# Is Belgium lagging behind in sustainability management? An international empirical analysis

# ABSTRACT

The understanding of sustainability and the possibilities for sustainability actions depend heavily upon prevailing national business systems including social, cultural, political and economic factors within a country (Doh and Guay, 2006; Tempel and Walgenbach, 2007; Matten and Moon, 2008). However, few studies propose an international comparison of business practices in terms of sustainability management.

This paper proposes a comparison of sustainability management practices in large Belgian firms with an international average in order to position the current Belgian situation in a broader worldwide context, to highlight best practices and to identify areas for improvement with reference to the specificities of the Belgian context.

This research shows that large Belgian firms are often performing below an international average in terms of sustainability management. Potential explanations for the current status of sustainability management in Belgium are developed and future prospects as well as potential paths for improving the current practice are proposed.

Key words: sustainability management, international comparison, large firms

## **INTRODUCTION**

Although sustainability and corporate social responsibility (CSR) are internationally accepted concepts, their conception, development and implementation have been through mechanisms of national translation which have led to the burgeoning of a variety of practices (Maignan, Ferrell and Hult, 1999; Maignan and Ralston, 2002; Maignan and Ferrell, 2001, 2003; Egri et al., 2004; Chapple and Moon, 2005; Louche et al., 2009;). Some authors argue that the understanding of sustainability and the possibilities for sustainability actions depend heavily upon prevailing national business systems including social, cultural, political and economic factors within a country (Doh and Guay, 2006; Tempel and Walgenbach, 2007; Matten and Moon, 2008).

Sustainability (management) is a quite recent concept in the Belgian institutional environment and it is mainly promoted under the label "corporate social responsibility (CSR). In May 1997, a first legal framework for sustainable development was set up and, in April 2006, the federal government adopted a "Reference Framework for CSR" followed, in 2007, by the CSR action plan (Mazijn and Gouzee, 2007; Louche et al., 2009). In parallel to governmental initiatives, the number of actors, networks and platforms involved in sustainability has significantly increased leading to the multiplication of other initiatives over the last two decades.

However, some recent studies focusing on sustainability management in Belgian firms show that, while considerable improvements have been made over the last decade, sustainability management in Belgium offers great disparities and diversities (Louche et al., 2009; Business and Society Belgium, 2011).

This paper proposes a comparison of large Belgian firms' practices with an international average in order to position the current Belgian situation in a broader worldwide context, to highlight best practices and to identify areas for improvement with reference to the specificities of the Belgian context. The comparison of the Belgian data with the international average allows investigating whether the sustainability management practices in Belgium differ significantly from the practices in other economically developed countries. Moreover, the analysis reveals potentials for further improvements in the Belgian corporate practice of sustainability management. In order to do so, the data of the International Corporate

Sustainability Barometer (ICSB) will be used, which surveys the corporate sustainability management of large firms in eleven economically developed countries.

After an overview of the context for sustainability management in Belgium (Section 1) and a presentation of the methodology (Section 2), this paper compares Belgian firms' practices with the international average. Section 3 underlines some key observations and shows that large Belgian firms are often performing below the international average. In the discussion (section 4), potential explanations for the current status of sustainability management in Belgium are developed and future prospects as well as potential paths for improving the current practice are proposed.

### **1. THE BELGIAN CONTEXT**

## 1.1. General characteristics of Belgium

Belgium is a small country, centrally located in Western Europe, with a high population density and with a very specific and unique institutional structure (Louche et al., 2009). It is a federal state comprised of three communities (Flemish, French and German speaking) and three regions (Flanders, Wallonia and Brussels-Capital). Whereas the Federal Government is responsible for general matters that, for technical and economic reasons, require a uniform national treatment (e.g. control of air pollution from mobile sources or social security), the regions retain most responsibilities with regard to societal issues. For example, the regions determine environmental objectives as well as appropriate policy instruments and carry out enforcement (O'Brien, Carey and Høj, 2001; Louche et al., 2009).

Belgium is a highly industrialized country with an important transportation infrastructure. It is a small open economy that is characterized by a highly productive and skilled work force, a high GNP and high exports per capita. The Belgian business world consists of a series of large firms and a very high number of SMEs. As far as large firms are concerned, a set of large Belgian firms employ thousands of people worldwide, such as AB Inbev, the world's largest brewery group. However, the majority of the large companies operating in Belgium belong to foreign groups, such as Microsoft or Randstad.

### 1.2. Sustainability in Belgium

Sustainability management in Belgium is framed within a European and more specifically continental model of welfare state, where social considerations between social/societal/public partners are anchored in the law, contrary to the Anglo-Saxon model (Louche et al., 2009). This means that the government is inclined to build a (legal) frame for CSR and sustainability. This is reflected in the legal basis for a sustainable development strategy process that has been developed by the Federal Government. Especially, in May 1997, a first legal framework for sustainable development was set up and, in April 2006, the federal government adopted a "Reference Framework for CSR" followed, in 2007, by the CSR action plan (Mazijn and Gouzee, 2007; Louche et al., 2009). Appendix 1 summarizes key federal governmental actions related to Sustainable Development in Belgium. However, it is worth mentioning that, as Belgium is a complex country, initiatives about sustainability (management) are organized at both federal and regional level.

Next to governmental initiatives, the number of actors, networks and platforms involved in sustainability has significantly increased leading to the multiplication of initiatives over the last two decades. For example, Business and Society Belgium has emerged as one very influential network of companies over the last decade. Scientific research and education related to Sustainable Development have developed a lot within universities and business schools in Belgium (Louche et al., 2009). Different kinds of sustainability-related awards - like the Solidaritest or the DeWoot awards - have been created and an increasing number of industry councils are elaborating industry-level sustainability reports based on stakeholders' consultation (eg. FEBELFIN, the Belgian Financial Sector Federation).

Four major studies focusing on sustainability management in Belgian firms have been carried out over the last decade (Business & Society 2005; FEB 2007; Louche et al., 2009; Business and Society Belgium, 2011) in order to measure firms' awareness about sustainability issues in Belgium. Most of these studies are practitioner-oriented reports (Business & Society 2005; FEB 2007; Business and Society Belgium, 2011). The most recent ones (FEB 2007; Louche et al., 2009; Business and Society Belgium, 2011) focus on both large firms and SMEs and show that, while considerable improvements have been made over the last decade, sustainability management in Belgium offers great disparities and diversities (Louche et al., 2009; Business and Society Belgium, 2011).

The following paragraph underlines some key observations made in these three recent studies.

Firstly, the study carried out by the Belgian Enterprises Federation (FEB) in 2007 reveals that, while more than 90% of the 250 companies interviewed consider that the purpose of companies goes beyond profit-making and should also include social and environmental aspects, Belgian companies are still far from integrating CSR/sustainability issues at the strategic level. Communication related to sustainability and stakeholder engagement does not come out as a priority for Belgian companies. In addition, a majority of the companies do not engage on a regular basis with stakeholders. In case of engagement, the target groups are usually employees and customers. Engagement with not for profit organisations such as environmental and social organisations is almost inexistent (Louche et al., 2009). Finally, this study underlines that Belgian firms are aware of the existing international standards and guidelines but that a majority of the companies are not ready or willing to implement them mainly because (1) they lack information, (2) the firms do not perceive a direct relevance for their business and (3) they do not always have the resources (time and financial) to implement them.

Secondly, after an overview of the Belgian context and a summary of major studies about sustainability management in Belgium, Louche et al (2009) propose an international comparison of the practices of 16 large Belgian firms, all members of the BEL 20, based on data from Vigeo (a French rating agency). They observe that a large part of the Belgian firms score below average compared to their international peers in the six themes investigated (especially in terms of implementation) and that Belgian firms seem to be progressing more slowly than their peers from other countries.

Finally, the recent barometer published by Business and Society Belgium in 2011 states that sustainable development is now firmly rooted in companies in Belgium. Based on a sample of large and SMEs, this study identifies the drivers for sustainability (management), the influence of various stakeholders and what firms do with regard to key sustainability issues (environment, labour practices, consumer and customer issues, fair operating practices, community involvement, human rights and organizational governance) in Belgium. Even if they recognize that respondents are more hesitant on questions about tools, the authors argue that Belgian firms are gradually adopting specific management tools to implement the sustainability initiatives and making them reproducible. Nevertheless, only very limited details about the sustainability management tools are given. Mainly indirect and vague references to audits, codes of conduct, assessment/performance measurement systems as well as remuneration and incentive systems are made in the study.

Even if these studies provide interesting observations about sustainability management practices in Belgium, they offer only limited details about the integration and the implementation of sustainability practices in Belgium. In addition, the most recent ones include SMEs in their sample. Finally, except from the brief international comparison (solely at the European-level) proposed by Louche et al. (2009), none of these studies compare the practices in Belgium with firms' practices in other non-european countries. Nevertheless, (large) firms are now operating in a increasingly international context and the understanding of sustainability management as well as the possibilities for sustainability actions depend heavily upon prevailing national business systems including social, cultural, political and economic factors within a country (Doh and Guay, 2006; Campbell, 2007; Tempel and Walgenbach, 2007; Matten and Moon, 2008).

For all the above-mentioned reasons, an analysis of large Belgian firms' practices compared to an international average is relevant and will allow to position the current Belgian situation in a broader worldwide context, to highlight best practices and to identify areas for improvement with reference to the specificities of the Belgian context.

#### 2. METHODOLOGY

The data presented in this paper is based on the International Corporate Sustainability Barometer (ICSB) survey project. The ICSB aims at depicting and comparing the current state and progress of corporate sustainability management of large companies in different countries. Unlike other studies which focus on single sustainability related issues like environmental management, the EMAS regulation or corporate environmental strategies (Baumast 2000, Wätzold et al. 2001, Wagner 2002) it covers the full range of sustainability topics with a special focus on the companies' intention to pursue sustainability management, the integration of sustainability into the core business and the actual implementation of corporate sustainability. The survey was successfully conducted in 11 countries (Australia, Belgium, France, Germany, Great Britain, Hungary, Japan, South Korea, Spain, Switzerland, United States of America) from 4 different continents (Asia, Australia, Europe, North America).

#### 2.1. Data Collection

The ICSB was coordinated by the Centre for Sustainability Management at Leuphana University Luneburg in Germany. In every country a scientific institution organised the national surveys. In order to validate the international questionnaires, extensive pre-testing was conducted. For all countries which didn't use the English questionnaire, back-translations were organised to enable multi-country comparisons. In each country, the survey was directed to the sustainability managers of the country's largest firms by turnover. Subsidiaries were excluded from the list of contacted companies, in case they didn't manage sustainability issues independently from their parent company. In total, 2110 questionnaires were sent out in 11 different countries. The international survey yielded in 468 responses (22.2% response rate).

The Belgian Survey was carried out by the Accenture Chair for Sustainable Strategy at the HEC-Management School at the University of Liège. A population of 138 large firms operating in Belgium was selected on the basis of two sources. On the one hand, the largest 100 Belgian firms were identified via an official database (Belfirst), which gathers together key information about firms active in Belgium and in Luxembourg. A questionnaire was sent to 91 of these large firms, since subsidiaries needed to be excluded. On the other hand, as Business and Society has commonly been presented as the most influential Belgian network for sustainability management (Louche et al., 2009; Business and Society Belgium, 2011), the fifty biggest firms, which are members of this network, were isolated (revenues  $\geq 50$  Mio) and a questionnaire was sent to 47 of them, since these 47 companies fulfil the above mentioned criteria. After several follow-up contacts by telephone and e-mail, 22 large firms operating in Belgium completed the questionnaire. The response rate in Belgium equals thus to 16% (22 respondents out of a total of 138 firms).

## 2.2. Data analysis

The data was analysed using IBM SPSS 20, which allows building different subsamples for each participating country. To ensure that the companies from all investigated countries fulfil common criteria, all companies which ex post turned out not to fit in the sample (e.g. because they indicated that their revenue does not exceed 50 Mio  $\in$ ) were excluded from the analysis. Due to the high response rate, the ICSB-data meets the requirements set by Bartelett et al. (2001) for performing meaningfull statistical analyses. The response rate is furthermore within the standard deviation range Baruch & Holton (2008) identified for survey based articles on organizations published in refereed academic journals. Thus the data can be

assumed to build a representative picture of large companies in the surveyed countries.

# 2.3. Sample

Before analysing and contrasting the Belgian and the international data with regard to specific sustainability management issues, it is well worth comparing some key characteristics (company size, industry affiliation, share of non-domestic sales) of both samples.

Number of employees	Number of sampled	Percentage	Percentage
	firms (Belgium	(Belgium	(International
	sample)	sample)	average)
Up to 50	0	0	0,4
51 - 250	3	13,6	2,8
251 - 1,000	6	27,3	9,7
1,001 - 10,000	8	36,4	40,9
10,001 - 100,000	5	22,7	38,7
More than 100,000	0	0	7,5

## Table 1: Number of employees

Table 2: Revenues

Revenues	Number of sampled	Percentage	Percentage
	firms (Belgium sample)	(Belgian	(International
		sample)	average)
More than €50 and up to	8	36,4	13,9
€500 million			
More than €500 million and	5	22,7	17,1
up to €1,500 million			
More than €1,500 million	1	4,5	13,2
and up to €2,500 million			
More than €2,500 million	1	4,5	14,5
and up to €5,000 million			
More than €5,000 million	4	18,2	31,4
and up to €50,000 million			
More than €50,000 million	3	13,6	9,8

As tables 1 and 2 demonstrate, the Belgian sample is characterized by a set of **smaller firms** (in terms of employees and revenues) than the international average. Indeed, 13,6% of the sampled firms employed less than 250 employees in 2012 while this category of firms only represented 0,5% of the international average. In addition, while 40% of the Belgian firms have less than 1,000 employees, these firms only represent 12% of the international average. In the Belgian sub-sample, there are no firms with more than 100,000 employees while these

firms represented 8% of the international average. Finally, 59% of the firms surveyed in Belgium have revenues below  $\leq 1,500$  million while this category of firms only represents 31% of the firms in the international average.

Still, according to the definition of the European Commission  $(2003)^{1}$ , the Belgium companies belong to the group of large companies (turnover greater than  $\in$ 50m) and are thus comparable to the international dataset.

# Share of non-domestic sales

Consistent with the description of the Belgian economic landscape, a high dispersion is observed when considering/analysing the share of non-domestic sales of the Belgian subsample. Two extreme cases can be differentiated. On the one side, the sample is composed of (with) relatively small firms that are very nationally oriented. Indeed, in 38% of the sampled firms, non-domestic sales represent less than 20%. On the other side, the sample is composed of a series of very internationally oriented firms. In more than 30% of the sampled firms, non-domestic sales represent more than 80% of all sales.

Industry	Number of sampled	Percentage	Percentage
	firms (Belgium	(Belgian	(Internationa
	sample)	sample)	l average)
Industry, capital goods, building	4	18,2	22,6
Consumer goods, trade, logistics	5	22,7	21,6
Finance & services	10	45,5	32,1
Commodities, auxiliary material,	3	13,6	23,7
energy, chemical & pharmaceutical			
industry			

Table 3: Industry

Lastly, analysing the industry affiliation of the participating Belgian companies reveals that more than 45% of the sampled/surveyed firms belong to the finance or services industries. This observation is consistent with a panorama of the Belgian economy since these industries are particularly present in the Belgian business landscape (SPF Economie, P.M.E., Classe Moyenne et Energie, 2011).

# **3. FINDINGS**

<sup>&</sup>lt;sup>1</sup> The EU defines a large company as one with a headcount of more than 250 people; turnover greater than  $\notin$ 50m; or a balance sheet greater than  $\notin$ 43m.

In most of the issues tackled by the International Corporate Sustainability Barometer (ICSB), we observe that Belgian firms are positioned below the international average. Different potential reasons for this observation will be developed in this section as well as in the next section with reference to the specific Belgian context (see Section 1). Furthermore, the survey shows/reveals that Business and Society Belgium members are performing better than the other sampled firms on some specific points (such as stakeholders' engagement or variety of key societal issues managed). This observation underlines the role of networks in promoting sustainability within organizations and in supporting their approach through the diffusion of accurate knowledge and through the exchange of best practices among peers. However, this observation/finding is not valid for the integration issue and it is less obvious for the implementation of sustainability. Based on the analysis of the diverse studies and documents available as well as on our experience, we assume this observation can (partly) be explained by the fact that this network has put less emphasis on these issues up to now.

In order to facilitate the readers' understanding, the following analysis has been organized into three broad themes tackled in the ICSB:

(3.1) intention: Why do companies manage sustainability?

(3.2.), integration: How do companies integrate sustainability into their core business and their organisation?

(3.3.) implementation How is corporate sustainability operationalized?

## 3.1. Intention

• Influence of stakeholders

With reference to *internal stakeholders*, Belgian firms rate their influence below the international average. Linear regression models (Appendix 2) controlling for the effects of company size and using the country of origin as a dummy variable, revealed that these differences are biggest for the CSR/sustainability department (on a significance level of p<0.01) and for manufacturing (p<0.05) which are both valued as being less supportive in Belgium. All other internal stakeholders were rated as being less supportive in Belgium too, but no significant differences could be found. However, the most and least influential internal stakeholders are quite similar in Belgium and in the international average. The

CSR/sustainability and the public relation/communication units as well as the top management are perceived as key drivers for sustainability (implementation) while the finance and accounting/control units have the most restricted impact. These results are consistent with the observation made in Business and Society Belgium (2011).

The perceived influence of *external stakeholders* is also generally lower in Belgium than in the international average (see Figure 1). This observation is consistent with the findings from previous national studies (FEB, 2007; Louche et al., 2009) that/which state that stakeholder engagement does not come out as a priority for Belgian companies, neither for the large or the small enterprises, and that a majority of the companies do not engage on a regular basis with stakeholders. Testing the significance of these differences using further linear regression models (again controlling for company size), the biggest and most significant differences could be observed concerning the influence of scientific institutions, trade unions, rating agencies and competitors (p<0.01) and to smaller degree for supplier, banks, insurance companies, media/public, NGOs/environmental/social organisations and national authorities/legislators (p<0.05). For all other external stakeholders, no significant influence of the dummy variable "Belgium" could be found, while still their influence on corporate sustainability was evaluated as a little bit less supportive for the Belgian sub-sample (Appendix 3).



Figure 1: Influence of external stakeholders

Firstly, Figure 1 shows that the Belgian respondents particularly stress the influence of NGOs (1), the community (2), the investors and providers of capital (3), the media (4) and the international authorities (like the UN).

Secondly, consumers and customers, consumers' organisations as well as scientific institutions have a real/tangible/considerable influence but their impact is more limited than the impact of the four categories of external stakeholders presented above.

Thirdly, competitors, suppliers, trade unions and banks are observed as the least influential external stakeholders. This means that the influence of some key actors belonging to the firms' competitive environment are particularly neglected as far as sustainability management is concerned. When comparing the national average with the international average, we note that this observation is particularly true in Belgium. This shows that, even if more and more firms consider sustainability issues as a source of opportunity and innovation for new products and services (Business and Society Belgium, 2011) and even if there are some signs which indicate that Belgian firms perceive a relationship between sustainability and creating a competitive advantage (e.g. the influence of consumers and customers), they do not clearly and completely link sustainability management to competitive advantage (eg. opportunity to gain an advantage over their competitors). Finally, rating agencies are perceived as less influential in Belgium (one of the lowest scores).

• Issues managed

Even if they are less closely managed, top sustainability issues managed by Belgian firms are similar to those observed in the international average and the survey shows they are generally aligned with stakeholders' requirements.

## o Environmental issues

As far as environmental issues are concerned, energy consumption as well as emissions and waste are closely managed by Belgian companies while biodiversity is less commonly considered. These observations are similar to the international average and consistent with the findings of Business and Society Belgium (2011).

It is worth noting that transport is the third most important issue stressed by the Belgian respondents while this challenge is the second last one in the international average. Consequently, Belgian companies manage transport issues more closely than their international peers. The central location of Belgium in Europe and its important transportation

infrastructure can explain this observation. In contrast, linear regression analysis reveales that material consumption (p<0.01) and emissions/waste/waste water (p<0.05) are managed managed significantly less closely in Belgium than by the international average (Appendix 4).

# o Social issues

Concerning the investigated social issues, no significant differences could be found between the international sample and the Belgian sub-sample. Key social issues are prioritized similarly than in the international average. Internal social issues are more closely managed (safety and health, workplace/employment and training) than external ones (eg. child labour). Actually, many external social issue, like child labour and consumer protection and some internal social issues such as the right to collective bargaining are strongly regulated by Belgian laws. However, based on our findings, the legal context cannot explain completely why these issues are less closely managed. Indeed, safety and health are observed as the most important issue to be managed by Belgian firms while they are highly regulated in Belgium too. In addition, we observe a great importance of diversity issues in Belgium companies. This can be explained by related scientific activities and legislation. Similarly, Business and Society Belgium (2011) found an increasing corporate interest in diversity issues over the last two years.

# 3.1.3. Prohibiting factors for sustainability management

The lack of financial resources is presented as the most inhibiting factor in Belgium. This factor has also been highlighted as a top-prohibiting factor in the international comparison. Nevertheless, the lack of personnel capacities (lack of knowledge? lack of time?) has been underlined further in the international average. The smaller size of the firms belonging to the Belgian sample can explain why they stress a bit more the lack of financial resources.

# 3.2. Integration

• Connection with core business

When considering how large firms connect sustainability with their core business, the Belgian observations are more dispersed than the international average.

Compared to the international average, Figure 2 shows that a particularly high percentage of Belgian firms <u>connect sustainability to most segments</u> of their core business or even connect sustainability, in a consistent manner, <u>to all segments</u> of their core business (integration).



Figure 2: Connection with core business

This observation shows that a relatively large proportion of Belgian firms tend to connect sustainability issues to a wide range of segments of their core business more frequently than the international average and that they are thus particularly interested in finding opportunities to link sustainability with their core business. Indeed, based on previous studies and on our experience, we observe that some supportive networks promote heavily the materiality principles. Figure 2 shows however that sustainability practices in Belgium (and how they are integrated in core business) are uneven and diverse.

• Involvement of other departments for sustainability measurement

Consistent with the international average and recent Belgian surveys, the CSR department commonly holds the main responsibility for sustainability management. Other departments like the public relations/communication department or the top management are commonly involved. Consistent with previous literature (Zvezdov et al. 2010; Ballou et al. 2012), we

observe that the finance and accounting/control departments are the organizational structures/units that are the least involved in sustainability management although their expertise could be very judicious to improve these aspects (Zvezdov et al. 2010; Ballou et al. 2012).

This observation challenges a bit the findings of the recent study carried out by Business and Society Belgium (2011, p. 3), which underlines that "sustainability tends to be integrated into the practices of all companies' departments, from the design of products and services to after-sales service".

# **3.3 Implementation**

• Stakeholders' management

Consistent with the international average, we observe that stakeholders' relations are mainly managed by informing these actors (via the websites, for example) or, to a lesser extent, by collecting their advice for decision-making as well as by collaborating on specific projects. There is a very limited delegation of decision-making authority.

• Tools for sustainability management (see Appendix 5)

As for most of the issues tackled in the survey, the average awareness and application of sustainability management tools are below average in Belgium (average number of applied tools in Belgium: 17.95; international average: 27.17). The effect of the dummy variable "Belgium" is highly significant (p<0.05), even if we control for the size of companies (see Appendix 6). Furthermore, we observe a strong link between the awareness of tools and their application.

Especially, significant differences between the national and the international averages have been identified when considering tools including the term "sustainability". Indeed, the term CSR or a direct reference to environmental or social issues is more common in Belgium.

In addition, (internally-oriented) accounting and control tools are less known and less applied in Belgium (eg. eco-budgeting, sustainability accounting, environmental accounting, social accounting, ABC analysis, environmental cost accounting, material and energy flow accounting, social cost accounting, eco-investment accounting). Based on various documents and our own experience, we identify two major reasons for this observation. On the one hand, until now, the key supporting actors in Belgium (scientific community, networks, platforms and governmental authorities) have not promoted these tools a lot (via conferences, press articles, practitioners' reports or specific workshops). On the other hand, these tools are more technical tools that require some knowledge and expertise (in the accounting area, for example) that the respondents (sustainability managers) do not necessarily have and thus require the support of additional actors (e.g. from the accounting department) which are usually not involved in the firms' sustainability management (section 3.1).

Consistent with one of the above-mentioned arguments, we also observe a particularly high awareness of a limited number of specific sustainability management tools promoted by key supporting actors (eg. social audits, sustainability supply chain management, stakeholders' dialogue or LCA), imposed by the Belgian legislation (e.g. social report) or promoted by famous standards (eg. environmental management systems or social management systems).

• International standards

As shown in Figure 3, the awareness and application of international standards is generally more limited in Belgium than the international average. The fact that the Belgian sample is characterized by a set of **smaller firms** (in terms of employees and revenues) than the international average can be a potential explanation for this observation. Consequently, the differences between the international and the Belgian sample, concerning the number of known and an applied sustainability related standards, can only be found to be significant if "company size" is not used as a control variable.

Refining the scope of the analysis to a standard-specific basis, more detailed observations canbe detected. A multinomial logistic regression reveals that the application of ISO 14001ff is indeed significantly lower in Belgian companies (Appendix 7). In contrast, , the SA 8000 and the EFQM standards are less known on average but they are applied more commonly in Belgium than in the international average. Actually, one possible reason for this might be that key actors in Belgium have particularly promoted these two international standards over the last years. The awareness of the ISO 26000 standard in Belgium is similar to the international average.

In Belgium, the most frequently known standards are ISO 14001, ISO 9000, ISO 26000 and the GRI guidelines. Consistent with Business and Society Belgium (2011), the most applied standards are ISO 14001, ISO 9000 and the GRI guidelines. Other standards like AA1000, OSHAS or Sigma guidelines are not known by a large proportion of the Belgian firms and are thus not applied a lot/frequently applied.



Figure 3: Awareness and application of international standards

When considering international standards, it is worth mentioning that we observe a less clear link between awareness and application than the one we observe for sustainability management tools. For example, standards like the ISO 26000; the EMAS or the OECD Guidelines are well known but not often applied in Belgium. Louche et al (2009, p. 135) provide one potential explanation for this observation. "Companies are aware of the existing international standards and guidelines but a majority are not ready or willing to use/implement them mainly because they lack information, the firms do not perceive a direct relevance for their business and they do not always have the resources (time and financial) to implement them."

To conclude our analysis, it worth mentioning that, with regard to earlier national studies (Business and Society Belgium, 2005; Business and Society Belgium, 2011), the current survey confirms that improvements in managing and measuring environmental and social impacts have been made in Belgium over the last years. Belgium is nevertheless generally below the international average on most of the issues included in the International Corporate

Sustainability Barometer. Some potential explanations for this observation can be that other countries have started earlier and/or that they have evolved more rapidly.

# 4. DISCUSSIONS AND RECOMMENDATIONS

The International Corporate Sustainability Barometer (ICSB) confirms that sustainability management is a living and evolving concept in Belgium. However, as Louche et al. (2009) suggest, it (also) shows that Belgian practices are commonly below the international average and sometimes uneven.

This chapter highlights some key observations.

Firstly, the (perceived) influence of stakeholders is lower in Belgium than in the international average. In particular, the influence of key actors belonging to the firms' competitive environment (such as competitors, suppliers, trade unions or banks) is particularly neglected as far as sustainability management is concerned. This shows that they do not clearly and completely link sustainability management to competitive advantage.

Secondly, even if they are less closely managed, top societal issues managed by Belgian firms are similar to those observed in the international average. Nevertheless, "transport" is more closely managed in Belgium. The central location of Belgium in Europe and its important transportation infrastructure can explain this observation.

Thirdly, even if integration within core business is uneven and diverse, a particularly high percentage of Belgian firms connect sustainability to most segments of their core business or even connect sustainability consistently to all the segments of their core business (real integration). This observation shows that Belgian firms are thus particularly interested in finding opportunities to link sustainability with their core business.

Fourthly, the awareness and application of sustainability management tools as well as international standards are below average in Belgium. Especially, integrative sustainability management tools (in contrast to environmental or social management tools) referring explicitly to the concept of "sustainability" as well as specific accounting and control tools are less frequently known and applied in Belgium.

Finally, with regard to earlier national studies (Business and Society Belgium, 2005; Business and Society Belgium, 2011), the current survey confirms that improvements in managing and measuring environmental and social impacts have been made in Belgium over the last years. Belgium is nevertheless generally below the international average on most of the issues

included in the International Corporate Sustainability Barometer because other countries have started earlier and/or have evolved more rapidly.

Different potential explanations have been proposed in the analysis.

Firstly, the *smaller size* of the companies composing the Belgian sample can partly explain why Belgium is mainly below the average in terms of sustainability management as well as some of the specific observations summarized in the preceding paragraph. Previous studies (Brammer and Pavelin 2006; Business and Society Belgium, 2011; Gallo and Christensen 2011) underline that larger companies tend to have better social and environmental performances, have a higher degree of formalisation of their sustainability initiatives than smaller structures/firms and are more likely to introduce control mechanisms for sustainability.

Secondly, in this paper, we have stressed the particularly *strong influence of crucial supportive actors* (networks, platforms, scientific institutions) on sustainability management practices in Belgium. Sustainability management in Belgium is thus strongly impacted by the knowledge they diffuse.

Thirdly, we could imagine that, as the top management often drives sustainability, some of the managers in the Belgian entities/subsidiaries dispose of less information about sustainability management practices and tools.

Fourthly, people from the *finance and accounting/control* areas are the least involved in sustainability management although their expertise could be very judicious to improve these aspects (Ballou et al., 2012).

Fifthly, sustainability management *takes time* (York, 2009). To tend/develop/move towards sustainability, firms need to modify and, ideally, rethink the way they do business (new ways of purchasing, producing, distributing, communicating, etc.). As it is a relatively new concept in Belgium compared to some other countries (like Japan, Germany or the UK), it is quite unsurprising that Belgian firms are not as far as some of their international counterparts.

Based on these observations, several paths for improving sustainability management practices in Belgium could be investigated.

Firstly, even if it has improved a lot over the last years, scientific institutions and academic research centres could engage more with businesses (networks) and diffuse knowledge about sustainability management tools.

Secondly, a promotion of sustainability management tools (especially accounting, and control

tools) by key supporting actors (like networks, platforms or government) is essential to improve sustainability management practices in Belgium.

Thirdly, the involvement of people from the finance and accounting/control areas would also be crucial to improve sustainability management and measurement in Belgian firms (Zvezdov et al. 2010; Ballou et al., 2012). Indeed, one reason why some sustainability management tools (e.g. sustainability accounting or social cost accounting) are not applied is that they need to be applied in the departments other than the CSR-Department (e.g. Accounting). Some of them are very technical and they require knowledge and expertise that sustainability managers do not necessarily have. Since the managers in these departments are not involved and maybe don't even care about sustainability, these tools are not applied. An additional reason for the relatively low rates of application would thus be that the managers of these departements are not informed about sustainability issues. Closer collaborations with national and regional organisations representing these actors (like the IEC) could be a potential starting point.

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# Appendix 1: Key governmental actions in Belgium (from Mazijn et al., 2007)

Legal framework for sustainable development through the adoption of the Act of 5 May 1997

From 1997 to end 2006, the Federal Council for Sustainable Development published some 130 advises on climate change, product standards, biodiversity, corporate social responsibilities, natural resources, energy, development cooperation, etc.

The FPB has published and communicated three federal reports, the first in 1999, the second in 2003 and the third in 2005.

The government has adopted two sustainable development plans, the 2000-2004 Plan and the 2004-2008 Plan. Nowadays, the preparations for the Plan 2009-2012 have started for an adoption by the federal government in autumn 2008.

An evaluation of the first federal plan showed that of the 622 measures identified in the plan, 71% had been followed up (mainly concerning energy, transport, ozone and climate), 14% had had no follow up (e.g. measures concerning competences that had been transferred in the meantime to other government levels than the federal ones) and no information was available for the remaining 15%.

On 28 April 2006 adoption by the Council of Ministers of the Belgian CSR Reference Framework followed by the Federal CSR Action plan on 25 October 2006.

Appendix 2: Linear regression models: Influence of internal stakeholders in Belgium and in
the international sample on the implementation of corporate sustainability

	Belg	ium	Company Size		Model Fit	Multicollineari ty
Dep. Variable: Internal Stakeh.	Stand. B	Sign.	Stand. B	Sign.	Adj. R²	VIF
Top mgmt.	-0.034	0.469	0.053	0.263	0.000	1.008
Procurement / purchasing	-0.037	0.438	0.120	0.011	0.012	1.006
R&D	-0.101	0.059	0.113	0.035	0.018	1.002
Manufacturing	-0.111	0.045	0.090	0.104	0.014	1.000
Logistics / distribution	-0.028	0.587	0.106	0.044	0.007	1.003
Quality control	-0.056	0.275	-0.012	0.820	-0.002	1.010
Marketing	-0.076	0.120	-0.015	0.757	0.001	1.009
PR / communications	-0.020	0.668	0.042	0.371	-0.002	1.007

Investor	0.017	0 747	0.044	0.401	0.002	1.004
Relations	-0.017	0.747	0.044	0.401	-0.005	1.004
HR	-0.019	0.687	0.062	0.190	0.000	1.008
Legal dep. / compliance	-0.052	0.281	-0.010	0.830	-0.002	1.004
Finance	-0.051	0.296	0.041	0.400	0.000	1.009
Financal &						
mgmt.	-0.023	0.627	-0.010	0.840	-0.004	1.008
accounting						
Strategic	-0.066	0.174	-0.015	0.758	0.000	1.011
planning						
CSR /	-0.157	0.001	0.044	0.358	0.023	1.009
sustainability						
Employee council	-0.094	0.077	0.008	0.879	0.003	1.001

Sample size (n) ranging from 325 to 460.

"Belgium" and "Company Size" are both operationalized as dummy variables. The effects of belonging to the Belgian sub-sample respectively to the group of large companies (revenue > 2.500 Mio €) are tested.

The small values for the adjusted R square can be explained by the huge variantions among the large group of non-Belgian companies.

**Appendix 3:** Linerar regressions models: Influence of external stakeholders in Belgium and in the international sample on the implementation of corporate sustainability

	Belg	jium	Compa	ny Size	Model Fit	Multicollinearity
External Stakeh.	Stand. B	Sign.	Stand. B	Sign.	Adj. R²	VIF
Suppliers	-0.111	0.019	0.042	0.378	0.011	1.008
Consumers / end						
users (B2C	-0.055	0.273	0.077	0.128	0.004	1.003
business)						
(Intermediary)						
vendors /						
business	-0.068	0.158	0.081	0.095	0.007	1.006
customers (B2B						
business)						
Competitors	-0.162	0.001	0.130	0.005	0.042	1.007
Investors/owners						
/ shareholders /	-0.037	0.439	0.091	0.037	0.007	1.004
coop. members						
Banks	-0.106	0.031	0.075	0 120	0.013	1.006
(creditors)	-0.100	0.031	0.075	0.129	0.015	1.000

Rating agencies	-0.147	0.002	0.210	0.000	0.063	1.002
Insurance	-0.118	0.010	0.055	0.266	0.013	1 003
companies	-0.110	0.019	0.055	0.200	0.015	1.005
Community	-0.042	0.383	0.048	0.318	0.000	1.008
Media / Public	-0.120	0.011	0.116	0.014	0.026	1.006
NGOs / env. /						
SOC.	-0.095	0.046	0.099	0.038	0.016	1.006
organisations						
Consumer	0.060	0 168	0.082	0.104	0.007	1.001
organisations	-0.009	0.100	0.082	0.104	0.007	1.001
Trade	0.070	0 152	0.020	0.557	0.001	1 006
associations	-0.070	0.152	-0.027	0.557	0.001	1.000
Trade unions	-0.146	0.003	0.090	0.067	0.026	1.003
National						
authorities /	-0.112	0.019	0.129	0.007	0.027	1.005
legislators						
International	0.073	0 134	0.126	0.000	0.018	1.004
authorities	-0.073	0.134	0.120	0.009	0.018	1.004
Scientific	0.573	0.000	0.066	0.450	0.013	1.004
institutions	-0.373	0.009	-0.000	0.430	0.015	1.004

Dependent variable: Influence of internal stakeholders on the implementation of corporate sustainability.

Sample size (n) ranging from 393 to 450.

"Belgium" and "Company Size" are both operationalized as dummy variables. The effects of belonging to the Belgian sub-sample respectively to the group of large firms (revenue > 2.500 Mio €) are tested.

The small values for the adjusted R square can be explained by the huge variantions among the large group of non-Belgian firms.

**Appendix 4:** Linerar regressions models: Degree to which environemtal issues are managed in Belgium and in the international sample

	Belg	jium	Company Size		Model Fit	Multicollinearity
Env. Issue	Stand. B	Sign.	Stand. B	Sign.	Adj. R <sup>2</sup>	VIF
Energy consumption	-0.092	0.050	0.052	0.263	0.008	1.006
Water consumption	-0.075	0.110	0.012	0.803	0.002	1.006
Material consumption	-0.162	0.000	0.022	0.637	0.023	1.006
Emissions / waste water / waste	-0.113	0.015	0.068	0.143	0.014	1.006

Biodiversity	-0.021	0.645	0.119	0.011	0.011	1.006
Transport	0.017	0.724	0.083	0.079	0.003	1.006

Dependent variable: Degree to which specific environmental issues are managed Sample size (n) ranging from 446 to 463.

"Belgium" and "Company Size" are both operationalized as dummy variables. The effects of belonging to the Belgian sub-sample respectively to the group of large firms (revenue > 2.500 Mio €) are tested.

The small values for the adjusted R square can be explained by the huge variantions among the large group of non-Belgian firms.

100,0%							
80,0%							
60,0%							
40,0%							
20,0%							
0,0%	Environmental management system (EMS) Guality management system (QMS) Sustainable Supply Chain Management Environmental information system Social report Incentive system Social report Incentive system Green Purchasing Environmental point Environmental report Sustainability report Environmental statement Further education Environmental statement Further education Environmental statement Further education Environmental statement Social audit Product Carbon Footprint (PCF) Environmental statement Social audit Product Carbon Footprint (PCF) Environmental statement Social audit Social audit Product Carbon Footprint (PCF) Environmental statement Social indicators Social indic						
	■ International ■ Belgium						

Appendix 5: Awareness of sustainability management tools – Comparison of the national average with the international average

**Appendix 6:** Linear regression analysis on the application of sustainability management tools in Belgium and in the international sample

	Belg	jium	Company Size		Model Fit	Multicollinearity	
Dep. Variable	Stand. B	Sign.	Stand. B	Sign.	Adj. R <sup>2</sup>	VIF	
Number of	0.106	06 0.020	0.226	0.000	0.062	1 008	
applied tools	-0.100	0.020	0.220	0.000	0.002	1.000	

Dependent variable: Number of applied tools.

n = 463

"Belgium" and "Company Size" are both operationalized as dummy variables. The effects of belonging to the Belgian sub-sample respectively to the group of large firms (revenue > 2.500 Mio €) are tested.

The small value for the adjusted R square can be explained by the huge variantions among the large group of non-Belgian firms.

**Appendix 7**: Multinomial logistic regression models: The application of sustainability related standards in Belgium and in the international sample

	Belgium		Company Size		Nagelkerke
Standard	Stand. B	Sign.	Stand. B	Sign.	Pseudo R <sup>2</sup>
ISO 14001	-0.969	0.029	-0.502	0.018	0.034
ISO 9000	-0.518	0.241	-0.097	0.626	0.005
ISO 26000	-0.023	0.971	-0.614	0.025	0.020
EMAS	-0.161	0.802	-0.591	0.023	0.020
OECD Guidelines	-0.606	0.430	-1.374	0.000	0.095
GRI Guidelines	-0.536	0.251	-0.983	0.000	0.081
UN Global	0.608	0.228	1 210	0.000	0.107
Compact	-0.098	0.228	-1.217	0.000	0.107
EFQM (inkl. S-	0 694	0.230	-0 393	0 201	0.011
EFQM)	0.074	0.230	-0.373	0.201	0.011
AA 1000	-0.892	0.392	-1.198	0.000	0.065
OHSAS 18001 / BS	-0.817	0 1/18	-0.468	0.019	0.025
8800	-0.017	0.140	-0.408	0.017	0.025
SA 8000	0.535	0.410	-0.681	0.044	0.021
Sigma Guidelines	-1.296	0.211	-0.734	0.007	0.038

Dependent variable: Application of specific sustainability related standards Sample size: n = 468

"Belgium" and "Company Size" are both operationalized as dummy variables. The effects of belonging to the Belgian sub-sample respectively to the group of relatively small firms (revenue < 2.500 Mio €) are tested.

The small values for the adjusted R square can be explained by the huge variantions among the large group of non-Belgian firms.