# Sustainability in local governments

Disclosures in Dutch and Canadian municipal annual reports

Master's thesis

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## **Abstract**

Although the sustainability of corporations has been of great interest to researchers to date, relatively few studies have investigated sustainability disclosures in the public sector. In recent years, the increased concern of citizens about the transparency and sustainability of government finances has incentivized the public sector to show their stakeholders they address sustainability issues, in order to meet the needs of the present and future generations. Hence, the present study explored the sustainability disclosures of municipalities in their annual reports. The study aimed to investigate the relationship between the size and country of municipalities and sustainability disclosures. Sustainability disclosures of Dutch (n = 25) and Canadian (n = 24) municipalities were measured in the present study using the GRI sustainability framework. This framework distinguishes four sustainability categories: general, economic, social, and environmental information. The present study found municipality size to be a significant predictor of the extent of sustainability disclosures, as well as the extent of economic information disclosures. Larger municipalities reported more sustainability disclosures than smaller ones. The present study did not find country to be a significant predictor of the extent of sustainability disclosures. However, country was found to be a significant predictor for three of the four sustainability categories: general, social, and environmental information disclosures.

Generally, the results of the present study were only partly in line with previous research. Thus, limitations of this study were discussed as well as recommendations for future research.

Keywords: sustainability, GRI, annual reports, cross-cultural, Canada, the Netherlands, municipalities, local government, culture

## 1. Introduction

In the last few decades, corporations have encountered an increased number of stakeholders as a result of globalization (House & Rehbein, 2004). While shareholders and investors were considered to be the most important stakeholders in the past, multiple additional stakeholder groups, such as employees, consumers and governments, have had to be considered by corporations in more recent years (Preston & Sapienza, 1991). These stakeholders require organizations to show their corporate social responsibility (CSR), for example by means of sustainability initiatives (McWilliams & Siegel, 2001; Navarro-Galera, de los Ríos Berjillos, Ruiz Lozano, & Tirado Valencia, 2014).

Sustainability initiatives are considered to be good instruments to enhance the legitimacy of an organization among its stakeholders (Handelman & Arnold, 1999; Marcuccio & Steccolini, 2009). Few studies have investigated to what extent and how sustainability initiatives are communicated to stakeholders by the public sector. When communicating on sustainability initiatives, the public sector attempts to incite the private sector to implement sustainability policies on one hand (Crane & Matten, 2007), while on the other hand the public sector also has the moral duty to implement promoted sustainability policies themselves (Alcaraz-Quiles, Navarro-Galera, & Ortiz-Rodríguez, 2015; Williams, Wilmshurst & Clift, 2011). Within the public sector, the economic crisis of 2008 has led to an increased concern of citizens about the transparency and sustainability of government finances (Alcaraz-Quiles, Navarro-Galera & Ortiz-Rodríguez, 2014; Burritt & Schaltegger, 2010). Stakeholders are now demanding governments to act more sustainable too, and desire more information on their sustainability initiatives (Coglianese, 2009; Crane, Matten, & Spence, 2008).

## The quest for consistent sustainability reporting

This significant demand from stakeholders for sustainability information has resulted in the development of various reporting frameworks, such as the Global Reporting Initiative (GRI, 2006; 2015). The Global Reporting Initiative (GRI), founded in 1997, is a worldwide network of institutions and organizations that have joined forces to create a framework for sustainability reporting (Planken, 2013).

The GRI framework was created to help organizations construct their sustainability report in a consistent manner (Planken, 2013). The framework distinguishes four reporting categories; *general information* (e.g. information on organizational structure, mission and vision), *economic disclosures* (e.g. information on revenues, subsidies, wages), *social disclosures* (e.g. information on total workforce, employee training, pensions) and *environmental disclosures* (e.g. information on energy consumption, water consumption and

recycling). Social disclosures in the GRI framework are often referred to as CSR (Ebner & Baumgartner, 2006). Corporate sustainability and CSR are considered synonyms, as "both concepts refer to corporate activities, voluntary by definition, demonstrating the inclusion of social and environmental concerns in business operations and in interactions with stakeholders" (Thomsen, 2013, p. 2361). In 2005 and 2010, the Global Reporting Initiative published a supplement for the public sector in order to respond to specific information needs of the public sector, and complements the GRI framework for the public sector (GRI, 2010).

The GRI framework has most recently been updated in 2013 and is considered to be the most established sustainability reporting framework (Greiling, Traxler & Stötzer, 2015). Currently the GRI framework is used worldwide as the standard for sustainability reporting (Bernhart, 2009; Chen & Bouvain, 2009; Tort, 2010), by various types of organizations, such as businesses, NGOs and public agencies (Planken, 2013).

## Disclosure of sustainability information by local governments

The reporting of sustainability efforts by governments has received relatively limited research interest compared to the private sector. However, in recent years a few studies have evaluated sustainability disclosures of municipalities.

Williams et al. (2011) have explored which media (e.g. annual report, strategic report, website) municipalities use to report their sustainability efforts. The authors used a survey to collect their data from 190 Australian municipalities. In this survey, municipalities were asked whether they reported sustainability information to their external stakeholders, and if so, which reporting media the respondents preferred to use. The results showed that 95% of municipalities which indicated to report on their sustainability efforts use the annual report to do so, while 70% of municipalities said to use their website (Williams et al., 2011). Respondents were also asked which type of sustainability categories (environmental, social or economic) they report. Economic information was said to be reported by 86% of respondents, social information by 81% and environmental information by 72% of respondents (Williams et al., 2011).

Surprisingly, even though the study of Williams et al. (2011) reported annual reports to be the most commonly used medium for municipalities to report their sustainability efforts, only one study investigated sustainability disclosures in governmental annual reports to this researcher's knowledge. The study, by Tagesson, Klugman and Ekström (2013), focused on sustainability disclosures in annual reports of 290 Swedish municipalities. The researchers found significant differences between the municipalities in terms of extent and content of disclosures. Their analyses showed that the extent of sustainability disclosures positively correlate with size of the municipality, tax rate and financial performance. According to

Tagesson et al. (2013), larger municipalities report more sustainability disclosures for two reasons. First, a larger organization has more employees, and is therefore able to specialize more employees in collecting and compiling such information. And second, a larger organization generally also has a larger group of stakeholders that can influence them, which results in a higher demand for such information (Tagesson et al., 2013). The study by Tagesson et al. (2013) provides insights in the sustainability reporting in annual reports of municipalities. Similar results have been found in research investigating corporate sustainability disclosures. Adrem (1999), Ljungdahl (1999), Jaggi and Low (2000), Hossain and Reaz (2007) have also found organization size as a predicting variable for the extent of an organization's information disclosure.

More studies were found to have investigated municipal websites, the second most utilized sustainability reporting medium according to Williams et al. (2011). One such study, by Alcaraz-Quiles et al. (2015) investigated sustainability disclosures as proposed in the GRI framework on websites of 55 municipalities in Spain. 13 variables, among which were population size, unemployment rate and debt, were correlated to sustainability disclosures. The results showed that Spanish municipalities disclosed 40% of the sustainability information of the GRI framework. General information was disclosed for 44%, economic information for 35%, social information for 70%, and environmental information for 24%. Alcaraz-Quiles et al. (2015) concluded that the Spanish municipalities provided a high level of social disclosures in comparison to economic and environmental disclosures. While Alcaraz-Quiles et al. (2015) did not find a significant relationship between sustainability disclosures and population size, a significant relationship was found for age. A larger population of inhabitants younger than 18 and older than 65 years, which the researchers referred to as dependent population, correlated with a higher disclosure of sustainability information (Alcaraz-Quiles et al., 2015).

Ortiz-Rodríguez, Navarro-Galera and Alcaraz-Quiles (2015) also investigated municipal websites. The researchers analyzed the websites of 62 local governments in the United Kingdom, Ireland, Portugal, and Spain for their sustainability disclosures. The results showed that municipalities in the United Kingdom and Ireland disclosed 58% of the sustainability information of the GRI framework, while Spanish and Portuguese municipalities disclosed 47% on their websites. General, economic, social and environmental information was disclosed for 63%, 60%, 68% and 46% respectively by municipalities in the United Kingdom and Ireland. Spanish and Portuguese municipalities disclosed general, economic, social and environmental information for 48%, 48%, 52% and 34% respectively (Ortiz-Rodríguez et al., 2015).

A similar study by Navarro-Galera et al. (2014) investigated sustainability information on the websites of Nordic and Anglo-Saxon municipalities using the GRI framework. The Nordic countries in this study consisted of Denmark, Finland, Sweden, Norway and the Netherlands. The Anglo-Saxon countries in this study consisted of the United Kingdom and Ireland. The results showed that Anglo-Saxon municipalities disclosed 63% of the GRI sustainability disclosures on their websites, while municipal websites in the Nordic countries report 42% of the GRI sustainability information. Municipalities in the Anglo-Saxon countries provided 63% of the general information disclosures, 68% of the economic information, 70% of the social information and 50% of the environmental information on their websites. Municipalities in the Nordic countries provided 50% of the general information, 33% of the economic information, 42% of the social information and 44% of the environmental information on their websites. According to the authors, all researched municipalities should increase their online sustainability reporting in general, and in particular on environmental efforts (Navarro-Galera et al., 2014).

#### Sustainability disclosures in a cultural comparison

Similar to Navarro-Galera et al. (2014), several other studies also investigated sustainability and CSR among different countries (Peng, Dashdeleg & Chih, 2012; Ringov & Zollo, 2007; Thanetsunthorn, 2015). However, these studies all included Hofstede's (2001) cultural dimensions as the basis of their cross-cultural analysis. Hofstede's (2001) work can be used to compare cultures on six aspects, called cultural dimensions. The first cultural dimension, power distance, refers to the attitude of a culture towards inequalities of its members (Hofstede, 2001). Cultures with a high power distance accept an unequal distribution of power among their members. The second cultural dimension, individualism, refers to societies where members tend to identify themselves as an individual or as part of a group (Hofstede, 2001). Members of an individualist society are expected to take care of themselves and their direct family only. The third cultural dimension, masculinity, refers to the value a society holds in regard to competitiveness, achievement, power, assertiveness and success (Hofstede, 2001). Masculine cultures tend to value these higher, while more feminine cultures tend to value caring, modesty, relationships and quality of life. The fourth cultural dimension, uncertainty avoidance, refers to the aversion towards ambiguous or unknown situations (Hofstede, 2001). A culture with a low score on uncertainty avoidance tends to easily accept new ideas and is willing to try something new. The fifth cultural dimension, long term orientation refers to the way a society deals with both traditions from the past and development into the future (Hofstede, 2001). Societies which score high on this dimension tend to be more pragmatic, and encourage

modernization, while cultures with a low score tend to prefer traditions and norms over development. The sixth cultural dimension, *indulgence*, refers to a culture's allowance of enjoyment (Hofstede, 2001). A society with a low score on this dimension tends to suppress gratification.

One study using Hofstede's cultural dimensions was Thanetsunthorn (2015), which investigated relationships between cultural dimensions and CSR performance. In the study, the CSR performance was determined by scores on CSRHub, a database which combined data from nine different CSR frameworks (Thanetsunthorn, 2015). The CSR performance of 3055 companies located in 28 European and Eastern Asian countries was correlated to Hofstede's national culture scores for those countries. The study found correlations between cultural dimensions and CSR performance. Negative relationships were found between masculinity, power distance, individualism and CSR performance. Positive relationships were found between uncertainty avoidance and CSR performance.

Peng et al. (2012) also explored relationships between cultural dimensions and sustainability scores. The researchers based their dataset on the Dow Jones Sustainability Index, using sustainability scores of 1189 corporations located in 25 different countries worldwide. These sustainability scores were correlated to Hofstede's cultural dimensions. In line with the results of Thanetsunthorn (2015), the researchers found negative relationships between masculinity, power distance, and sustainability scores, and positive relationships between uncertainty avoidance and sustainability scores. In concurrence to Thanetsunthorn's (2015) study, Peng et al. (2012) found individualism to positively correlate to scores of the Dow Jones Sustainability Index.

Ringov and Zollo (2007) investigated relationships between cultural dimensions and CSR performance for North American, European and Asian countries. In the study, 463 companies from 23 countries were examined, and the CSR performance of these companies according to the Innovest Group dataset was correlated to Hofstede's national cultural scores. The researchers found negative relationships between masculinity, power distance, and CSR performance. These results are in line with the study by Thanetsunthorn (2015), while significant relationships for uncertainty avoidance and collectivism were not confirmed by Ringov and Zollo (2007).

## The present study

The cross-cultural studies discussed above have all found negative relationships between masculinity and sustainability and CSR performance, meaning that the higher the masculinity value in a country, the lower the sustainability and CSR performance in that country is. In

addition, the cross-cultural studies also found negative relationships between power distance and sustainability and CSR performance. However, these studies investigated the private sector. Such a cross-cultural comparison does not seem to be present for the public sector yet. The public sector has been cross-culturally researched by Peng et al. (2012) and Thanetsunthorn (2015). However, these studies did not investigate annual reports, the most utilized sustainability reporting medium according to Tagesson et al. (2013). The studies that investigated the sustainability reporting on municipal websites used the GRI sustainability framework to do so (Alcaraz-Quiles et al., 2015; Navarro-Galera et al., 2014; Ortiz-Rodríguez et al., 2015). To enable the ability to compare results with outcomes of these studies, it was decided to investigate sustainability disclosures in municipal annual reports using the GRI framework as well.

The intention of the present study was to contribute to the literature on sustainability in relation to local governments and their annual reports. The findings of this study may support researchers aiming to investigate sustainability reporting in different levels of governments, as well as local governments aiming to improve the reporting of sustainability issues in their annual reports. The selection of Canadian and Dutch municipalities as the sample for this study was justified for several reasons. First, both Dutch and Canadian municipalities are required by legislation to provide an annual report (Kerby, 2001). This consists of the required financial statements, while it also gives municipalities a choice to include other information for their stakeholders, such as sustainability information. Second, the governments of Canada and the Netherlands have a similar facilitating role in addressing social responsibility issues (Kerby, 2001). Third, according to KPMG, 83 percent of the Canadian and 82 percent of the Dutch businesses report on their corporate responsibility (KPMG, 2013). This high similarity of sustainability reporting in the profit sector could be an indication that also the public sector (i.e. the governments) of these countries show comparable numbers of reporting, but this has not been investigated yet. Fourth, Canada and the Netherlands score very similar values in the cultural dimensions by Hofstede (2001), except for masculinity and long term orientation (Figure 1). Any differences between Canada and the Netherlands in terms of sustainability reporting could therefore be a result of differences in masculinity, as was already found in the private sector by Peng et al. (2012), or long term orientation.

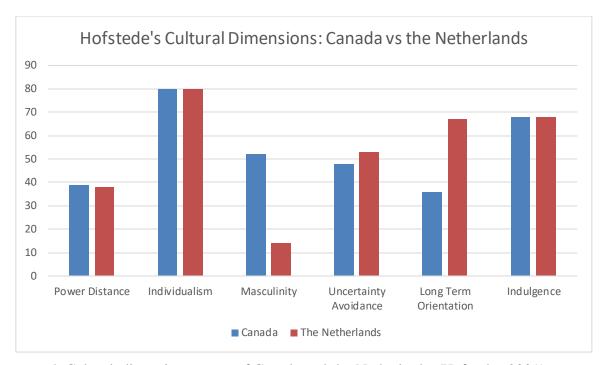


Figure 1. Cultural dimension scores of Canada and the Netherlands (Hofstede, 2001).

Based on the discussed literature, the following main research question was formulated in order to investigate sustainability disclosures in the annual reports of municipalities in Canada and the Netherlands: To what extent is there a relationship between country, population size and the sustainability disclosures of the GRI framework in annual reports of Canadian and Dutch municipalities?

As previously discussed studies (Alcaraz-Quiles et al. 2015; Navarro-Galera et al. 2014; Ortiz-Rodríguez; 2015) found different levels of reporting between the four sustainability categories, this study will also investigate the relationship between country, population size, and disclosures for each of the sustainability categories. Therefore, the following sub-questions were formulated:

Sub question 1: To what extent is there a relationship between country, population size and the general information disclosures in annual reports of Canadian and Dutch municipalities?

Sub question 2: To what extent is there a relationship between country, population size and the economic information disclosures in annual reports of Canadian and Dutch municipalities?

Sub question 3: To what extent is there a relationship between country, population size and the social information disclosures in annual reports of Canadian and Dutch municipalities?

## Sustainability reporting in municipalities' annual reports

Sub question 4: To what extent is there a relationship between country, population size and the environmental information disclosures in annual reports of Canadian and Dutch municipalities?

Based on the discussed literature, two hypotheses were formulated as well:

H1: There is a negative relationship between masculinity and the extent of sustainability disclosures.

H2: There is a positive relationship between municipality size and the extent of sustainability disclosures.

## 2. Methodology

This study aimed to investigate the extent of sustainability disclosures in annual reports of Dutch and Canadian municipalities. Based on the literature, it was hypothesized that the size of a municipality and the different countries would predict the extent of sustainability disclosures (Figure 2). This was investigated in the present study by means of a content analysis.

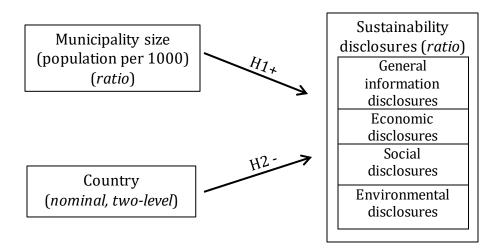


Figure 2. Proposed hypotheses and relationships between the variables.

#### **Materials**

The corpus selected for this study consisted of the annual reports of Dutch and Canadian municipalities for the year 2014. The sampling of the Dutch and Canadian municipalities was done by selecting annual reports of the 25 largest (based on population) municipalities of both countries (see Appendix 1 and 2). If a municipality did not provide its annual report online on its website, the next largest municipality was selected, until a sample of 25 annual reports was reached per country. In this study, it was decided to only include annual reports written in English or Dutch. By doing this, a correct interpretation by the coders could be ensured. If an annual report of a Canadian municipality was exclusively provided in French, the next municipality in the list of largest municipalities was selected, until a sample of 25 annual reports was reached.

The final selection of municipalities all have more than 75.000 inhabitants, a criterion mentioned by Ortiz-Rodríguez et al. (2015) with several reasons. First, a larger municipality has a larger variety of its stakeholders, which often means a more elaborate annual report (Ortiz-Rodríguez et al., 2015; Tagesson et al., 2013). Secondly, a larger municipality suggests that a larger volume of services and resources is managed, which could be devoted to sustainability (Ortiz-Rodríguez et al., 2015). Thirdly, larger municipalities normally have a larger number of employees, and are therefore able to specialize more employees in collecting and compiling

sustainability information, which increases the probability of including sustainability disclosures in their annual report (Ortiz-Rodríguez et al., 2015; Tagesson et al., 2013).

#### Procedure

In the present study, the GRI framework was used as it is the most established sustainability framework (Bernhart, 2009), and results can be compared to previous studies (Alcaraz-Quiles et al., 2015; Navarro-Galera et al., 2014; Ortiz-Rodríguez et al., 2015). As Alcaraz-Quiles et al. (2015) note, using the GRI framework provides objectivity and neutrality. For the actual analysis of this study, it was decided to use Alcaraz-Quiles et al. (2015) list for analyzing the four GRI reporting categories, which consists of a selection of items from the GRI framework and the GRI Public Sector Supplement. The list by Alcaraz-Quiles et al. (2015) was chosen because it contains specific questions on sustainability disclosures, rather than descriptions found in the GRI framework itself. This list of questions enabled consistent coding of the occurrence of sustainability disclosures.

The GRI consists of four reporting categories. In the list by Alcaraz-Quiles (2015), the first category, *general information*, contains 25 items, divided into 4 subcategories: 'strategy and analysis', 'organization profile', 'information parameters', and 'governments undertakings and stakeholder participation'. Examples of general information disclosures are statements in the mayor's letter on the importance of sustainability, and strategies and key factors relating to sustainability, amongst others. The scale for general information was found to be reliable (a = .79). The second category, *economic information*, contains 16 items. Examples of these disclosures are forecasts of revenue and expenditure, investments, statements on financial risk, and expenditure on local suppliers, amongst others. The scale for economic (16 items) was also found to be reliable ( $\alpha = .70$ ). The third category, social information, contains 7 items. Examples of these disclosures are quality standards, pension obligations, and policies for subcontractors, amongst others. The reliability analysis showed that the scale for social information was unreliable. It was decided to delete one item (number 44), in order to find a satisfactory alpha. After deletion, the reliability improved and became reasonably reliable ( $\alpha = .59$ ). The fourth category, *environmental information*, contains 13 items. Examples of these disclosures are initiatives to reduce environmental impact of products and services, energy consumption and savings, and volume of water disposed and recycled, amongst others. The reliability analysis showed environmental information to be unreliable. Therefore, it was decided to delete one item (number 50) in order to find a satisfactory alpha. After deletion, the scale was found to be reliable ( $\alpha = .74$ ). Finally, all sustainability disclosures combined were found to be reliable

( $\alpha$  = .86, see Table 1). A selection of examples of general, economic, social and environmental disclosures can be found in Appendix 3.

Table 1: Overview of sustainability disclosures and their reliability scores.

Variable	No of items	α
General Information	25	.79
Strategy and analysis	6	
Organization profile	8	
Information parameters	6	
Government undertakings and stakeholder participation	5	
Economic indicators	16	.70
Social indicators	6	.59
Environmental indicators	12	.74
Sustainability disclosures (total)	59	.86

Two coders analyzed the annual reports, the first coder analyzed the full sample while the second coder independently analyzed ten percent of the sample. Both coders used the codebook which provided the operational definitions of each sustainability item (see Appendix 4). For each item, a score of 1 was assigned if the particular disclosure was present, and a 0 was assigned if that disclosure was not present in the annual report.

To test the reliability of the coding scheme used in the present study, ten percent of the sample was analyzed by the second coder (Neuendorf, 2002) and an interrater reliability test was carried out. This test measured the reliability of the coding by comparing to what extent two or more coders agree on what can be marked as sustainability disclosures in the corpus of annual reports. The interrater reliability of the variable 'sustainability disclosures' was satisfactory:  $\kappa = .71$ , p < .001.

#### Statistical treatment

Using SPSS, a multiple regression analysis was used to determine a possible relationship between size of a municipality and the extent of sustainability disclosures (score of sustainability disclosures based on the entire list in Appendix 4), and the score per sustainability category (general information, economic, social, and environmental disclosures). The multiple regression analysis was also used to determine a possible relationship between country and the extent of sustainability disclosures (score of sustainability disclosures based on the entire list in Appendix 4, and the score per sustainability category (general information, economic, social, and environmental disclosures).

## 3. Results

This results section consists of regression analyses executed in order to answer the main research question "To what extent is there a relationship between country, population size and the sustainability disclosures of the GRI framework in Canadian and Dutch annual reports of municipalities?". When checking for the assumptions for the regression analyses, one Canadian municipality was found to be an outlier and violated the assumptions for the regression analysis. Therefore, it was decided to exclude the data for this municipality from the dataset in this research.

In total, 24 Canadian municipal annual reports were analyzed, and 25 Dutch municipal annual reports. Overall, Canadian municipalities provided more sustainability disclosures than the Dutch municipalities. Canadian municipalities provided 36% of the total sustainability disclosures, while 32% of the total sustainability disclosures were provided by Dutch municipalities in their annual reports (see Table 2). Moreover, the four sustainability categories were also measured. For the category general information, Canadian municipalities provided more disclosures than the Dutch municipalities, 36% and 24% respectively. In addition, Canadian municipalities reported 47% of the economic information disclosures, while Dutch municipalities reported 38%. Surprisingly, social information disclosures were reported more by Dutch municipalities, with 37%, whereas Canadian municipalities reported 20%. Finally, Dutch municipalities reported the most environmental information disclosures with 27%, while Canadian municipalities reported 18% of environmental information disclosures. A selection of examples of general, economic, social and environmental disclosures can be found in Appendix 3.

Table 2: Range, means, standard deviations and percentages for the sustainability variables for Dutch and Canadian annual reports (N = 49).

	Range	Dutch		Canadian	
		n = 25		n = 24	
		M(SD)	%	M(SD)	%
Sustainability disclosures (total)	0-59	18.56 (3.86)	31.5%	21.17 (8.82)	35.9%
General information disclosures	0-25	6.08 (2.55)	24.3%	8.88 (4.08)	35.5%
Economic information disclosures	0-16	6.08 (1.55)	38%	7.46 (2.78)	46.6%
Social information disclosures	0-6	2.2 (1.26)	36.7%	1.21 (1.22)	20.2%
Environmental information disclosures	0-12	3.28 (1.65)	27.3%	2.17 (2.12)	18.1%

#### Sustainability disclosures

In order to answer the main research question, a multiple regression analysis was run with the predictor variables 'country' and 'population size', and the dependent variable 'sustainability disclosures'. The multiple regression showed that the model was significant (F(2, 46) = 3.37, p = .043). The variables predicted 13% of the variance of the dependent variable (see Table 3). Country was found not to be a significant predictor of sustainability disclosures ( $\beta = .08$ , p = .598). Therefore, hypothesis 1 was not confirmed. Canadian municipal annual reports did not show a significantly lower disclosure of sustainability than Dutch municipal annual reports. Population size was found to be a significant predictor of sustainability disclosures ( $\beta = .32$ , p = .034). Municipalities with a larger population showed a significantly higher disclosure of general sustainability in their annual reports, given that all other variables were kept constant. Thus, hypothesis 2 was confirmed.

Table 3. Regression analysis for the predictor variables 'country' and 'population size' and the dependent variable sustainability disclosures (N = 49).

variable	В	SE B	β
Country	1.06	1.99	.08
Population size	.005	.002	.32*
$R^2$	.13		
$\mathcal{F}$	3.37**		

<sup>\*</sup> p = .034, \*\* p = .043

In addition, four multiple regression analyses were performed in order to specify the results of sustainability disclosures for each of the reporting categories; general information, economic information, social information, and environmental information, which are reported in the following sections.

#### General information disclosures

In order to answer sub question 1, a multiple regression analysis was run with the predictor variables 'country' and 'population size', and the dependent variable 'general information disclosures'. The multiple regression showed that the model was significant (F(2, 46) = 4.35, p = .019). The variables predicted 16% of the variance of the dependent variable (see Table 4). Country was found to be a significant predictor of general information disclosures ( $\beta = .35$ , p = .018), given that all other variables were kept constant. Canadian municipal annual reports showed a significantly higher disclosure of general sustainability than Dutch municipal annual reports. Population size was found not to be a significant predictor of general sustainability

disclosures ( $\beta$  = .10, p = .510). Municipalities with a larger population did not show a significantly higher disclosure of general information in their annual reports.

Table 4. Regression analysis for the predictor variables 'country' and 'population size' and the dependent variable general information disclosures (N = 49).

variable	В	SE B	β
Country	2.55	1.04	.35*
Population size	.001	.001	.10
$R^2$	.16		
F	.16 4.35**		

<sup>\*</sup> p = .018, \*\* p = .019

#### Economic disclosures

In order to answer sub question 2, a multiple regression analysis was run with the predictor variables 'country' and 'population size', and the dependent variable 'economic disclosures'. The multiple regression showed that the model was significant (F (2, 46) = 11.84, p < .001). The variables predicted 34% of the variance of the dependent variable (see Table 5). Country was found not to be a significant predictor of economic disclosures ( $\beta$  = .11, p = .401). Dutch municipal annual reports did not show a significantly higher disclosure of economic than Canadian municipal annual reports. Population size was found to be a significant predictor of economic disclosures ( $\beta$  = .54, p < .001), given that all other variables were kept constant. Municipalities with a larger population showed a significantly higher disclosure of economic information in their annual reports.

Table 5. Regression analysis for the predictor variables 'country' and 'population size' and the dependent variable economic disclosures (N = 49).

variable	В	SE B	β
Country	.50	.59	.109
Population size	.003	.001	.54*
$R^2$	.34		
F	11.84**		

<sup>\*</sup> p < .001, \*\* p < .001

#### Social disclosures

In order to answer sub question 3, a multiple regression analysis was run with the predictor variables 'country' and 'population size', and the dependent variable 'social disclosures'. The multiple regression showed that the model was significant (F(2, 46) = 3.85, p = .028). The

variables predicted 14% of the variance of the dependent variable (see Table 6). Country was found to be a significant predictor of social disclosures ( $\beta$  = -.38, p = .012), given that all other variables were kept constant. Dutch municipal annual reports showed a significantly higher disclosure of social information than Canadian municipal annual reports. Population size was not found to be a significant predictor of social disclosures ( $\beta$  = .014, p = .925). Municipalities with a larger population did not show a significantly higher disclosure of social information in their annual reports.

Table 6. Regression analysis for the predictor variables 'country' and 'population size' and the dependent variable social disclosures (N = 49).

variable	В	SE B	β
Country	-1.01	.38	38*
Population size	.00	.00	.014
$R^2$	.14		
F	3.85**		

<sup>\*</sup> p = .012, \*\* p = .028

#### Environmental disclosures

In order to answer sub question 4, a multiple regression analysis was run with the predictor variables 'country' and 'population size', and the dependent variable 'environmental disclosures'. The multiple regression showed that the model was not significant (F (2, 46) = 2.93, p = .064). The variables predicted 11% of the variance of the dependent variable (see Table 7). Country was found to be a significant predictor of environmental disclosures ( $\beta$  = -.35, p = .021), given that all other variables were kept constant. Dutch municipal annual reports showed a significantly higher disclosure of environmental information than Canadian municipal annual reports. Population size was not found to be a significant predictor of environmental disclosures ( $\beta$  = .19, p = .217). Municipalities with a larger population did not show a significantly higher disclosure of environmental information in their annual reports.

Table 7. Regression analysis for the predictor variables 'country' and 'population size' and the dependent variable environmental disclosures (N = 49).

variable	В	SE B	β
Country	-1.37	.58	35*
Population size	.001	.001	.19
$R^2$	.11		
F	2.93		

<sup>\*</sup> p = .021

## 4. Conclusion and discussion

This study investigated relationships between sustainability disclosures in 49 municipal annual reports from Canada and the Netherlands. The main research question of the present study was: "To what extent is there a relationship between country, population size and the sustainability disclosures of the GRI framework in annual reports of Canadian and Dutch municipalities?". It was hypothesized that Canadian municipalities would report less sustainability disclosures than the Dutch municipalities, as the higher masculinity score of Canada (Hofstede, 2001) would indicate a lower extent of sustainability reporting according to previous research (e.g. Peng et al., 2012). It was also hypothesized that municipalities larger in population size would report more sustainability disclosures than municipalities with a smaller population size, based on results by Tagesson et al. (2013).

In general, the relationship between sustainability disclosures and country showed that country was not a significant predictor for the extent of sustainability disclosures. Thus, there does not seem to be a significant relationship between country and sustainability disclosures. The first hypothesis, a negative relationship between the extent of sustainability disclosures and a country's masculinity, was therefore not confirmed. The results from previous studies in the private sector, where significant relationships between country and sustainability disclosures were found (e.g. Peng et al., 2012; Ringov & Zollo, 2007; Thanetsunthorn, 2015), do not seem to apply to the public sector in the present study. However, a significant positive relationship was found between population size and extent of sustainability information disclosures. The larger a municipality in size, the more sustainability information it discloses in its annual report, a result in line with Tagesson et al. (2013). Therefore, the second hypothesis, a positive relationship between municipality size and the extent of sustainability disclosures, was confirmed. This result also confirms Ortiz-Rodríguez et al. (2015), who stated that larger municipalities will report more sustainability disclosures as they have a larger volume of resources and services to report on, and a larger variety of stakeholders to report to. Overall, the results of the current study regarding sustainability disclosures in Dutch and Canadian annual reports differed from previous studies using the GRI framework. Dutch and Canadian municipalities disclosed sustainability information to a lower extent than the Nordic and Anglo-Saxon municipalities in Navarro-Galera et al. (2014), as well as the municipalities from Spain, Portugal, Ireland and the United Kingdom in Ortiz-Rodríguez et al. (2015).

However, as previous studies found different levels of reporting for the four sustainability categories (Alcaraz-Quiles et al., 2015; Navarro-Galera et al., 2014; Ortiz-Rodríguez, 2015), it was decided to also investigate these sustainability categories separately

in the present study in order to specify the answer of the main research question. This was done by formulating a sub question for each sustainability category. The first sub question addressed the possible relationship between country, population size, and general information disclosures. Country was found to be a significant predictor of general information disclosures. Canadian municipalities reported more general information disclosures than Dutch municipalities. Therefore, masculinity seems to be able to predict the extent of general information disclosures, a result that, interestingly, is different from the results on total sustainability disclosures. Unlike sustainability disclosures, a higher masculinity score does seem to result in a higher extent of general information disclosures. This result is not in line with Peng et al. (2012), who found a negative relationship between masculinity and sustainability disclosures. However, the discrepancy in results could be explained by the focus of this specific sustainability category on showcasing the organization (e.g. information on achievements and awards), which aligns with the focus on success and achievement in a more masculine culture (Hofstede, 2001). Moreover, Peng et al. (2012) investigated the private sector, opposed to the public sector in the present study. Therefore, it could also be argued that these are differences between the public and private sector. The results for general information also differed from the total sustainability disclosures for the population size. While municipality size was found to be a predictor of the total sustainability disclosures, this was not the case for general information disclosures. Larger municipalities did not disclose more general information than smaller municipalities, a result that is not in line with Tagesson et al. (2013). The scores of general information disclosures for both countries in the present study are lower than results found by previous studies. For general information disclosures, Dutch municipalities disclosed 24% and Canada disclosed 36%. Alcaraz-Quiles et al. (2015) found a higher score of 44% disclosed for general information on Spanish municipal websites, while Ortiz-Rodríguez et al., (2015) found an even higher score of 63% for general information on municipal websites in the United Kingdom and Ireland. The discrepancy in these results could be explained by the sample differences on country and reporting medium. Future research could investigate the relationship between reporting medium and the extent of general information disclosures. One example of general information disclosures is the statement on the importance of sustainability in the mayor's letter. The Canadian municipality of Toronto reported: "Together with my colleagues on City Council we will focus on making these investments, ensuring fiscal responsibility and sustainability and in getting Toronto moving" (The City of Toronto, 2015, p. 5).

The second sub question concerned the possible relationship between country, population size, and economic information disclosures. Analysis on the relationship between

economic information disclosures and country showed that country was not a significant predictor. Thus, masculinity seems not to predict the extent of economic information disclosures, a result that is similar to the result of the total sustainability disclosures. Population size, however, was found to be a significant predictor of economic information disclosures. Based on the results, it can be concluded that a larger population leads to more economic information disclosures in municipal annual reports. This result is in line with Tagesson et al. (2013), and also with results on the total sustainability disclosures in the present study. Economic information disclosures were reported by Canadian and Dutch municipalities for 47% and 38% respectively. These scores were higher than the Spanish municipalities in the study by Alcaraz-Quiles et al. (2015), which scored 35%, as well as the Nordic municipal websites investigated by Navarro-Galera et al. (2014), which scored 33%. One example of economic information disclosures is the statement on financial risk, for which the Canadian municipality Edmonton reported: "The goal of the City Council-approved investment policy, as overseen by the Investment Committee, is to reserve the original principal and to maximize investment returns within an acceptable prudent level of risk" (The City of Edmonton, 2015, p. 26).

The third sub question dealt with the possible relationship between country, population size, and social information disclosures. Country was found to be a significant predictor of the extent of social information disclosures. Dutch municipalities disclosed more social information than the Canadian municipalities in the annual reports. Thus, a higher masculinity score seems to lead to a lower extent of social information disclosures. This result is in line with the results of Peng et al. (2012), where a negative relationship between masculinity and sustainability information disclosures in the private sector was found. However, the results on social information disclosures are not in line with the results on sustainability disclosures in the present study. Furthermore, interpretation of the results on social information disclosures have to be made cautiously in the present study, as the reliability of the social information scale showed to be low ( $\alpha = .59$ ) compared to the other sustainability categories. Social information scores were all higher on the municipal websites investigated by Ortiz-Rodríguez et al. (2015) and Navarro-Galera et al. (2014) than the Dutch and Canadian annual reports. One example of social information disclosures is the service quality standards applied by the municipality, for which the Dutch municipality of 's-Hertogenbosch reported: "We willen de administratieve lastendruk voor burgers en bedrijven verlichten (...). Dit doen we door projecten en activiteiten gericht op de vermindering van administratieve lasten voor burgers en bedrijven. (...) Indicatoren: % inwoners dat het (helemaal) eens is met de stelling: 'de gemeente is alleen

geïnteresseerd in regels en formulieren'. % inwoners dat het (helemaal) eens is met de stelling: de gemeente heeft duidelijke regels en verordeningen" (Gemeente 's-Hertogenbosch, 2015, p. 47).

Finally, the fourth sub question addressed the possible relationship between country, population size, and environmental information disclosures. The results showed a significant negative relationship between the extent of environmental information disclosures and country. Dutch municipalities disclosed more environmental information disclosures than the Canadian municipalities. A higher masculinity score seems to lead to a lower extent of environmental information disclosures, a result in line with Peng et al. (2012). For environmental disclosures, population size was not a significant predictor, a result which does not align with results on sustainability disclosures in the present study and results by Tagesson et al. (2013). Furthermore, environmental information scores were all higher on the municipal websites investigated by Ortiz-Rodríguez et al. (2015) and Navarro-Galera et al. (2014) than the Dutch and Canadian annual reports in the present study. The Dutch municipalities did however disclose more environmental information in their annual reports than the Spanish municipalities, investigated by Alcaraz-Quiles et al., (2015), did on their websites. One example of environmental information disclosures is the statement made on the actions taken to increase savings via conservation or increased efficiency, for which the Dutch municipality of Utrecht reported: "In Utrecht besparen we energie en wekken we energie duurzaam op. Wat hebben we bereikt? 30% minder CO<sup>2</sup>, en 20% opwekking duurzame energie in 2020" (Gemeente Utrecht, 2015, p. 79).

The four sustainability categories were investigated separately in order to specify the answer to the main research question. The results showed that while country was not found to be a significant predictor for the extent of total sustainability disclosures, it was a significant predictor for general, social, and environmental information disclosures. Moreover, while population size was found to be a significant predictor for total sustainability disclosures, it was not found to be a significant predictor for general, social, and environmental information disclosures. Economic information however does align with the results on total sustainability disclosures. Based on the results for total sustainability disclosures and the results for the sustainability categories individually, it can therefore be concluded that population size is a significant predictor specifically for the total sustainability disclosures and the category economic information, and that country is a significant predictor specifically for the categories general, social, and environmental disclosures. The discrepancy in these results show that the sustainability categories nuance the results of the total sustainability, and are thus important to

also be investigated in future research, as opposed to the solely investigating the total of sustainability categories.

## 5. Limitations and further research

The purpose of the present study was to investigate the sustainability disclosures in Dutch and Canadian municipal annual reports. However, a number of limitations as well as practical implications must be noted. Firstly, in the present study, the municipal annual reports were analyzed for their *reported* sustainability. However, reported sustainability does not necessarily translate to actual sustainability performance. It is therefore possible that a municipality is more active in sustainability initiatives than its annual report suggests, for example by addressing sustainability issues in a separate report as Williams et al. (2011) suggest. It is outside the scope of this study to confirm the actual sustainability actions initiated by municipalities. Moreover, it is theoretically possible for municipalities to manipulate their sustainability disclosures in their annual report in order to appear more sustainable than they are in reality (greenwashing). Therefore, a comparison could be made between the reported and actual sustainability performance of municipalities in future research. For example, it could be investigated to what extent the actual and reported sustainability performance in different reporting mediums align.

The analyses of the municipal annual reports in this report focused on the presence of sustainability disclosures. However, this does not provide insights into the elaboration of each sustainability disclosure. Therefore, the analysis in the present study is limited to whether sustainability disclosures occur in annual reports or not. Future research could investigate the elaboration of sustainability disclosures in municipal annual reports, for example by crossculturally comparing the number of words reported on each of the sustainability categories.

Municipalities with a population size of only more than 100.000 have been included in the present study. This sampling was done in order to meet the criterion by Ortiz-Rodríguez et al., (2015), who stated that the minimum population size of municipalities should be 75.000 in order to perform reliable analysis on sustainability disclosures. While the present study has concluded the relationship between municipality size and extent of sustainability disclosures to be significant, this only applied to municipality of 100.000 inhabitants or more. Future research could include smaller municipalities in the sample to investigate whether this relationship applies to municipalities smaller than 100.000 inhabitants as well. Moreover, random sampling in future research could improve the ability to generalize results to all municipalities in the selected country. In addition, future research could also include age of the population to extend

the results by Alcaraz-Quiles et al. (2015), who found that population aged younger than 18 and older than 65 to be predictors of sustainability disclosures.

As the present study investigated annual reports of only municipalities, future research could compare the results of the present study to the extent of sustainability reporting by provincial and national government bodies. Such a comparison could provide further insights into the relationship between organizational size and extent of sustainability disclosures in the public sector, as well as whether the proximity between citizens and local governments (Ortiz-Rodríguez et al., 2015) influence their relationship.

The present study compared the annual reports of Dutch and Canadian municipalities. However, of the selected Canadian municipalities, only English annual reports were analyzed and French were not. Therefore, the sampling was not entirely consistent as a number of Canadian municipalities has been skipped. As a result, the sampling in the present study does not accurately represent all of the Canadian municipalities. The implications of the present study are therefore possibly more applicable to the English Canadian municipalities than the French Canadian municipalities. This limitation could be addressed in future research by also analyzing the French annual reports of Canadian municipalities, where the subtle differences between Anglophone Canadians and Francophone Canadians also need to be taken into consideration (Hofstede, 2001).

Canada and the Netherlands scored differently on the cultural dimensions masculinity and long term orientation, according to Hofstede (2001). In the present study, only the cultural dimension masculinity has been taken into consideration. This means that long term orientation could also have influenced the extent of sustainability reporting. Interestingly, previous research has not found a relationship between long term orientation and extent of sustainability reporting (Peng et al., 2012; Ringov & Zollo, 2007; Thanetsunthorn, 2015), as was found for masculinity. However, conclusions on the correlation with masculinity have to be made cautiously, as long term orientation could also affect the extent of sustainability reporting, and should be further addressed in future research. Moreover, while Hofstede's cultural dimensions have commonly been used as means to measure national culture, they have also been subject to criticism for lacking reliability and validity (Kang & Alcantara, 2011). Therefore, future research could utilize alternative measures of cultural dimensions.

Finally, while the GRI framework is globally the most accepted sustainability reporting framework (Bernhart, 2009), it has also been criticized in recent years (Dumay, Guthrie & Farneti, 2010). One of the main criticisms is that the framework is unable to indicate at what point an organization is either sustainable or unsustainable. In relation to the present study, the

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multidimensional design of the framework showed to limit the ability to draw conclusions on the broad concept of sustainability. Therefore, it is suggested that future research investigates sustainability by specifying results per sustainability category.

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**Appendix 1**List of the 25 largest Canadian municipalities sorted on population with a provided annual report for the year 2014.

No.	Municipality	Province	Population
01	Toronto	Ontario	2,615,060
02	Montreal	Quebec	1,649,519
03	Calgary	Alberta	1,096,833
04	Ottawa	Ontario	883,391
05	Edmonton	Alberta	812,201
06	Mississauga	Ontario	713,443
07	Winnipeg	Manitoba	663,617
08	Vancouver	British Columbia	603,502
09	Brampton	Ontario	523,911
10	Hamilton	Ontario	519,949
11	Surrey	British Columbia	468,251
12	Markham	Ontario	301,709
13	Burnaby	British Columbia	223,218
14	Saskatoon	Saskatchewan	222,189
15	Kitchener	Ontario	219,153
16	Windsor	Ontario	210,891
17	Regina	Saskatchewan	193,100
18	Richmond	British Columbia	190,473
19	Oakville	Ontario	182,520
20	Burlington	Ontario	175,779
21	Greater Sudbury	Ontario	160,274
22	Abbotsford	British Columbia	133,497
23	Cambridge	Ontario	126,748
24	Coquitlam	British Columbia	126,456
25	Kingston	Ontario	123,363

Appendix 2
List of the 25 largest Dutch municipalities sorted on population with a provided annual report for the year 2014.

No.	Municipality	Province	Population
01	Amsterdam	North Holland	810,909
02	Rotterdam	South Holland	618,467
03	The Hague	South Holland	508,592
04	Utrecht	Utrecht	328,577
05	Eindhoven	North Brabant	220,782
06	Tilburg	North Brabant	210,382
07	Groningen	Groningen	198,108
08	Almere	Flevoland	196,156
09	Breda	North Brabant	179,999
10	Nijmegen	Gelderland	168,499
11	Apeldoorn	Gelderland	157,535
12	Haarlem	North Holland	155,205
13	Amersfoort	Utrecht	150,943
14	Arnhem	Gelderland	150,817
15	Haarlemmermeer	North Holland	144,166
16	's-Hertogenbosch	North Brabant	143,745
17	Zoetermeer	South Holland	123,614
18	Zwolle	Overijssel	123,211
19	Maastricht	Limburg	122,331
20	Leiden	South Holland	121,199
21	Dordrecht	South Holland	118,716
22	Ede	Gelderland	110,657
23	Leeuwarden	Friesland	108,113
24	Emmen	Drenthe	108,003
25	Westland	South Holland	103,335

Appendix 3

Appendix 3		
Item#	Example Canadian	Example Dutch
(1) One example of general information disclosures is	The Canadian municipality of Toronto reported: "Together	The Dutch municipality of Eindhoven reported: "De
the statement on the	with my colleagues on City	transitie in het ruimtelijk
importance of sustainability	Council we will focus on	domein zorgt er voor dat
in the mayor's letter.	making these investments,	we meer integraal,
in the mayor 5 letter.	ensuring fiscal responsibility	gebiedsgericht en
	and sustainability and in	vraaggericht werken voor
	getting Toronto moving"	het realiseren van een
	(The City of Toronto, 2015, p.	duurzaam leef-, woon- en
	5).	werkgebied" (Gemeente
		Eindhoven, 2015, p. 5).
(34) One example of	The Canadian municipality	The Dutch municipality of
economic information	Edmonton reported: "The goal	Almere reported: "De
disclosures is the statement	of the City Council-approved	weerstandscapaciteit is het
on financial risk.	investment policy, as overseen	eigen vermogen van de
011 122 122 123 123 123 123 123 123 123 1	by the Investment Committee,	gemeente dat vrijgemaakt
	is to reserve the original	kan worden om de
	principal and to maximize	financiële effecten van
	investment returns within an	risico's op te vangen,
	acceptable prudent level of	zonder dat dit gevolgen
	risk" (The City of Edmonton,	heeft voor de continuïteit
	2015, p. 26).	van gemeentelijke taken.
	,	Hieronder vindt u de
		vergelijking van de
		geïdentificeerde risico's
		met de
		weerstandscapaciteit"
		(Gemeente Almere, 2015,
		p. 123).
(42) The social information disclosures contained a	The Canadian municipality of Saskatoon reported: "In 2014,	The Dutch municipality of 's-Hertogenbosch
question on the service	City Council, guided by citizen	reported: "We willen de
quality standards that were	and stakeholder feedback,	administratieve lastendruk
applied.	began to define the specific	voor burgers en bedrijven
off and	performance measures that we	verlichten door niet meer
	will use to track and monitor	naar de bekende weg te
	measuring our progress	vragen en door de
	towards achieving our	regeldruk te verminderen.
	Strategic Goals. From our	Dit doen we door
	dedication to improving our	projecten en activiteiten
	service, () these	gericht op de vermindering
	performance indicators will	van administratieve lasten
	measure our successes, and	voor burgers en bedrijven.
	align us with those targets that	() Indicatoren: %
	support our Strategic Goals"	inwoners dat het
	(The City of Saskatoon, 2015,	(helemaal) eens is met de
	p. 7).	stelling: 'de gemeente is
		alleen geïnteresseerd in
		regels en formulieren'. %

		inwoners dat het (helemaal) eens is met de stelling: de gemeente heeft duidelijke regels en verordeningen" (Gemeente 's- Hertogenbosch, 2015, p. 47).
(53) One example of environmental information disclosures is the statement	The Canadian municipality of Calgary reported: "In 2014, The City converted more than	The Dutch municipality of Utrecht reported: "Subdoelstelling 1.1: In
made on the actions taken to increase savings via conservation or increased efficiency.	2,500 street lights to LED in a program that will include 80,000 street lights by 2018. These LED fixtures significantly reduce electricity consumption and provide	Utrecht besparen we energie en wekken we energie duurzaam op. Wat hebben we bereikt? 30% minder CO², en 20% opwekking duurzame
	virtually no wasted or spilled light" (The City of Calgary, 2015, p. 26).	energie in 2020" (Gemeente Utrecht, 2015, p. 79).

#### Appendix 4

List of items on sustainability disclosures by Alcaraz-Quiles et al. (2015).

#### 1. General information

#### a. Strategy and analysis

- 1. Is a statement made by the Head of Government on the importance of sustainability for the LG and its strategy? [importance of sustainability/being sustainable in mayor's/city manager's letter]
- 2. Does this statement set out priorities, strategies or key factors for the short-medium term? [one of these three subjects stated for the next 5 years]
- 3. Does this statement address long-term trends relevant to priorities concerning sustainability? [Stated from 5 years onwards]
- 4. Does this statement include events, achievements and failures during the period in question? [Events, achievements or failures relating to sustainability during the last year]
- 5. Does this statement include goal-oriented performance perspectives? [Comparing actual performance to previously set target]
- 6. Does this statement include challenges and targets for the coming year and the forthcoming 3–5 years?

#### b. Organization profile

- 7. Does the public agencies offer a summary of their mission, functions, and responsibilities (e.g., services and regulations)? [Summary of all three]
- 8. Are different areas clearly defined? [Overview of departments within municipality]
- 9. Do LG officials have area-defined responsibilities? [Overview of head of the departments]
- 10. Is the situation of the regional seat of government stated? [Province and country stated on the cover or  $2^{nd}$  page of annual report?]
- 11. Is a statement made of the number of countries in which significant activities are carried out? [Are twin cities listed?]
- 12. Is the number of employees stated? [FTE] GRI 2.8
- 13. Have significant changes taken place in the LG structure or size? [In summary stated changes since last report] GRI 2.14
- 14. Has the LG been awarded prizes or other recognition during the period in question?

#### c. Information parameters

- 15. Is a statement made of the period corresponding to the information supplied? [fiscal/calender year stated?] GRI 2.11
- 16. Is the date of publication of this information stated? [exact date of annual report stated?]
- 17. Is the presentation frequency of this information stated? [jaarlijks/annual]
- 18. Is there a liaison person for questions concerning the information supplied? [contact person for questions on the annual report, specific person (no department)] GRI 2.10
- 19. Does the information supplied include dates of specific interest for suppliers and users? [Is there reporting on joint ventures or outsourced operations?] GRI 2.15
- 20. Is priority assigned to the aspects addressed in the information supplied? [Are there restatements such as mergers/acquisitions, change of base years/periods, measurements methods?] GRI 2.16

## d. Government, undertakings and stakeholder participation

- 21. Is there a given person or government body responsible for defining organization strategy? [Management/individual stated to be responsible for strategy?] GRI 3.6
- 22. Does the chief official hold any other public or private post? [Any other post for mayor?]

- 23. Do there exist works' committees or workers' representatives? [committees or appointed managers?] GRI 3.1
- 24. Are the stakeholders included in the information supplied? [Policies or systems to promote access to information by stakeholders?]  $\underline{GRI\ 3.9-3.12}$
- 25. Are stakeholder selection and identification criteria included in the information supplied? [Reported process for defining stakeholders and determining which groups to engage] GRI 3.9

#### 2. Economic indicators

- 26. Is an expenditure forecast/beneficiary population published? [forecast for expected expenses for at least one year]
- 27. Is a revenue forecast/beneficiary population published? [forecast for expected revenue for at least one year]
- 28. Are total revenues published? [total revenues for the reported year]
- 29. Is gross expenditure, detailed by type of payment, published? [expenditure on services, investments, taxes] GRI PA8
- 30. Is gross expenditure, detailed by financial classification, published? [expenditure sorted by amount] GRI PA9
- 31. Is capital expenditure, detailed by financial classification, published? [expenditure on capital, e.g. land, buildings, vehicles]
- 32. Is the policy on internal promotion published? [information on staff promotion policies]
- 33. Are staff training facilities published? [training facilities for employees]
- 34. Is a statement made of future financial risk? [financial risk of owned properties or investments]
- 35. Are data given on subsidies received? [data on any received subsidies for operating]
- 36. Is a report published on the expenditure forecast? [Forecast up to 5 years]
- 37. Does the latter include medium-term perspectives? [Forecast from 5 years and onwards]
- 38. Are the following key economic assumptions and forecast made public: GDP growth, employment, unemployment, inflation and rates of interest? [All 5 assumptions reported?]
- 39. Is a statement made on expenditure incurred in the area of social issues? [Total payroll and benefits (including wages, pension, other benefits] GRI EC5
- 40. Is information given on initial wage (when staff are hired)/local minimum wage?
- 41. Is information given on expenditure on local suppliers/total expenditure? [List all suppliers from which purchases in the reporting period represent 10% or more of total purchases in that period] GRI EC3/EC11

## 3. Social indicators

- 42. Is the offer of services made public? [Public agencies should identify service quality standards applied as well as give a description of the quality assurance systems and procedures] GRI PR8
- 43. Is a subsidies announcement made for business activities? [Information on subsidies for companies?]
- 44. Is a statement made on pensions obligations to employees? [Information on pension obligations for employees or policies on pensions]
- 45. Are grants offers to neighbourhood associations made public?
- 46. Are offers of public employment made public? [Public agencies should indicate whether/how policies, procedures, and monitoring systems also apply to sub-contractors] GRI HR3
- 47. Are grants offers to NGOs made public?

48. Are indicators of effectiveness and efficiency published? [the efficiency and effectiveness of services provided by the public agency, including the actions taken to achieve improvements in service delivery] GRI Administrative efficiency

#### 4. Environmental indicators

- 49. Is information published on the initiatives taken to alleviate the environmental impact of products and services?
- 50. Is the degree of reduction of the above impact stated?
- 51. Is a statement made of the direct consumption of energy obtained from primary sources?
- 52. Is a statement made of the consumption of intermediate energy?
- 53. Is a statement made of the actions taken to increase savings via conservation or increased efficiency?
- 54. Is information published on initiatives taken to promote products and services that are energy efficient or based on the use of renewable energies?
- 55. Is information published on reductions in energy consumption as a result of the above initiatives?
- 56. Is information published on the initiatives taken to reduce indirect energy consumption?
- 57. Is information published on reductions achieved by the above initiatives?
- 58. Is information published on the different sources of water supply employed, and the volume obtained from each source?
- 59. Is information published on the percentage and total volume of water that is recycled and reused in the community?
- 60. Is information published on the disposal of waste water by the community?
- 61. Is information published on the total and type of expenditure on environmental investment?