Sustainability reporting by public agencies

A research to the international state of sustainability reporting by public agencies focusing on the content, drivers and stakeholders

---

Erasmus University Rotterdam

Master of Science in Economics and Business

Master Thesis Accounting and Finance

Student: Roderick Stigter (308857)

Supervisor: Drs. R. van der Wal RA (Rob)

Co-reader:

Rotterdam, August 2012

List of contents

Index (List of abbreviations)

ACCA	Association of Chartered Certified Accountants
ASAE 3000	Australian Standard on Assurance Engagement 3000
AA1000AS	AccountAbility 1000 Assurance Standard
BRIC	Brazil, Russia, India and China
CPA	Certified Practicing Accountants
CPASR	Centre for Public Agency Sustainability Reporting
CR	Corporate Responsibility
CSR	Corporate Social Responsibility
EEGO	Energy Efficiency in Government Operations policy
EMAS	Eco-Management and Audit Scheme
EMS	Environmental Management System
EU	European Union
GBE(s)	Government Business Enterprise(s)
GRI	Global Reporting Initiative
IAASB	International Auditing and Accounting Standards Board
IAS	International Accounting Standards
IPSAS	International Public Sector Accounting Standards
ISAE 3000	International Standard on Assurance Engagement 3000
ISO	International Standards Organisation
ISO 9001	Management standard on quality improvement
ISO 14001	Environmental management standard
ISO 26000	Management standard on Corporate Social Responsibility
KPMG GSS	KPMG's Global network on Sustainability Services
MDGs	Millennium Development Goals
NGO(s)	Non-Governmental Organisation(s)
OECD	Organisation for Economic Co-operation and Development
OH&S	Occupational Health and Safety
PA	Public Agency
PAs	Public Agencies
PASS	Public Agency Sector Supplement
PAT	Positive Accounting Theory
SD	Sustainable Development
SMEs	Small and Medium Enterprises
SMS	Social Management System
SoE	State of the Environment
SOE(s)	State Owned Enterprise(s)
SR	Sustainability Report
SRing	Sustainability Reporting
SRs	Sustainability Reports
SS(s)	Sector Supplement(s)
UK	United Kingdom
UN	United Nations
UNEP	United Nations Environmental Program
US	United States
WCED	World Commission on Environment and Development
WSSD	World Summit on Sustainable Development

1. Introduction

Sustainability is a broad and much discussed topic today. This chapter elaborates on related terms and narrows it down to sustainability reporting (SRing) by public agencies (PAs) in which a research opportunity is found. Thereby, the research objective and its relevance will be discussed. Furthermore, the research question and subquestions will be drawn. To conclude this chapter, the thesis structure is outlined.

1.1 Thesis subject

The main subject of this thesis is SRing in the public sector. Therefore this paragraph focuses on the subject of SRing in general followed by an introduction to public agency (PA) SRing.

1.1.1 Sustainable development

In 1983, the UN originated the World Commission on Environment and Development (WCED). Their goal was to investigate the weakening global environment and the influence hereof on the social and economic development. The results were presented in the 1987 report 'Our Common Future'. Together with the introduction of the term Sustainable Development (SD), defined as: *'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs'* (WCED, 1987).
Hereafter SD increasingly became more important and discussed. Accordingly, related activities grew significantly. The focus areas of this development, identified by Kates (2005) should be:

1). Nature: earth, biodiversity, and ecosystems;
2). Life support: ecosystem services, resources, and environment;
3). Community: cultures, groups, and places;
4). People: child survival, life expectancy, education, equity, and equal opportunity;
5). Economy: wealth, productive sectors, and consumption; and
6). Society: institutions, social capital, states, and regions.

Many international conferences and summits on these topics followed and were attended by a vast majority of countries. Adopted SD goals and plans were periodically monitored, reviewed and met or adjusted. Some well-known conventions are the World Climate Conference, the World Summit on Sustainable Development (WSSD) and the UN Millennium Summit. In 2015 a meeting will be organised in order to monitor the compliance of the millennium goals.

Another noteworthy moment in the short history of SD is the introduction in 2000 of the first SRing guidelines by the Global Reporting Initiative (GRI), a non-profit organisation

that promotes economic, environmental and social sustainability. These guidelines focus on reporting environmental, social and economic policy and performance by organisations. Today GRI is internationally the most renowned institute that develops guidelines on SRing. Since its introduction, the guidelines have been improved several times. The latest generation guidelines (G3.1) were launched in March 2011. For many industries the guidelines are customised in so called 'Sector Supplements'.
Over the years, a steady increase in SRing and the use of the GRI guidelines is observed (KPMG GSS, 2005, 2008 & 2011). This could be an indication of the growing importance organisations ascribe to SD and their participation herein communicated through a report. Still there is a lot of potential. The next sentences support the importance of SRing in the context of SD. *'Another way to define SD is in how it is measured. Indeed, despite sustainable development's creative ambiguity, the most serious efforts to define it, albeit implicit in many cases, come in the form of indicators' (Kates, 2005).*

1.1.2 Sustainability reporting

To date, two types of external reports exist: financial and non-financial (e.g. sustainability, social and environmental reports). The main goal of such reports is to provide stakeholders a true and fair view of the organisation. Romney and Steinbart (2006) identified reporting objectives to help ensure the accuracy, completeness, and reliability of internal and external company reports (financial and non-financial) in order to improve decision making and monitor company activities and performance more efficiently.
A significant difference between the just identified types of reporting is that financial reporting emerged a long time before non-financial reporting. The latter started to develop only four decades ago in the 1970s when social and environmental reporting received considerable interest as a result of the creation of the UN Environmental Program (UNEP). This faded away in the early 1980s assumingly due to the great recession. The development of non-financial reporting took serious impetus with the first separate environmental report published in 1989 (Kolk, 2004a). From this year on some organisations, mainly those that have a relatively high impact on the environment (e.g. oil & gas, and utility companies) started to report on their SD performance (Veen, 2004). This resulted in one of the first sustainability reports (SRs), that reports on the triple bottom line (people, planet and profit), published in 1998 by Shell. In essence, SRing emerged from SD, and can be defined as: *'The practice of measuring, disclosing, and being accountable to internal and external stakeholders for environmental, social, and economic performance of the organisation towards meeting the needs of the present without compromising the ability of future generations to meet their own needs' (*GRI, 2004 & 2006*)*.
Another difference is that non-financial reporting is mainly voluntary. An exception on this is the mandatory environmental disclosure by organisations in the (polluting) production industry of steel, oil, plastic and other materials in the Netherlands and other European Nations (Rijksoverheid, 2012).

Over the years many non-financial report types passed by. Most common are: environmental, social and a combination of these reports, environment/health and safety reports and the most comprehensive, SRs. A depiction of the relation between previous mentioned reports and other external report types can be found in appendix 1.
KPMG's triennial survey (since 1993) of corporate responsibility (CR) reporting shows the shift in non-financial reporting (from environmental to integrated sustainability) by the largest private organisations in the world both national and international. This change is also observed in non-financial reports registered since 1999 in world's largest database of CR reports, CorporateRegister.com. The latest trend in non-financial reporting is to compile all information on non-financial performance in relation to sustainability in a separate sustainability report (SR), or even integrated within the annual (financial) report. Another survey supports the idea that CR is getting more important for companies and even can drive innovation. This survey also mentioned that organisations integrate CR in their business strategy (KPMG GSS, 2011).
Remarkable is that hardly any public sector organisation publish a SR. Especially since they stimulate private sector organisations to do so.

1.1.3 Public agency sustainability reporting

When comparing the public and private sector on employment globally, the public sector is relatively small compared to the private sector but still has a considerable size and impact on the economy. The public sector also has a major direct (operations) and indirect (policies) impact on national and international progress, for example towards SD through GRI and OECD (GRI, 2004).
Organisations in the public sector are generally known as PAs. Which can be defined as: *'Legal entities established by political processes which have legislative, judicial or executive authority over other institutional units within a given area.'* (United Nations et al., 1993: section 4.104).
PAs exist at different levels: international (e.g. United Nations), national (e.g. ministries), regional (e.g. provinces) and local (e.g. city councils). Within these geographic categories, numerous types of PAs exist. This large amount of different PAs worldwide is in line with the great impact these organisations have within the economy. Their main objectives are to provide their stakeholders (which include citizens, organisations etc.) in their public needs (i.e. goods and services) in exchange for a certain fee (i.e. direct/indirect taxes and other income) without commercial intentions and to reallocate income and wealth.
Like other organisations, PAs are expected to justify their activities and performance by reporting on a true and fair view to their stakeholders. As a result, PAs produce many different reports. Ranging from financial (obligatory) to non-financial (mainly voluntary) reports and from reports on organisational performance or operations to public policies and jurisdictional conditions.
PAs could make use of the International Public Sector Accounting Standards (IPSAS) to create their financial report. These standards were developed to establish more national and international consistency and transparency in the financial reports of public sector organisations.

Besides their financial accountability, PAs are held accountable for their non-financial performance. However, reporting on this non-financial performance is for the majority of PAs not required. Examples of PAs that are, to some extent, required to publish a non-financial report can be found in: Australia (mandatory energy reporting, requirement on environmental performance and contribution to ecologically SD, reporting against National Environment Protection Measures), Japan (minimal requirements for some agencies on their environmental impact) and Sweden (all PAs are required to report the implementation of their environmental management system). Nevertheless, some PAs do report on their non-financial performance voluntarily. Guidelines make this easier. In 2005 the GRI introduced the Public Agency Sector Supplement (PASS) guideline for SRing. The voluntary characteristic and immaturity of non-financial reporting could be reasons for the seemingly low adoption and high diversity hereof by PAs. Thereby, through their daily activities these organisations already support SD objectives indirect and to some extent report on this, albeit unconscious in general.

1.2 Research opportunity, objective and relevance

This paragraph reveals the research opportunity, objective and the relevance of this research.

1.2.1 Research opportunity

Over the past four decennia, the society increasingly recognizes the high importance of SD and gradual embrace related activities such as SRing. Momentarily the private sector represents a leading role in this, especially the largest companies in the world (i.e. Fortune 500). Almost all of these organisations publish a SR. This is in line with their great impact on the society and significant responsibility and influence on SD.
In contrast, it seems that public sector organisations hardly publish SRs despite their role and considerable impact. Also little research in this sector has been done regarding SRing. Probably the more attention (e.g. research, guidelines) this topic receives, the more public sector organisations start to publish a SR or improve it. This could be done by determining the state of SRing by PAs. In this a research opportunity has been found.

1.2.2 Research objective

To determine the state of SRing by PAs without certain boundaries would be an impossible task. Therefore some objectives have been added. The key purpose is to focus on the main report content, drivers to report and stakeholders that could influence reporting regarding PA SRing internationally. In order to support reporting activities, research and discussion in this field worldwide.

1.2.3 Relevance of the research

As to my best knowledge, little research has been done on SRing regarding the public sector. This research will contribute to further explore and stimulate this area.
For PAs, as the major bodies within the public sector and as role models, this study can increase their awareness, insights and benefits of PA SRing. Thereby, it could motivate to start or improve their reporting activities.
Also for the stakeholders of PAs this research is useful to learn more about report content, drivers and stakeholders with the greatest influence on SRing. With this information they could effectively stimulate PAs to start, improve and/or customise SRing.
In addition, this study could be helpful for institutions that develop reporting guidelines and standards. But also for advisory, accounting & assurance corporations to increase and tailor activities.
Answering the research question determines the state of SRing by PAs which could be the basis for further development in this area. So that in the end all organisations think, act and report responsible.

1.3 Research question and subquestions

In the present paragraph, the research question that resulted out of the opportunity will be formulated as well as the subquestions which fulfil a supportive role.

1.3.1 Research question

The research question of this research is:

- What are the main report contents, most important drivers to report and stakeholders with the greatest influence on reporting regarding public agency sustainability reporting internationally?

1.3.2 Subquestions

To address the research question the following subquestions were formulated:

- 1. What is the current state of sustainability reporting?
- 2. What are the main standards, codes and guidelines for sustainability reporting?
- 3. What is the current state of sustainability reporting by public agencies?
- 4. What are the main report contents of sustainability reports by public agencies?
- 5. What are the most important drivers to report and stakeholders with the greatest influence on reporting of sustainability reports by public agencies?
- 6. What is the influence of public agencies' drivers and stakeholders on the content of public agencies' sustainability reports?

1.4 Research design

In the previous paragraph the research question have been identified, followed by subquestions which should help to answer the main research question and draw conclusions.
This thesis will be based on a descriptive and empirical research. The descriptive part consists of a content analysis of SRs. The empirical part consists of two regression analyses. First a regression analysis between the drivers to report and the content of a SR is performed. Secondly the stakeholders influencing SRing and the content of a SR is analysed. In chapter 3 the research design will be explained in more detail.

1.5 Thesis structure

Now the introduction to this study has been given, the next chapter will elaborate on the literature. First the literature about sustainability in general will be discussed which is followed by standards, codes and guidelines. This is followed by literate about SR by PAs. The literature study ends with the positive accounting theory and the relation with SR. Hereafter, the focus will be on the research design in chapter 3 in which the hypotheses are determined. Chapter 4 presents the results of the content analysis of PAs' SRs and the regression analyses. The answer on the research question will be given in chapter 5, together with drawing limitations and recommendations for future research.

1. Introduction

⇩

2. Literature

⇩

3. Research design

⇩

4. Results

⇩

5. Conclusion

2. Literature

2.1 Introduction

In this chapter a part of the available literature on SRing (focusing on both the private and public sector) is discussed. The number and variety of reports have grown over the past twenty years, which will turn out after reading this chapter. Also, the reader should know what the different kind of drivers to report are and which stakeholders could influence reporting regarding SD (specific for the public sector). Furthermore an explanation about the Positive Accounting Theory (PAT) and how this could be related to SRing will be discussed.

Chapter 2 answers the following three subquestions:

- 1. What is the current state of sustainability reporting?
- 2. What are the main standards, codes and guidelines for sustainability reporting?
- 3. What is the current state of sustainability reporting by public agencies?

2.2 Literature about Sustainability Reporting

To date, numerous research has been done on SRing. However, hardly with respect to the public sector. In this paragraph major prior researches on SRing, concerning both the private and public sector, will be discussed. Focusing on reporting activity, origins of reporting organisations and report content. Also the reporting codes, standards and guidelines will be discussed.
Those researches that focus on the private sector include mainly the largest companies in the world. By far, the KPMG GSS triennially survey since 1993 on CR reporting is the most comprehensive research on this topic. Corporateregister.com, Kolk and SustainAbiltiy also published some very useful reports in this domain. Researches that focus on reporting in the public sector and in both the private and public sector are mainly of Australian origin. Besides these researches, other major researches were summarised in appendix 2 – Review table 'Prior research on sustainability reporting' as well.

2.2.1 Reporting organisations

Organisations increasingly start to report on their non-financial and sustainable performance. This trend has been depicted in figure 2.1 of appendix 3. Knowing this, it is interesting to learn more about these reporting organisations. What are their origins, in which sectors do they operate and what types of organisations are they?

Origins
The geographic distribution by region of reporting organizations has been captured in figure 2.2 of appendix 3. Most of the registered reports in the CorporateRegister.com's

database were of European organisations. Organisations from North & Central America and Asia (especially Japan) represent the second and third place respectively (just over and under 500 reports). In general, these are the more developed and democratic regions with absolute the larger organisations. The least reports were published by organisations from Africa & the Middle East, regions with the least democratic and developed countries.
Kolk (2004b) used in her research a sample with comparable figures. More than half of the reporting companies in that sample were European companies, around forty percent from the US, and around ten percent from Japan. Companies from Norway, Sweden, and Denmark have been identified as early movers of non-financial reporting by Kolk (2005). However, these companies now lag behind their Dutch and Finish counterparts. That followed normal growth patterns. The highest reporting prevalence was among Japanese companies, which can be subscribed to reporting standards there. Closely followed by UK, Canadian, France and US companies.
Industry Canada (2001) stated that European companies are more likely to publish SRs partly because of the stimulating role of the European public sector. Besides this, they also take the lead in report quality. Mainly European and North American companies made it into the top three of different SR award scheme categories. Best reports were primarily published by UK companies (e.g. Vodafone Group plc, BP plc, and Royal Dutch Shell plc). Other good SRs were published by organisations in the Netherlands, the US, Japan, Australia and New Zealand.
Based on these results and those of the research by ACCA & CorporateRegister.com (2004), it seems that reporting is more likely in more developed countries than in less developed countries. Another useful categorisation and discussion of the appearance and likelihood of SRing is by sector.

Sectors
It is generally known that SRing in the private sector is much more evolved than in the public sector. Thereby, non-financial reporting used to be more common in the industrial, in general more polluting industries (e.g. Oil & Gas, Utilities, Pharmaceutical, Chemical, Mining, and Automotive) and less in the financial oriented industries.
However, over the years, companies from other sectors, particularly (late adopting) financial, increasingly started to publish SRs. The uptake of reporting by financial companies took serious impetus from 2002 on. Financial companies were first quite narrow minded regarding sustainability topics and issues, and therefore, limited the report focus to their own relatively small impact on the environment. The increase of SRing by financial sector companies can be mainly subscribed to the fact that these companies started to realise that besides their own impact on the environment, their products and services have a much larger, environmental, social and economic impact. In the beginning, these organisations were mainly from Europe. However, financial organisations from other countries followed soon (Kolk, 2005). Besides the increase in reports published by financial organizations, the quality of those reports increased as well, resulting in nine top 50 appearances of SRs (SustainAbility, 2006). Relatively, companies from the more polluting sectors still take the lead, with sometimes reporting percentages of 80 percent or higher (Kolk, 2004a/b & 2005; KPMG GSS 2005 & 2008; SustainAbility, 2004; CorporateRegister.com, 2008 & 2009).

Organisation types

What types of organisations do report? Researches on SRing mainly include the largest organizations in the world. In the triennially international survey of CR reporting by KPMG GSS (since 1993) consequently used the 250 largest companies in the world (the first half of the Global Fortune 500 at that time) and the 100 largest national companies of different countries (at that time). These companies were dubbed G250 and N100 respectively. Hereof, 80 percent among G250 and 45 percent, on average, among N100 companies publish a SR. Kolk (2003, 2004a & 2005) also made use of these samples in some of her research.

In Australia, for example, the largest hundred companies publish relatively less reports than their counterparts in Japan and the UK. Within the 300 largest national companies in Australia, the reporting rates are higher for the first 100 companies than the resulting 200 companies (CAER, KPMG and DGCS, 2005). This suggest that reporting activity is related to the size and accompanying impact of an organisation. Larger organisations are more likely to publish a SR (KPMG GSS, 2011).

Also public sector organisations show some reporting activity. A first move of government agencies has been discovered by GRI in 2004, who found several PAs that publish a SR. In the years between, more SRing PAs have been found. CPA Australia (2005) identified that commonwealth Government Business Enterprises (GBEs) mainly disclosed sustainability information in their annual reports. Half of the state GBEs in the survey published a discrete SR. State of the Environment (SoE) reports were the dominant reports among local government authorities.

Besides the increase in published reports, some interesting facts arose regarding these reports. For example, the larger PAs noticed GRI more than the smaller agencies. Since GRI is the global number one SRing standard, it is more likely that PAs that are aware of GRI, publish or intend to publish a SR. Based on this information, the probability that larger PAs (will) publish a SR is higher than of smaller PAs. Another trend (CPASR, 2005) seems to be that smaller agencies are more likely to publish a SR as expanded SoE report. Larger agencies are more likely to publish a SR as expanded annual report. Since annual reports are published more than SoE reports the chance that larger PAs (will) publish a SR is higher.

2.2.2 Report content

The focus in this paragraph is on topics related to or could influence the report content. Such as report types and formats, management standards, reporting principles and guidelines, stakeholder engagement, assurance, nature of information, report quality and awards. Besides that the main content and recent topics of non-financial reports, and in special SRs, will be discussed.

Types of reports and formats (by region)

Over the years a shift in CR reporting has been identified from mainly environmental, via a broad range of different reports (e.g. environmental, social, environmental & social, health & safety, environmental, health & safety, triple bottom line, and integrated multiple bottom line information in annual reports (ACCA & CorporateRegister.com,

2004)) to SRs and CR reports. This has been depicted in figure 2.3 of appendix 4. Until 2004, environmental reports were the leading type of reports for both internal and external purposes. This is supported by Industry Canada, (2001). Another interesting trend captured in this figure, is the emergence and increase of integrated reports, from 2004 on. These are the ultimate future reports, including both financial and non-financial information in the annual report. SustainAbility (2004) also expect that integrated multiple bottom line reporting (environmental/social/economic) with financial reporting will become the most common report type in future. This view has been supported by KPMG Australia (2008b) which suggested that aligning SRing with financial reporting is an evolving area, providing a true and fair view of the organisations' environmental, social, and economic performances. Thereby, Kolk (2005) identified an increasing standardisation of non-financial reporting (for example with regard to titles, length, approach, scope, depth and contents) and movement to mainly SRing, the most comprehensive form of non-financial reporting today.

Besides this overall development in report types, it is interesting to determine what types of reports have been published by organisations from different continents and countries. Research by ACCA & Corporateregister.com (2004) did this. Most reports have been published by European organisations, mainly Western European and Scandinavian. Environmental reports were dominant, followed by SRs. Asian and Australasian organisations published second most reports. (South) East Asian organisations published 56% of these reports. The other 44% were published by organisations in Australia and New Zealand. In these regions environmental reports were also leading over, although the rapid development of, SRs. In the Americas, the US have the most organisations that publish a report, followed by Canada. Here environmental, health and safety reports were published most. South American organisations, apart from Brazilian, still hardly publish non-financial reports. Like organisations in Africa (75% in South Africa) and in minority the Middle East. Nevertheless, SR were leading in these regions.

Another research, that focus on types of reports published by organizations (mainly the largest companies) in different countries (mainly Australia), has been done by CAER, KPMG and DGCS (2005). They found, as other researches (e.g. Deloitte, 2006 and KPMG GSS, 2008), that SRing is increasing and the leading form of non-financial reporting. Especially by the larger companies, which earlier adapt new trends. In Australia, however, SRing rates are the highest among public and private non-listed companies (KPMG GSS, 2005). Thereby, the foreign-owned companies take the lead in publishing SRs. On an international level, Australia has the lowest prevalence of SRing and Japan takes the lead followed by the UK.

Previous in this subparagraph is mainly based on companies, private sector organizations. What report types have been published by public sector organisations partly stems from GRI (2004). SRs have been hardly published by PAs. Some other reports published by PAs were identified: financial/annual reports, environmental reports, sustainable development strategy/policy reports, state of the environment reports. Those reports that report on sustainable issues are mainly action plans rather than performance reports. The great variety of reports can be contributed to the lack of generally agreed non-financial reporting standards for PAs. Nevertheless, since 2005 there is a GRI guideline especially for PAs: the Public Agency Sector Supplement (PASS).

There is a high diversity in report types published by private and public sector organisations. In their research CPA Australia (2005) identified some companies that published discrete SRs which greatly differ in scope and form. The majority of companies disclosed just environmental and/or social issues, mainly some sort of policy statements, within their annual report. Among commonwealth GBEs, sustainable information was characteristically disclosed within the annual reports. Although, several published separate SRs sometimes even external verified. Local government authorities mainly published state of the environment reports. A few of these authorities disclosed sustainable information within their annual report.
Organisations spread their reports in numerous formats and languages. Today, most common report formats are printed, digital (e.g. PDF) and web-based reports. English is the language in which most reports have been written. In future, digital and web-based reports expectably will become more popular and perhaps available in many different languages. Even a mobile application of a report on your phone (e.g. App) would be a rather likely development. Since, in this digital and internationalising era, people increasingly read documents on the computer, internet, tablets and mobile phones. Thereby, these are more environmental and user friendly formats of reporting.
Now the development of report types and formats have been discussed it is interesting to find out more about how the information for these reports usually is collected and which management and reporting standards, principles and guidelines are generally used to compile these reports.

Management and reporting standards, principles and guidelines
Frequently used management standards and guidelines used by the largest companies in the world on a national level identified by KPMG GSS (2005 & 2008) were (ranked on frequency used): ISO14001 (environmental management standard), AA1000 (principles-based standard for organisations to become more accountable, responsible and sustainable), EMAS (Eco-Management Audit Scheme), sector specific management systems and SA8000 (Social Accountability standard). It is not surprising that standard ISO14001 has been used most. Companies have been aware of their environmental impact and the stakeholder pressure to look after the environment since the very beginning of non-financial reporting. Thereby, the ISO14001 standard is the oldest standard among these standards and is published by the renowned International Organisation for Standardisation (ISO). The other standards AA1000, EMAS, SA8000 appeared later and therefore not as well-known and used as much.
These standards directly or indirectly have been used to compile SRs. Based on this information, there is no management standard explicit for sustainability or CSR. However, recently, (early 2010) ISO introduced ISO26000, a guideline/standard for organisations to help develop their CSR strategy and policies. This development contributes to the standardisation of CSR, sustainability management and the reports that arise from this. Expectably this standard in future will fulfil an important role for many organisations regarding their social responsibility.
Besides management standards and guidelines, all sort of other systems (e.g. information and measurement systems) and performance indicators have been used to store and collect information in order to publish non-financial reports on time with a high credibility (Industry Canada, 2001 & Deloitte, 2006). To structure and determine useful

SR content, the GRI standards, principles and guidelines increasingly have been used (Kolk, 2004a; SustainAbility, 2004; CAER, KPMG and DGCS, 2005; KPMG GSS, 2005 & 2008; KPMG Australia, 2008b). Nonetheless, still the majority of reporting organizations do not follow GRI (CorporateRegister, 2009).

SustainAbility (2004) found that when organisations do use the GRI guidelines they prepare their SRs mainly *in accordance with* these guidelines. Some only mentioned GRI in their SR and fragmentally make use of the guidelines. Moreover, KPMG (2005 & 2008) identified that most of the largest SRing companies in the world that use the GRI guidelines, apply these guidelines on an A+ level. This level of application stands for the highest level of application (A) and assurance of the report by a third party (+). This means that these reports represent a fair and credible view of the sustainability performance of the organisation.

So far, previous is mainly based on the use of management standards and reporting guidelines by companies. Guidelines specifically for PAs are the GRI PASS guidelines, introduced in 2005. Before these guidelines a great variety existed among the few non-financial PA reports (GRI, 2004). Nonetheless, most public sector organisations that reported, were aware of the GRI guidelines. Even some made reference hereof.

Focussing on the use of GRI guidelines by region, it is remarkable that organisations from the underdeveloped and developing continents such as Africa, the Middle East and South America, use the GRI guidelines relatively more than organisations from developed continents. This was also for the very small amount of reports that have been compiled in accordance with the GRI guidelines (ACCA & CorporateRegister.com, 2004; CorporateRegister.com, 2008 & 2009). An explanation for these results is that South American, African & Middle East reporting organisations are relatively late adopters and therefore, have many examples on how to report using the latest norms. Thereby, the majority of reporting organisations come from the more developed regions. In absolute figures they publish the most reports according to the GRI guidelines.

Based on previous, GRI could be seen as the foremost developer and provider of SRing guidelines in the world. The guidelines prescribe sections on performance but also on vision and policies. GRI (2006) stated that the reporting principles of the GRI G3 guidelines are those activities and rules, like stakeholder engagement and materiality, which make reporting more credible. Thereby, the reporting guidelines on the other hand focus more on quantitative disclosures of SRs, like triple bottom line performances.

Other than management standards or reporting guidelines that help in collecting reporting information or deciding on report content are for example: internal sustainability related policies regarding working conditions, core labour standards, environmental policies and social, sustainability and community policies (Deloitte, 2006).

KPMG GSS (2005 & 2008) found more standards to determine the report contents. Namely those developed by the company and national reporting standards. Besides reporting frameworks and standards there are also other tools that could be used to compile and decide on the content of a SR (CPA Australia, 2005). One of these tools is stakeholder engagement (e.g. stakeholder feedback and stakeholder consultation) (KPMG GSS, 2005).

Stakeholder engagement

Stakeholder engagement is the interaction between stakeholders and an organisation. Meeting the needs of those stakeholders the best way possible. In this regard, stakeholders could influence organisations. Organisations become increasingly more aware of the importance of stakeholder engagement. It could result in more satisfied stakeholders. That is why more and more organisations have structured stakeholder engagement. It is very likely that information and requests resulting from this engagement will be taken into account in determining the non-financial report content, like sustainability issues and topics. Kolk (2004a) identified that the demand of stakeholders to assess companies' results, rather than their policies, resulted in a tendency to include more performance measures in reports. These requests (resulting from stakeholder engagement), and the use of management standards, reporting guidelines and/or other tools lead to the inclusion of certain topics in reports.

Most likely stakeholders are interested in specific topics, those which are relevant to them. The more frequent and detailed a topic has been requested and reported, the more standard this topic becomes. Therefore, these topics could be categorised as standard topics.

Standard topics

The standard topics discussed in reports vary depending the report type and on the use of which reporting guideline and standard. In general, most organisations report on the performance of these topics. Thereby, organisations, especially PAs (CPASR, 2005), report also on the policies.

Over the years, social reporting showed most progress compared to environmental and economic reporting (SustainAbility, 2004). The increase in social performance indicators supported this. However, environmental topics are still more frequent and thorough reported than the social and economic counterparts (KPMG GSS 2005 & 2008).

Kolk (2003 & 2004a) and KPMG GSS (2005 & 2008) presented the next common social topics reported on: community involvement and philanthropy, health and safety, equal opportunity and diversity of the workplace(-force), human rights, employee satisfaction and relationships, social aspects in supplier relations, child labour, freedom of association, fair trade and international development, and corruption. Hereof, the more traditional topics (e.g. community involvement/philanthropy, health and safety, and equal opportunity/workplace diversity) are most reported on. Social issues in the category working conditions frequently reported on were: health and safety, training, and working conditions.

Environmental topics most frequent and detailed reported were: greenhouse gas emissions, energy use, water use, paper use and global warming. Pure environmental reports gradually make place for SRs. Some companies believe that when they operate in a sustainable way and include environmental, social and economic criteria into their management system they perform better. Thereby, increasingly more of these organisations refer to the GRI Guidelines in their report or compile it in accordance with these guidelines and the environmental, social and economic performance indicators hereof.

Economic performance indicators measure broader sustainable economic performance rather than revenue, costs and profit. An example of an economic performance indicator

and a common economic report topic with regard to SRing is distributing added value to various stakeholders (Kolk, 2004a).
How detailed environmental, social or economic topics were reported differed. A term closely linked to this is implementation likelihood, introduced by Kolk (2004b). How likely will it be that reported information has been or will be implemented. Practice what you preach.
The implementation likelihood within a company is higher for the more traditional environmental topics than for social topics. However, social topics, especially the more traditional such as community and employee matters, have been reported on more thoroughly.
Standard topics are in general the more traditional topics and therefore most and more detailed reported on. Recent topics however are those topics that are relevant today and could become a standard topic in future.

Recent topics
One of the main recent topics in SRs today is corporate governance. A result of the corporate governance code, introduced after the accounting scandals like Enron and Parmalat.
Since corporate governance (reporting) is relatively new, many differences exist on the implementation and reporting hereof by different organisations. Regardless of these differences, the sections on corporate governance in SRs increasingly become more complete (SustainAbility, 2006).
SustainAbility identified in their research (2004) that compliance and financial integrity was the main focus of corporate governance within SRs. Rather than ethical, social and environmental issues concerning this topic, even in the best ranked reports.
Also KPMG GSS (2005 & 2008) paid attention in their research to the information in SRs on corporate governance and ethics. The vast majority of the largest organisations in the world that report, include their corporate governance code of conduct or ethics in their SR. More than half of these reporting companies reported on non-compliance with the code. This means a high transparency of many companies on their incidents, a positive development of reporting on 'negative' information. It also means that there were still incidents not in conformity with the corporate code of conduct. Companies that do not report on the non-compliance incidents with the code of conduct, either did not have any incidents or were not transparent on these incidents.
Another topic on which many companies recently report is the supply chain. Only some reports focus on the implementation and monitoring of supply chain management, besides mentioning it. Also climate change is a topic that is still winning attention in reporting. The majority of reports of the larger companies in the world include climate change issues, ranging from chapters to only a number of sentences. Mainly focussing on greenhouse gas emissions, energy use and targets to reduce these. Climate change issues, targets and risks increasingly have been included in SRs. Remarkable is that climate change opportunities receive far more attention than risks such as short-term climate change, legal action, long-term climate change, and the most common cost of energy (KPMG GSS, 2005 & 2008; GRI and KPMG GSS, 2007).
The major development in reporting principles, addressed by SustainAbility (2004) and KPMG GSS (2005 & 2008), is the introduction of materiality in the field of SRing.

Materiality is a reporting principle to determine whether a topic is essential to provide a true and fair view of the organisation via the report. It strives in this way to make a report more transparent and reliable. What material is or not have been mainly determined by the GRI guidelines, stakeholder consultation and national standards. Thereby, materiality is sometimes enclosed as indicator in management systems of organisations. Materiality is important for the credibility of a SR. Nevertheless, still many companies fail to address material issues in their SR. This credibility could be increased by conducting assurance.

Assurance of the report content

To enhance and demonstrate the reliability, credibility and transparency of a non-financial report, an assurance statement is an ideal tool. This has been supported by Kolk (2004b), who identified several attempts to increase the implementation likelihood and the credibility of reported information. These were increasing knowledge in performance measurement, reporting standardisation and external verification, auditing and assurance.

Companies become more and more aware of how important the assurance of their SR is. That is why increasingly more reports include an assurance statement. Thereby, formal third party (independent) assurance or external verification is a rapidly increasing trend (Kolk, 2004a; Deloitte, 2006; KPMG GSS, 2008). However, the majority of SRs worldwide still not have an external verification statement (from 5% in North & Central America to 30% in Europe), depicted in figures 2.4, 2.5 & 2.7 of appendix 4.

The International Standards on Assurance Engagement 3000 (ISAE3000) of the International Audit and Auditing Standards Board (IAASB) are the leading assurance standards to prepare these assurance reports. A reason for this is that the major accounting and consulting firms (Big 4) are obliged to use these standards in their services, if there is no national alternative standard like ASAE3000 (KPMG Australia, 2008b). The assurance standard of AccountAbility, AA1000AS, used to be the number one (SustainAbility, 2004; KPMG GSS, 2005 & 2008). Besides the Big 4, other frequently used assurance providers were: certification bodies (e.g. Bureau Veritas Certification) and specialists consultancies (e.g. Environment/CSR Consultants). Figure 2.6 of appendix 4 include all assurance providers. In their report, CAER, KPMG and DGCS (2005) even identified university departments that provided assurance. Third party assurance of SRs appeared relatively most among European and Japanese companies, in general the more experienced and evolved in SRing. This leading position could be partially subscribed to high government encouragement and regulation in these regions (Kolk, 2003; KPMG GSS, 2005). Reporting companies from other continents closely follow the European companies in terms of report assurance, except for North & Central American companies that hardly (<10%) include a verification statement in their reports (figure 2.5 & 2.7 of appendix 4). This is remarkable, especially after the accounting scandals by North & Central American companies that resulted in a call for more reliability and transparency. Publishing SRs and the assurance hereof could help to establish this.

Assurance statements were typically included in the better SRs in the world. Not strange, since verification improves credibility and transparency. Thereby, CPA Australia (2005) found that verification of integrated SRs was more likely than verification of standalone SRs. Probably because the verification of sustainability topics in an annual report, that

would have been verified anyway, is more likely than the external verification of a stand-alone SR.
Most reports with an assurance statement included one that covered the standard sustainability topics. The minority also focussed on more recent topics like greenhouse gas emissions and climate change statements (GRI & KPMG GSS, 2007). However, the assurance of reports becomes more customised for stakeholders anyway. In future, assurance of all issues and topics is expected (SustainAbility, 2006). In addition, Kolk (2004a) and ACCA & CorporateRegister.com (2004) presume that external verification of SRs is expected to be as standardised in future as the assurance of financial reports. Assurance improves the credibility and could partly regulate window dressing. Nevertheless, this still happens as discussed hereafter.

Nature and use of information
CPA Australia (2005) found that the information in non-financial reports is overwhelmingly positive. However, this information could be biased since organisations and people find it difficult to criticise themselves, being honest and transparent. Thereby, most critics are more positive formulated than they were and some negative critics were not included at all. This suggests window dressing.
To a certain extent, the nature of information determines the quality of a report, for example the information quality and right quantity. Moreover the quality of reports would be discussed hereafter.

Quality of the reports and awards
To determine the quality of something, comparisons against certain standards should be made. The quality of SRs depends on many factors, but mainly on the completeness of topics and how detailed and correct the information of these topics is. Award schemes are such standards to determine the quality of SRs. SustainAbility (2004 & 2006) identified that over the years, especially since 2002, the quality of non-financial reporting has been significantly increased among the organisations that regularly publish non-financial reports. The best SRs are mainly published by European organisations, especially from the UK (CorporateRegister.com, 2008 & 2009). A remarkable fact is that no African, Asian, Australian, South American and companies from Oceania made it into the top three of any award category of the CorporateRegister.com award scheme of both 2008 and 2009. Other good reports were published by organizations in the Netherlands, the US, Japan, Australia, and New Zealand. Even two reports from South Africa and one from Brasil were qualified among the top 50 reports in the SustainAbility (2004 & 2006) award scheme. On average these reports comprised 90 pages. Thereby, two non-OECD countries made it into the top 10. In the top 50, many reports were published by banks or financial sector organisations. Besides the increase in reporting activity by companies from the financial sector, the quality of those reports increased as well.

2.2.3 Reporting standards, codes and guidelines

Key standards, codes and guidelines

The major standards, codes and guidelines in the world on sustainability or comparable reporting applicable to PAs are summarised in table 2.1 of appendix 5. Those with an explicit focus to companies are excluded from this overview, since PAs are central in this study. Most standards and guidelines in the overview are voluntary.

Main international voluntary SRing guidelines are those of GRI. Besides these guidelines, other well-known international voluntary standards are: the AA guidelines of AccountAbility, ISO standard 9001 (quality management), 14001 (environmental management) and ISO 26000 (CSR management) of the International Standards Organisation (ISO) and the guide to best practice and award scheme of the Association of Chartered Certified Accountants (ACCA). Two international recognized voluntary assurance standards are: the International Standard on Assurance Engagement 3000 (ISAE3000) of the International Auditing and Accounting Standards Board (IAASB) and the AccountAbility 1000 Assurance Standard (AA1000AS) of AccountAbility.

Most well-known mandatory standards from the overview are the International Accounting Standards (IAS). These are applicable to all European Union (EU) organizations.

The majority of the standards are environmentally (e.g. Eco-Management and Audit Scheme, Environmental Protection act) and socially (e.g. Employment Equity Act) focussed rather than on sustainability. A reason for this could be that environmental and social standards, codes and guidelines appeared way earlier. Most guidelines exist in developed countries. Developing and underdeveloped countries are assumingly in most cases not yet ready for this development.

Additional standards, codes and guidelines

Table 2.2 in appendix 5 captures the standards, codes and guidelines identified by the KPMG Global Sustainability Services (GSS) network (KPMG partners and directors from different countries around the world that focus in their work, individually or with their division, on sustainability issues), as a response to this research questionnaire. Only those additional to table 2.1 have been included.

This table shows a few equalities with the first table. Both tables consist standards from Australia, Italy and Sweden. Thereby, it is notable that Australian standards, codes and guidelines are both in the voluntary and mandatory category of table 2.1 and 2.2. Based on this observation Australia, on a country level, takes a leading role in regulation/standardisation of SRing.

Effects of mandatory reporting vs. self-regulation

Non-financial reporting and its latest form, SRing, are still quite immature. Not much regulation hereon exists. What would be the effects of more regulation or even mandatory reporting? Regulation obviously increases the amount of organisations that report but not necessarily the development and transparency of it. In case of no regulation or self-regulation, organisations have more freedom on what and how they report using which voluntary standards. This means that it becomes harder to compare reports and performance between organisations.

A few potential advantages of mandatory reporting are higher credibility, less incomplete than voluntary reports, better comparability, lower non-disclosure of negative performance, reduction of non-diversifiable market risk, cost savings, and more standardisation. Disadvantages of mandatory reporting could be knowledge gap between regulator and industry, one size does not fit all, inflexibility in the face of change and complexity, lack of incentive for innovation, constraints on efficiency and competitiveness (KPMG GSS & UNEP, 2006).
Advantages of self-regulation could be higher proximity, higher flexibility, better compliance, and collective interests of industry. Disadvantages on the other hand could be conflicts of interest inadequate sanctions, under-enforcement, global competition, and insufficient resources (KPMG GSS & UNEP, 2006).
Based on the potential advantages and disadvantages of both mandatory reporting and self-regulation, regulators should try to make those decisions that affect the development of SRing in its best way. In the end, the goal is that as many organisations in the world integrate sustainability through their organisation and report about this to their stakeholders the best way possible.
Kolk (2003) already identified a number of environmental reporting requirements of mainly EU and VS governments such as publication of environmental report, reporting on environmental and social issues. She also identified encouragements including support for EMAS, threats and appeals to publish environmental reports and guidelines for environmental reporting. These requirements and encouragements are early supporters of the goal to increase the number of organisations with an integrated sustainability strategy, and a report about their sustainability strategy and performance.

GRI, the International Auditing and Assurance Standards Board (IAASB), and AccountAbility take the lead

The vast majority of the world's largest companies make use of the GRI guidelines in SRing (KPMG GSS, 2008). This makes GRI the international leading provider of SRing guidelines today. In general, the guidelines can be separated in reporting principles that provide information on how to report and standard disclosures that give guidance on what to report (GRI, 2006). Besides the 'standard' guidelines, GRI customised their guidelines for numerous sectors since different sectors have diverse needs. These tailor made guidelines have been dubbed by GRI as: Sector Supplements (SS). The first version of the supplementary guidelines for the public sector was published in 2005 and is called the Sector Supplement for Public Agencies (SSPA).
Besides reporting standards, also assurance standards and the use hereof in providing assurance have been developed since the beginning of this century. Around 40% of the larger companies in the world with a SR contain a formal assurance statement (KPMG GSS, 2008). Renowned organisations that develop assurance standards are the International Auditing and Accounting Standards Board (IAASB) and AccountAbility. KPMG GSS (2008a) identified in their survey that, 64% of the G250 and 54% of the N100 companies with an assurance statement in their report made use of the International Standard of Assurance Engagements 3000 (ISAE3000) by IAASB. A remarkable increase compared to percentages three years earlier: 24% and 14% respectively (KPMG GSS, 2005). Another frequently used assurance standard is the AccountAbility 1000 Assurance Standard (AA1000AS). This standard of AccountAbility

was used in 2005 by 18% of the G250 and 10% of the N100 organisations. Three years later, these percentages were 33% and 36% respectively.
In conclusion, ISAE3000 is the standard that has been used most, followed by the AA1000AS. The main reason for this is that accounting firms, which are the major assurance providers (70% by G250 and 65% by N100 companies), are obliged to use ISAE 3000 if there is no national alternative standard (KPMG GSS, 2008).

2.3 Literature about Sustainability Reporting by Public Agencies

In this paragraph former literature on PAs' role in SD and SRing will be discussed. Besides that, drivers to report and stakeholders with the greatest influence will be derived from the literature.

2.3.1 Public agencies' role in sustainable development and sustainability reporting

PAs are the main bodies within the public sector, one of the largest sectors in the world. This means that their participation in SD and SRing may have substantial impact. Thereby, PAs should have a role model function by setting the right example. Both are important arguments why PAs need to participate in SD and SRing.
To date, the role of the public sector with regard to Corporate Social Responsibility (CSR) and the reporting hereof, which could be interchangeably used with SRing, is mainly to stimulate and strength those activities in the private sector. This position of the public sector is reflected in studies by Bell (2002), and Fox et al. (2002).

Public agencies and sustainable development
In the short history of SD a number of international summits have been held, attended by a vast majority of countries. Some major outcomes of these summits were: world environment day, the introduction and implementation of (Local) Agenda 21 (blueprint for action towards sustainable development), the Kyoto protocol on climate change (including targets on greenhouse gas emissions) and the Millennium Development Goals (MDGs). All important developments in which the public sector plays a leading role.
More specific roles of governments and the public sector to promote corporate SD were discussed by Bell (2002). These roles are: vision/goal setter, leader by example, facilitator, green fiscal authority and innovator/catalyst. Besides these roles, other more specific instruments to potentially encourage SD within organisations came forward. For example, rebalancing the roles of government and public enterprise, direct regulation, market instruments and economic/fiscal measures, voluntary/non-voluntary initiatives, and education/persuasion/information for decision making.
Other SD roles of the public sector focus more on strengthening CSR. Fox et al. (2002) present in their study two axes to illustrate the public sector roles versus public sector activities regarding CSR. The key public sector roles on the horizontal axis are mandating (i.e. command and control legislation, regulators and inspectorates, legal and fiscal penalties and rewards), facilitating (i.e. enabling legislation and funding support, creating

incentives and raising awareness, capacity building and stimulating markets), partnering (i.e. combining resources, stakeholder engagement, dialogue), and endorsing (i.e. political support, publicity and praise). On the vertical axis the public sector activities as 10 key themes of the CSR Agenda are: 1. Setting and ensuring compliance with minimum standards, 2. Public policy role of business, 3. Corporate governance, 4. Responsible investment, 5. Philanthropy and community development, 6. Stakeholder engagement and representation, 7. Pro-CSR production and consumption, 8. Pro-CSR certification, 'beyond compliance' standards and management systems, 9. Pro-CSR reporting and transparency and 10. Multilateral processes, guidelines, and conventions.

Both Bell (2002) and Fox et al. (2002) identified regulating and facilitating roles of the public sector in SD and perhaps SRing.

More evidence of the advancing role of the public sector is discovered by Moon (2004). Both the Thatcher and Blair government encouraged CSR in the UK. As a result, CSR activities increased and started to formalise. Besides government as an important driver for this development, also business drivers were identified as influencing factors. Such as imperatives from investors, suppliers, partners, customers and reputation. As well as social drivers including consumers, NGO's and employees.

Calder and Culverwell (2005) identified that governments hardly participate in the international CSR agenda. Governments should engage more in the international and developing countries' CSR agenda to ensure businesses uphold against internationally agreed norms and in the private sector in order to support the delivery of SD and poverty reduction goals. Various stakeholder groups such as NGO's and international organisations pointed some governments on this absence which resulted in more activity by them. In addition, Calder and Culverwell (ibid.) presented options for governments to stimulate actions by the private sector on CSR as follow up to the World Summit on Sustainable Development (WSSD) commitments. On a national level some interventions are: minimising standards, creating incentives (e.g. tax breaks, government procurement policies and award schemes) and developing reporting and certification schemes. Interventions at an international level they identified are: setting and endorsing norms and standards for corporate behaviour and reporting (e.g. the OECD guidelines on Multinational Enterprises and the GRI) and capacity building for the development of effective national-level public sector frameworks for promoting CSR. Thereby, they noticed that governments of developed countries can function as donors in promoting CSR. For example those European governments with public policies on CSR that promote responsible and sustainable business practices (Albereda et al., 2007). These policies have been classified in policies within governments, policies in the government-businesses relationship, policies in the government-society relationship and relational CSR policies between government, business and society.

In short, public sector organisations (including PAs) have many roles and activities that contributes to SD. This stresses their importance in the field of SD.

Public agencies and sustainable reporting

The role of PAs in SRing could be determined by looking at related studies and SRs. Fox et al. (2002) recognises the importance of promoting public access to information on environmental and social issues as part of the SD agenda. They identified that reporting

on non-financial policies and performance by companies has become an instrument within the CSR agenda. SRing also attracted the attention of the public sector in many developed countries. Requirements for mandatory reporting against social or environmental indicators and development of guidelines for voluntary reporting are some public sector initiatives regarding reporting. An example of guidelines for voluntary reporting are the GRI guidelines in which some developed countries and other stakeholders have engaged.
In the early years of SRing Australia came up with a number of initiatives to support companies to start reporting. Examples hereof are the framework for public environmental reporting in 2000 and the report on triple bottom line reporting against environmental indicators in 2003 by Environment Australia (today's Department of the Environment and Heritage (DEH)). Furthermore, the DEH launched a corporate SRing website which includes a library of SRs published by Australian companies (CAER, KPMG and DGCS, 2005).
GRI (2004) identified some PAs that publish a SR. These agencies do this in order to 'practise what they preach' and to stimulate other organisations to report. This is reflected in the study by a statement of the UK Environmental Agency: 'We need to demonstrate, clearly and convincingly, that our own house is in order if we are to influence others to adopt more sustainable lifestyles and business practices'.
An example of a PA that report is the Dutch ministry of economic affairs. The ministry says it has taken the role model position among Dutch governmental organisations for SRing (Ministerie van Economische Zaken (EZ), 2007). They used the GRI guidelines to structure the report and include an assurance statement. Here, the role of PAs as lead by example bodies for SRing has been demonstrated.
Furthermore, the ministry of housing, spatial planning and the environment is also active in the field of SRing. In the beginning, this was limited to promoting SRing among companies and other organisations. However when SRing started to evolve, the ministry couldn't stay behind and published a report as well. Their stakeholders were very enthusiastic. Not in the last place about that the ministry could experience now how much effort it costs to publish a report. Taking guidelines and internal bias into account (Annemarie van der Rest, manager Environmental Affairs, Shell). And indeed it took the ministry quite a lot of work to compile the report (Ministerie van Volkshuisvesting Ruimtelijke Ordening en Milieubeheer (VROM), 2007). Thereby, the stakeholders enthusiasm show also the high demand for PA SRing and possible the motivation to publish a report themselves.
In conclusion, the roles of PAs in the area of SRing are roughly: lead by example, facilitating, supporting and motivating. Comparable to their roles in SD.

2.3.2 Drivers to report

In this paragraph, the drivers of organisations to start or continue publishing a SR will be discussed. The term 'drivers' can be used interchangeably with reasons, motivations, and incentives to report. Research identified some drivers to SRing which have been summarised in table 2.3 of appendix 6. Additional to those drivers, a number of drivers

were identified via a questionnaire to the KPMG GSS network. These could also be found in appendix 6.

Drivers to corporate social responsibility

Drivers to CSR are related to drivers to SRing since reporting on CSR is also a type of non-financial reporting. Some of these drivers are: intra-organisational factors, competitive dynamics, institutional investors, end-consumers, government regulators, and NGOs. Hereof, most could be classified as stakeholders of external origin (Haigh and Jones, 2006). Garriga and Melé (2004) identified four types of theories regarding CSR which are: instrumental, political, integrative, and ethical. From each of these four theoretical categories a driver for CSR can be ascertained: economic considerations, political considerations, social demands, and ethical considerations.
Now the drivers to CSR have been identified it would be interesting to find out if these indeed have something in common with drivers to SRing.

Drivers to sustainability reporting

To find drivers of organisations to SRing numerous researches were scanned. Drivers of companies to report were identified in KPMG's International Survey of Corporate Responsibility Reporting (KPMG GSS, 2005 & 2008) and Sustainability Reporting (Kolk, 2005). Also drivers of PAs to report were identified. This has been done in Public Agency Sustainability Reporting (GRI, 2004), Sector Supplement (SS) for Public Agencies; Pilot Version 1.0 (GRI, 2005) and Sustainability Reporting by Public Agencies; international uptake, forms and practice (CPASR, 2005). Both drivers of companies and PAs have been captured in table 2.3 of appendix 6. The table shows many different drivers of which some appear in more than one research. Assumingly these are the more important drivers. Thereby, a slight difference have been noticed between drivers for companies and PAs.
In both the KPMG (2005 & 2008) and CPASR (2005) research the drivers were ranked. The top 3 drivers of those researches greatly differ, most likely because of differences in drivers tested and differences between companies and PAs. KPMG's top 3 drivers were: economic considerations, ethical considerations and innovation and learning. Based on the high ranking of economic considerations, they concluded that: business drivers have a great influence on SRing. The CPASR research identified the next top 3 drivers: monitor performance, regulatory requirement and demonstrate progress to sustainability principles. Where KPMG seems to have mainly internal desirable results identified as drivers for companies, CPASR also identified external demands as drivers for PAs. Remarkable is that only two drivers, reputation management and risk management, were identified in both researches and therefore are applicable to companies and PAs. Drivers identified by Kolk (2005) could be rather classified as, very specific, reasons to report.
The identified drivers of PAs are most important to this research since its main focus on PAs. GRI (2004& 2005) identified the drivers by interviewing PAs. CPASR (2005), on the other hand, predetermined the drivers and asked PAs in a questionnaire to rank those. Either way the drivers have been determined, they all make sense. Some that appear more than once or seem to be obvious for PAs are: lead by example (fulfilling their role model position), legislation/regulation (meeting their legal obligations), monitor performance (observing their performance), reputation management (improving their

reputation), stakeholders demand/pressure (meeting their stakeholders' needs), and transparency and accountability (providing high levels of transparency and accountability on their sustainability performance and therefore an increase in credibility).
Besides previous discovered drivers also drivers have been identified by questioning the KPMG GSS network. They were asked to provide, in their opinion, the three main drivers for PAs to report and to not report. All these drivers have been ranked in table 2.4 of appendix 6.
Before looking at the drivers, it should be noted that the drivers were mainly identified by offices of the KPMG GSS network from developed countries. In addition, the majority of respondents were European members.
All respondents identified at least one and maximum three driver(s) why they think PAs either report or not. The top three drivers for PAs to publish a SR are: 1. regulation, 2. stakeholder pressure and 3. benefits. Lead by example ended fourth in this ranking. Remarkable, given the role model position of PAs. Moreover, it was expected that higher ranked drivers of PAs, as integer organisations, were mainly internal drivers. In this regard, it is remarkable that the first two drivers have an external focus and that the drivers transparency and accountability, important principles these days as a result of accounting scandals and global warming, were hardly mentioned. Noteworthy is also the high ranking of regulation, as a driver to report, since it can be argued whether this is a driver or more an obligation. And in that regard mandatory instead of voluntary. Higher government pressure was expected higher in the ranking because PAs can be affected by PAs higher in the hierarchy. As a final point, it is remarkable that competition is the fifth ranked driver, because hardly any competition in the public sector was expected.
As known so far, the majority of PAs do not publish a SR. In that regard, it is interesting to know the reasons why PAs decide to not report. The top three drivers to not report identified by the KPMG GSS network were: 1. low awareness, 2. insufficient resources and 3. lack of understanding & lack of regulation.
Remarkable is that the opposite drivers of the top three drivers to report did not make it into the top three drivers to not report and vice versa, except for (lack of) regulation. In addition, it is noteworthy that the top three drivers to not report are mainly internal, except for lack of regulation again.
Besides stakeholder pressure, stakeholders as such have been hardly mentioned as a driver to report. However, stakeholders are important in SRing and could influence on this. Which stakeholders from the literature are most important and have the greatest influence on SRing will be examined in the next paragraph.

2.3.4 Stakeholder influence

This paragraph focuses on the influence of stakeholders on SRing by PAs. First, the meaning of stakeholders has been explained. Partly by defining what a stakeholder is. Then, an overview of stakeholders identified in the literature has been given. Hereafter, stakeholders with the greatest influence on PA SRing have been ranked. At the end of this paragraph, the influence of stakeholders have been discussed.

Stakeholders

All organisations have stakeholders. Stakeholders, as in the name, are all that have a stake in an organisation. A group of stakeholders is a large collection of people or institutes that influence and could be influenced by an organisation. Public sector organisations including PAs, have all different kinds of stakeholders but no shareholders. Except for state-owned enterprises in which the state owns the majority of shares. The stakeholder definition used in this study is: *'Any group or individual who can affect or is affected by the achievements of an organisation's objectives'* (Freeman, 1984).

Based on the stakeholder definition, there are many different stakeholders of organisations. From communities and investors extern, to employees and management intern. However, only a select number (the more important) appeared consequently in the literature that mainly focussed on the private sector. For example, the more traditional stakeholders for companies such as financial stakeholders (e.g. investors and shareholders). Identified in literature as one of the key stakeholders if not the most important (Kolk, 2005; KPMG GSS, 2006; and GRI & KPMG GSS, 2007). In addition, Kolk (2004a) discovered that a fifth of the SRs published by companies identified a limited number of main stakeholders: employees, customers, shareholders and communities. Previous learns more about what seems to be the more important stakeholders for organisations. Together with these, other stakeholders appeared in the literature (focussing on either the private or public sector) which have been presented in table 2.5 of appendix 6.

In general, stakeholders can be categorised as internal or external. And, based on the stakeholder definition, stakeholders could affect or are affected by (decisions of) an organisation. Some stakeholders are more important than others (Jones and Wicks, 1999). This has an effect on the relation of influence between organisations and stakeholders. Expected is that the more important a stakeholder, the more influence it has on an organisation and its activities. For example, SRing.

Main stakeholders

Based on the key stakeholders identified in research by Industry Canada (2001), KPMG Australia (2008b), KPMG GSS (2008a), the stakeholders mentioned multiple times in table 2.5 of appendix 6 and those identified by the KPMG GSS network (appendix 6, table 2.6), a selection of more important stakeholders for companies and PAs has been made.

Besides traditional key stakeholders such as shareholders and investors also other stakeholders have been included in this selection: citizens, community, customers, employees, government/higher governments/other PAs and suppliers. The more relevant stakeholders for companies are shareholders and investors, as financial stakeholders. Also customers, as buyers of products/services in competing markets, are important. Stakeholders more relevant for PAs are other PAs, especially higher governments, as guiding organisations and provider of financial means. Also citizens, the community and private sector, as customers and (indirect) investors via taxes, are important stakeholders for PAs. Employees, as the engine of organisations are highly relevant for both companies and PAs.

Stakeholder importance and influence

The more important a stakeholder, the greater is its influence or vice versa. This influence can be used for example to have organisations publish a SR or which information they should include in this report. For instance through stakeholder engagement (involvement of stakeholders in the organisation's activities and decisions). By doing this SRs become more useful for its users. How stakeholders should be treated in this regard has been shown in figure 2.8 of appendix 6. The actions that should be taken by organisations to stakeholders depends on the level of stakeholder influence and the level of interest this stakeholder has in the organisation's sustainability performance, written down in its SR. This means that organisations should include certain information in their SR based on the kind of stakeholder and its request. An example hereof is the tendency of organisations to include more performance measures rather than policies as a result of stakeholders' demands (Kolk, 2004a).

So far, (main) stakeholders for both private and public sector organisations were central in this paragraph. However, it is more interesting to focus on PAs since these are central in this study. Therefore, the KPMG GSS network were asked to identify stakeholders with influence on SRing by PAs. An overwhelming majority replied higher governments. This made them the stakeholders with the greatest influence on PAs to publish a SR, followed by the community and the private sector. This top 3 of stakeholders make sense. Higher governments could for example oblige other PAs to publish a SR. A public agency is an important part of a community. In that regard, it seems reasonable that the community as stakeholder will request a public agency to report on their sustainable performance. The private sector, which has not been identified as an important driver in the literature, is ranked third. This can be motivated by the fact that they expect PAs to practice what they preach.

Although most stakeholders are external, a mix of internal and external stakeholders instead of only external stakeholders was expected in the top 3. Another expectation, based on the stakeholder literature, was a higher ranking of stakeholders like 'employees', 'NGO's', 'other public agencies' although their fourth place. 'Citizens' and 'customers' were also expected higher in the ranking.

2.4 Positive Accounting Theory

Now the literate about SRing is discussed in this part the PAT and the relationship with SRing will be discussed.

Positive Accounting Theory

To understand more why some companies are reporting about sustainability and other companies do not we first have to look why the managers of those companies choose certain accounting practices in the first place. To do this we will look at the PAT. The PAT was created by Watts and Zimmerman (1978) and investigates the behavior and interests of the managers who decide about the accounting methods of the company. According to Watts and Zimmerman, there are several factors influencing managers' attitude to accounting standards. It is stated that managers will use the accounting method which will maximize their own benefits. They present their theory with three

hypotheses: the bonus plan hypothesis, debt/equity hypothesis en political costs hypothesis.

1. *Bonus Plan Hypothesis*
   The Bonus Plan Hypothesis states that managers who have bonus plans based on accounting results choose accounting procedures that transfer future periods to the current period. This way the results of the company look better and they can increase their bonuses for the current year.

2. *Debt/equity Hypothesis*
   The debt/equity hypothesis states that managers will choose accounting methods that will show better results the closer a company is to violating accounting-based debt covenants. Debt covenants are restrictions given by the entity which granted a loan to the borrower of that loan. These restrictions could be for example certain levels of profits or turnover. If these restrictions are not met and thus the covenant is broken, the loan becomes due immediately. Off course managers will try to overcome this and therefore will choose an accounting method which will show the needed results with respect to the debt covenant.

3. *Political cost Hypothesis*
   The third hypothesis is the political cost hypothesis. This hypothesis states that managers of companies with high profits tend to choose certain accounting methods to show lower profits than actually are made. High profitability can lead to increased political attention which could lead to more regulations or higher taxes.

Watts and Zimmerman presented a theory about positive accounting. When choosing accounting methods, they assume that every manager's action has a self-interest move and managers will select the accounting methods which maximizes their own benefits. Is this something which could be the case for SRing? For example, let`s assume that a manager has a bonus compensation plan for certain sustainability goals when reached. Will managers then find it more important to report about sustainability?

2.5 Summary

Based on the literature it seems that SRing by PAs, compared to the private sector and compared to financial reporting, is still in its infancy. Nevertheless a number of standards, codes and guidelines have been developed for this type of reporting. The main guidelines were developed by GRI, also tailored for PAs in a so called sector supplement.
The role of the public sector with regard to CSR and the reporting hereof is mainly to stimulate and strength those activities in the private sector.

In Appendix 2 numerous studies used in this literature study has been analysed. However not all studies have the same results. Below the main similarities and differences of these studies are mentioned.

Main similarities

- Environmental issues are reported in most SRs, also with the highest level of detail. Reported environmental issues are in general more likely to be implemented than for example social issues.
- Mainly in developing countries SRs are published.
- GRI standards are the most common standards used.

Main differences

- The results of the studies are more diverge when talking about the main reasons to report. KPMG GSS (2005 & 2008) stated that 'ethical and economic considerations' are the main drivers to report. On the other hand stated Industry Canada (2001) that the main reasons to report are 'effectively manage operations and social risk' and 'to generate business value'. In contrast Kolk, A. (2004a) listed the main reason to report ('improved all-round credibility from greater transparency') and not to report ('it is difficult to gather consistent data from all operations and to select correct indicators'). Deloitte (2006) stated that 'enhance reputation' and 'stakeholder relations' are the main reasons why public sector organisations publish a SR.

3. Research design

3.1 Introduction

In this chapter the research design will be discussed which shows how the research question will be answered. The research design consists of four parts; the research framework, the research type, the research method and finally the hypothesis that will be tested in this thesis. In the summary these items are summed up.

3.2 Research framework

This study examines three different components of SRing by PAs: the content of the SR, the drivers to publish a SR and the stakeholders of the PA with an influence on SRing. In this study first the content of the SR will be analysed. Secondly the study analysis whether a relationship can be identified between the drivers to report and the content of a SR. Thirdly the study analysis whether a relationship can be identified between the stakeholders influencing SRing and the content of a SR.

The research framework is shown in figure I.

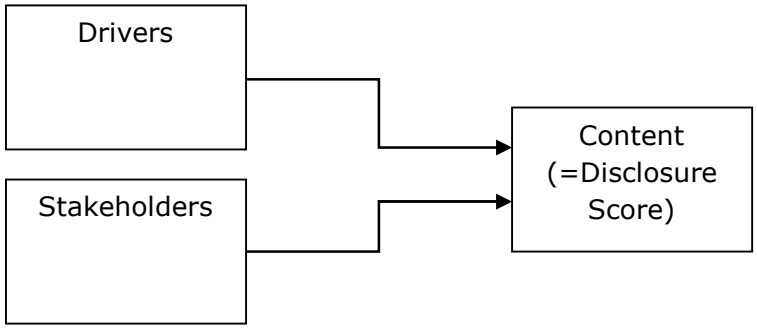


Figure I - Research Framework

In order to examine whether a relationship can be identified between the drivers and stakeholders of a SR and the content of a SR, the content of the SR will be defined with a disclosure score. The way the disclosure score is calculated is further explained in paragraph 3.4.

3.3 Research type

The research type of this study is both descriptive and empirical. The descriptive part consist of the content analysis. The empirical part consists of the regression analyses between the drivers and stakeholders of a SR and the content of a SR (=disclosure score).

3.4 Research Method

In order to explain the research method this paragraph is divided in the content analysis and the regression analysis.

3.4.1 Content analysis

Data collection
It is almost impossible to check all PAs worldwide individually whether they publish a SR sustainability report. As a result, it is very difficult to make convincing and representative statements on the present 'state' hereof. However, this research tries to gather reports that are representative for the worldwide activity by PAs in SRing to score and analyse these. In addition, the reporting organisations will be send a questionnaire to collect more information, specifically on the drivers to report and stakeholders with influence.

First, reports were collected out of the databases, networks and researches of international well-known and representative organisations in the field of SRing. The sources used were:

CorporateRegister.com - The largest online database of SRs. This database has been searched on the criteria 'Government, Authorities & Agencies', of the advanced search options, to gather all reports available from this source as at 31 March 2008.

Global Reporting Initiative (GRI) - A multi-stakeholder non-profit organisation that develops and publishes the foremost guidelines on sustainability (environmental, social, and economic) performance. It has its own database of SRs which were compiled using GRI. The database has been searched on the criteria 'PAs' to gather all reports available from this source as at 31 March 2008.

The Centre for Public Agency Sustainability Reporting (CPASR) - A collaboration of the GRI, ICLEI – Local Governments for Sustainability, the City of Melbourne and the State Government of Victoria. Their report 'SRing by PAs; International uptake, forms and practice' identified a number of PAs that publish(ed) a SR. The sites of these PAs will be searched for the latest sustainability or comparable reports. If not successful they will be contacted to provide this.

KPMG Global Sustainability Services (GSS) network - The ever changing GSS network within KPMG, represented by 350 social and environmental professionals in more than 35 countries. The network has been asked to identify reporting practices by PAs in their country and to provide the reports or contact information.

Association of Chartered Certified Accountants (ACCA) - The global association for accounting professionals. Is involved in sustainability issues, for example through their SRing award scheme that focuses on report transparency. The most recent reports of the judges (including nominees and winners) for the ACCA SRing awards as at 31 March 2008 on ACCA Global have been searched for public sector organisations and their reports.

If reports were not available via these sources, the PAs identified as organisations that report were requested to provide their most recent non-financial report. Including environmental, social and economic elements. If this was not successful, their websites were checked for the most recent reports.

Previous process resulted in the initial sample of 196 reports. Out of these gathered reports a final sample was deducted, using the following selection criteria:

- Focus on performance (historic) policies and goals (future);
- Published not before 2005; and
- Written in English, Dutch, German, French or Spanish.

The final sample (n=85), includes a great variety of sustainability (41) and comparable reports like environmental (16) and environmental and safety (2) reports. Published by different agencies around the world. Especially in developed countries such as Australia (32%), the UK (21%) and New Zealand (9%). However, also in developing countries like South Africa (1%). Most reports were identified via the database of CorporateRegister.com (45%) and the research by CPASR (29%). Four reports were identified by both of these sources (5%). In addition, all reports were available in PDF and some even as web-based application (9%). To score these reports on the main report content and characteristics of the publishing agencies, a framework has been developed.

Framework to analyse the content of SRs

In these reports the main content and characteristics of the reports were identified. The framework to analyse the content of SRs used in this study (figure 3.1 of appendix 7) is based on existing frameworks and theory from the following researches and guidelines:

- Corporate Responsibility Reporting (KPMG GSS, triennial survey since 1993);
- Scoring corporate environmental and sustainability reports using GRI 2000, ISO 14031 and other criteria (Morhardt, 2002);
- Risk & Opportunity: Best Practices in Non-Financial Reporting (SustainAbility, 2004);
- A decade of SR: developments and significance (Kolk, 2004a);
- More Than Words: An Analysis of Sustainability Reports (Kolk, 2004b);
- Tomorrow's Value Executive Summary (SustainAbility, 2006);
- CR Reporting Awards 2007 & 2008 (CorporateRegister.com, 2008 & 2009);
- GRI Public Agency Sector Supplement (GRI PASS, 2005); and
- G3 Guidelines on Sustainability Reporting (GRI, 2006).

Besides the 'implementation likelihood' framework created by Kolk (2004b), the G3 guidelines (GRI, 2006) and the Public Agency Sector Supplement (PASS) (GRI, 2005) have been mainly used in this process. Important environmental, social and economic performance topics and vision and strategy were subtracted from the GRI guidelines. Kolk's framework has been used in general, to structure the framework of this research in different sections. The implementation likelihood aspect of that paper was left out, since it is too detailed for this initial research. Besides the common topics, no

supplementary relevant topics were found in the other researches. This means that the framework covers most relevant topics.
The framework consists of 22 core topics, divided over the following five sections (an overview hereof is stated in figure 3.1 of appendix 7):

1. General information regarding the public agency and the report (for example, tier of organisation and report title).
2. Focus area of the report (e.g. type and main focus of the report).
3. Organisational topics (e.g. vision & strategy, mission and performance indicators).
4. Performance of the organisation (e.g. social, environmental and economic).
5. Monitor activities within the organisation and of the report (e.g. monitoring management systems, verification and assurance of the report).

3.4.2 Regression analysis

In order to examine whether a relationship can be identified between first the drivers to report and the content of a SR and secondly the stakeholders influencing SRing and the content of a SR, these variables have to be quantified.

Quantification Content
To quantify the content of all SRs we will use the framework explained in paragraph 3.4.1 to score main report content and characteristics of the publishing agencies. Based on these scores we can calculate the disclosure score (the score of a non-financial report based on the completeness or comprehensiveness of its content).
The disclosure scores (with a maximum of 51 points) of the reports were calculated based on the report type, main focus, guidelines (used to compile the report), stakeholders (identification/engagement), vision (identified), mission (identified), governance structure (identified), key achievements (identified), social management system (identified), environmental management system (identified), social performance indicators (identified), environmental performance indicators (identified), economic performance indicators (identified), social performance topics (identified), environmental performance topics (identified), economic performance topics (identified), assurance statement (included). The scores of the alternatives per previous mentioned categories and the total disclosure scores have been depicted in table 3.1 and 3.2 of appendix 7.

Quantification drivers and stakeholders
In addition to the report content analysis, a questionnaire has been sent to the PAs involved in this research, especially to identify drivers to report and important stakeholders. The PAs were asked and free to forward the questionnaire to other PAs, in order to increase responses. Ultimately 22 out of 85 PAs responded, a response rate of 25,9%.
The questionnaire consists of several questions (appendix 8). One of them focus on the importance of drivers, another on the importance of stakeholders. The questioned PAs were asked to rate both the most important drivers and stakeholders from 1 to 5. These outcomes were used for the regression analyses.

Regression analysis of drivers to report

So in the previous part it has been explained how the data is collected. Over these data a multi regression analysis will be performed. The proposed relationship of the drivers to report and the disclosure score is as follows:

$$D_i = c + \gamma_1 Trans_i + \gamma_2 Lead_i + \gamma_3 RMan_i + \gamma_4 Mon_i + \gamma_5 Gov_i + \gamma_6 Leg_i + \gamma_7 Stake_i + \gamma_8 Risk_i + \gamma_9 Other_i + \varepsilon$$

Equation 1

Where:

i	= the "i-th" object;
c	= constant;
D_i	= Disclosure score of the report;
$Trans$	= Score for driver Transparency and accountability;
$Lead$	= Score for driver Lead by example;
$RMan$	= Score for driver Reputation Management;
Mon	= Score for driver Monitor Performance;
Gov	= Score for driver Higher Government demand/pressure;
Leg	= Score for driver Legislation/Regulation;
$Stake$	= Score for driver Stakeholder demand/pressure;
$Risk$	= Score for driver Risk management;
$Other$	= Score for driver Other drivers;
ε	= the error term.

Regression analysis for stakeholders influence on SRing

In this part the regression analysis of the stakeholders with influence on SRing by PAs will be defined. This regression analysis is defined as follows:

$$D_i = c + \gamma_1 HG_i + \gamma_2 Work_i + \gamma_3 Cit_i + \gamma_4 Cust_i + \gamma_5 Com_i + \gamma_6 OPA_i + \gamma_7 NGO_i + \gamma_8 PS_i + \gamma_9 Con_i + \gamma_{10} Other_i + \varepsilon$$

Equation 2

Where:

i	= the "i-th" object;
c	= constant;
D_i	= Disclosure score of the report;
HG	= Score for stakeholder Higher governments;
$Work$	= Score for stakeholder Workforce direct/indirect;
Cit	= Score for stakeholder Citizens;
$Cust$	= Score for stakeholder Customers;
Com	= Score for stakeholder Community within jurisdiction;
OPA	= Score for stakeholder Other public agencies;
NGO	= Score for stakeholder NGO's;
PS	= Score for stakeholder Private Sector;
Con	= Score for stakeholder Contractors and Suppliers;
$Other$	= Score for stakeholder Other stakeholders;
ε	= the error term.

3.5 Hypotheses

Based on the literature study, the hypotheses for this research have been formulated in this paragraph, classified by topic.

3.5.1 Reporting public agencies

Literature: Based on prior research by ACCA & CorporateRegister.com (2004), CorporateRegister.com (2008 & 2009), Industry Canada (2001), Kolk (2003), KPMG GSS (2005, 2008 & 2011), SustainAbility (2004), we could say that mainly organisations in Europe publish SRs. Research by CPASR (2005) focussed on the public sector and identified most reports published by PAs in Australia and New Zealand. In addition, Australia and New Zealand are highly concerned about SD. Combining previous information resulted in the next hypothesis.
Hypothesis 1: SRs are mainly published by PAs in Europe, Australia and New Zealand.

Literature: Mainly the largest companies in the world publish SRs which is supported in for example research by Kolk (2003) and KPMG GSS (2005, 2008 & 2011). A clarification for this could be that in general the larger companies have a greater impact on, and greater accountability in, society. In addition, these organisations are very visible and their performance is closely watched by the public. This is expectably the same for organisations in the public sector. Based on this the next hypothesis has been drawn.
Hypothesis 2: Mainly the national PAs, as largest PAs in a country, publish a SR.

3.5.2 Report content

Literature: Industry Canada (2001) revealed that mainly environmental issues were reported. In addition, KPMG GSS (2005 & 2008a) discovered that environmental content were more detailed reported than social and economic issues. Thereby, environmental issues were rather more likely to be implemented than social issues (Kolk, 2004b). This lead to the next hypothesis.
Hypothesis 3: PA SRs include mainly environmental topics.

Literature: KPMG GSS (2005 & 2008) discovered that 40 percent in 2005 and 73 percent in 2008 of the largest companies in the world made use of the GRI guidelines to report. Thereby, the materiality of reported information has been determined mainly by using GRI, stakeholder consultations, and national standards. In SustainAbility's 2006 research all top 50 reports referred to GRI and half were produced in accordance with these guidelines.
In determining and structuring the report content, companies mainly make use of the GRI guidelines. These guidelines are the most renowned guidelines for SRing in the world and therefore expected to be used most, also by PAs to report.
Hypothesis 4: PAs mainly make use of the GRI guidelines and stakeholder engagement to structure and determine the content of their report.

3.5.3 Reporting drivers

Literature:
Based on CPASR (2005) monitor performance and regulatory requirements are the top two drivers for publishing a SR for PAs. Also GRI (2004) mentioned demonstrating progress (=monitor performance) as a main driver in their report about PA SRing.
Besides the literature study a discussion has been held within the KPMG GSS department about the main drivers of PAS to publish a SR. Regulation and stakeholder pressure were mentioned the most (see table 2.4 of appendix 6).
Hypothesis 5: As a driver legislation, monitor performance and stakeholders demand/pressure have a positive influence on the Disclosure Score of PA SRs.

3.5.4 Stakeholders with the greatest influence

Literature:
Higher governments resulted from an internal request within the KPMG GSS network as the stakeholder with the greatest influence on SRing by PAs. Thereby, stakeholders that have been addressed in the literature (Gray, 2000; Industry Canada, 2001; GRI, 2005) multiple times (Government, state, parliaments) and ranked high are expected to have a more important relation of influence with the organisation. Therefore, these stakeholders are most likely able to influence an organisation to publish a SR or the content hereof.
Hypothesis 6: As stakeholders higher governments have a positive influence on the Disclosure Score of PA SRs.

3.6 Summary

For this thesis two research methods will be used. For the content analysis we will use a framework to analyse the content and main characteristics of PA's SRs. Besides the content analysis we will examine whether a relationship can be identified between the drivers to report and the content of a SR and between the stakeholders influencing SRing and the content of a SR.
In total six hypotheses have been defined based on the literature study. Hypothesis 1 till 4 will be tested with the content analysis. Hypothesis 5 and 6 will be tested with the regression analysis.

4. Results

4.1 Introduction

This chapter presents the result of the research. First the results of the content analysis of PAs' SRs will be discussed. Second the results of the regression analysis will be discussed.

Chapter 4 answers the following three subquestions:

- 4. What are the main report contents of sustainability reports by public agencies?
- 5. What are the most important drivers to report and stakeholders with the greatest influence on reporting of sustainability reports by public agencies?
- 6. What is the influence of public agencies' drivers and stakeholders on the content of public agencies' sustainability reports?

4.2 Reporting organisations and report content

In this paragraph, the reporting organisations and the results of scoring the reports will be presented consecutively by framework category.

4.2.1 General Information (public agencies and reports)

The results presented here, focus on the main characteristics of first PAs and then their reports.

Public agencies - country, continent and region of origin

Per continent, most reports were published in Europe (40) and Oceania (35). On a country level most reports were published by Australian PAs (27), followed by the United Kingdom (18) and New Zealand (8). In the other countries and continents in which SRs were published this was done by not more than five PAs. See figure 4.1 and 4.2 in appendix 9 for the complete results.

This geographical distribution can be partly explained by the fact that most mandatory and voluntary standards and guidelines are applicable to PAs in these countries and continents. For example, Australian agencies are obliged by the Energy Efficiency in Government Operations policy (EEGO) to report on their use of energy behaviour. In addition, Australian organisations must include information about their environmental performance and contribution to ecologically sustainable development in their annual reports. Some are even required to report against National Environment Protection Measures. Despite these regulations, non-financial reporting is mainly voluntary which has been motivated in this research before.

In that regard another explanation for this uptake is that mostly developed, developing and democratic countries and continents publish SRs. Knowing this, it is remarkable that hardly any reports from North American public organisations made it to the dataset of

this research. On the other hand, the absence of reports of organisations from South America, Africa and Asia was more expected. Partially because these continents are not yet ready (concerning their state of development or political system) for this type of reporting. Nevertheless, companies from these continents increasingly start with SRing, especially in South America and Asia, continents with former emerging economies like Brazil, Russia, India and China (BRIC). South Africa seems to be the only country on the African continent in which SRing seriously starts to emerge. However, only one PA (Eskom) published a SR (annual report with integrated sustainability issues) there. No reports were published by public organisations in the Middle East.

Public agencies - tier

Although more regional and much more local PAs exist, this research discovered that mainly national agencies (31) published SRs, followed by regional (21) and local agencies (21). Hardly any international and state PAs were found that published a report as depicted in figure 4.3 of appendix 9.

Based on this it is more likely that national agencies report rather than regional or local agencies. This is a good sign since national PAs, as larger organisations, could have a great impact on SD and SRing. However, for every major change the majority of people (also on local level) must in the end support it. Something big must happen, to increase the urgency.

On a local and regional level, the largest group that reported were city councils. This means that they have a high awareness of SRing. Thereby, it empowers that city councils are closely connected with the community they operate and could motivate for example Small and Medium Enterprises (SMEs), schools and hospitals to report. In this way, they could have an even greater impact than national agencies.

Hardly any international PAs were found that published a report, partly because there are just a small amount of these large organisations.

Comparable to this result, is the result by private sector organisations. Here mainly the larger companies publish a SR. These have a greater accountability and responsibility, because of their great impact, and therefore a higher demand for transparency and credibility.

Now the origins and tiers of reporting agencies have been discussed, the type of PAs that publish a report will be discussed next.

Public agencies - type

As shown in figure 4.4 of appendix 9, the other category with different types of PAs publish the most SRs (22). Not one type of agency in this group appears more than two times. An example of an agency type in this group is a University (Monash University, Australia). Since this other group does not consist of just one type of agency no reasonable statements can be made. Groups with a single type of agency are more interesting in this regard.

State-owned enterprises (SOEs) publish most SRs (21). Closely followed by city councils (19) and departments/ministries (17). PAs that act on a national or regional level are SOEs and departments/ministries. These agencies together are by far the largest reporting group, followed by local city councils.

Departments and ministries assumingly publish many SRs because these relatively large organisations have a great impact on society and therefore on SD and SRing. Also their lead by example and regulating role can have a significant impact.
SOEs expectably publish the most, more comprehensive and integrated SRs because of their strong similarities (i.e., great impact and focus on profits) with (large) companies who take the lead in reporting. City councils publish relatively very little reports. They could have a huge impact on society too (especially on local small and medium companies, and the people in the community). This is an interesting future opportunity.
All researched main characteristics of reporting PAs have been discussed so far. Hereafter the main characteristics of the reports will be elaborated.

Reports - edition
The reports were mainly published for the second (14) or third (7) time. Reasons for this are the relative newness of SRing, especially in the public sector, and the increase in reporting. In addition, after some years, the report edition would not be mentioned anymore in general, only in exceptional cases. For example, two reports that were published for the 10^{th} time.
Figure 4.5 of appendix 9 shows the number of reports by edition. Expected is that in future first edition reports will gradually grow. Since today, PA SRing is at the beginning of its development.
The report editions tell more about the historical and current uptake of SRing by PAs, and which agencies report from the very beginning.

Reports - other characteristics
Other report characteristics on which the report were scored are: title, reporting period and frequency, number of pages, source(s) and availability (e.g. hardcopy, PDF) of the report.
Report titles are in general strongly linked to report types. However, there are many different report titles (e.g. Sustainability Report, Maatschappelijk Jaarverslag, Annual Report) used for the same report type. This could be very confusing for its readers.
A reason for this great variety in report titles could be the lack of standardisation for SRing and the early stage of development (especially in the public sector). In future, report titles are expected to become more revealing and less divers due to more standardisation and further development.
All reports used for this research were published in, or after, 2005. In general, the reports were published on an annual basis. This is also most common in the area of other external reporting such as financial reporting. These characteristics are not likely to change in future, which is not necessary either. However, in this era of internet and social media it could be possible that reports will be published online more often and updated real time. Online reports have an increased readability and accessibility.
Another aspect that is of influence on the readability of a report is the number of pages.
All reports are different and consist of a different amount of pages, ranging from just a few to over hundred pages. Reports with many pages are harder to read than reports with fewer pages. However in general, the more pages the more comprehensive. A good balance should be found between the readability and the detailness of information

provided, expressed in a reasonable amount of pages. More standardisation could contribute to this.

Besides the many different titles and great variety in number of pages, another fact that supports the immaturity of PA SRing, is the small amount of sources that provide these reports. Most of the reports have been collected by far via CorporateRegister.com (45%), the largest database of corporate responsibility reports. Expectably in future, a similar database for PA SRs will be created or (better) integrated in the CorporateRegister.com database. This will probably stimulate the development of reporting in this area.
Most sources provided a link to the report or a PDF document hereof. This is representative for the availability of reports today, which is mainly digital (all in this research). Printable as PDF or online in a web-based format, only 8 of the 85 reports. Still reports are also available in hard copy. This is because not everyone prefers to read these documents digital. Thereby, some copies were used as show models. In future, after this transition period from hard copy to digital, people will become used to reading digital documents (either on their computer, smart phone or e-book) and forget about the paper alternative, which is also better for the environment.

4.2.2 Focus

The focus of the reports is expressed in and determined by the: type and geographical scope of the report, main report focus, reporting guidelines used and the identification of stakeholders (engagement). The results of scoring the reports on these topics will be presented in this subparagraph.

Type and geographical scope
Both pure SRs (41) and annual reports with integrated sustainability issues (26) were included in this study, see figure 4.6 of appendix 9. Besides that, the dataset also includes some environmental (16) and social & environmental reports (2). These reports show many similarities with full SRs and are expected to be replaced hereby in future. Previous mentioned report types are just a few of the many different non-financial, mainly stand-alone, report types.
The SRs in this research highly vary in main focus, comprehensiveness, transparency and form. This could mainly be explained by the voluntary nature of SRing today. The sustainable issues integrated in annual reports differ greatly in length. Where some agencies report very comprehensive on sustainability issues in a number of pages or even paragraphs, others just report a little section.
Expected is that in future, even more SRs and annual reports with integrated sustainability issues will be published, taking into account also the non-financial (environmental, social and economic) performance of organisations. Combining this with the financial performance of an organisation, provides a rather complete picture in one report. This trend has been observed for private sector reports already.

The geographical scope differs per report and is closely related to the tier of agency. This means that most reports have a national (33) and regional (21) scope, followed by a

local (19) scope. Frequent reporting companies in general have a national or even an international report scope.
The report type partly reveals the type of information, the geographical scope for whom this information is useful. However, these two characteristics do not reveal the essence of information, which will be done by the main report focus.

Main report focus
The main focus of the report indicates the nature of information provided. To classify the main focus of reports in this research, the next five categories have been used in the framework:

1. Organisational performance, operations, public policies and implementation measures;
2. Organisational performance and operations;
3. Organisational performance;
4. State of the environment/jurisdiction;
5. Development plan/strategy.

If reports could not be categorised in one of these categories they were qualified as other. In this category not more than two reports had the same main focus. Among the standard categories a clear distinction has been made between the main focus on performance of the organisation itself, the jurisdictional performance and on development plans and strategies.
Most of the reports (34%) focus on the organisational performance, operations, public policies and implementation measures of the organisation. All to some extent related to sustainability. Organisational performance and operations is the main focus in 18 percent of the reports and pure organisational performance in 16 percent. Still 9 percent of the reports focus on the state of the environment/jurisdiction. Thus, not on their own performance. Nevertheless, it says that they are aware of the importance of SRing. This applies also to PAs that publish a development plan/strategy (5%). The final 18 percent reports have many different main report focuses and were qualified in the category other. Previous has been depicted in figure 4.7 of appendix 9.

Guidelines
Guidelines were used to (structure a) report in 41 cases. Hereof 37 times the GRI guidelines were used. Remarkable is that the GRI G3 guidelines have been used to compile seventeen of the reports. Occasionally in combination with GRI PASS (5) or GRI 2002 (2) guidelines. The GRI PASS guidelines have been used in eleven reports. Noteworthy is that none of the organisations that reported using the GRI PASS guidelines were SOEs.
In twelve of the reports the guidelines were only mentioned. Double as much (24) included a content index of the guidelines. Hereof, thirteen were in accordance with the guidelines and four contained a content index based on the comply or explain principle.
The content index makes clear in which report section information based on the guidelines can be found. In addition, an index based on the comply or explain principle indicates on which indicator has not been reported and why not. Including such an index improves the transparency of the report. However, most reports that included a content

index included a normal content index and have been published in accordance with the guidelines.
Worth mentioning is that only reports compiled using the G3 guidelines, whether or not combined with GRI PASS, had an application level of the guidelines (ranging from C: lowest, till A: highest). Hereof two had a by the organisation self-declared application level. Two other reports had an application level declared by a third party (e.g. GRI). Even one report had a both self and third party declared application level. The remaining five report did not make clear if their application level was declared either by themselves or a third party. Other guidelines, less frequent used than GRI, were: the Eco Management Audit Scheme (EMAS), the guidelines of the Organisation of Economic Co-operation and Development (OECD) or self-developed guidelines. For a total overview of used guidelines and application levels of the reports please check table 4.1 of appendix 9.
Also within the private sector the GRI guidelines are, by far, most used. If their report has an application level, this has been declared in general by a third party.

Stakeholders (engagement)
In forty-one reports stakeholders were just mentioned as such. Sometimes they were even specifically identified (25). Nineteen reports did not mention the stakeholders of the organisations at all.
Of all stakeholders most identified were the community, employees and other agencies. These stakeholders could affect or could be affected by PAs very direct. Remarkable is that not all reports identified their stakeholders or report target groups. Especially since knowing for which stakeholders the report has been written could improve the transparency and readability of the report.
Via stakeholder engagement organisations could interact with their stakeholders. In the majority of reports stakeholder engagement was identified and discussed (51). Only seven reports just referred to stakeholder engagement as such. The rest of the reports (27) did not even refer to stakeholder engagement. Of all different types of stakeholder engagement, stakeholder dialogue has been mentioned and identified most. Stakeholder engagement could increase the transparency and usefulness of the reports by affecting its content and focus. Thereby, it is important to involve stakeholders, as (indirect) investors, to a certain extent in the organisation to have their say.

4.2.3 Organisation

By scoring the reports on how the organisation is organised in terms of their vision, mission, governance structure, management systems, and performance indicators it can be measured for example if goals were identified, how these were structured and safeguarded.

Vision & Mission
A vision is an organisation's ambition. Where do they want to be in future? In fifty-eight reports the vision has been identified. These visions varied from the main vision of the organisation to a special vision on sustainability, or even these two combined. Visions

identified throughout the reports were for example: 'To maintain our position as the leading practice for procuring and maintaining community facilities' (Architectural Services Department, 2007) and 'To be a truly sustainable water business' (City West Water Limited, 2007). By identifying the organisation's (sustainability) vision within a report, it becomes clear to all stakeholders what ultimate goal(s) the organisation strive to achieve. This is important so that all involved parties are aware of the direction and if necessary can correct the organisation. Almost a third of the reports (31,7%) did not identify the vision at all.
To work towards the vision, organisations could make use of a mission. Existing of more concrete sub-goals. In only twenty-eight reports the mission has been identified. Two examples of a mission are: 'To provide services in a professional manner' (Architectural Services Department, 2007); and 'To guarantee affordable and safe water for today and tomorrow' (City West Water Limited, 2007). In contrast with the vision, the mission has not been identified as much. The majority fifty-seven reports did not identify the mission. This is remarkable because both the organisation's vision and mission are important and are often mentioned together. Therefore it was expected that the mission would have been identified at least as much as the vision throughout the reports. The other way round this was the case. Except for one report in which only the mission was identified.

Governance structure (corporate governance)
Another important element that contributes to a good structure of the organisation and the authorisation of certain key figures is corporate governance. Since the accounting scandals at the beginning of this century, corporate governance has been widely discussed. Regulation on corporate governance then started to appear. Examples hereof are the Sarbanes-Oxley law in the USA and Code Tabaksblad in the Netherlands. As a result, identifying the governance structure in annual reports and SRs has become more common. This research discovered that forty-four reports did identify the organisation's governance structure and forty-one not. By reporting on their corporate governance, organisations force themselves even more to act in accordance with it. This results in better governance and a decrease in the chance of governance scandals. Thereby, it improves the transparency and credibility of organisations.

Management systems
Besides corporate governance as an instrument to help organisations improve, there are many management systems to do so. These systems are mainly used to provide information and control activities. This research focuses only on environmental and social management systems since all organisations are expected to work with a financial management system anyway. The majority of reports (67%) referred to the presence of an environmental management system (EMS) within their organisations. Most frequent mentioned is ISO14001, a standard for EMS. Social management systems (SMS) have been less referred to (41%). If they refer to the presence of a SMS the Occupational, Health and Safety management systems like OH&S, OHSAS18001 and SA8000 has been referred to.
Previous suggests that it is more likely that an organisation has an EMS than a SMS. This is in accordance with the topics and issues discussed in SRs by companies which are mainly of environmental nature (KPMG, 2005). A reason for this could be that this type of

management systems and the accompanying standards are older than the social counterparts and therefore more integrated.
Presence of environmental and social management systems suggests more structured activities in these areas. Part of these management systems are indicators that set performance targets and goals.

Performance indicators (environmental, social and economic)
Performance indicators are clearly stated goals which can be measured after a certain period whether they are achieved or not. The performance indicators identified in the reports were formulated differently. Some reports present their performance indicators more clear than others.
As the same with management systems, environmental performance indicators have been identified most. Probably as a result of the development of non-financial performance and management systems. Eighty-six percent of the reports did so. This were mainly indicators regarding greenhouse gas emissions and energy, water and paper use were. Social performance indicators have been identified in fifty-nine percent of the reports. More than economic performance indicators, fifty-three percent. Most social performance indicators focussed on health, safety and training opportunities. Income and sustainability procurement policies were most used economic performance indicators. By including performance indicators in the report stakeholders see that organisations set measurable targets on which they are accountable.

4.2.4 Environmental, social and economic performance

By scoring the SRs mainly environmental topics have been identified, followed by social and economic issues. This outcome is comparable to the presence of management systems within the organisation and performance indicators in the reports. Although focussing on the private sector, a similar result has been shown in the outcomes of the KPMG surveys on corporate reporting (2005 & 2008).
Top four most reported environmental performance topics were: greenhouse gas emissions (84%), waste and recycling (82%), electricity and energy use (80%) and water use and recycling (74%). Social topics were less represented in the reports. The three main social topics identified were: training opportunities and capability development for the workforce (60%), health and safety for the workforce (52%) and diversity of the workforce (41%). Economic sustainability related topics like total income broken down by capital and revenue (42%), procurement policy related to SD (40%) and gross expenditure broken down by types of payment (36%) were identified least. Tables 4.2, 4.3 and 4.4 of appendix 9 show all topics on which the reports have been scored per performance category. The percentages indicate in how many of the reports has been reported on a certain topic.
Four most reported environmental performance topics were expected since these have been widely discussed in the news and within organisations these days. Especially greenhouse gas emissions, which seems to be one of the reasons for global warming, is currently gaining attention. In this context, it is no revelation that most PAs reported on their gas emissions.

The social performance category includes more unique topics on which the reports have been scored than the environmental and economic performance categories. Roughly, these social performance topics can be classified in four groups: core labour standards, working conditions, community involvement and philanthropy. Most reported on were topics related to working conditions and core labour standards, the two oldest categories. This could be the main reason that most reports contain topics from those areas. Training and capability development (60%), health and safety (52%) and diversity (41%) were the top three most reported topics. Three least reported topics were child and forced labour (9%), women at the top (8%) and philanthropy (0%). These topics were more expected in company reports rather than in reports published by PAs.
Economic performance topics within SRs focus on wider (in relation to sustainability issues) economic performance. Financial performance topics as in the financial annual report (e.g. pure profit and loss figures) are not meant here since SRing is a form of non-financial reporting. However, total income, if broken down by capital and revenue, provides an indication of the income in categories which makes it more transparent and credible. Sustainable procurement policy is an even better example of wider economic performance of an organisation since such policies take into account the performance on sustainability of their suppliers, for example during procurement negotiations.

4.2.5 Monitor

The last part of the framework has been dubbed monitor. This part focuses on the measures and instruments organisations could use to increase the credibility of their report. Herein, the score categories were: assurance statements and providers. The results of scoring the reports on these categories will be discussed in this subparagraph where the definitions assurance statement and verification report will be used interchangeably.

Assurance statements, providers and standards
The assurance of SRs by assurance providers is increasing. Nevertheless, a minority of twenty-six reports contain an assurance statement. Not surprisingly since assurance is not obliged and within the field of SRing it is one of the latest developments.
Assurance providers were categorised in certification bodies like Lloyds and DNV, specialist assurance firms, technical experts firms (assurance on for example technical environmental issues), major accountancy firms, PAs self (internal assurance providers) or a combination of these providers for partial assurance. Figure 4.8 of appendix 9 captures the reports in percentages by assurance provider.
The reports were mainly assured by certification bodies (27%) and specialist firms (27%), closely followed by technical expert firms (23%). Certification bodies are organisations that carry out (external) audits to award organisations with certificates if they comply with for example the ISO standards. Specialist firms are those organisations that are primarily focussed on providing assurance. And technical expert firms provide assurance based on their technical knowledge of the subject. These assurance providers together provide assurance for 77 percent of the reports. Major accountancy firms, like

KPMG and PWC, have been used in only twelve percent of the cases to provide assurance.
Six assurance statements of the PA reports have been published in accordance with assurance standards. Three of these reports were in accordance with ISAE 3000 and certified by the major accountancy firms. The other three assurance statements were in accordance with AA1000 AS, the other well-known assurance standard, and validated by specialist firms.

4.2.6 Drivers and stakeholders

In addition to scoring the reports by using the framework, a questionnaire has been sent to the reporting agencies to gain more information on SRing. Drivers and stakeholders with the greatest influence on reporting were the main focus of this questionnaire. The results will be thoroughly discussed hereafter.

Drivers to report
What make PAs decide to publish a sustainability or comparable report? This is the central question to be answered in this subparagraph. First, the drivers identified by the questionnaire respondents will be discussed.
Table 4.5 of appendix 9 presents the drivers ranked from 1 to 9 based on the mean values (the higher, the more important the driver is) in combination with the number of respondents (the higher, the stronger the mean values).
In ranking the drivers, the mean-values were in general of more importance than the number of respondents except for the option other. This option has, obviously, the highest average importance score (4.8) since the drivers in this category were very specific and formulated by the respondents themselves. Thereby this option had a substantial lower number of respondents probably since most drivers already were identified among the predetermined drivers. Other drivers identified were for example promoting sustainability and share information and help set a high standard. This category is not representative as a single driver and therefore ranked last (despite the high mean).
Most important driver to report identified by PAs is transparency and accountability. This driver could be qualified as an internal driver more than an external driver. Although, over the years stakeholders increasingly expect more transparency and accountability of organisations to become more credible. Therefore PAs are, besides their own intentions to do so, more or less forced by external stakeholders. Reporting PAs take their responsibility and think reporting can contribute to this.
Second most important driver identified is lead by example. This driver is a typical internal driver rather than an external driver since organisations that want to lead by example are mostly predecessors in the field they want to lead in. Herein they are not forced by others which should make it an external driver.
Shared third most important drivers are reputation management and monitor performance. Reputation management could be seen as an internal driver since organisations could think that publishing a SR is good for their reputation and in this they are not motivated by external stakeholders, parties or forces like other reporting

organisations. Performance monitoring, the other third most important driver, has also an internal character since organisations want to measure their performance and act on that. However, there exist some external pressure on organisations to monitor their performance on sustainability but this is not obliged.
Drivers identified in the category other were: commitment to monitoring and reporting on performance, practicing what we teach (university) and promoting sustainability.
Determining if the drivers are internal or external could be useful in order to learn how PAs could be influenced to report. Remarkable is that the top three identified drivers are all internal drivers just like most drivers in the category other. The other, lower ranked, drivers identified are mainly external. This indicates that PAs are mainly intrinsic motivated to publish a SR. Another explanation could be that the external drivers are not strong enough.

Stakeholder influence on reporting
One of the drivers of PAs to publish a SR identified in this research is stakeholder demand. Although this driver has not been qualified as one of the more important drivers to start or continue SRing, it is interesting to learn more about the many different stakeholders that could influence PAs to do this. Thereby, these stakeholders could influence the content, structure and form of these reports. In this subparagraph the stakeholders with the greatest influence on PA SRing identified by PAs will be discussed.
Table 4.6 of appendix 9 presents the stakeholders ranked on importance based on the mean values in combination with the number of respondents.
Higher governments have been identified as stakeholders with the greatest influence on SRing by PAs closely followed by the (in)direct workforce, citizens, customers and the community within the jurisdiction. Examples of stakeholders identified in the category other were: parliament, elected representatives of municipalities and politicians.
The high ranking of higher governments is no surprise since they could oblige for example lower governments to report. Thereby, these higher agencies could be money providers and examples. Employees, both direct and indirect, were ranked second. Since these were the only internal stakeholders to choose in combination with the intrinsic character of SRing by PAs, this ranking can be justified. The joined third ranking of citizens, customers and the community within the jurisdiction could be clarified because these are stakeholders that are all affected by the performance of the PA which they recognize.
Most stakeholders are external and perhaps not the best motivators for PAs to publish a report. Nonetheless, they can at least try to motivate PAs to report or influence the content.

4.3 Regression analyses

In paragraph 3.4.2 the equations for the regression analysis are presented. In this paragraph the way the regression analyses have been conducted is further eleborated. The main part of this paragraph will describe the results of the regression analyses between drivers to report, stakeholders that could influence SRs and the content of SR.

4.3.1 Regression results for drivers to report

Let's start with the regression analyses of the drivers on the disclosure score, where the disclosure score is the dependent variable and the drivers are the independent variables. In chapter 3 equation 1 is already presented:

$$D_i = c + \gamma_1 Trans_i + \gamma_2 Lead_i + \gamma_3 RMan_i + \gamma_4 Mon_i + \gamma_5 Gov_i + \gamma_6 Leg_i + \gamma_7 Stake_i + \gamma_8 Risk_i + \gamma_9 Other_i + \varepsilon$$

Equation 1

The regression analysis is executed over an observation group of n=22. To test if every variable has a contribution to the regression model, several regression analyses have been executed. This can be tested by looking at the R Squared and R Squared (Adj.) of the model. If for example R Squared is 0,85, this means that the model explains 85% of the variation of the model. But R Squared increases every time a new variable is added, so also the R Squared (Adj.) has to be investigated. R Squared (Adj.) is a modification of R Squared that adjusts for the number of explanatory terms and increases only if the new term improves the model more than would be expected by chance.
So what has been done. The model started with one variable and execute a regression analysis. Then another variable is added, the regression is ran again and we looked if R Squared (Adj.) increased. This is done for every variable and these are put in a model named I to IX. The results can be found in figure II.

	Model								
Variable	**I**	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**
Constant	18	16	16	15	16	17	13	13	14
Trans	0,05 (-0,21)	0,02 -0,06	-0,01 (-0,03)	-0,03 (1,116)	-0,06 (1,141)	-0,02 (-0,08)	-0,03 (-0,12)	-0,02 (-0,08)	0,01 (0,045)
Lead		0,14 (0.62)	0,09 (-0,3)	-0,19 (1,671)	-0,08 (1,823)	-0,06 (-0,28)	-0,07 (-0,33)	-0,09 (-0,43)	-0,04 (-0,17)
Rman			0,118 (-0,5)	0,025 (1,290)	0,020 (1,309)	-0,00 (-0,01)	-0,40 (-1,79)	-0,39 (-1,73)	-0,41 (-1,85)
Mon				0,421 (1,820)	0,376 (1,865)	0,376 (1,701)	0,208 (0,938)	0,216 (0,977)	0,185 (0,835)
Gov					-0,19 (1,103)	-0,10 (-0,46)	-0,17 (-0,72)	-0,15 (-0,66)	-0,14 (-0,61)
Leg						-0,11 (-0,46)	-0,00 (-0,03)	-0,01 (-0,04)	-0,07 (-0,31)
Stake							0,786 **(3,80)***	0,799 **(3,86)***	0,799 **(3,86)***
Risk								-0,03 (-0,15)	-0,02 (-0,09)
Other									-0,09 (-0,41)
Explanatory Power (R^2)	0,00%	2,01%	2,89%	9,00%	12,00%	12,50%	46,50%	47,10%	47,10%
Adjusted R^2	-4,80%	-8,20%	-13,00%	-12,50%	-15,60%	-22,60%	19,70%	13,60%	7,30%

* Relation is significant at the 0.05 level (2-tailed).

** Relation is significant at the 0.01 level (2-tailed).

Figure II – Regression models I to IX of Drivers to report

In figure II the results of the several regression analyses which have been conducted are shown. This leads to several models from I to IX with the used variables underneath. For every variable the Beta is shown with the output of the values for the regression analysis for predicting the dependent variable between brackets underneath it.

As can be seen from the table above, the Adjusted R Squared decreases almost every time a variable was added, indicating that the added variables do not increase the explanatory power of the model. Only when adding the variables monitor performance and stakeholder demand/pressure the explanatory power increases. Also it can been seen that the latter variable has significant influence on the disclosure score, with a Beta of 0.799, when looking at model IX. Later it will be investigated what the results on the disclosure score will be when just these two variables are used.

When the regression is ran for all the variables we get figure III.

	Model	
Variable	**IX (All variables)**	**Mon + Stake**
Constant	14	
Trans	0.01 (0,045)	
Lead	-0,04 (-0,17)	
Rman	-0,41 (-1,85)	
Mon	0,185 (0,835)	-0.03 (-0,121)
Gov	-0,14 (-0,61)	
Leg	-0,07 (-0,31)	
Stake	0,799 **(3,86)***	0.60 **(3,86)***
Risk	-0,02 (-0,09)	
Other	-0,09 (-0,41)	
Explanatory Power (R^2)	47.10%	34,0%
Adjusted R^2	7.30%	27,1%

* Relation is significant at the 0.05 level (2-tailed).

** Relation is significant at the 0.01 level (2-tailed).

Figure III – Regression models IX and Mon + Stake of Drivers to report

Before looking at table III we looked at ANOVA, R Squared and R Squared (Adj.) of the model to test the quality of the model. One part of the output of the regression analysis is the ANOVA table. This table indicates in which degree the regression model predicts the outcome variable significantly well. When looking at that table (see table 4.7 of appendix 10) we can see that the significance of the model is 0.383, indicating that the predicted outcome variable of the model is not significant.
Another thing we looked at, as discussed earlier, is the R Squared. The R Squared is 0,471 which means that 47,1% of the variation of the model is explained. When this is

corrected for adding extra variables this even drops to 0,073 indicating that the explanatory power of the model is very low when corrected for extra variables.

With this in mind, we will look at the results of the regression analysis. In figure III we can see that in model IX, apart from stakeholder demand/pressure, none of the drivers is significant when looking at a confidence interval of 95% or 99%. This means that only the variable stakeholder demand/pressure has significant influence on the disclosure score with a significance of 0.028 and a Beta of 0.799. This means that if the variable stakeholder demand/pressure increases with 10% then the disclosure score will increase with 10*0.799 = 7.79%. All other variables are not significant.

In figure III, a regression model is also included with the two variables which increased R Squared (Adj.). We can see that this model has a positive R Squared and R Squared Adjusted. For the driver monitor performance (Mon) there is no significant relationship with the disclosure score. For the variable stakeholder demand/pressure (Stake) a significant (0.05 level) positive relationship (Beta 0.60) is found. It is striking that this is the only significant relationship with the disclosure score, though something which could be explained by the fact that stakeholder demand/pressure is a wide notion, so PAs could explain this anyway. In the next part the stakeholders will be further examined.

4.3.2 Regression results for stakeholders influence on SRing

In the previous part the results of drivers to report has been discussed. In this part, the same will be done for stakeholders. Let's start with repeating the regression equation which has been defined earlier:

$$D_i = c + \gamma_1 HG_i + \gamma_2 Work_i + \gamma_3 Cit_i + \gamma_4 Cust_i + \gamma_5 Com_i + \gamma_6 OPA_i + \gamma_7 NGO_i + \gamma_8 PS_i + \gamma_9 Con_{i+} \gamma_{10} Other_{i+} \varepsilon$$

Equation 2

Again a regression analysis has been done on an observation group of n=22. Also a test has been done to check if every variable has a contribution to the model. The same method as in 4.3.1 is used and as a result figure IV is generated.

Model										
Variable	**I**	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**IX**	**X**
Constant	21	15	15	13	12	12	12	12	13	14
HG	-0,185 -0,834	-0,421 (-1,896)*	-0,312 (-1,43)	-0,218 (-0,983)	-0,24 (-0,919)	-0,26 (-0,117)	-0,52 (-0,232)	-0,15 (-0,677)	-0,195 (-0,878)	-0,19 (-0,857)
Work		0,585 (2,912)**	0,71 (3,489)*	0,481 (2,392)	0,578 (2,878)	0,795 (3,958)	0,637 (3,168)	0,71 (3,532)	0,128 (0,638)	0,276 (1,371)
Cit			-0,213 (-1,22)	-0,272 (-1,34)	-0,394 (-1,887)	-0,272 (-1,36)	-0,148 (-0,711)	-0,189 (-0,97)	0,14 (0,497)	-0,12 (-0,58)
Cust				0,368 (1,73)	0,283 (1,331)	0,21 (0,989)	0,344 (1,616)	0,77 (0,362)	0,694 (3,263)	0,559 (2,627)
Com					0,118 (0,533)	0,165 (0,747)	0,44 (0,198)	0,17 (0,772)	-0,85 (-0,383)	-0,1 (-0,6)
OPA						-0,522 (-2,773)	-0,689 (-3,662)	-0,745 (-3,958)	-0,457 (-2,427)	-0,628 (-3,336)
NGO							0,239 (1,195)	0,211 (1,53)	0,43 (2,145)	0,517 (2,583)
PS								0,39 (1,67)	0,218 (1,135)	0,276 (1,433)
Con									-0,54 (-2,814)	-0,483 (-2,7)
Other										-0,131 (-0,7)
Explanatory Power (R^2)	3,40%	32,10%	33,10%	41,10%	41,40%	49,60%	50,70%	54,70%	61,00%	61.7%
Adjusted R^2	-1,40%	25,00%	22,00%	27,20%	23,10%	29.4%	26,10%	26,80%	31,80%	26,90%

* Relation is significant at the 0.05 level (2-tailed).

** Relation is significant at the 0.01 level (2-tailed).

Figure IV – Regression models I to X of Stakeholders that could influence SRing

As can be seen from figure IV, the Adjusted R Squared increases for several variables, meaning that these variables improve the model more than would be expected by chance. When looking at the variables Work, Cust, OPA, PS and Con we see that Adjusted R Squared increases. Also these variables will be investigated.

In the next part the total regression model will be analysed.

Model		
Variable	**X**	**XI**
Constant	14	12
HG	-0,19 (-0,857)	
Work	0,276 (1,371)	0,369 (-1,835)
Cit	-0,12 (-0,58)	
Cust	0,559 (2,627)	0,562 (2,473)
Com	-0,1 (-0,6)	
OPA	-0,628 (-3,336)	-0.33 (-1,745)
NGO	0,517 (2,583)	
PS	0,276 (1,433)	0.180 (-0,934)
Con	-0,483 (-2,7)	-0,413 -(2,309)
Other	-0,131 (-0,7)	
Explanatory Power (R^2)	61.7%	56,2%
Adjusted R^2	26.90%	42,5%

* Relation is significant at the 0.05 level (2-tailed).

** Relation is significant at the 0.01 level (2-tailed).

Figure V – Regression models X and XI of Stakeholders that could influence SRing

Also for this regression analysis several factors are tested. In table 4.8 of appendix 10 we can see that the significance of model X is 0.181 indicating that the model applied is not good at predicting the outcome variables.

R Squared of model X in figure V is 0,617 which means that 61,7% of the variation of the model is explained. When this is corrected for adding extra variables the R Squared (Adj.) is 0.269 (26.9%).

When looking at figure V, it can been seen that no significant relations can be found for any of the stakeholders as predictor for the disclosure score, which is striking since we have seen in the analysis of the drivers that stakeholder demand/pressure as driver is the only significant driver. So you would expect significant relations between the stakeholder variables on the disclosure score. This could indicate that there are no relations between the stakeholders and the disclosure score of the report. But it could be also because the number of observations is very low (n=22). Another reason could be

that these variables together have no influence, but in another combination a relation could be found.

The five variables which increased R Squared are included in Model XI. We can see that they have a positive R Squared and R Squared Adjusted. However, none of these five variables have a significance influence on the disclosure score either.

4.4 Summary

Based on the content analysis of SR of PAs we know have a clear view of the main report contents of SRs by PAs. Unfortunately in the regression analysis not many significant relations have been found. Within drivers to report only the variable 'stakeholder demand/pressure' has significant influence on the disclosure score. Within stakeholders influencing SRing no significant relations have been found. In chapter 5 the hypotheses will be accepted or rejected and the main research questions will be answered.

5. Conclusion

5.1 Introduction

After the results have been presented in chapter 4 we are now able to answer the research question and accept or reject the hypotheses. This chapter first concludes what is presented in the previous chapters by discussing the hypotheses (5.2) and the research question (5.3). After that limitations of this thesis are mentioned (5.4) and suggestions for further research will be described (5.5).

In this chapter the research question will be answered:

- What are the main report contents, most important drivers to report and stakeholders with the greatest influence on reporting regarding public agency sustainability reporting internationally?

5.2 Conclusion of hypotheses

In chapter 3 based on the literature six hypotheses have been defined. Based on the results shown in chapter 4 the hypotheses will be accepted or rejected.

Hypothesis 1: SRs are mainly published by PAs in Europe, Australia and New Zealand.

Based on the results shown in paragraph 4.2 and figure 4.1/4.2 of appendix 9 this hypothesis can be accepted. The content analysis of the 85 SRs indicates that SRs are published by PAs in mainly Australia, the United Kingdom and New Zealand. The vast majority of remaining reports are published by PAs in many other European countries.

Hypothesis 2: Mainly the national PAs, as largest PAs in a country, publish a SR.

As hypothesis 1 this hypothesis can also be accepted. Paragraph 4.2 presents that the majority of PAs that publish a SR are national PAs. Followed by regional, local, state and international PAs. Figure 4.3 in appendix 9 is a good depiction hereof.

Hypothesis 3: PA SRs include mainly environmental topics.

Both paragraph 4.2 and table 4.2 to table 4.4 of appendix 9 provide information on which behalf this hypothesis can be accepted. The top three environmental topics are covered in much more reports than the top three social and economic topics.

Hypothesis 4: PAs mainly make use of the GRI guidelines and stakeholder engagement to structure and determine the content of their report.

Paragraph 4.2 and table 4.1 of appendix 9 suggest that PAs indeed mainly make use of the GRI guidelines to structure and determine the content of the report. However, strong evidence of stakeholder engagement that contribute to structure and determine the

report content could not be found. Therefore, this hypothesis can be rejected.

Hypothesis 5: As a driver legislation, monitor performance and stakeholders demand/pressure have a positive influence on the Disclosure Score of PA SRs.

The outcome of the regression analysis between the disclosure score and drivers to report in paragraph 4.3 is that only the driver stakeholder demand/pressure has significant influence on the disclosure score of PA SRs. Based hereon hypothesis 5 can be rejected.

Hypothesis 6: As stakeholders higher governments have a positive influence on the Disclosure Score of PA SRs.

Performed regression analysis between the disclosure score and the stakeholders with influence on reporting resulted in an outcome with no significant relationship between the dependent and independent variables. This means that based on this study also higher governments have no positive influence on the disclosure score of PA SRs. Rejecting hypothesis 6.

5.3 Answer on main research question

The answer of the research question can be divided into three aspects. The main report contents, the most important drivers to report and the stakeholders with the greatest influence on SRing.

Main report content
The main report content of SRs of PAs is in Chapter 4 described with the help of six framework categories ('general information', 'focus', 'organisation', 'environmental, social and economic performance', 'monitor' and 'drivers and stakeholders'). Below the main report content is described based on these six categories.

General information:

- Most reports are published in Europe and Oceania.
- Mainly national agencies published SRs .

Focus:

- Most of the reports focus on the organisational performance, operations, public policies and implementation measures of the organisation.
- Most of SRs used the GRI guidelines.
- Most of the SRs mentioned the stakeholders of the PA.

Organization

- In most of the SRs the vision of the PA is identified.
- Half of the SRs identified the organizations governance structure.

- The majority of reports referred to the presence of an environmental management system (EMS) within their organisations.
- In almost all SRs environmental performance indicators have been identified.

Environmental, social and economic performance

- The four most reported environmental performance topics were greenhouse gas emissions, waste and recycling, electricity and energy use and water use and recycling.
- The social topics were less represented in the reports. The three main social topics identified were training opportunities and capability development for the workforce, health and safety for the workforce and diversity of the workforce.
- The economic related topics were even less represented in the reports. The three main economic topics were capital and revenue, procurement policy related to SD and gross expenditure.

Monitor

- Only minority of the SRs contain an assurance statement.

Drivers and stakeholders

- The most important driver to report identified by PAs is transparency and accountability. Second most important driver identified is lead by example.
- Higher governments have been identified as stakeholders with the greatest influence on SRing by PAs closely followed by the (in)direct workforce, citizens, customers and the community within the jurisdiction.

Most important drivers to report

The most important drivers to report are analysed with the help of the multiple regression method. Based on the result shown in Chapter 4 it can be concluded that (based on the sample size of 22 reports) only 'stakeholder demand/pressure' has a significant relation with the disclosure score. Thus it can be stated that 'stakeholder demand/pressure' is an important driver to report.

Stakeholders with the greatest influence on reporting.

The stakeholders with the greatest influence on SRing are analysed with the help of the multiple regression method. Based on the result shown in Chapter 4 it can be concluded that (based on the sample size of 22 reports) none of the stakeholders has a significant relation with the disclosure score.

5.4 Limitations

The major limitation of this study is that there exist SRs published by PAs that are not included in this study. The question is whether this study still provides a representative indication of the global status of SRing by PAs. The content analysis is based on 85 SRs, but the regression analysis is only based on 22 SRs. Therefore the outcomes of the regression analysis are not very reliable, because only a small amount (n=22) of SR are investigated.

Another limitation of this study is that only sustainability reports written in English, Dutch, German, French and/or Spanish are included in the dataset of reports that have been analysed. SRs published in other languages are unfortunately excluded in the report content analysis of this study. Fortunately these were only a few reports. The language criterion for the reports is based on the researcher's language knowledge. Because this knowledge is limited, as for other stakeholders, the researcher's opinion is that the reports must be at least produced in the world's number one language (English) for comparability, understandability and accessibility reasons of the organisation's stakeholders.

Another limitation, concerning the scoring on contents of the selected SRs, is that it does not necessarily imply that when a PA report on a certain performance criteria (preach) it really performed that way. For a better formulation of this part the article 'More Than Words; An Analyses of Sustainability Reports' (Kolk, 2004b) should be used.

5.5 Further research

This study could be expanded by asking KPMG GSS's member practices to score the reports of the largest 100 PAs within their country by means of the framework. In this case it is more likely that a higher number of reports will be included in the research since reports written in languages unknown for the researcher of this study are taken into account as well.

Furthermore the drivers to report and stakeholders that influence SRing could be further investigated with a qualitative study. In this study a questionnaire is used to determine the drivers to reports and the stakeholders that influence SRing. However with in debt interviews more information could be obtained from the PAs who filled in the questionnaire.

Bibliography and references

ACCA & CorporateRegister.com (2004). *Towards transparency: progress on global sustainability reporting 2004*. London: ACCA & CorporateRegister.com.

ACCA Global, ACCA Awards for sustainability reporting, http://www.accaglobal.com/publicinterest/activities/subjects/sustainability/awards/, 31 March 2008.

Bell, D.V.J. (2002). *The Role of Government in Advancing Corporate Sustainability*, York: York University.

CAER (the Centre for Australian Ethical Research), KPMG and DGCS (Deni Greene Consulting Services) (2005). *The State of Sustainability Reporting in Australia 2005*. Canberra: CAER et al.

Calder, F. & Culverwell, M. (2005). *Following up the World Summit on Sustainable Development (WSSD) Commitments on CSR; Options for actions by governments*, London: Chatham House.

CorporateRegister.com, http://www.corporateregister.com, 31 March 2008.

CorporateRegister.com (2008). *CR Reporting Awards 2007: Global Winners & Reporting Trends*, London: CorporateRegister.com.

CorporateRegister.com (2009). *CR Reporting Awards 2008: Global Winners & Reporting Trends*, London: CorporateRegister.com.

CPA (Certified Practising Accountants) Australia (2005). *Sustainability Reporting; Practices, Performance and Potential.* Melbourne: CPA Australia.

CPASR (the Centre for Public Agency Sustainability Reporting) (2005). *Sustainability reporting by public agencies: international uptake, forms and practice*. Victoria: The Centre for Public Agency Sustainability Reporting.

Deloitte (2006). *Sustainability Reporting: A survey of NSW Government*, New South Wales: Deloitte.

Fox, T., Ward, H. & Howard, B. (2002). *Public Sector Roles in Strengthening CSR; A Baseline Study*, Washington D.C.: The World Bank.

Freeman, R. (1984). *Strategic Management: A Stakeholder Perspective*, New Jersey: Prentice-Hall.

Gray, R. (2000). 'Current Developments and Trends in Social and Environmental Auditing, Reporting and Attestation; A Review and Comment', *Int. J. Auditing*, no. 4, 2000, p. 247-268.

GRI (2004). *Public Agency Sustainability Reporting: A GRI Resource Document In Support of the Public Agency Sector Supplement Project*, Amsterdam: GRI.

GRI (2005). *Sector Supplement for Public Agencies: Pilot Version 1.0*, Amsterdam: GRI.

GRI (2006). *Sustainability Reporting Guidelines: version 3.0*, Amsterdam: GRI.

GRI & KPMG GSS (2007). *Reporting the Business Implications of Climate Change in Sustainability Reports*, Amsterdam: GRI & KPMG GSS.

GRI, http://www.globalreporting.org, 31 March 2008.

Haigh, M. & Jones, M.T. (2006). *The drivers of corporate social responsibility: a critical review*, Berkhamsted: Ashridge Business School.

Industry Canada (2001). *Reporting on Corporate Social Responsibility Performance: Results of a Survey of Canadian Companies*, Canada: Industry Canada.

Jones, T. & Wicks, A. (1999). 'Convergent stakeholder theory', *Academy of Management Review*, no. 24, p. 206-221.

Kates, R.W., Parris, T.M. & Leiserowitz, A.A. (2005). 'What is sustainable development? Goals, indicators, values, and practice', *Environment Science and Policy Sustainable Development*, vol. 47 no. 3, 2005.

Kolk, A. (2003). 'Trends in sustainability reporting by the Fortune Global 250', *Business Strategy and the Environment*, vol. 12 , no. 5, p. 279-291.

Kolk, A. (2004a). 'A decade of sustainability reporting: developments and significance', *Int. J. Environment and Sustainable Development*, vol. 3, no. 1, 2004, p. 51-64.

Kolk, A. (2004b). 'More Than Words? An Analysis of Sustainability Reports', *New Academy Review*, vol. 3, no. 3, Autumn 2004, p. 59-75.

Kolk, A. (2005). 'Sustainability Reporting', *vba journaal*, najaar 2005, nr.3: p. 34-42.

KPMG GSS (1993). *KPMG International survey of environmental reporting*. n.p.

KPMG GSS (1997). *International survey of environmental reporting 1996*. Stockholm.

KPMG GSS (1999). *KPMG International survey of environmental reporting 1999*. The Hague.

KPMG GSS (2002). *KPMG International survey of corporate sustainability reporting 2002*. De Meern.

KPMG GSS (2005). *KPMG International survey of corporate responsibility reporting 2005*. Amsterdam: KPMG.

KPMG GSS & UNEP (United Nations Environmental Programme) (2006). *Carrots and Sticks for Starters: Current trends and approaches in Voluntary and Mandatory Standards for Sustainability Reporting*. South Africa: KPMG.

KPMG GGS (Global Government Services) (2007). *Performance agenda; an international government survey*, Canada: KPMG GGS.

KPMG GSS (2008a). *KPMG International survey of corporate responsibility reporting 2008*. Amstelveen: KPMG.

KPMG Australia (2008b). *Sustainability Reporting: A Guide*. Australia: KPMG.

KPMG GSS (2011). KPMG International survey of corporate responsibility reporting 2011. Amstelveen: KPMG

Lamoen, C. van & Tulder, R. van, in collaboration with DHV (2001). 'Duurzame Verslaggeving?' draft version of 'Accepteren, aanmodderen of afwijzen', E*conomische Statische Berichten (ESB)*, jaargang 86 nr.4337, 30 november 2001, p.932-934.

Ministerie van Economische Zaken (EZ) (2007). *Maatschappelijk jaarverslag 2007; Aan het werk voor Nederland*. the Hague: Ministerie van EZ.

Ministerie van Volkshuisvesting Ruimtelijke Ordening en Milieubeheer (VROM) (2007). *Maatschappelijk jaarverslag 2006. Duurzaam VROM; Ambities, daden en dilemma's.* the Hague: Ministerie van VROM.

Moon, J. (2004). *Government as a Driver of Corporate Social Responsibility*, Nottingham: University of Nottingham.

Morhardt, J.E., Baird, S. and Freeman, K. (2002). 'Scoring corporate environmental and sustainability reports using GRI 2000, ISO 14031 and other criteria', *Corporate Social Responsibility and Environmental Management (published online in Wiley InterScience – www.interscience.wiley.com)*, no. 9, 2002, p. 215-233.

Rijksoverheid, http://www.rijksoverheid.nl/onderwerpen/milieubeleid/milieujaarverslag, 5 July 2012.

Romney, M. & Steinbart, P. (2006). *Accounting Information Systems*, 10th edition, New Jersey: Pearson Prentice Hall.

United Nations, the Commission of the European Communities, the International Monetary Fund, the Organisation for Economic Co-operation & Development and the World Bank (1993). *The System of National Accounts 1993*. New York: United Nations et al., section 4.104.

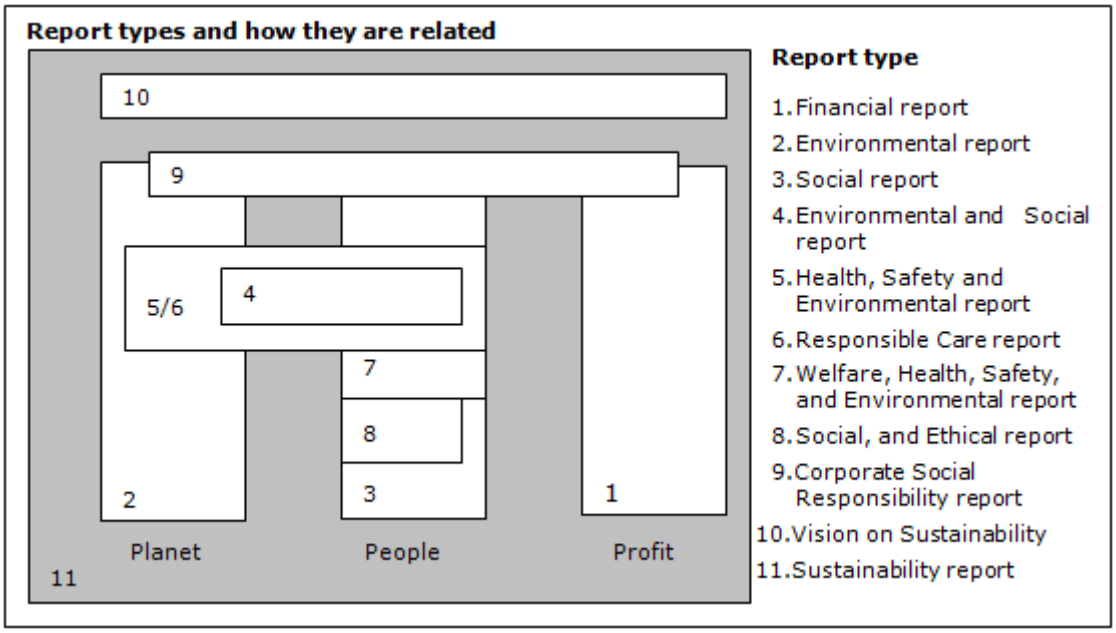
Watts, R.L., Zimmerman, J.L. (1978). 'Towards a positive theory of the determination of accounting standards', The Accounting Review, vol. LIII, no. 1, January 1978, p. 112-134.

WCED, the World Commission on Environment and Development (1987) *Our Common Future*. Oxford: Oxford University Press, p.43.

Appendices

Appendix 1 – Report types and how they are related

Figure 1.1 Report types and how they are related



Source: Van Lamoen, C. & Van Tulder, R., 2001

Appendix 2 – Review table 'Prior research on sustainability reporting'

Sustainability reporting research regarding the private sector				
Author(s) & Title	**Purpose/Goal**	**Scope/Sample**	**Methodology**	**Results**
KPMG GSS (2005 & 2008) - KPMG International Survey of Corporate Responsibility Reporting.	Identify the trends and latest developments of corporate responsibility reporting (where possible by country, continent/region, sector, and on the content of the reports).	International/Corporate responsibility reports produced by the largest 250 companies in the world (i.e., first half Global Fortune 500 – G250) and the largest 100 national companies (i.e., N100) of several countries (16 in 2005 and 22 in 2008).	International survey (empirical) on the contents of/trends in corporate responsibility reports of G250 and N100 companies. Reports were gathered, scored and analysed.	Sustainability reporting is increasing, especially among G250 companies from developed countries mainly from the financial (absolutely) and polluting (relatively) sectors. Reporting trend is from mainly environmental to sustainability. Ethical and economic considerations are the main drivers to report. Most used management systems are: ISO14001, AA1000, EMAS, Sector specific management systems, and SA8000. 40 percent in 2005 and 73 in 2008 made use of the GRI guidelines. A third hereof do this on a appliance level of A+ (highest level of appliance + external assurance). Stakeholder engagement changed from just mentioning to structured dialogue/feedback. Environmental contents are more detailed than social and economic issues/topics. The main assurance standards used are ISAE3000 and AA1000AS. ISAE3000 is obligatory, if there is no national alternative, for the major accountancy firms (the leading assurance providers). External assurance increased, so does, reporting on corporate governance. The materiality of reported information has been determined mainly by using GRI, stakeholder consultations, and national standards. Almost all G250 companies report on the supply chain, but only half on the implementation and monitoring hereof. Reporting on climate change has been done in majority. Mainly the focus is on the opportunities rather than on the risk of this recent development.
Gray (2000) - Current Developments and Trends in Social and Environmental Auditing, Reporting and Attestation: A Review and Comment.	Clarify the confusions around: sustainability reporting terminology and the goal of environmental and social reports and audits, because of the dangers that can arise from this.	International/Not applicable.	Literature review.	The value of the attestation/verification of a report to a reader (mainly stakeholders) could be argued since reports not always provide a reliable and true and fair view of the organisations' performance. Environmental and social reports can't be relied on until accounting education start producing independent critical thinking professionals who challenge the taken for granted assumptions of the less admirable practices.
Industry Canada (2001) - Reporting on Corporate Social Responsibility Performance: Results of a Survey of Canadian Companies.	Identify the state of, and stimulate corporate social responsibility (CSR) reporting within Canadian companies.	Canada/Interviews with, and CSR reports produced by 25 Canadian large companies.	Survey (empirical) to identify CSR reporting practices. The reporting companies in the sample were selected from a range of industrial sectors. Telephone interviews with senior representatives of these companies.	Mainly environmental issues were reported. Which is in line with the performance indicators. Main reasons to report are: effectively manage operations and social risk, and to generate business value. Difficulties are to collect/measure CSR information and to report hereabout to stakeholders. However, some companies made use of management systems, and guidelines in order to produce a reliable report on time. Canadian companies lagging behind regarding CSR reporting compared to their European counterparts. The European public sector support CSR reporting at European companies strongly. Nevertheless, Canadian companies do participate in leading sustainability initiatives (e.g., GRI and CSR benchmark framework).

Morhardt (2002) - Scoring Corporate Environmental and Sustainability Reports Using GRI 2000, ISO 14031 and Other Criteria.	Determine to which extent environmental and sustainability reports are in line with the requirements of two new guidelines (GRI 2000 and ISO 14031).	International/Corporate environmental or sustainability reports of 40 of the largest industrial companies worldwide.	Field and desk based research (empirical). Comprehensive scoring systems have been used to analyse the 40 collected reports. Two of the scoring systems were developed based on GRI 2000 and ISO 14031. Three scoring systems already existed.	Reports scored with the GRI 2000 and ISO 14031 scoring system have considerably lower scores than whit the other scoring systems. The research explains this by the fact that GRI 2000 and ISO 14031 are much more detailed and comprehensive than guidelines used for the other scoring systems.
Kolk, A. (2003) - Trends in Sustainability Reporting by the Fortune Global 250.	Determine the development of non-financial reporting in the 21st century.	International/ G250 (the first half of the Global Fortune 500) in 1998 and 2001.	Literature review (of empirical researches). The most recent environmental, social, sustainability or annual reports with substantial sustainability information of G250 companies as per 2001 were collected, analysed and compared on the characteristics and content with selected reports in 1998.	Sustainability reporting is increasing rapidly. The larger companies take the lead. In particular from Europe and Japan. Especially in the industrial and more polluting sector and less in the financial sector. External assurance increased to almost one-third. The research concludes that standardisation of sustainability reporting is likely to increase both quantity and quality of reporting.
ACCA & CorporateRegister.com (2004) – Towards Transparency: Progress on Global Sustainability Reporting 2004.	To report the worldwide differences in reporting per continent/region (Europe, Asia and Australasia, the Americas, and Africa and the Middle East) on types, use of GRI, and external assurance.	International/Out of the database of CorporateRegister.com 6619 and 3637 reports were used for this survey. These reports have been identified over two periods: 1990-2003 and 2001-2003, respectively.	Survey (empirical) to identify the global corporate non-financial reporting status.	Most reports (more environmental than sustainability) are produced in Europe especially companies/countries from the west. Followed by Scandinavian counterparts. Hardly by companies/countries from Central and East Europe. Second most reports (more environmental than sustainability) are from Asia and Australasia. Especially South East Asia and East Asia, and Australia and New Zealand. Hardly by East Asian (e.g., India and Pakistan) companies. Most reports (more environmental than sustainability) from the Americas (3rd) come from the USA followed by Canada. Hardly by South American organisations. Least reports (more sustainability than environmental reports) from Africa and the Middle East. In this collection mostly South African and hardly other African and Middle East reports.
SustainAbility (2004) - Risk & Opportunity: Best Practices in Non-Financial Reporting.	Stimulating the growth of the sustainability reporting field by benchmarking reports and reward reporters that focus on relevant topics/issues.	International/Sustainability reports produced by 100 companies selected from award competitions and benchmarks.	Benchmarking survey (empirical). Scoring selected reports with a 0-4 points scale (from none to integrated information) on 48 criteria in 4 categories (context and commitments, management quality, performance, and accessibility and assurance). This resulted in a ranking (Top 100) of reports.	Overall the report quality increases. Top 50 reports mainly from Europe, besides numerous from USA, Japan, Australia & New-Zealand, and two from South Africa and one from Brasil. Top 10 especially from the UK. Reporting on social compared to environmental and economic issues progressed most. In majority the reports make reference to GRI and some even are produced in accordance. Thereby, most reports include an assurance statement sometimes against certain standards (mainly AA1000 AS). Materiality decreases the average scores by a tenth (significantly). The survey concludes on the future development of standardisation (move towards common formats), consolidation (agreements on concepts, content and language), regulation (rise of obligations by governments) and integration (increasing attempts to integrate with financial reporting).
Kolk, A. (2004a) - A decade of Sustainability Reporting: developments	Provide an overview of the worldwide trends in sustainability reporting with	International/G250 (the first half of the Global Fortune 500)	Literature review (of empirical researches). Introducing a model to assess organisations on the	Organisations (mainly UK and industrial companies) increasingly started with sustainability reporting in the period 1990-2003. Industrial sectors still produce most reports. However, financial

and significance.	regard to frequency and contents during the 1990s and beginning 2000s. In addition, a model has been introduced to assess organisations on the implementation likelihood of their report (do they practice what they preach?).	and N100 (national 100 largest) companies of eleven countries.	implementation likelihood of their report.	sector reporting is rapidly increasing. Reasons to report (e.g., 'improved all-round credibility from greater transparency') and to not report (e.g., 'it is difficult to gather consistent data from all operations and to select correct indicators') were included. Environmental reporting decreases and sustainability reporting increases. GRI main guidelines. Increase of stakeholder dialogue. Increasingly organisations include an assurance statement mainly provided by the Big 4. The implementation likelihood model (Kolk, 2004b) has been introduced because traditional scoring systems mainly do not look at how detailed the performance information on a certain indicator is. The more detailed the information, the higher the likelihood that this indicator has been implemented and the organisation act in line with this indicator.
Kolk, A. (2004b) - More Than Words: An Analysis of Sustainability Reports.	Determine the implementation likelihood of information in sustainability reports.	International/Sustainability reports (excluding community and social reports) produced by 33 companies of G250 (first half of Global Fortune 500) per 23 July 2001.	Exploratory analysis (experimental, empirical) using own developed framework build on several initiatives such as GRI. Scoring reports on the implementation likelihood of reported information where possible on a four point scale (i.e., no info, no figures, detailed, normalised) on the predetermined issues of the model.	Reported environmental issues are rather more likely to be implemented than social issues. Thereby, the research concludes that these types of researches are useful for the further development of corporate social responsibility.
Kolk, A. (2005) - Sustainability Reporting.	Provide an overview of the developments in sustainability reporting.	International/G250 (the first half of the Global Fortune 500) and N100 (national 100 largest) as per 2001 and 2004 of companies from several countries.	Literature review (of empirical researches).	Non-financial reporting occurred in the 1970s, initiated by academics and accounting professionals. In 1978, 90 percent of the fortune 500 reported limited on social topics in their annual report. However, attention for non-financial reporting faded away due to a recession. Late 1980s non-financial reporting returned with the first separate environmental reports. Main recent developments are: mainly developed countries report; reporting by more financial sector companies; from environmental to sustainability reports; and external assurance increases.
CAER, KPMG, and DGCS (2005) - The State of Sustainability Reporting in Australia.	Indicate trends, over time, regarding sustainability reporting in Australia.	Australia/Largest 486 companies in Australia of which 119 produced a sustainability report and only 76 companies provided information for this study on their sustainability reporting activities.	Questionnaire survey (empirical).	Reporting rates in Australia among the largest national companies are lower than in most of the countries surveyed by KPMG (2005). Also compared with the largest international companies in Australia the rates of reporting are lower among the largest national companies. Sustainability reports dominate the field even as the more polluting sectors. Larger companies are more likely to report. More reports include an assurance statement provided by the Big 4. Most reports refer to GRI instead of using it in accordance.
SustainAbility (2006) - Tomorrow's Value: The Global Reporters 2006 Survey of Corporate Sustainability Reporting.	Recognise growth of the sustainability reporting field and reward reporters that focus on relevant topics/issues.	International/Sustainability reports produced by 100 companies selected from award competitions and benchmarks.	Benchmarking survey (empirical). Scoring selected reports with a 0-4 points scale (from none to integrated information) on 29 criteria in 4 categories (governance strategy, management, presentation of performance, and	Top 3 reports from the UK. In the top 50, five Dutch reports. Strong representation of US and Japan and also non-OECD countries, with two top 10 reports. Financial sector dominant in top 50. All top 50 reports make reference to and half produced in accordance with GRI. Increase in portfolio, more specific, approach to assurance.

			accessibility and assurance). This resulted in a ranking of reports.	
GRI and KPMG GSS (2007) - Reporting the Business Implications of Climate Change in Sustainability Reports.	Identify the positive and negative effects of climate change on businesses and the reporting hereof.	International/Sustainability reports published in 2006 by 50 world leading companies. Selected by cross referencing a list of companies that use the GRI guidelines with the Fortune 500 list.	Survey (theoretical & empirical) on reporting climate change and related issues in sustainability reports. The survey includes a literature survey on climate change, the selection of sustainability reports, determining climate change issues and reports assessed on these issues, and finally a discussion assessment results on a regional or sector level.	Opportunities (e.g., carbon credits and emission trading, investment and asset management services) are more reported than the risks (e.g., long-term climate changes, cost of energy) arising from climate change. Most reports report on climate change or global warming in majority by discussing these terms and the accompanying targets.
CorporateRegister.com (2008 & 2009) - CR Reporting Awards 2007 & 2008: Global Winners and Reporting Trends.	Increasing momentum of sustainability reporting and ensuring better transparency, credibility, communication, and better focus on material issues of the reports.	International/Exactly 2000 invited reporting companies for the 2007 and 2008 awards. In 2007 the participation list was limited to 300 reports in order to keep it manageable. In 2008 a fee to enter the awards and classification of the reports in categories reduced the number of reports (123 in total). This made the judging process of the voters became easier.	Corporate Responsibility (CR) reporting awards (award scheme & empirical). The participating reports were voted by a panel (experienced stakeholders) of 461 users for the 2007 awards and 628 users for the 2008 awards on nine award categories (ranging from best overall report to categories relating to the nature of the report/company and categories relating to transparency issues). In 2007 there were 3660 'good' votes and in 2008 this amount was 4917. Reports were scored in different categories on a five point scale. 1 stands for the first choice and 5 last choice. The totals of these scores results in the final ranking for the awards.	Sustainability reporting shows an increasing trend. From environmental to corporate responsibility. Europe takes the lead. Although increasing, the minority of reporters use the GRI guidelines. The use of the GRI guidelines is higher, relatively, in Africa & the Middle East and South America than in the other continents/regions (e.g., Europe and North & Central America). Big 4 Accountants take the lead in providing assurance. Followed by certification bodies and specialist consultancies. Most reports, relatively, with assurance statements from Europe and least from North America. Remarkable since the accounting scandals. Award participating reports mainly from Europe and North & Central America. Absolutely the bank sector participated most. Majority of voters from Europe. Corporate CR professionals the largest voting stakeholder group. Remarkable was the low percentage of Government, Authorities & Agencies.
KPMG Australia (2008b) - Sustainability Reporting: A Guide.	Guidance in compiling effective sustainability reports.	Australia/Not applicable.	Literature review. Examining some of the more challenging and contentious reporting issues.	Potential benefits sustainability reporting (e.g., creating financial value, enhancing reputation, achieving continuous improvement, and raising awareness, motivating & aligning staff and attracting talent). The GRI framework should be a guideline in planning the report and providing relevant information by a balanced and representative view of environmental, social and economic performance. For external assurance, ISAE3000 or ASAE3000 should be used. The report accessibility depends on the format: hard copy, downloadable, or online application.

Sustainability reporting research regarding the public sector

Author(s) & Title	Purpose/Goal	Scope/Sample	Methodology	Results
GRI (2004) - Public Agency Sustainability Reporting: A GRI Resource Document	Providing information on sustainability reporting by public agencies in order to inform	International/Not applicable.	Literature review. Resource document (out of field research).	Public agencies publish many types of reports mainly financial and some non-financial. Hardly any sustainability report focus on their performance. They in majority produce action plans in

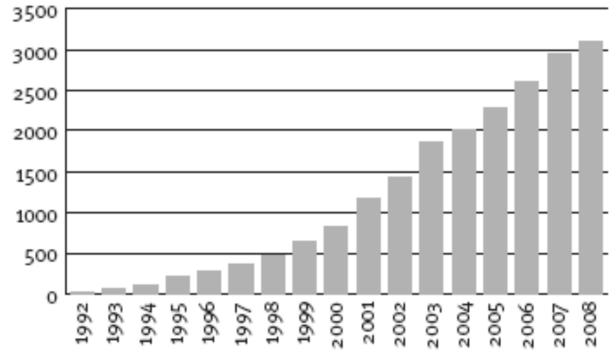
In Support of the Public Agency Sector Supplement Project.	preparers of the GRI Sector Supplement for Public Agencies; pilot version 1.			relation to sustainable development. In addition the report reveals incentives, tools that can be used, audiences, and benefits regarding sustainability reports.
GRI (2005) – Sector Supplement for Public Agencies; Pilot Version 1.0.	Providing sustainability reporting guidelines specifically designed for public agencies in order to stimulate reporting in this area.	International/Not applicable.	Not applicable (Multi stakeholder process; literature + interviews).	GRI G3 guidelines adjusted for more relevant use of public agencies.
CPASR (2005) - Sustainability Reporting by Public Agencies: International Uptake, Forms and Practice.	Determine uptake, forms, and practice of sustainability reporting by public agencies. Building capacity for public agencies to report and continue to expand on the international best practice frameworks.	International/82 organisations (66 questionnaires and 22 interviews).	Questionnaire survey (empirical + literature).	Only a small number of reports have been identified. Mainly from Australia & New Zealand. Monitor performance is an important driver to report. GRI is the most recognised guideline and mainly used by larger agencies. Main report preparers: environmental departments followed by corporate reporting teams. Local agencies mostly produce sustainability reports as expanded State of Environment reports and hardly as expanded annual reports. The study concludes that there is an ongoing need to clarify the scope of sustainability reporting by public agencies and that the uptake of reporting among these agencies will continue.
Deloitte (2006) - Sustainability reporting: A survey of NSW Government.	Examining sustainability reporting in New South Wales public sector and providing transparency between government bodies to assist them in developing suitable resources for this type of reporting.	Australia, New South Wales (NSW)/Entire public sector (including Public Sector Agencies, Departments and Stated Owned Corporations).	Desk-based research (empirical).	Public sector organisations have varying needs and drivers to produce a sustainability report. Major reporting are: enhance reputation and stakeholder relations. The majority of public sector organisations published a sustainability report in the last three years (half of the public sector agencies, half of the departments and all of the participating state owned corporations) or intend to do this coming three years. Most reports produced by organisations self, some by external consultants. No adequate staff resources and systems to capture data are obstacles in producing the reports. Mainly triple bottom line reports closely followed by sustainability/csr reports. Some include an external assurance statement.

Sustainability reporting research regarding the private and public sector

Author(s) & Title	Purpose/Goal	Scope/Sample	Methodology	Results
CPA Australia (2005) - Sustainability Reporting: Practices, Performance and Potential.	Consider the value of sustainability & TBL disclosures and their association with corporate governance and related organisational behaviour. The main objectives: 1.)Identify connection between finance-based accounting disclosures and the TBL counterpart. 2.)Enable articulation of accounting policy in advancing or supporting TBL initiatives. 3.)Provide empirically-based assessment of the market for TBL initiatives and the impact on the governance and organisation itself.	Australia/Companies with discrete reports on sustainability & TBL issues from the top 500 listed companies (24). Also 8 commonwealth and 8 state government business enterprises and 35 local governments were selected.	Field based research (empirical). Examining collected sustainability/TBL reports on the nature and extent and analysing the disclosures of the private sector sample against the GRI indicators.	Sustainability reporting is the result of increased public examination of organisations and the request to become more responsible and transparent. Despite this the minority of 500 listed companies produce a sustainability report. In addition, companies include minimal disclosures on social and/or environmental issues in their report. Thereby, hardly use reporting standards and verification. This result in greatly varying titles and contents. The dominating way of reporting information is positive also when negative. Commonwealth government business entities mainly disclose sustainability information in the annual reports. State government business enterprises are more likely produce sustainability reports that are assured. NSW local governments produce state of the environment reports. Other local governments include sustainable issues in majority in their annual report. The research document concludes that more research should be undertaken that identify ways to extend sustainability/TBL reporting in Australia. An example in this regard is the request for suitable guidelines for different organisations.

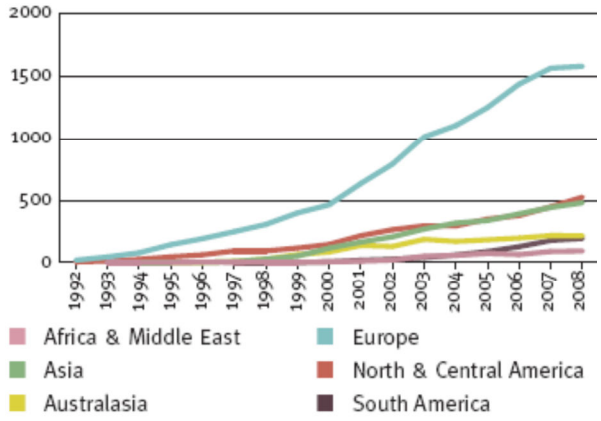
Appendix 3 – Reporting organisations

Figure 2.1 Global report output per year



Source: adapted from CorporateRegister.com, 2009

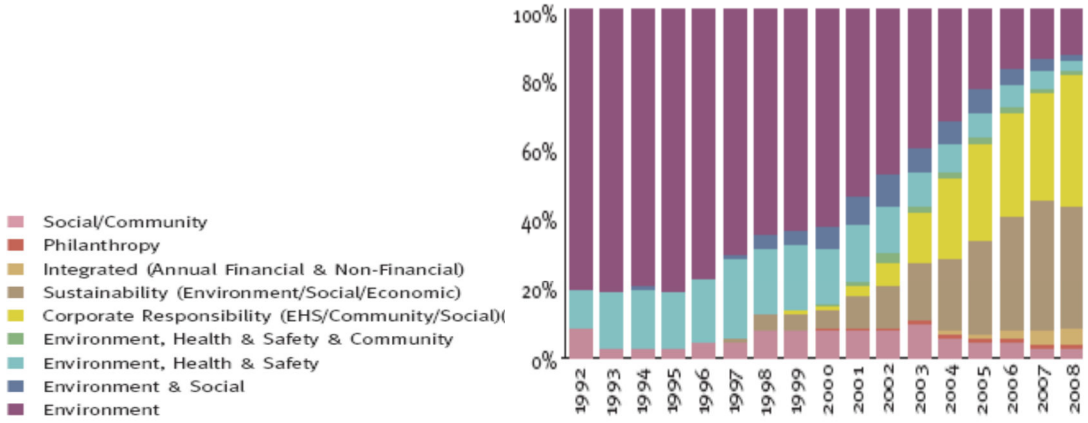
Figure 2.2 Report output per year by region



Source: adapted from CorporateRegister.com, 2009

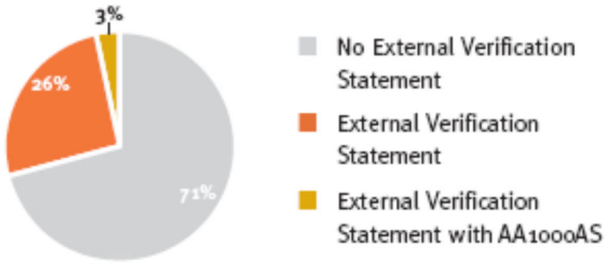
Appendix 4 – Report content

Figure 2.3 Global report output by report type and year



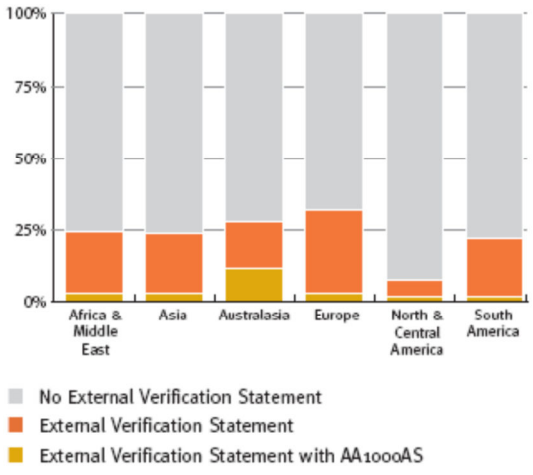
Source: CorporateRegister.com, 2009

Figure 2.4 External assurance in 2007 reports



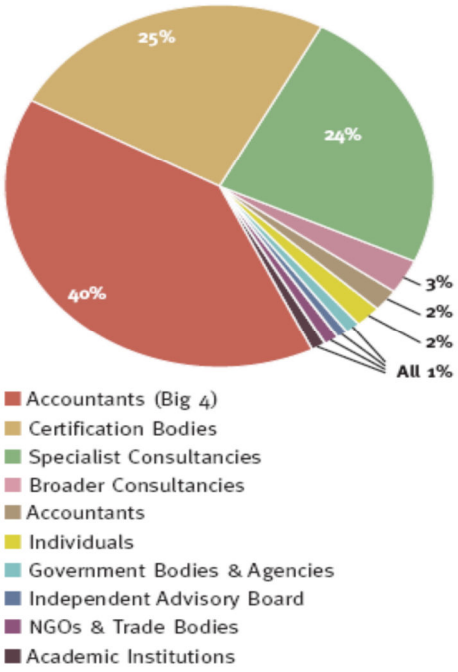
Source: adapted from CorporateRegister.com, 2008

Figure 2.5 External assurance in 2007 by region



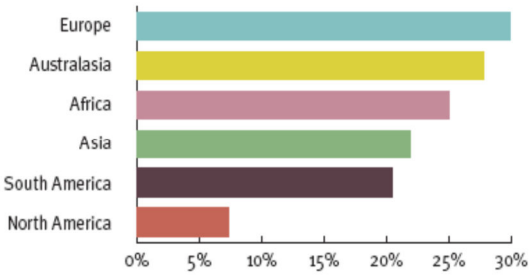
Source: adapted from CorporateRegister.com, 2008

Figure 2.6 Assurance providers in 2008 reports



Source: adapted from CorporateRegister.com, 2009

Figure 2.7 Use of assurance by region in 2008



Source: adapted from CorporateRegister.com, 2009

Appendix 5 – Standards, codes and guidelines related to non-financial reporting

Table 2.1 Standards, codes and guidelines KPMG and UNEP

Standards, codes and guidelines identified by KPMG and UNEP	
Voluntary standards	
Country/Region	**Standards, codes and guidelines**
International	>Global Reporting Initiative (GRI) guidelines. >AA guidelines and assurance standard of AccountAbility. >ISO 14001 and ISO 9001 standards of the International Standard Organisation (ISO). >Guide to best practice and award scheme of Association of Chartered Certified Accountants (ACCA). >Responsible care initiative of the International Council of Chemical Association (ICCA). >SA8000 guideline of CEPAA.
Europe	>Eco-Management and Audit Scheme (EMAS) of the European Union.
Australia	>Australians Minerals Industry Framework for Sustainable Development guideline. >Triple Bottom Line Reporting in Australia guide of the Department of Environment and Heritage. >Greenhouse Challenge Programme.
Denmark	>New guideline for Intellectual Capital Statements.
Finland	>Finnish Accounting Standards Board (FASB) Guidelines.
India	>Corporate Responsibility for Environmental Protection (CREP).
Italy	>Study Group for Social Reporting (GBS) Standard. >CSR-SC project.
Japan	>Environmental Reporting Guidelines of the Ministry of the Environment.
North America	>Global Sullivan Principles of Social Responsibility of the Sullivan Foundation. >Certification of Environmental Standards (CERES) Principles. >Public Environmental Reporting Initiative (PERI).
Norway	>Naeringslivets Hobedorganisasjon (NHO).
South Africa	>Second King Report on Corporate Governance (King II).
The United Kingdom	>Environmental Reporting Guidelines of the Department for Environmental, Food & Rural Affairs. >Extractive Industries Transparency Initiative.
Mandatory standards	
Country/Region	**Standards, codes and guidelines**
European Union	>EU modernisation directive. >International Accounting Standards (IAS).
Australia	>ASIC Section 1013DA Disclosure Guidelines of the Australian Securities and Investments Commission. >New South Wales Greenhouse Gas Abatement Scheme.
Belgium	>Bilan Social.
France	>CJDES Bilan Societal.
Japan	>Law of Promotions of Environmentally Conscious Business Activities. >Pollution Release and Transfer Register Law.
South Africa	>National Black Economic Empowerment Act. >Employment Equity Act.
Spain	>Resolucion de 25 de marzo de 2002. >National Accounting Plan.
The Netherlands	>Environmental Protection Act (EPA), in Dutch: Wet Milieubeheer (WM).
The United States	>EEO-1 Survey of the US Equal Employment Opportunity Commission. >Securities and Exchange Commission (SEC).

Global and national assurance standards	
Country/Region	**Standards, codes and guidelines**
International	>International Standard on Assurance Engagement (ISAE) 3000. >AA1000 Assurance Standard (AA1000AS) of AccountAbility.
Australia and New Zealand	>Standard DR03422. >Australian Auditing Standards.
Germany	>Standard for assurance engagements of sustainability reports of the German Institute of Chartered Accountants.
Japan	>Environmental Report Assurance Services Guidelines of the Japanese Institute of Certified Public Accountants.
Sweden	>Draft recommendation Independent Assurance on Voluntary Separate Sustainability reports of the Swedish institute for the Accountancy Profession.
The Netherlands	>Standard RL 3410 assurance engagement relating to sustainability reports of the Royal Dutch Institute for Registered Accountants (NIVRA).

Source: adapted from KPMG and UNEP, 2006

Table 2.2 Standards, codes and guidelines KPMG GSS

Standards, codes and guidelines per country identified by KPMG GSS	
Voluntary standards	
Country/Region	**Standards, codes and guidelines**
Australia	>Ecologically Sustainable Development (ESD) guidelines.
Italy	>Directive of Ministry of Public Function. >Forum on finance and accountancy of local administrations.
Mandatory standards	
Country/Region	**Standards, codes and guidelines**
Australia	>Energy Efficiency in Government Operations (EEGO) Policy. >Section 516A of the Environment Protection and Biodiversity Conservation Act. >National Environmental Protection Measures (NEPMs).
Sweden	>Government decision to implement an environmental management system and report hereabout (not necessarily publicly).

Source: internal questionnaire to KPMG GSS, 2008

Appendix 6 – Drivers and stakeholders with influence to report

Drivers to report

Table 2.3 Drivers of organisations to publish a sustainability report

Drivers of organisations to publish a sustainability report			
Private sector (Companies)		**Public sector (Public agencies)**	
CR Reporting (KPMG GSS, 2005 & 2008a)[1]	SRing (Kolk, 2005)	PA SRing (GRI, 2004)	SRing by PA (CPASR, 2005)[2]
Note: The percentages indicate the responses. • Economic considerations 74% & 68% • Ethical considerations 53% & 69% • Innovation and learning 53% & 55% • Employee motivation 47% & 52% • Risk management or risk reduction 47% & 35% • Access to capital or increased shareholder value 39% & 29% • Reputation or brand 27% & 55% • Market position (market share) improvement 21% & 22% • Strengthened supplier relationships 13% & 32% • Cost saving 9% & 17% • Improved relationships with governmental authorities 9% & 21% • Other 11%	• Enhanced ability to track progress against specific targets • Facilitating the implementation of the environmental strategy • Greater awareness of broad environmental issues throughout the organization • Ability to clearly convey the corporate message internally and externally • Improved all-round credibility from greater transparency • Ability to communicate efforts and standards • License to operate and campaign • Reputational benefits, cost savings identification, increased efficiency, enhanced business development opportunities and enhanced staff morale	• To reinforce organisational commitments and demonstrates progress • To integrate sustainability into operations • To serve as a role model • To facilitate public participation in government SS for PA (GRI, 2005) • Promote transparency and accountability • Reinforce organisational commitments and demonstrate progress • Serve as a role model for the private sector • Improve their internal governance • Highlight significance of its role as a consumer and employer in various economies • Meet disclosure expectations and make information available to facilitate dialogue and effective engagement with stakeholders	Note: The percentages indicate the responses. • To monitor performance 78% • Regulatory requirement 53% • Demonstrate progress to sustainability principles 53% • Public relations 48% • Reputation management 43% • Stakeholder demand 41% • Risk management 32% • Elected officials demands 26%

Compiled from KPMG GSS, 2005 & 2008; Kolk, 2005; GRI 2004 & 2005; CPASR, 2005

[1]The percentages behind the drivers (table 3.1) represent the amount of companies as a percentage of the G250 that identified that driver as a driver to report in 2005 & 2008, respectively.
[2]The percentages behind the drivers (table 3.1) represent the amount of public agencies as a percentage of the sample that identified that driver as a driver to report.

Table 2.4 Drivers of public agencies to (not) publish a sustainability report identified by KPMG GSS

Drivers of public agencies to (not) publish a sustainability report identified by KPMG GSS			
Drivers to report (n=43)		**Drivers to not report (n=47)**	
Regulation	23,3%	Low awareness	23,4%
Stakeholder pressure	20,9%	Insufficient resources	23,4%
Benefits	14,0%	Lack of understanding	14,9%
Lead by example	11,6%	Lack of regulation	14,9%
Competition	7,0%	No benefits	6,4%
Transparency	7,0%	No competition	4,3%
Higher government pressure	4,7%	Lack of stakeholder pressure	4,3%
Contribution	4,7%	No rewarding	2,1%
Accountability	2,3%	Lack of Higher government pressure	2,1%
Recommendation	2,3%	Facilitate public participation	2,1%
Follow examples	2,3%	No priority	2,1%

Compiled from reactions by the KPMG GSS network on an e-mail request

Stakeholders with influence to report

Table 2.5 Stakeholders with influence on organisations to publish a sustainability report

Stakeholders with influence on organisations to publish a sustainability report		
Private sector (Companies)		**Public sector (Public agencies)**
Current Developments & Trends in Social & Environmental Auditing, Reporting and Attestation; A Review and Comment (Gray, 2000)	Corporate Responsibility Reporting (KPMG GSS, 2005 & 2008a)	PA SRing (GRI, 2004)
• Competitors • Customers/clients; • Employees (e.g., part-time and full-time) • Financial (e.g., investors and banks) • Government/state • Local community • Suppliers; and • Wider community (e.g., NGOs natural environment)	• Community groups • Customers • Employees • Investors • Management • Neighbours • Non-governmental organisations (NGOs) • Regulators • Shareholders • Suppliers; and • Many others	• Citizens (residents/taxpayers) • Communities within the government's jurisdiction • Contractors and suppliers • International organisations • Legislative bodies such as Parliaments • Other government agencies • Staff in the agency
Reporting on CSR Performance; Results of a Survey of Canadian Companies (Industry Canada, 2001)	SRing: A guide (KPMG Australia, 2008b)	Sector Supplement for PA; Pilot Version 1.0 (GRI, 2005)
• Business • Civil society • Community • Customers • Employees management and suppliers • Government • Shareholders	• Business/joint venture partners • Communities and government • Customers • Industry bodies • Market analysts and employees • Media organisations • Non-governmental organisations (NGOs) • Opinion leaders and business/social commentators • Regulatory bodies and local authorities • Shareholders and investors; • Suppliers • The academic community • Trade unions	• Communities (locations, nature of interest) • Customers (retail, wholesale, businesses, government) • Shareholders and providers of capital (stock exchange listings) • Suppliers (products/services provided, local/national/international operations) • Trade unions (relations to workforce and reporting organisation) • Workforce, direct and indirect (size, diversity, relationship to the reporting organisation) • Other stakeholders (other public agencies like parliament and ministries, general public like citizens and tax payers, and various interest groups)

Compiled from Gray, 2000 Industry Canada, 2001; KPMG GSS, 2005 & 2008; KPMG Australia, 2008b; GRI, 2004 & 2005

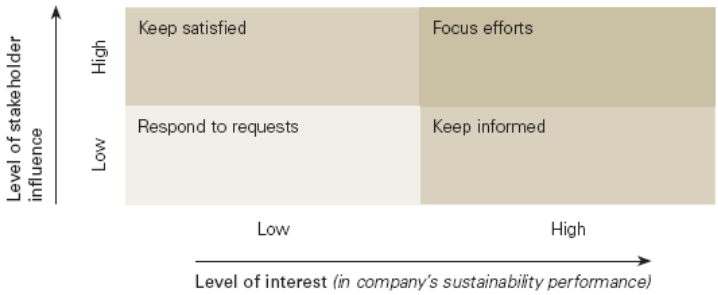
Table 2.6 Stakeholders with influence on public agencies to publish a sustainability report identified by KPMG GSS

Stakeholders with influence on public agencies to publish a sustainability report identified by KPMG GSS (n=42)	
Higher governments	45,2%
Community	11,9%
Private sector	7,1%
Employees	4,8%
NGO's	4,8%
Other public agencies	4,8%
Citizens	2,4%
Customers	2,4%
Financial means	2,4%
Information lobby agencies	2.4%
Inspection bodies	2.4%
Municipalities	2.4%
Municipal councillors	2.4%
Sustainability experts	2.4%
Users of the public agency	2.4%

Compiled from reactions by the KPMG GSS network on an e-mail request

Stakeholder importance

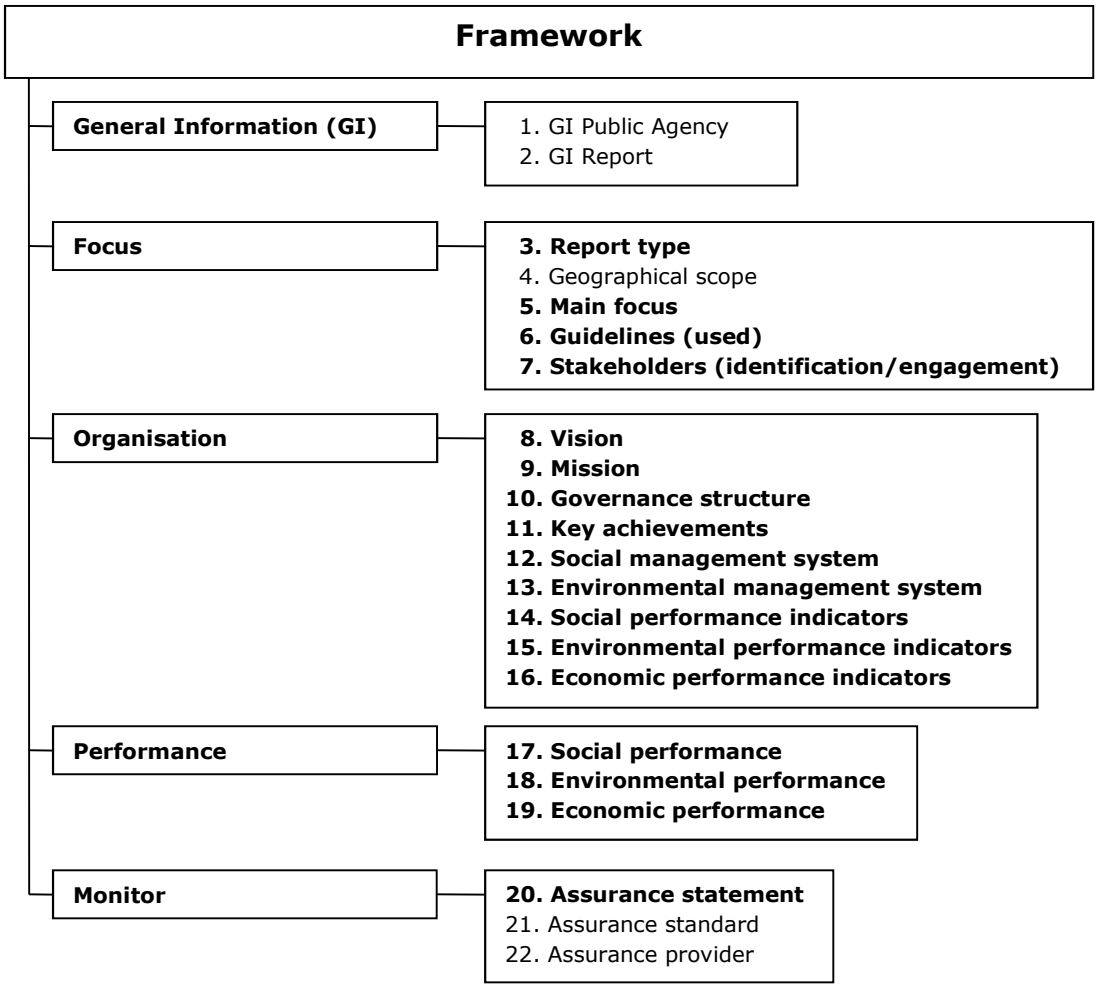
Figure 2.8 Actions by companies to stakeholders based on their levels of influence and interest



Source: adapted from KPMG Australia, 2008b

Appendix 7 – Framework and disclosure score tables

Figure 3.1 - Framework



Sources: Kolk 2004a & 2004b; and GRI, 2005 & 2006

Table 3.1 - Scores of the alternatives per category

Report Type	Score
Environmental	1
Social	1
Social and Environmental	1
Social , Health and Safety	1
Sustainability	2
Annual with Integrated Sustainability	1,5
Other;	0,5
Not Identified	0

Main Focus	Score
Organisational Performance	1
Organisational Performance and Operations	1
Public Policies & Implementation Measures	1
Organisational Performance, Public Policies & Implementation Measures	1,5
Organisational Performance, Public Policies & Implementation Measures, and	2
Development Plan/Strategy	1
State of the Environment/Jurisdiction	1
Other;	1
Not identified	0

Guidelines Guidelines used:	Score
GRI	1
GRI 2002	1
GRI PASS	2
GRI G3	1
Other; AA1000, EMAS, JBIC, OECD, UNEP	0,5
Not identified	0

Stakeholders		Score
Stakeholder Identification:	Stakeholder Engagement:	
Identified, (Please specify)	Identified (Please specify)	
Not Identified only	Not Identified only	
Identified 2x		2
Identified 1x		1
Not identified		0

Vision	Score
Identified	1
Not Identified	0

Mission	Score
Identified	1
Not Identified	0

Governance Structure	Score
Identified	1
Not Identified	0

Key Achievements	Score
Identified	1
Not Identified	0

Social Management System (SMS)	Score
OHSAS18001 (Safety Management)	1
AS/NSZ4801 (Safety Management)	1
Social Accountability 8000 (SA8000)	1
Safety Management System	1
Occupational Health & Safety	1
Food Safety (HACCP - ISO 22000)	1
Personel Management System	1
Not identified	0

Environmental Management System (EMS)	Score
ISO14001 (Environmental Management)	1
Environmental Management System	1
Not identified	0

Social Performance Indicators (SPI's)	Score
Identified	1
Not Identified	0

Environmental Performance Indicators (EPI's)	Score
Identified	1
Not Identified	0

Economic Performance Indicators (EPI's)	Score
Identified	1
Not Identified	0

Social Performance	Score
Intern:	
A) Health and safety for the workforce	1
B) Training opportunities/Providing capability development	1
C) Working conditions	1
D) Employee satisfaction	1
E) Organisational breakdown of workforce	1
F) Senior management composition female to male ratio	1
G) Diversity	1
H) Equal opportunity	1
I) Work/Life balance	1
J) Occupational accidents and diseases	1
K) Human rights in company and to sub-contracters	1
L) Participation in the community	1
M) Philantrophy	1
N) Corruption, Bribery	1
O) Child labour/Forced labour	1
P) Efficiency and effectiveness of service provided	1
Max score	16

Environmental Performance	Score
Intern:	
A) Gas Emissions (CO2, SO2 etc.)	1
B) Electricity/Energy use (KWH)	1
C) Water use/Recycling (Litres)	1
D) Paper use (KG)	1
E) Waste/Recycling (Amount/Programmes)	1
F) Transport/Fleet (CO2/Type of cars/Number cars)	1
G) Noise (Decibel)	1
H) Biodiversity of land owned/in jurisdiction	1
I) Non-compliance with applicable environmental laws (Incidents	1
J) Energy rebate program/External programmes	1
Max score	10

Economic Performance	Score
Intern:	
A) Total payroll and benefits	1
B) Total income broken down by capital and revenu	1
C) Gross expenditures broken down by types of payment	1
D) Cost of all goods, materials and services purchased	1
E) Procurement policy as related to sustainable development	1
F) Economic, environmental and social criteria applied to expenditures and financial	1
G) Donations/Sponsoring to community	1
Max score	7

Assurance Statement	Score
No	0
Yes	1

Table 3.2 - Total disclosure scores by questionnaire respondent

	Public Agency	Disclosure Score
1	Ministerie van Defensie (Dutch Ministry of Defence)	15,5
2	Greater London Authority	20
3	HM Prison Service	17
4	The Office of Gas and Electricity Markets	12
5	Woking Borough Council	19
6	Federal Planning Bureau	5
7	Greater Vancouver Regional District	24
8	Corporation of London	23,5
9	Coillte	10,5
10	Gosford City Council	21
11	Monash University	32
12	Sutherland Shire Council	27,5
13	Warringah Council	12
14	Wyndham City Council	17,5
15	The City of Vaxjö	12
16	Leeds City Council	13,5
17	Mass Transit Railway Corporation Limited	20
18	Environment Canterbury	19,5
19	Whangarei District Council	13,5
20	Sustainable Development Commission	9
21	CSIRO	32
22	Dong Energy (Oil & Gas)	30

Appendix 8 – Questionnaire

1. Contact details and General information

Participant

Name of contact person:
Department:
E-mail address:
Telephone number:

Organisation

Name of organisation:
Country:

Tier of organisation/Area of jurisdiction:
☐ International
☐ National
☐ State
☐ Regional
☐ Local
☐ Other (please specify)

Type of organisation:
☐ Ministry/Department
☐ State-owned enterprise
☐ Province/State council
☐ City
☐ Other (please specify)

Core business:
☐ Regulation
☐ Policy
☐ Energy
☐ Water
☐ Waste
☐ Nature
☐ Infrastructure
☐ Other (please specify)

2. Report identification

Definitions Sustainability reporting:

'Non-financial reporting that encompass the social, environmental and economic aspects of an organisation's performance'(GRI 2005, Sector Supplement for Public Agencies: Pilot Version 1.0, p.16) *'The practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable* development' (GRI 2006, Sustainability Reporting Guidelines: Version 3.0, p.3)

1. Please provide the title of your most recent sustainability report, or similar report:

2. How would you qualify the type of this report?
☐ Sustainability
☐ Sustainable development plan/strategy
☐ Social and Environmental
☐ Social, Health and Safety
☐ Social
☐ Annual with integrated Sustainability Issues
☐ Other (please specify)

3. What is the main focus of the report?
☐ Sustainable organisational performance (e.g., workforce diversity, energy consumption)
☐ Sustainable public policies & implementation measures (e.g., energy consumption via solar hot water system rebate program)
☐ Combination of the two focus areas mentioned above
☐ Other (please specify)

4. What is the edition of the report?
☐ 1st
☐ 2nd
☐ 3rd
☐ 4th
☐ 5th
☐ Other (please specify)

5. What is the report's frequency?
☐ Bi-annually
☐ Annually
☐ Biennially
☐ Triennially
☐ Other (please specify)

6. Which department/team within the organisation produced the report?

7. In your opinion, how will the future reporting activities within your organisation develop, especially in relation to above questions (e.g., type, focus, frequency and report's producers)?

3. Drivers and Stakeholders

Drivers

8. Please identify the drivers and the importance of those drivers for the public agency to produce the report?

	(1) Very Unimportant	(2) Unimportant	(3) Neutral	(4) Important	(5) Very Important
☐ Higher government demand/pressure	☐	☐	☐	☐	☐
☐ Lead by example	☐	☐	☐	☐	☐
☐ Legislation/ Regulation	☐	☐	☐	☐	☐
☐ Monitor Performance	☐	☐	☐	☐	☐
☐ Stakeholder demand/pressure	☐	☐	☐	☐	☐
☐ Reputation management	☐	☐	☐	☐	☐
☐ Risk management	☐	☐	☐	☐	☐
☐ Transparency and Accountability	☐	☐	☐	☐	☐
☐ Other (please specify)	☐	☐	☐	☐	☐

Stakeholders

9. Please indicate the stakeholders and the importance of those stakeholders influencing the public agency to publish the report?

	(1) Very Unimportant	(2) Unimportant	(3) Neutral	(4) Important	(5) Very Important
☐ Citizens	☐	☐	☐	☐	☐
☐ Community within jurisdiction	☐	☐	☐	☐	☐
☐ Contractors and suppliers	☐	☐	☐	☐	☐
☐ Customers	☐	☐	☐	☐	☐
☐ Higher governments	☐	☐	☐	☐	☐
☐ NGO's	☐	☐	☐	☐	☐
☐ Other public agencies	☐	☐	☐	☐	☐
☐ Private sector	☐	☐	☐	☐	☐
☐ Workforce, direct and indirect	☐	☐	☐	☐	☐
☐ Other (please specify)	☐	☐	☐	☐	☐

10. How did the drivers and stakeholders identified above influence the content, structure and form of the report?

End of questionnaire.

Thank you for taking the time to participate in this research.

Please return the questionnaire to Roderick Stigter (stigter.roderick@kpmg.nl) at KPMG Sustainability NL.

If you are interested in the results of this analysis please provide us with your e-mail address and we will be glad to send the results to you.

Appendix 9 – Reporting uptake, content, drivers and stakeholders

Figure 4.1 Reports by country (n=85)

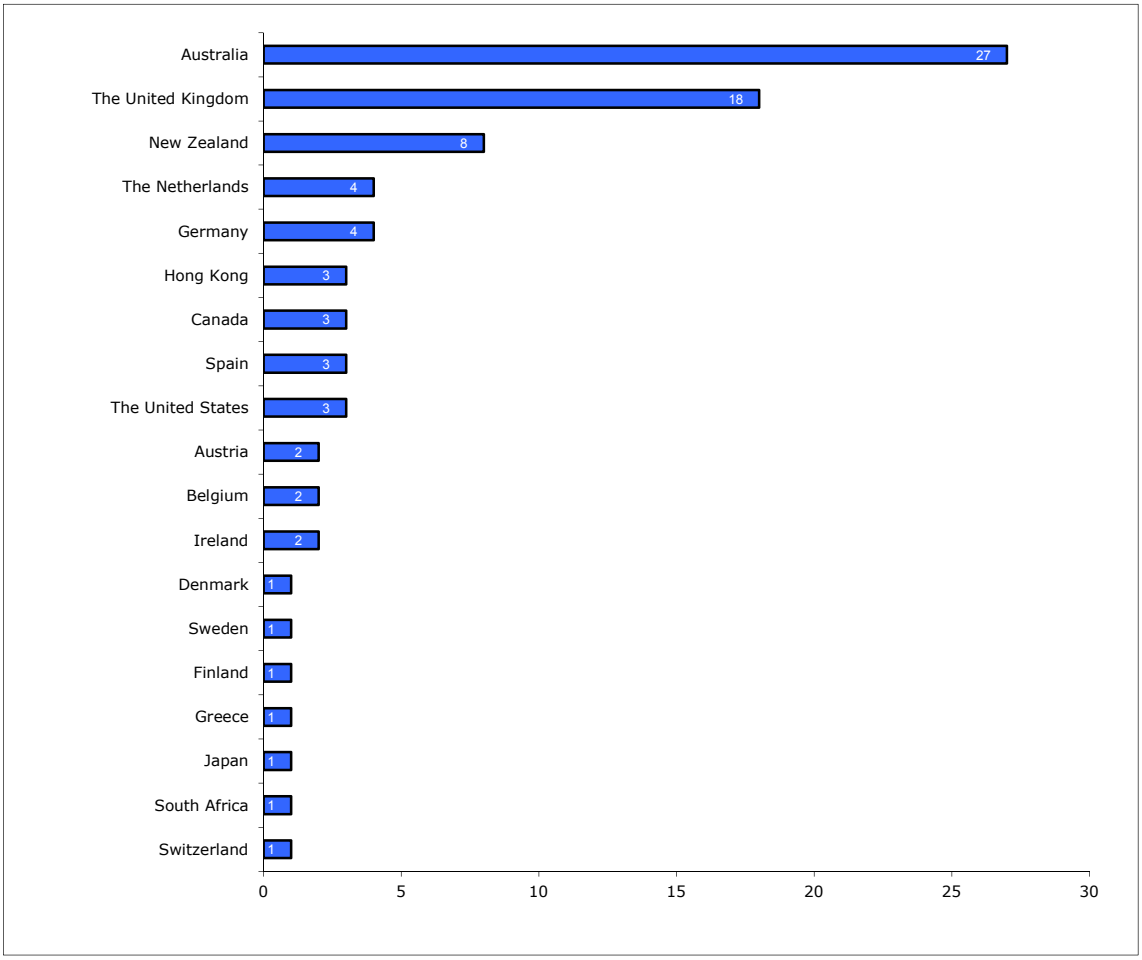


Figure 4.2 Reports by continent (n=85)

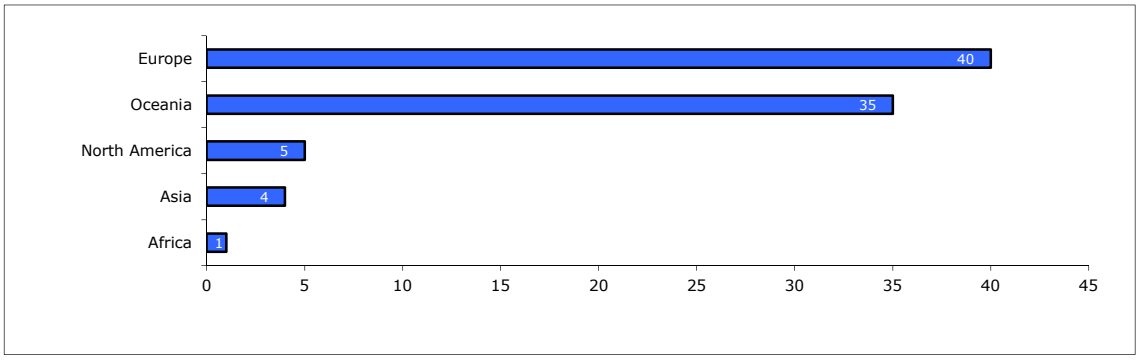


Figure 4.3 Reports by tier of agency (n=85)

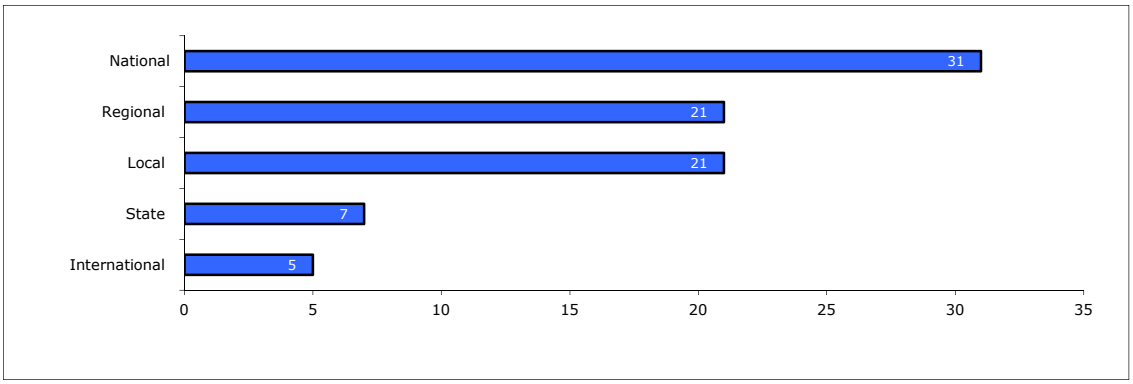


Figure 4.4 Reports by type of agency (n=85)

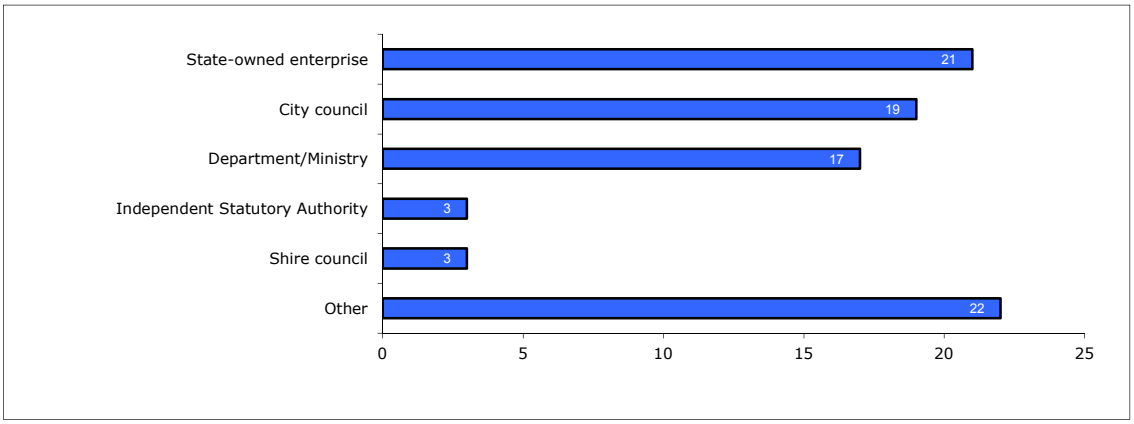


Figure 4.5 Reports by edition (n=42)

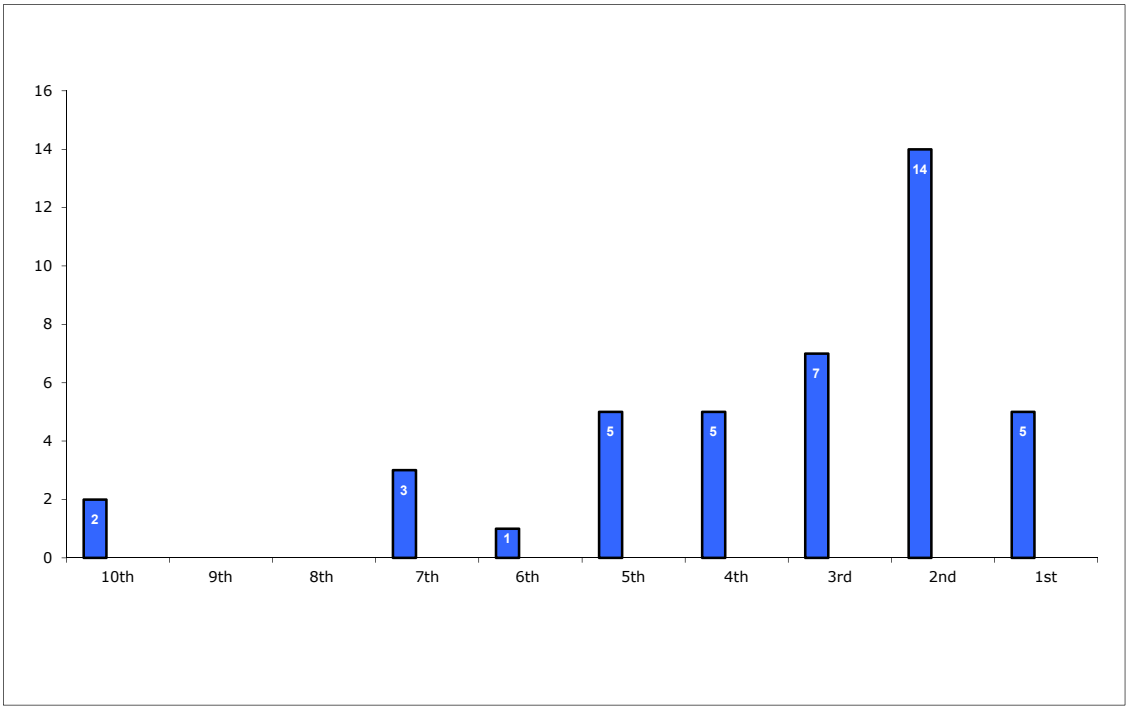


Figure 4.6 Reports by type (n=85)

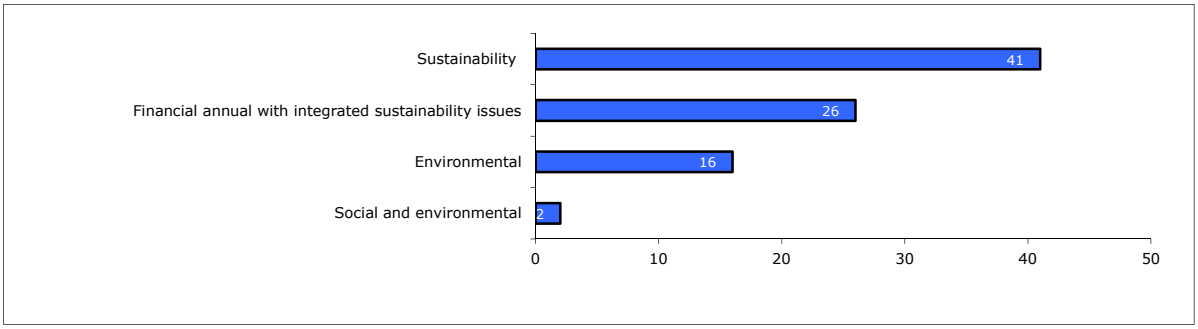


Table 4.1 GRI guidelines used, implementation and application level (n=37)

Guidelines used Version (# of reports)	**Implementation** Mentioned, Content Index, Context Index – 'Comply or Explain', In Accordance (# of reports)	**Application level** Self declared or third party checked – indicated with a plus + (# of reports)
GRI (5)	Mentioned (4), Content Index (1).	-
GRI 2002 (2)	Mentioned (1), Content Index and In Accordance (1).	-
GRI G3 (17)	Mentioned (3), Content Index (3) Context Index – 'Comply or Explain' (3), Content Index and In Accordance (8).	Application levels; C self-declared (1), B (3), B+ (1), B+ third party checked (1), A+ self-declared and third party checked (1).
GRI PASS (5)	Mentioned (2), Content Index (3).	-
GRI 2002 and GRI G3 (2)	Mentioned (2).	-
GRI 2002 and GRI PASS (1)	Content Index (1).	-
GRI G3 and GRI PASS (5)	Mentioned (1), Content Index and In Accordance (3), Content Index – 'Comply or Explain' and In Accordance (1).	Application levels; A+ GRI checked (1), A self-declared (1), C (1).

Table 4.2 Environmental performance reported (n=85)

Environmental performance topics & reporting percentages	
Gas emissions (in: CO_2, SO_2)	83.5%
Waste and recycling	82.4%
Electricity and energy use (in: Kwh)	80.0%
Water use and recycling (in: litres)	74.1%
Paper use (in: Kg)	54.1%
Transport and fleet (in: CO_2, type and number of cars)	52.9%
Biodiversity of land owned or in jurisdiction	51.8%
Noise (in: decibel)	25.9%
Energy rebate program/External programmes	21.2%
Non-compliance with applicable laws (in: incidents and fines)	20.0%

Table 4.3 Social performance reported (n=85)

Social performance topics & reporting percentages	
Training opportunities and capability development for the workforce	60.0%
Health and safety for the workforce	51.8%
Diversity of the workforce	41.2%
Organisational breakdown of the workforce	38.8%
Participation in the community	37.6%
Equal opportunity	36.5%
Employee satisfaction	32.9%
Working conditions	30.6%
Occupational accidents and diseases	30.6%
Work and life balance	24.7%
Human rights within the organisation and by sub-contractors	20.0%
Corruption and/or bribery	17.6%
Efficiency and effectiveness of service provided	12.9%
Child labour/Forced labour	9.4%
Senior management composition female to male ratio	8.2%
Philanthropy	0.0%

Table 4.4 Economic performance reported (n=85)

Economic performance topics & reporting percentages	
Total income broken down by capital and revenue	42.4%
Procurement policy as related to sustainable development	40.0%
Gross expenditures broken down by types of payment	36.5%
Total payroll and benefits	32.9%
Cost of all goods, materials and services purchased	28.2%
Donations and/or sponsoring for the community	27.1%
Economic, environmental and social expenditures	20.0%

Figure 4.7 Reports by main focus (n=85)

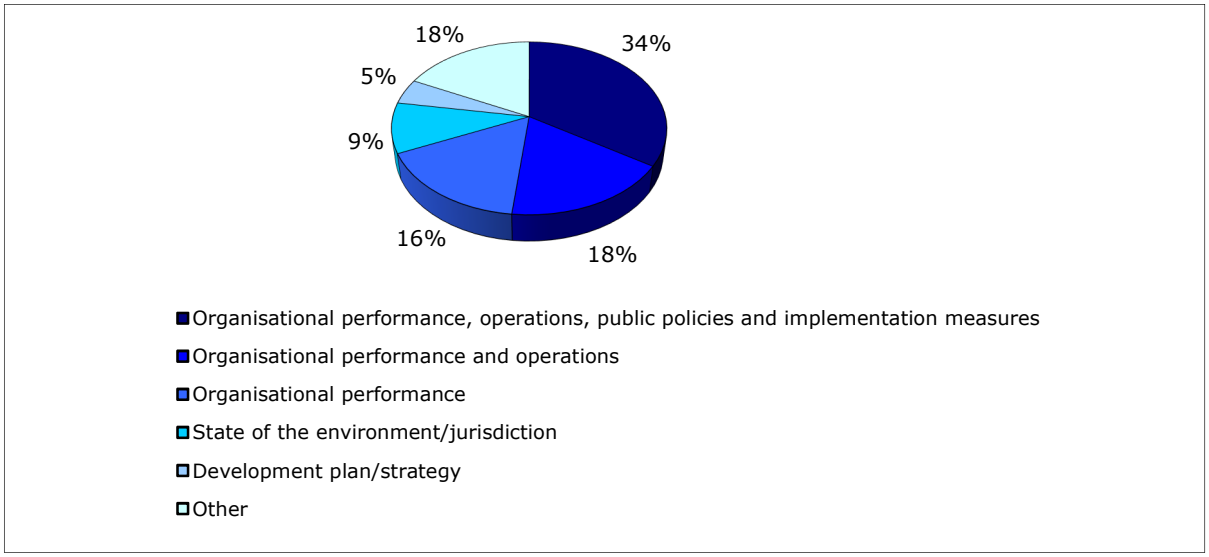


Figure 4.8 Assurance providers (n=26)

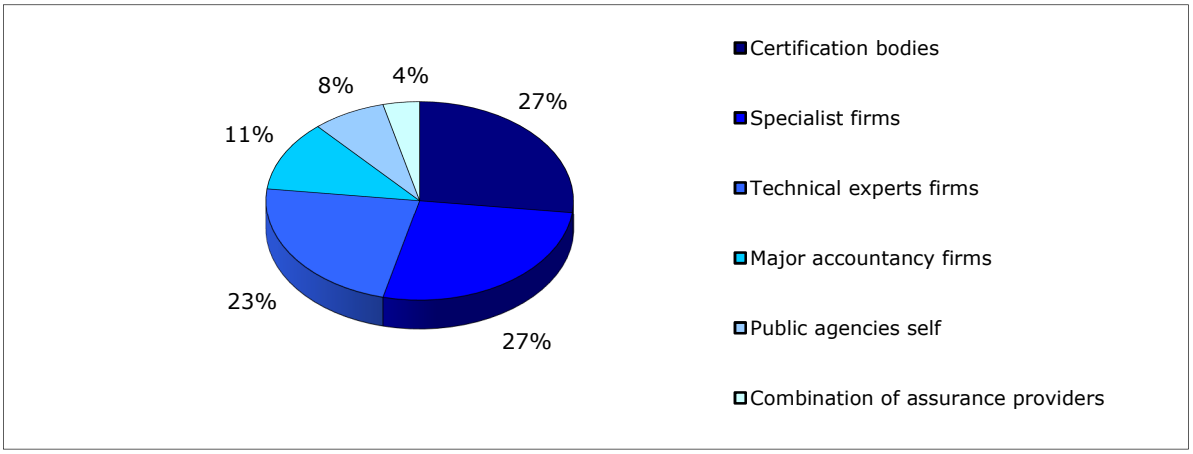


Table 4.5 Drivers to report (Questionnaire for Public Agencies) (n=22)

Ranking	**Drivers to report**	Mean	Median	Min.	Max.	Respondents
1	Transparency and accountability	4,6	5,0	4,0	5,0	18
2	Lead by example	4,3	4,0	3,0	5,0	16
3	Reputation management	4,2	4,0	2,0	5,0	16
4	Monitor performance	4,2	4,0	2,0	5,0	17
5	Higher government demand/pressure	4,1	4,5	2,0	5,0	14
6	Legislation/Regulation	4,1	4,0	2,0	5,0	14
7	Stakeholder demand/pressure	4,0	4,0	3,0	5,0	16
8	Risk management	3,7	4,0	2,0	5,0	13
9	Other	4,8	5,0	4,0	5,0	5

Table 4.6 Stakeholder with greatest influence to report (Questionnaire for Public Agencies) (n=22)

Ranking	**Stakeholders**	Mean	Median	Min.	Max.	Respondents
1	Higher governments	4,2	4,0	3,0	5,0	16
2	Workforce direct/indirect	4,1	4,0	3,0	5,0	17
3	Citizens	4,0	4,0	3,0	5,0	16
4	Customers	4,0	4,0	3,0	5,0	16
5	Community within jurisdiction	4,0	4,0	1,0	5,0	15
6	Other public agencies	3,7	4,0	3,0	5,0	15
7	NGO's	3,7	3,5	3,0	5,0	16
8	Private sector	3,5	4,0	1,0	5,0	15
9	Contracters and suppliers	3,3	3,0	1,0	5,0	15
10	Other	4,5	4,5	4,0	5,0	4

Appendix 10 – ANOVA tables

Table 4.7 ANOVA table - Drivers

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	550,714	9	61,190	1,185	,383[b]
	Residual	619,740	12	51,645		
	Total	1170,455	21			

a. Dependent Variable: Disclosure Score

b. Predictors: (Constant), Other, Reputation management , Higher government demand/pressure , Transparency and accountability , Monitor performance, Risk management , Stakeholder demand/pressure, Legislation/Regulation, Lead by example

Table 4.8 ANOVA table - Stakeholders

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	722,215	10	72,221	1,772	,181[b]
	Residual	448,240	11	40,749		
	Total	1170,455	21			

a. Dependent Variable: Disclure Score

b. Predictors: (Constant), Higher governments, Customers , Other, NGO's , Community within jurisdiction, Contracters and suppliers , Private sector, Citizens , Other public agencies , Workforce direct/indirect