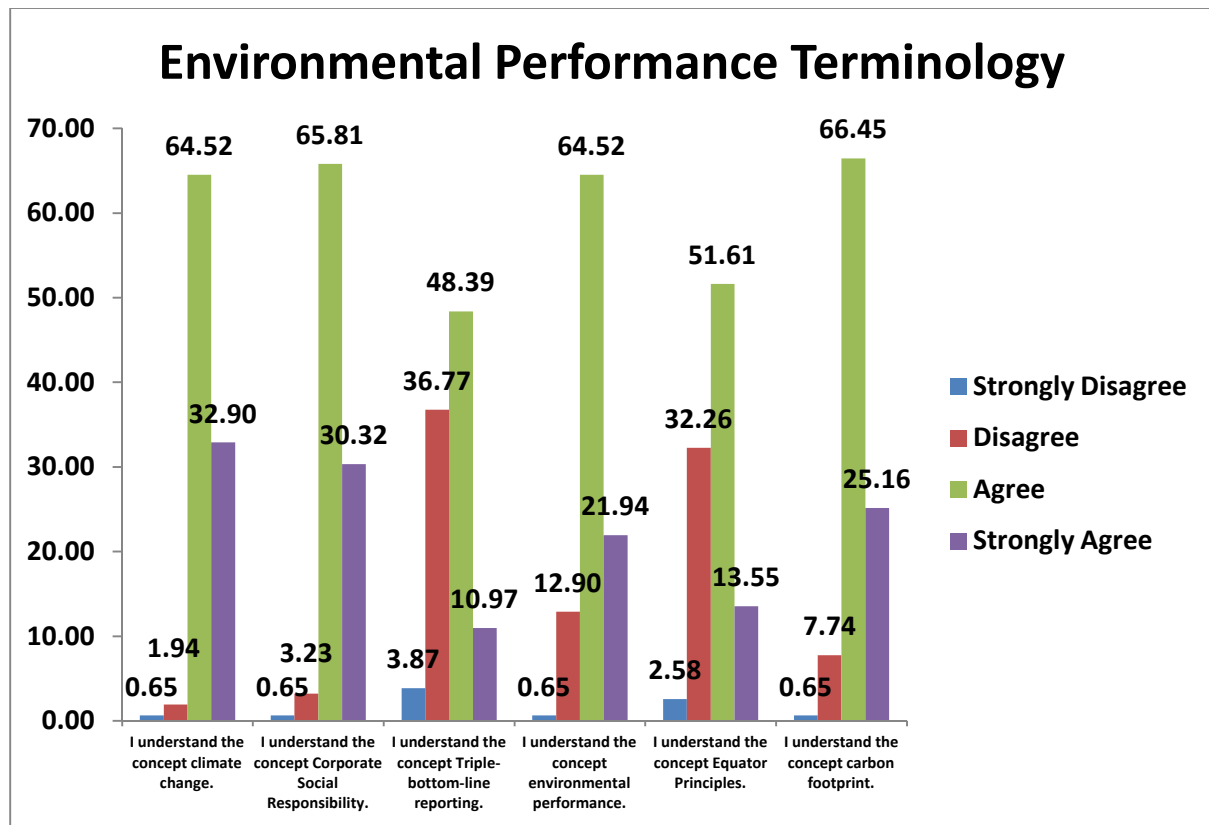


Figure 4.12 – Environmental performance terminology

Six questions relating to the terminology associated with environmental performance were included in the survey. The questions were included by the researcher to determine whether the respondents were comfortable with the terminology associated with the study topic.

On average, the respondents had knowledge of all the terms associated with environmental performance and scored above 85% in all these areas.

There were, however, two exceptions:

- The triple-bottom-line concept is only marginally understood by 59.35% of the respondents; and
- Section 4.3.2.4 above dealt with the Equator Principles. In general, 90% of all respondents indicated that they agreed that FNB Business complied with the equator principles; however, only 65.16% of the respondents indicated in this

sub-section that they understood the terminology associated with the Equator Principles.

The researcher has some concern that given the fact that only 65.16% of the respondents felt they were aware of what the equator principles were, the statistics in section 4.3.2.4 may be skewed, as respondents may have agreed that FirstRand Ltd. complied with the principles without being fully aware of what the Equator Principles were.

4.3.2.8 General

By adding the results of the two questions below together and determining an average, the figure below indicates that on average 96.45% of all the respondents believe it is important for organisations to achieve high levels of environmental performance and that they would like to receive regular updates on what additional steps the organisation has followed to achieve such results.

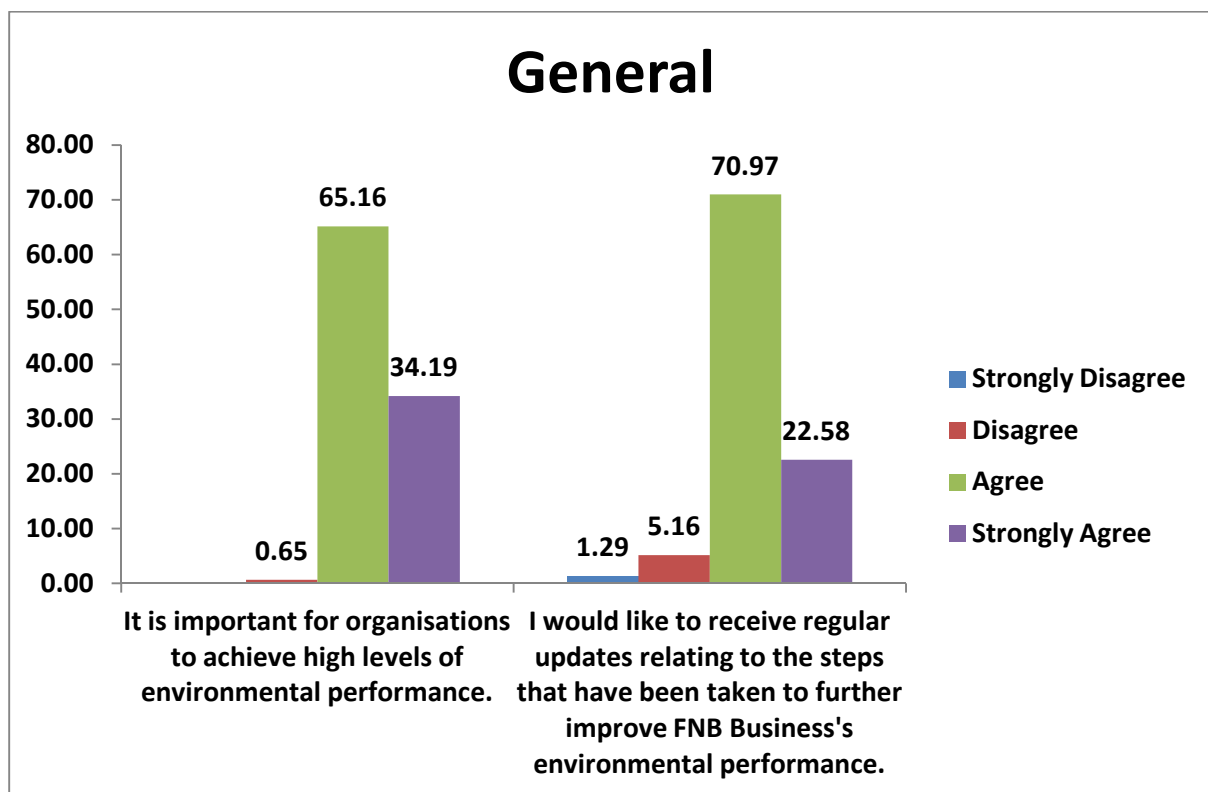


Figure 4.13 – General

4.4 Organisational performance

To determine whether the organisation has performed well with regard to environmental performance, the perception of the organisation's employees plays an important role.

If the employees are well informed about the topic *environmental performance*, understand the institutes and policies that govern such performance within the organisation and are comfortable with the terminology, it is likely that the organisation would perform well in this field.

The table below contains the ranked results of the eight sub-sections included in Section B – Environmental Performance of the questionnaire.

The values range between 0 and 1, where a value of 0 would indicate little to zero performance by the organisation and a score of 1 would indicate that perfect environmental practices exist in the organisation.

Table 4.2 – Organisational performance

	Overall	Rank
Development	0.79	2
Reporting	0.72	5
Competition	0.72	5
Equator Principles	0.77	3
Institutes	0.71	6
FirstRand Ltd policy	0.69	7
Terminology	0.76	4
General	0.81	1

According to the data, the respondents perceive that the organisation performs well in all eight sub-sections of environmental performance; however, the FirstRand policy section was the worst performing area of the eight subsections and ranked last overall.

Concern was raised in section 4.3.2.6 by the researcher that, although the reading of the FirstRand Environmental policy is mandatory, only 80.65% of the respondents indicated that they had read and understood the policy. The figure should be higher, as compliance with the policy is mandatory for all employees.

The fact that not all employees have read and understood the policy, combined with the fact that only 53.55% (refer to section 4.3.2.6) had knowledge pertaining to the budgets associated with environmental performance has resulted in this section being ranked last, with a score of 0.69 or 69%.

The top-performing sub-section was the General subsection, which almost unanimously indicated that the respondents would like to be informed of new environmental practices in the organisation and that the respondents understood the importance of environmental performance. This speaks directly to the culture of the organisation, as well as that almost all employees believe in the cause of preserving the environment.

An interesting observation can also be made with regard to the environment considered during the *development* of the organisation, which was rated second-highest, This indicating that the respondents perceive the organisation to consider the environment during new policies, processes and products.

FNB has been on the forefront with online, electronic and tablet banking in recent years. It was identified as the most innovative bank in the world during 2012. Many of the innovations were solutions to dated carbon-intensive processes, such as tablet banking, which reduces the frequency of customer branch visits. This in turn reduces cash required to be delivered by SBV/Coin to service ATMs. This not only reduces the use of paper-based currency, but also reduces paper-intensive back office processes and fuel used to deliver cash to the branch.

The two top-ranked areas indicate that the organisation in general understands the importance of environmental performance, which has positively influenced the development of new products and processes in the organisation.

4.5 Employee awareness

To analyse the employee awareness levels, a variable had to be created that would reflect employee awareness levels. By making use of results from specific questions in Section B of the questionnaire, an awareness level could be created for each biographical category and group.

The results of the questions in Table 4.3 were combined and utilised to determine the employee awareness variable.

Table 4.3 – Employee awareness variable

Reporting	
B.4	I receive regular reports on FirstRand Ltd's. environmental performance initiatives.
B.5	In my opinion, FirstRand Ltd. supplies clear and accurate environmental information in their reports.
B.6	In my opinion, FirstRand Ltd. communicates openly about their environmental performance.
Equator Principles	
B.11	I am aware that FNB Business seeks to conform to the standards set out in the Equator Principles.
B.15	I am well informed about FirstRand Ltd. being an ISO14001 registered organisation.
FirstRand Ltd. Policy	
B.17	I have knowledge regarding the FirstRand Environmental Policy.
B.18	I have knowledge of budgets and deadlines FirstRand Ltd. has to reach regarding environmental performance.
Terminology	
B.20	I understand the concept <i>Climate change</i> .
B.21	I understand the concept <i>Corporate social responsibility</i> .
B.22	I understand the concept <i>triple-bottom-line reporting</i> .
B.23	I understand the concept <i>Environmental performance</i> .
B.24	I understand the concept <i>Equator Principles</i> .
B.25	I understand the concept <i>Carbon footprint</i> .

An awareness variable was created for all the biographical data types and range between 0 and 1. Values closer to 0 indicate low levels of awareness and values closer to 1 indicate high levels of awareness. The higher the awareness levels, the better the employees are informed about environmental performance.

Table 4.4 – Employee awareness variables by category

Categories	Awareness Variables
Overall	0.72
Age*	
25 to 34	0.71
35 to 44	0.73
45 to 54	0.73
55 to 64	0.73
Gender	
Male	0.72
Female	0.73
Highest academic qualification	
Grade 12	0.74
National Certificate	0.73
National Diploma	0.73
Three-year degree	0.70
Postgraduate qualification	0.72
Tenure within the FirstRand Group	
Less than 24 months	0.68
Between 2 and 5 years	0.75
Between 5 and 10 years	0.74
More than 10 years	0.72
Employment level	
Band B	0.71
Band C	0.71
Band D	0.74
Area	
Free State	0.72
North-West	0.73
Northern Cape	0.74
Limpopo	0.70
Mpumalanga	0.74
Gauteng	0.69

*Age group 65 to 74 were not included because there was only 1 respondent in that category

The overall awareness variable (0.72) in Table 4.4 above indicates that high levels of employee awareness exist within the organisation. The awareness variables range from 0.68 to 0.75, which implies an even spread.

Once the awareness variables were created, the researcher conducted a T-test and an analysis of variance to test whether or not there were significant differences among the demographic groups.

A T-test was done to determine if the level of employee awareness were different for males and females.

T-Test for Equality of Means

Awareness	t-statistic	P-value
	-0.78	0.44

The P-value of 0.44 was greater than 0.10 and therefore the level of employee awareness was the same for both males and females. If the P-value were smaller than 0.10, the level of employee awareness would have been different for males and females, but this is not the case.

An Anova test was completed by the researcher to determine if the group means of interval variables differ from one another for the remaining biographical categories.

The test was done to determine if the employee awareness differed among the six age groups, five academic qualification groups, three tenure groups, three employment-level groups and the six area groups.

Table 4.5 – Anova

Group variables	F	P-value
Age	0.65	0.63
Academic qualification	0.50	0.74
Tenure	1.24	0.30
Employment level	1.22	0.30
Area	0.43	0.83

All the P-values are greater than 0.1, which indicate that there are no significant differences among the different age groups, among the different academic qualification groups, among the different tenure groups, among the different employment level groups, and among the different provinces.

The result is similar to the average score results reported above.

This means that the level of employee awareness is consistent for all five the remaining biographical groups.

4.6 Section C – Feedback

Section C consisted of one open-ended question, which would allow the researcher to gain further insight into what the employees may perceive to be good environmental performance practices that could be implemented within the business in future to enhance the environmental performance of FNB Business Inland further. In total, 66 respondents completed the open-ended question, which was also the only non-compulsory question in the questionnaire.

From the answers received, three main themes presented were identified by the respondents and are discussed below:

Improve communication to employees relating to environmental performance

In total, 40.9% of the respondents who completed the open-ended question indicated that they would like to experience an improvement on the communication that is sent out by the business relating to any environmental topics.

These respondents further indicated that they would like to be informed of any new strategies and initiatives that the business might pursue in future to reduce its carbon footprint.

The above finding can also be obtained from Figure 4.7, where only a marginal majority of 57.42% of the total respondents indicated that they received regular feedback on environmental performance.

Paper saving

The second initiative highlighted by 21.2% of the respondents who completed the open-ended question related to true paper savings. Among these responses, it was highlighted that implementing paper-saving initiatives in the past had led to an increase in paper usage in some instances.

The above may be directly related to insufficient communication and research, which are done within the organisation prior to implementation of new processes or systems.

Green initiatives

The third theme that presented itself was highlighted by 7.6% of the respondents who completed the open-ended question.

It was highlighted that, upon implementation, the bank should explain and communicate to its employees what the benefits of implementation of a new initiative would be.

The following two initiatives, which were highlighted under green initiatives, could be developed and built into new and exciting product developments within the business.

The first recommendation advised that the bank should not only improve the environmental efficiency of the business in the larger head office spaced buildings. It was recommended that the business could improve the culture around green banking by investing in some of its smaller buildings in order to promote a green culture.

The second recommendation related to the provision of credit to promote green practices.

One respondent indicated that the valuation process that is currently followed to determine the value of a credit-seeking farm operation to be too strict and that some relaxation on this may allow the bank to provide additional funding to the customer, which could put the bank's customer in a position to implement green processes/machinery in its farming operations.

The above recommendation, if implemented correctly, could lead to exciting new credit products, which may allow the bank's customers to adopt green practices.

The remainder of the open-ended questions did not have much value as these were either completed by phrases such as "not applicable", "the bank is performing well with regard to environmental performance" and so forth.

The next section will reiterate some of the important items that were highlighted in Chapter 4.

4.7 Conclusion

In this chapter, the researcher extracted all the data responses from Survey Monkey. By making use of descriptive and empirical statistical tactics, the researcher was able to interpret the results received from the respondents.

The overall opinion of the respondents is that FNB Business Inland complies with legislation requirements in terms of environmental performance. All the responses on all the questions and terms were positive, with the FV values exceeding 50% in all instances, with a couple of instances having only marginal positive responses.

The results further indicated that FNB Business Inland is active in the promotion and development of environmental performance within the organisation.

Communication to the frontline staff member did receive a marginal positive response from the respondents; however, this seems to be one of the areas the organisation can improve on.

Another area of concern was that not all staff members read the compulsory FirstRand Environmental Policy.

The final chapter will include the conclusions of the study in terms of the study objectives and will include some suggestions of what the organisation may improve on to promote environmental performance further.

Chapter 5

5.1 Introduction

The results obtained from the questionnaires received back from the respondents were discussed in Chapter 4 by making use of descriptive and inferential statistics.

Chapter 5, the final chapter of the study, will include the conclusion of the study in relation to the study objectives, recommendations based on the feedback received from the respondents, highlight the importance of the study and provide future research possibilities.

In the following section, the primary and secondary objectives of the study are analysed and discussed in conjunction with the conclusions of these study objectives.

5.2 Study objectives and conclusions

In Chapter 1, the researcher indicated that FNB recognised the importance of environmental performance; however, the problem statement highlighted that initiatives pertaining to the subject of environmental performance would only be effective if the employees who were required to implement these initiatives had sound knowledge of the initiatives and understood the importance of the subject.

Failure by the organisation to create an environment where employees understand the importance of environmental performance in the organisation may lead to penalties issued to the organisation, due to non-compliance with regulations set out by legislative bodies or a loss of revenue due to reputational risk.

King III also highlighted that corporate citizens should take the impact organisations have on the environment seriously.

This resulted in one primary and four secondary objectives included in the study by the researcher. The various study objectives with their conclusions are discussed below.

5.2.1 Primary study objective

The primary objective was to analyse employee awareness of environmental performance at FNB Business Inland.

This objective was achieved through realising the secondary objectives of the study.

5.2.2 Secondary study objectives

In order to address the primary objective, the following secondary objectives were formulated and addressed as indicated below:

The first secondary study objective was to provide an overview of environmental performance. This objective was achieved by means of Chapter 2, the literature review.

In Chapter 2, the researcher highlighted important terminology that is associated with environmental performance and provided information on international and domestic legislation governing environmental performance.

The second secondary objective was for the researcher to determine the measures that are available to measure environmental performance.

In Chapter 2, the researcher included a section on the international and domestic measures that are used to measure environmental performance and highlighted the difficulties associated with achieving high levels of environmental performance.

Further, the effective international and domestic practices associated with the field were elaborated on, with specific reference to the environmental assessment toolkit, ISO 14000 and the Environmental Management Plan (EMP).

In order to achieve the third secondary objective, namely to determine employee awareness levels on environmental performance in FNB Business Inland, the researcher sent out 301 self-administered questionnaires to the total population of employees at FNB Business Inland. 155 usable questionnaires were received back from the respondents.

An employee awareness variable was designed by carefully selecting thirteen questions from Section B of the questionnaire, from the subsections, reporting, Equator Principles, and FirstRand Ltd. policy and terminology.

The overall awareness level was 0.72 (72%), which indicated that the majority of the employees were aware of environmental performance.

A t-test was conducted to determine if the awareness levels varied for males and females, which indicated males and females in the organisation had the same awareness levels.

By making use of an Anova test, it was also determined that all groups (age, academic qualifications, tenure, employment levels and area) had the same awareness levels.

The final secondary objective was to identify areas where environmental performance could be improved at FNB Business Inland.

An open-ended question was included in Section C of the questionnaire to provide the respondents with an opportunity to provide any areas that required improvement to support environmental performance in the organisation.

The returned questionnaires indicated three main areas that required improvement, as perceived by the employees:

- Communication on environmental performance have to be improved further;
- Better communication and research need to be communicated before new paper-saving initiatives are implemented; and
- Benefits of green initiatives should be communicated.

Recommendations will be provided in the following section on how the organisation can improve environmental performance further.

5.3 Recommendations

By assessing the results of the study in conjunction with the study objectives, the researcher has highlighted five recommendations that FNB Business Inland may use

to their advantage to improve its environmental performance further. These are discussed in the following five sub-sections.

5.3.1 Maintain the high levels of environmental performance achieved

The results of the surveys indicate that employees perceived FNB Business Inland to perform well with regard to environmental performance as all the survey results received were positively answered. It was concluded that the employees indicated that high levels of environmental performance was important and had a good understanding of the principles associated with environmental performance.

Although the organisation has performed well with regard to environmental performance, the organisation should strive to maintain and further improve the high levels of environmental performance achieved.

High levels of environmental performance will not only gain face with customers, as the organisation will be seen as a responsible corporate citizen, but past experience has also indicated that green initiatives can distinguish one organisation from another and may lead to new and innovative products, which could benefit customers, the organisation and the environment.

Tablet and mobile phone banking are examples of such initiatives, as these products allow customers to purchase items online or make transfers without visiting bank branches. The use of tablet/mobile phone banking reduces fuel consumption burnt by customers to visit branches, reduces fuel used to deliver cash to branches by armoured vehicles and reduces paper usage within the organisation.

It may be seen as little savings to some; however, it is more than that, as customers have easier and more convenient access to their resources and the organisation has developed a competitive edge over its competition by introducing easier and more effective methods to conduct banking. This has been achieved while reducing the impact banking operations have on the environment.

It is therefore recommended that the organisation continue to emphasise the importance of environmental performance amongst its employees and to ensure that new initiatives and products are developed with environmental performance in mind, as such initiatives can result in competitive products offered to customers.

5.3.2 Improve internal communication of environmental projects

Some of the respondents indicated in Section C of the questionnaire that many of the new green processes implemented by FNB Business have led to higher carbon-intensive practices or more paper usage. From the responses, it is perceived that this result may be due to insufficient business impact assessments prior to implementation.

Thomas A. Edison said, "I have not failed. I have just found ten thousand ways that won't work."

In order to try to achieve less carbon-intensive processes, failures will happen, but these failures can be reduced by communication. The organisation should communicate its projected plans and projects to reduce its carbon impact to its employees and should explain the proposed benefits of such anticipated processes.

The employees who work at a frontline or ground level of the organisation usually have better understanding of the actual impact a new process will have on the daily operations of the organisation and by getting their opinions and input, the processes could possibly be rolled out in more effective ways. One or two slight adjustments prior to rollout could potentially benefit the effectiveness of the newly rolled out process, thereby improving efficiency and helping the environment.

Employees who experience that their inputs are actually used become more motivated, resulting in a positive impact on morale and the owner culture modern businesses strive to achieve. This will lead to employees becoming more willingly involved in new initiatives.

5.3.3 Improve checking controls on internal policies

Although it is mandatory for all employees to read and understand the FirstRand Ltd. Environmental policy, only 80.65% of employees indicated that they had read and understood the policy.

Environmental performance should be made part of the on-boarding process for new employees to illustrate and explain the importance of the environmental performance to newly appointed employees.

The human resource system should also be automated to ensure that all line managers are obliged to check and sign off that their direct reports had acknowledged on the system that they had read all mandatory policies.

5.3.4 Revisit the farm valuation process to identify new financing opportunities

Agricultural loans are only granted at about 40% of a farm's valuation. This threshold should be reconsidered and additional credit should be granted over and above the 40% threshold to farmers seeking green alternatives or improved productivity on their farms.

By allowing additional credit to farmers who seek green practices, FNB Business can tap into additional markets by financing equipment that supports green agriculture.

This could increase the organisation's face value and demonstrate to all stakeholders and agricultural customers that the organisation is serious about supporting environmental performance.

5.3.5 Continue to support innovative methods to improve environmental performance and efficiency

FNB has recently tapped into the telecommunications industry by supplying smartphones and tablets to its customers at preferential rates, creating an innovative method to market their online banking applications.

With the energy crisis in South Africa, the same principle can be used where homeowners who have financed their homes through FNB can receive preferential rates on solar geysers for their homes, which will result in FNB indirectly contributing to the reduction of carbon emissions.

When organisations generally consider saving on carbon emissions, these organisations usually start by reducing paper-intensive processes. This is good, but in order to be ahead of the pack, organisations should consider out-of-the-box ideas, which could be feasible in the long run, no matter how impractical the original idea may sound.

FNB has the “Innovations” challenge, which allows employees in the organisation to log ideas on a system. The loggers of the best ideas are then assigned teams to build on their ideas. Once a year a vote takes place and the initiator of the best-implemented idea wins R1 million. The organisation should continue to build on this initiative, as it is through this medium that ideas such as tablet banking were first developed.

5.4 Limitations of the study

The entire population of FNB Business Inland was afforded the opportunity to respond to the electronic questionnaires that were distributed; however, this excluded the remaining three provinces in this division and also excluded all other divisions within FirstRand Ltd.

The study was also based on the assumptions of how employees perceived environmental performance and the performance of the organisation in this regard, but did not test the actual knowledge of the employees.

5.5 Future research possibilities

With more reliance on organisations to be responsible corporate citizens, it is important for organisations to continue research and improve controls pertaining to environmental performance.

Based on the conclusions of the study, the following recommendations can be made for future research and are indicated below.

- The scope of this study was limited to FNB Business Inland and by including more test subjects in a similar survey, the results may become more reliable and representative of the perception of employees in general;
- The scope of this study was based on the perceptions of the respondents and in future the respondents’ knowledge relating to environmental performance should be tested by the questionnaire to provide a more accurate knowledge level of the respondents;

- All stakeholders could be included in future studies, including customers and vendors, to determine how these stakeholders perceive the organisation's performance and to determine their expectations; and
- By including other financial institutions, the impact of environmental performance on competition among organisations can be identified.

5.6 Conclusion

Overall, the respondents had sound knowledge of environmental performance with an awareness variable of 72%, which indicated that environmental performance was considered important and that FNB Business Inland was actively involved in promoting and improving environmental performance within the organisation.

Future research possibilities were identified and discussed and recommendations were made on how the organisation could further improve its environmental performance.

Never doubt that a small group of thoughtful committed citizens can change the world; indeed, it's the only thing that ever has. – Margaret Mead

Reference List

- Allet, M. 2011. *Measuring the environmental performance of microfinance*. [Online.] Available from: http://www.planetfinancegroup.org/sites/default/files/publications/WP1_MeasuringEnvlPerfMF_ALLET_2011.pdf [Accessed 4 March 2014.]
- Babbie, E. 2013. *The practice of social research*. (13th ed). Belmont: Wadsworth Publishing Company.
- Barker, G., Hill, R.C., Bowen, P.A. & Evans, K. 2004. Economic and regulatory approaches to improve the environmental performance of buildings in South Africa. *Acta Structilia: Journal for the Physical and Development Sciences*, 11(1 & 2): 1-25.
- Benefits of Recycling. 2014. *When did global warming start?* [Online.] Available from: <http://www.benefits-of-recycling.com/whendidglobalwarmingstart/> [Accessed 14 January 2014.]
- Beukes, C. J. 2003. Environmental performance evaluation in non-financial terms: research article. *Southern African Business Review*, 7(2): 28-35.
- Bihari, S. 2010. Green banking-towards socially responsible banking in India. *International Journal of Business Insights & Transformation*, 4(1): 82-87.
- Bryman, A. & Bell, E. 2003. *Business research methods*. United States: Oxford University Press.
- CDP (Carbon Disclosure Project). 2014. *What we do*. [Online.] Available from: <http://www.cdp.net/EN-US/WHATWEDO/Pages/South%20Africa.aspx> [Accessed 21 January 2014.]
- CIPS (The Chartered Institute of Purchasing & Supply). 2008. *Be prepared – EU sustainability legislation and its impact on purchasing and supply management*. [Online.] Available from: http://www.cips.org/Documents/Resources/Knowledge%20Now/Be%20Prepared_v2.pdf [Accessed 12 March 2014.]
- Cohen, L., Manion, L. & Morrison, K. (2007.) *Research methods in education*. (6th ed). United Kingdom: Routledge.

Coley, G. 2007. Environmental revolution. *Accountancy Age*, May 2007: 10-11.

Cooper D. & Schindler P. 2011. *Business research methods*. (11th ed). Europe: McGraw-Hill.

Correia C., Langfield-Smith K., Thorne H. & Hilton R.W. 2008. *Management accounting: Information for managing and creating value*. United Kingdom: McGraw-Hill.

Daft, R.L. 2008. *The new era of management*. (2nd ed). United States: Thompson Southern Western.

Delmas, M.A. & Blass, V.D. 2009. Measuring corporate environmental performance: The trade-offs of sustainability ratings. *Business Strategy and the Environment*, 19(4): 245-260.

Delmas, M.A., Etzion, D. & Nairn-Birch, N. 2013. Triangulating environmental performance: What do corporate social responsibility ratings really capture? *Academy of Management Learning & Education*. 12 (3): 255-267.

Environment.co.za. 2014. *Make your supply chain greener and leaner*. [Online.] Available from: <http://www.environment.co.za/sustainable-green-business-news/make-supply-chain-greener-leaner.html> [Accessed 18 January 2014.]

ELC (The Environmental Literacy Council). 2008. *Possible consequences of global warming*. [Online.] Available from: <http://www.enviroliteracy.org/article.php/1334.html> [Accessed 18 January 2014.]

Fabius Maximus. 2012. *When did we start global warming? See the surprising answer (it's not what you've been told)*. [Online.] Available from: <http://fabiusmaximus.com/2012/10/18/global-warming-co2-44158/> [Accessed 11 December 2013.]

Finlay, P. 2000. *An introduction to business and corporate strategy*. London: Pearson Education Limited.

FirstRand Ltd. 2012. *Environmental and social risk analysis and equator principles report*. August 2012.

FNB (First National Bank). 2014. *Environmental focus*. [Online.] Available from: <https://www.fnb.co.za/about-fnb/environmental-focus.html> [Accessed 14 January 2014.]

GEMI (Global Environmental Management Initiative). 1995. *Environmental, Health and Safety Training: A Primer*. [Online.] Available from: http://www.gemi.org/resources/ehs_108.pdf [Accessed 24 March 2014.]

GEMI (Global Environmental Management Initiative). 1998. *Measuring environmental performance: A primer and survey of metrics in use*. [Online.] Available from: http://www.gemi.org/resources/met_101.pdf [Accessed 6 March 2014.]

Gilbert, A.J., 2007. *The value of green marketing education at the University of Wisconsin-La Crosse*. [Online.] Available from: <http://www.uwlax.edu/URC/JUR-online/PDF/2007/gilbert.pdf> [Accessed 8 March 2014.]

Hartman, R.S., Huq, M. & Wheeler, D. 1997. *Why paper mills clean up: Determinants of pollution abatement in four Asian countries*. Washington D.C.: World Bank.

Henningfield, J., Pohl, M. & Tolrust, N. 2006. *The ICCA handbook on corporate social responsibility*. Chichester: John Wiley & Sons Ltd.

HP (Hewlett-Packard). 2007. HP sees benefits of going green. *MarketWatch: Global Round-up*, 6(1): 177-178.

IISD (International Institute for Sustainable Development). 2013. *Sustainable Banking*. [Online.] Available from: http://www.iisd.org/business/banking/sustainable_banking.aspx [Accessed 16 March 2014.]

IOD (Institute of Directors). 2002a. *Executive summary of the King Report 2002*. March 2002.

IOD (Institute of Directors). 2002b. *King Report on Corporate Governance for South Africa 2002*.

IOD (Institute of Directors). 2009. *King Report on Corporate Governance for South Africa 2009*.

ISO (International Organisation for Standardisation). 2009. *Environmental management – The ISO 14000 family of International Standards*. [Online.] Available from: http://www.iso.org/iso/theiso14000family_2009.pdf [Accessed 16 March 2014.]

Johannesburg Stock Exchange. 2014. *Introduction to SRI Index*. [Online.] Available from: http://www.jse.co.za/About-Us/SRI/Introduction_to_SRI_Index.aspx [Accessed 25 January 2014.]

Josipovic, M. 2005. Improving environmental performance in the SME sector. *Resour*, 7(3): 19-21, 23.

Kotze, L.J. 2007. On integrated environmental governance in the Netherlands: a comparative study in reforms for South Africa. *Comparative and International Law Journal of Southern Africa*, 40(3): 472-508.

KPMG. 2009. *Quick reference guide to King 3 Code*. February 2009.

KPMG – IMF (Industrial Environmental Forum of South Africa). 1997. *KPMG-IMF Top SA Companies Environmental Survey 1997*. Cape Town: KPMG.

Kroski, E. 2012. *Ten advantages to taking online classes*. [Online.] Available from: <http://oedb.org/librarian/10-advantages-to-taking-online-classes/> [Accessed 24 March 2014.]

Meheus, J. 1999. The positivists' approach to scientific discovery. *Philosophica*, 64(2): 81-108.

Motley, A. 2012. Paper or pixels? *Independent Banker*, 62(11): 14-17.

NBI (National Business Initiative). 2011. *The ten principles*. [Online.] Available from: <http://www.nbi.org.za/Focus%20Area/RoleOfBusinessInSociety/Pages/The-Ten-Principles.aspx>. [Accessed 25 January 2014.]

Nel, J.G. & Wessels, J.A. 2010. How to use voluntary self-regulatory and alternative environmental compliance tools: some lessons learnt. *Potchefstroom Electronic Law Journal*, 13(5): 48-78.

- Nickles, T. 1980. Scientific discovery and the future of philosophy of science. *Scientific Discovery, Logic, and Rationality*, 56: 1-59.
- Nightingale, W. 2012. *Positivist approach to research*. [Online.] Available from: <http://www.wider-mind.com/research/wdn-positivism-v2.pdf>. [Accessed 3 May 2014.]
- O'Neill, C. 2009. For banks, green is the new black. *New Jersey Banker*. February 2009: 22-23.
- Parker, M. 2014. *Types of sampling*. [Online.] Available from: <http://www.ma.utexas.edu/users/parker/sampling/srs.htm> [Accessed 2 May 2014.]
- Peart, R. 2001. External factors influencing the environmental performance of South African firms. *South African Journal of Science*, 97(1 & 2): 2-8.
- PWC (PriceWaterhouseCoopers). 2009. *King III at a glance*. September 2009.
- Quiggin, J. 2013. Is it too late to stabilise the global climate? *Australian Journal of Agricultural & Resource Economics*, 57(1): 1-14.
- Rifkin, J. 2008. The third industrial revolution. *Engineering & Technology*, 3(7): 26-27.
- Robinson, D. & Reed, V. 1998. *The A–Z of social research jargon*. England: Ashgate Publishing Limited.
- Rosencranz, A., Kibel, P. & Yurchak, K.D. 1999. *The principles, structure, and implementation of International Environmental Law*. University Corporation for Atmospheric Research.
- Schneider, T.E. 2011. Is environmental performance a determinant of bond pricing? Evidence from the U.S. Pulp and Paper and Chemical Industries. *Contemporary Accounting Research*, 28(5): 1537-1561.
- Sekaran, U. & Bougie, R. 2010. *Research methods for business: A skill building approach*. (5th ed). New Jersey: John Wiley and Sons Inc.
- Seung-soo, H. 2012. *From the Industrial Revolution to a green revolution*. OECD Yearbook.

Smith, E.E. & Perks, S. 2010. A perceptual study of the impact of green practice implementation on the business functions. *Southern African Business Review*, 14(3): 1-29.

Temple, J. 2013. Wall Street is banking on global warming. *San Francisco Chronicle*. Aug 2013.

Thorton, S. 2009. *What is triple-bottom-line reporting?* [Online.] Available from: http://www.ehow.com/about_5064070_triple-bottom-line-reporting.html [Accessed 23 March 2014.]

Tshautshau, A. 2013. *Folk EIA: A useful but an often neglected tool*. [Online.] Available from: <http://www.environment.co.za/environmental-laws-and-legislation-in-south-africa/folk-eia-a-useful-but-an-often-neglected-tool.html> [Accessed 18 January 2014.]

Unknown. 2010. The South African business case of going green. *Brands & Branding Intelligence*, Oct 2010: 85.

Van Der Merwe, C. 2012. *Environmental sustainability in the banking sector*. [Online.] Available from: http://www.greenbusinessjournal.net/index.php?option=com_content&view=article&id=81:environmental-sustainability-in-the-banking-sector&catid=1:latest-news [Accessed 3 March 2014.]

Walls, J. L., Berrone, P. & Phan, P.H. 2012. Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal*, 33(8): 885-913.

Walsh, B. 2013. *Cold years in the future could be hotter than the hottest years now*. [Online.] Available from: <http://science.time.com/2013/10/10/cold-years-in-the-future-will-be-hotter-than-the-hottest-years-now/> [Accessed 8 March 2014.]

Weart, S.R. 2013. *The discovery of global warming*. [Online.] Available from: <http://www.aip.org/history/climate/timeline.htm> [Accessed 16 December 2013.]

Wingard, H.C. & Vorster, Q. 2001. Financial performance of environmentally responsible South African companies. *Meditari: Research Journal of the School of Accounting Sciences*, 9: 313-332.

Appendix A

Questionnaire on Environmental Performance at FNB Business Inland

Section A

A.1	Indicate your age group	25 to 34 1	35 to 44 2	45 to 54 3	55 to 64 4	65 to 74 5
-----	--------------------------------	---------------	---------------	---------------	---------------	---------------

A.2	Indicate your gender	Male 1	Female 2
-----	-----------------------------	-----------	-------------

A.3	Indicate your highest academic qualification	
	Grade 12	
	National certificate	
	National diploma	
	3-year degree	
	Post graduate qualification	

A.4	How long have you been working for the FirstRand Group	< 24 Months 1	2 – 5 Years 2	5 – 10 Years 3	> 10 Years 4
-----	---------------------------------------------------------------	---------------------	---------------------	----------------------	--------------------

A.5	Indicate your employment level	Band B 1	Band C 2	Band D 3
-----	---------------------------------------	-------------	-------------	-------------

A.6	Indicate the area you are situated in	Free State 1	North West 2	Northern Cape 3	Limpopo 4	Mpumalanga 5	Gauteng 6
-----	----------------------------------------------	-----------------	--------------------	-----------------------	--------------	-----------------	--------------

Section B

		Strongly Disagree	Disagree	Agree	Strongly Agree
	Development				
B.1	FNB Business considers environmental impacts when developing policies or major change initiatives.	1	2	3	4
B.2	FNB Business considers environmental impacts when developing new products and services.	1	2	3	4
B.3	FNB Business is reducing its environmental impact (e.g. by recycling, reducing energy consumption, and preventing pollution).	1	2	3	4
	Reporting				
B.4	I receive regular reports on FirstRand Ltd's. environmental performance initiatives.	1	2	3	4
B.5	FirstRand Ltd. supplies clear and accurate environmental information in their reports.	1	2	3	4
B.6	FirstRand Ltd. communicates openly about their environmental performance.	1	2	3	4
B.7	FirstRand Ltd. continuously collects environmental performance data on their environmental impact.	1	2	3	4
B.8	FirstRand Ltd. will ensure that they are compliant with all legislation pertaining environmental aspects.	1	2	3	4

	Competition				
B.9	FNB Business's implementation of environmental performance is competitive compared to other financial institutions.	1	2	3	4
B.10	FNB Business has experienced growth in market share due to the implementation of environmental performance.	1	2	3	4
	Equator principles				
B.11	I am aware that FNB Business seeks to conform to the standards set out in the Equator Principles.	1	2	3	4
B.12	FNB Business ensures that when financing business customers, they include an assessment of the potential environmental impact of the project.	1	2	3	4
B.13	FNB Business collaborates with key suppliers to secure an improvement in their environmental performance.	1	2	3	4
B.14	FNB Business reviews and updates objectives, targets, and environmental projects in line with their commitment to environmental performance.	1	2	3	4
	Institutes				
B.15	I am well informed about FirstRand Ltd. being an ISO14001 registered organisation.	1	2	3	4
B.16	I am aware that FirstRand Ltd. complies with the guidelines that are set out in the King III Report for good corporate governance.	1	2	3	4

	FirstRand Ltd. Policy				
B.17	I have read and understand the contents of the FirstRand Environmental Policy.	1	2	3	4
B.18	I have knowledge of budgets and deadlines FirstRand Ltd. has to reach regarding environmental performance.	1	2	3	4
B.19	All stakeholders (e.g. employees, stakeholders and customers) are involved in the implementation of the FirstRand Ltd. Environmental Policy.	1	2	3	4
	Terminology				
B.20	I understand the concept Climate change.	1	2	3	4
B.21	I understand the concept Corporate social responsibility.	1	2	3	4
B.22	I understand the concept triple-bottom-line reporting.	1	2	3	4
B.23	I understand the concept Environmental performance.	1	2	3	4
B.24	I understand the concept Equator principles.	1	2	3	4
B.25	I understand the concept Carbon footprint.	1	2	3	4
	General				
B.26	It is important for organisations to achieve high levels of environmental performance.	1	2	3	4
B.27	I would like to receive regular updates relating to the steps that have been taken to improve FNB Business's environmental performance further.	1	2	3	4

Section C

In your opinion, what can FNB Business do better in order to improve environmental performance in the business further?

Appendix B



Mr. John Harris
FNB Business
Bloemfontein

20 May 2014

Dear John

It is with pleasure that I confirm your access to our environment, defined for your requirements, to conduct research for your MBA thesis. This permission is granted as per the intellectual property rights and normal confidentiality rules that apply within our environment.

Any intent to publish all or part of the completed thesis, has to be agreed to by the relevant authorities in FNB Business.

I wish you well in the completion of your studies.

Yours sincerely

A handwritten signature in cursive script, which appears to read 'Shamala Moodley', is positioned above the printed name.

Shamala Moodley

FNB Business:Head of HR
First National Bank