

BENCHMARKING SUSTAINABILITY BETWEEN HIGHER EDUCATION INSTITUTES

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LIST OF ABBREVIATIONS

- 3P's People Profit Planet
- AISHE Auditing Instrument for Sustainability in Higher Education
- CERES Coalition for Environmentally Responsible Economies
- DHO Duurzaam Hoger Onderwijs
- DMA Disclosure on Management Approach
- EMS Environmental Management System
- GASU Graphical Assessment of Sustainability in Universities
- GRI Global Reporting Initiative
- HEI Higher education institution
- ISO International Organisation for Standardisation
- LIFE Learning In Future Environments
- LNE Environment, Nature and Energy department
- PDCA Plan-Do-Act-Check
- SDG Sustainable Development Goals
- STARS Sustainability Tracking, Assessment & Rating System
- ULSF University Leaders for Sustainable Future
- UN United Nations
- UNEP United Nations Environment Programme
- UniSAF-NL University Sustainability Assessment Framework

ABSTRACT

As our population keeps rising and the boundaries of our ecosystem become more and more transgressed, a clear call for a transition towards sustainable development is heard. Higher education institutions (HEIs) play a crucial part in this transition since they have a significant role in the formation of the skills and mindset of youngsters. One way for institutions to communicate about their sustainability efforts towards their stakeholders is through the use of a sustainability report. In order to aid in the preparation of such a report, a wide array of reporting tools are available, ranging from general tools to tools specifically designed for HEIs. For this thesis, two general tools and four tools specifically designed for HEIs were analysed and compared in terms of strengths and limitations. Next, interviews were conducted with contacts from the five Flemish universities in order to evaluate three aspects related to sustainability: (1) the current sustainability situation and their current status on sustainability reporting, (2) the attitude towards benchmarking sustainability and (3) the value of sustainability (reporting) at their institution. Additionally, an interview was conducted with Ecocampus in order to investigate the view and role of the government towards sustainable HEIs. The outcome of the thesis showed that sustainability is still in its early stages in Flemish universities as only two universities currently have a sustainability report and three out of five have a Green Office. The main reasons for reporting were that the report could be used to (1) track progress and policy implementation, (2) give advice to the board of directors and (3) use it as a communication tool. Furthermore, none of the tools that were considered in this thesis fulfilled all the requirements universities have in order to do sustainability reporting. The tools that came closest to meet the requirements were GRI and STARS. Therefore, it might be useful for future research to create an extension for these tools. It was also apparent that even though universities were not against benchmarking, it was too early to introduce such a project in Flanders. The main reasons for this were a lack of funds and workforce. The Flemish universities would need to increase their efforts for sustainability reporting before a benchmarking project could take place.

SAMENVATTING

Nu de populatiegroei blijft toenemen en de grenzen van onze ecosystemen steeds meer en meer overschreden worden, is er een duidelijke roep voor een transitie naar duurzame ontwikkeling hoorbaar. Hogeronderwijsinstellingen (HEIs) spelen een cruciale rol in deze transitie gezien ze een belangrijke rol hebben in de vorming van jongeren hun vaardigheden en mentaliteit. Een manier voor instellingen om te communiceren over hun duurzaamheidsinspanningen naar hun stakeholders toe is via een duurzaamheidsrapport. Om het rapporteerproces te vereenvoudigen is er een scala aan rapporteringstools beschikbaar; gaande van algemene rapporteringstools tot tools die specifiek voor hogeronderwijsinstellingen werden gemaakt. Voor deze thesis werden er twee algemene rapporteringtools en vier rapporteringtools die specifiek voor HEIs werden gemaakt, geanalyseerd en vergeleken op gebied van sterktes en zwaktes. Vervolgens werden er vijf Vlaamse universiteiten geïnterviewd om drie verschillende duurzaamheidsaspecten te onderzoeken: (1) hoe de huidige situatie omtrent duurzaamheid(rapportering) is, (2) wat de attitude is naar benchmarking van duurzaamheid en (3) welke waarde duurzaamheid(rapportering) heeft in hun universiteit. Bijkomend werd er een interview afgenomen met Ecocampus om te onderzoeken wat de rol en de kijk is van de overheid op duurzaamheid aan universiteiten. De resultaten van dit werk tonen dat duurzaamheid(rapportering) nog in zijn kinderschoenen staat in de Vlaamse universiteiten. Dit uit zich onder andere in het feit dat er maar twee universiteiten zijn met een duurzaamheidsrapport en drie universiteiten vrij recentelijk een Green Office hebben. De voornaamste redenen waarom men positief stond tegenover duurzaamheidsrapportering waren om (1) vooruitgang en beleidsvorming in kaart brengen, (2) de raad van bestuur adviseren en (3) het rapport als communicatiemiddel te gebruiken. Verder bleek het ook dat geen van de geanalyseerde rapportagetools voldeed aan alle eisen die universiteiten hebben als ze aan duurzaamheidsrapportering doen. De rapportagetools die het dichtstbij kwamen waren GRI en STARS. Daarom werd er een voorstel gedaan om een uitbreiding op deze tools te maken zodat ze dan wel aan alle eisen zouden voldoen. Verder viel het ook op de Vlaamse universiteiten niet per se tegen benchmarking waren. Ze gaven echter wel aan dat momenteel nog te vroeg is voor zo een project. De hoofdreden hiervoor is een tekort aan middelen en personeel. Vooraleer men aan zo een benchmarking project zou kunnen starten, zouden de Vlaamse Universiteiten hun inspanningen omtrent duurzaamheidsrapportering moeten verhogen.

INTRODUCTION

As we entered the 21st century, one of the most prominent problems we face is the changing climate due to human activities. In 2005, the joint Science Academies' statement on climate change called for immediate action to reduce emissions and take appropriate measurements. The statement noted that when we fail to do so, the effects and impact on the ecosystem would be felt throughout the entire 21st century and beyond. In his book Collapse (2005), Jared Diamond described how in history, environmental problems contributed to the collapse of entire societies. According to Diamond, one of the most important factors contributing to collapsing societies was overpopulation relative to the carrying capacity of the environment. In 2009, Rockström *et al.* introduced the Planetary Boundary Framework as an attempt to define the safe operating boundaries for humanity without evoking deleterious environmental effects. In 2015, Steffen *et al.* published an update of the Planetary Boundaries and estimated the current values for the boundaries. The framework currently entails the following nine boundaries that are clearly influenced by human activity: biosphere integrity (functional diversity and genetic diversity), climate change, novel entities, stratospheric ozone depletion, atmospheric aerosol loading, ocean acidification, biochemical flows (phosphorus and nitrogen), freshwater use and land-system change (Rockström *et al.*, 2009; Steffen *et al.*, 2015).

Human activities already exceeded the safe operating margins for genetic diversity (measured as extinction rate) and biochemical flows (both phosphorus and nitrogen) (Steffen *et al.*, 2015). Land-system change and climate change were in the zone of uncertainty whether or not human activities already exceeded the margins and thus impose an increasing risk (Steffen *et al.*, 2015). If one or more of these planetary boundaries are substantially and persistently transgressed, the Earth system might be pushed into a new state that is "*less likely to be hospitable to the development of human societies*" (Steffen *et al.*, 2015). Sustainable development can play a key role to avoid transgressing these boundaries without compromising our high quality standard of life. Generally, sustainable development is defined as "*development which meets the needs of current generations without compromising the ability of future generations to meet their own needs*" (The Brundtland Report , 1987). A decade later, Elkington introduced the 'Triple Bottom Line' concept that could be used to measure corporate sustainability. The concept consists out of a social, environmental and financial dimension, often referred to as People, Profit and Planet (3P's) (Slaper & Hall, 2011). Since the introduction of this concept, many companies have tried to measure their sustainability performance against the three P's (Slaper & Hall, 2011).

Nevertheless, sustainable development cannot be achieved through technological advances, legislative measures and policy frameworks alone (Wals, 2012). These measures need to go hand in hand with a change in people's mindsets, values and lifestyles in order to be successful (Wals, 2012). Schools and universities have a large role in the formation of these values and mindsets. Furthermore, they also educate the employees of the future. Hence, universities can play a key role in the shift towards a more sustainable society by incorporating sustainability in its core mission and delivering graduates that can incorporate sustainable practices not only in their own lives, but also in their work field. To emphasis this importance, the United Nations (UN) declared the period between 2004-2014 to be the UN Decade of Education for Sustainable Development (Wals, 2012).

Multiple universities already took a step in the right direction by signing sustainability declarations such as the Talloires Declaration, the Kyoto Declaration and the Copernicus Declaration in order to pledge themselves to incorporate sustainability in the fundaments of their institutions (Lozano *et al.*, 2013). The preamble of the Copernicus Declaration states that in order for universities to be more effective, they need to enhance cooperation between disciplines, generations and institutions (Copernicus Charta 2.0, 2011). A certain level of transparency is desired when interacting with the universities' stakeholders. One way for higher education institutions (HEIs) to achieve this transparency and communicate about their sustainability performance is through the use of a sustainability report (Adams, 2013).

Various globally recognised frameworks, guidelines and management systems exist to make sustainability reporting easier (Adams, 2013). According to Lozano (2006) there are three different

approaches to report on sustainability: accounts, narrative assessments and indicator-based assessments. Accounts are structures of raw data that are translated to more common units such as money, area or energy (Lozano, 2006). Narrative assessments are a combination of texts, maps, graphics and tabular data. They might also use indicators, but they are not essential to the assessment (Lozano 2006). Finally, the indicator-based system can also include texts, maps, graphics and tabular data, but indicators are the cornerstone of the system (Lozano 2006).

The indicator-based assessment is widely used because it is consistent, easily measurable, comparable and it offers more transparency (Lozano, 2006; Ceulemans *et al.*, 2015). This makes it particularly useful as a decision-making tool since it is more objective than narratives and accounts (Lozano, 2006). In 2014, Mendoza and Terpou reported on 22 tools that are available for assessing, managing and reporting on sustainability efforts in universities.

Roughly, one can divide the frameworks in general reporting tools and reporting tools specifically designed for HEIs (Lozano, 2006). Examples of general reporting tools are the Global Reporting Initiative (GRI) sustainability reporting guidelines and the ISO 14000 series. These reporting tools are mostly used by corporations to report on their sustainability (Lozano, 2006). These general reporting tools, however, lack specific indicators on research and education, thus making them less useful for universities to report on sustainability. Aside from this, universities can also consist of multiple campuses scattered around the city and some also own housing accommodations for students or staff. Furthermore, the large number of attendees (e.g. Ghent University had over 41.000 students in 2016) makes it resemble the workings of a small city. These aspects, combined with the fact that laboratories and auditoria are present in campuses, make universities a very different setting than factories that are mostly machine parks or other companies that mostly consist of offices. This difference in characteristics might demand a different approach to do sustainability reporting than the way it is done in industrial companies. Therefore, specific academic reporting tools or adaptations of the GRI framework that include an educational category which entails curriculum, research and services were created (Lozano, 2006). Four of the most mentioned or most recent tools in the state-of-the-art literature are the Auditing Instrument for Sustainability in Higher Education (AISHE), the Sustainability Tracking, Assessment & Rating System (STARS), the Graphical Assessment of Sustainability in Universities (GASU) and University Sustainability Assessment Framework (UniSAF-NL).

Previous research shows that one of the main drivers for universities to report on sustainability is to meet the demand of the stakeholders, who would like to see sustainability incorporated into everyday workings, curricula and in the university values (Bice & Coates 2015). In 1984, Freeman defined stakeholders as "any group or individual who can affect or is affected by the achievement of the organization's objectives". The main stakeholders of a university are the students, the academic and

administrative staff, business community and society (Mainardes *et al.*, 2010). These stakeholders are important, as they can exert pressure on the institution and, as a result, improve the quality of transparency of sustainability reports (Fernandez-Feijoo *et al.*, 2014). Nevertheless, recent research showed that there is a discrepancy between what is reported in sustainability reports and what stakeholders expect from sustainability reports (Bradford *et al.*, 2014). This might suggest that depending on which stakeholder group you are addressing, a different format of sustainability reporting is appropriate (Bradford *et al.*, 2014).

Another motivation to do sustainability reporting is that it can be an extra asset that can attract or persuade future students in their choice for a higher education institution and therefore increase the university's competitive advantage (Bice & Coates, 2015). Del Mar Alonso-Almeida *et al.* (2015) also state that sustainability reporting can have positive effects on the reputation of the institution and as a consequence, institutions can attract more students and researchers. Another beneficial consequence of sustainability reporting is that it increases the institution's visibility and can facilitate fundraising for future sustainability projects (Del Mar Alonso-Almeida *et al.*, 2015). One general reason to report on sustainability is to evaluate the economic, social and environmental aspects of the institution (Lozano, 2011). Lozano (2006) notes that despite the extra workload, sustainability reporting pays off in terms of improved performance, integration and transparency.

However, there is a positive correlation between universities that invest in high quality reporting and high sustainability performance (Richardson & Kachler, 2016). Institutions that do not score well on sustainability might not want to report on it to avoid negative feedback (Richardson & Kachler, 2016). Another reason why institutions might be reluctant to report is due to the extra time and resources needed for reporting (Lozano, 2006). Moreover, once an institution starts to report, it would be very difficult to stop in the future since stakeholders tend to demand more and more information (Lozano, 2006). Another drawback of sustainability reporting for both companies and universities alike is that there is a possible risk for 'greenwashing', since different frameworks do not necessarily evoke the same results (Bullock & Wilder, 2016). Greenwashing is the phenomenon where companies, organisations or HEIs pretend to be more sustainable than they actually are (Bullock & Wilder, 2016).

Bullock and Wilder (2016) compared outcomes of different reporting tools for the same institution by converting the results into percentiles. For the 232 institutions that the paper investigated, the average difference between the highest and lowest percentile ranking for the same institution (but a different reporting tool) was 33 percentile points (Bullock & Wilder 2016). This lack of standards and subsequent discrepancy in results might undermine the validity of reporting, making it unclear which framework correctly reflects the current sustainability situation at the campus. Benchmarking could possibly help alleviate this problem since all institutions are presented the same set of indicators and

thus have comparable results. Nevertheless, the literature shows that there is still no consensus among universities on which reporting tool should be used in the HEI context.

Over the past 16 years, there has been a substantial increase in sustainability reports from HEIs as can clearly be seen in the GRI database. In 2001 the first report from a university (University of Florida) was uploaded into the GRI database (Ceulemans *et al.*, 2015). As of May 2017, there are 115 universities that uploaded their sustainability report (http://database.globalreporting.org). This upsurge in reports validates that there is an increased interest in sustainability reporting globally. However, little research has been done on the topic of sustainability reporting for universities in Belgium. Until now, Ghent University is the only Flemish university that uploaded a sustainability report for its entire university to the GRI database. Odisee College published 4 reports for its campus in Brussels and the Catholic University of Leuven published 1 report for its faculty of Economics and Business (http://database.globalreporting.org). Hence, it would be interesting to investigate the current state of reporting at Flemish universities and explore barriers and opportunities for universities related to sustainability reporting. Since different tools and indicators are being used, it is impossible to objectively compare results between universities. Consequently, it would be interesting to investigate the attitude of Flemish Universities towards benchmarking.

RESEARCH QUESTIONS

- 1. Study the different tools that are available for sustainability reporting worldwide. More specifically, compare two general tools and four tools designed specifically for HEIs in terms of common ground, strengths and limitations.
- 2. Investigate what tools are currently used in Flemish universities to report on sustainability.
- 3. Perform an inquiry to investigate the attitudes of Flemish universities and the government towards the use of sustainability benchmarking tools and the possibility of introducing a sustainability-benchmarking tool that can be used by all the Flemish universities.
- 4. Investigate which of the reporting tools would best fit the needs of the interviewed universities and how the universities feel about benchmarking.

MATERIALS AND METHODS

LITERATURE STUDY

As a first step, a literature study was conducted to have an overview of the existing guidelines and frameworks used for sustainability reporting worldwide. Next, the guidelines and frameworks that were most used for reporting and most frequently mentioned in state-of-the-art literature were selected and briefly described. These were divided into two groups, one containing the general tools and the other group containing the tools specifically designed for HEIs. For the description of each of the reporting tools, the official or unofficial implementation manual was consulted unless stated otherwise.

The general tools are the Global reporting initiative (GRI) guidelines and ISO 14000 guidelines. For the GRI guidelines there are currently two versions: the G4 version that was released in 2013 and the GRI Standards version that was released in October 2016. The G4 guidelines are currently still in use, but will be phased out by 1 July 2018. From that moment onwards, it will be required to use the GRI Standards. For this study, we will focus on the G4 guidelines since they are currently still valid and mostly discussed on in state-of-the-art literature. Information about the GRI guidelines was found in the official G4 guidelines documents or on the GRI website, unless stated otherwise.

The tools specifically designed for HEIs that were selected for comparison were Graphical Analysis of Sustainability in Universities (GASU), Assessment Instrument for Sustainability in Higher Education (AISHE), Sustainability Tracking, Assessment and Rating System (STARS) and UniSAF-NL. Where possible, the official implementation manual was consulted, as well as relevant literature. In the case where the implementation manual was unavailable or the information in the literature was inadequate, the respective developers of the tool were contacted through email for additional information.

During the first step, the reporting tools were briefly described by explaining their origin, characteristics and implementation. Next, the reporting tools were compared to each other based on similarities, dissimilarities and main strengths and limitations. This information was then used to investigate which reporting tool suits best to the needs of the Flemish universities that were interviewed and whether or not it allows benchmarking.

INTERVIEWS

Interviews were conducted in order to investigate the support base for sustainability reporting in Flemish universities. Colleges ("hogescholen" in Dutch) were not contacted because they are often associated with one of the universities. The goal of these interviews was to investigate the current state of sustainability reporting and to explore the acceptability of benchmarking. More specifically, we looked into both benchmarking against other universities and benchmarking against one's own past.

Furthermore, attitudes towards sustainability reports were examined as well - e.g. the underlying motives why Flemish Universities report or not and what reasons would convince them to report. Based on the collected information, a conclusion was made.

The following universities were contacted to conduct an interview about sustainability reporting: Ghent University, Catholic University of Leuven, Hasselt University, Free University of Brussels (Vrije Universiteit Brussel shortened as VUB) and the University of Antwerp. They were contacted through e-mail and arrangements were made to meet and conduct the interview in person. Contact details were found on the universities' website page of the Green Offices or the environmental department. If no such page existed, contact details were acquired via the Green Office at Ghent University. All the interviews were recorded with the permission of the interviewee and transcribed. Interviews were conducted in Dutch as this was the mother language of the interviewees. The transcriptions of the interviews were not included in the appendix on request of the interviewees.

The inquiry consisted out of 3 main parts and was designed to answer the following aspects:

- 1. **General questions** deal with the basics around sustainability reporting at the university and what the current situation is.
- 2. **Questions on sustainability benchmarking** examine the attitude towards benchmarking results against other universities in the future.
- 3. Questions on the value of sustainability reporting explore the incentives to report on sustainability and look into the progress that has been made.

The full inquiry can be found in the appendix (appendix A).

Finally, Ecocampus was interviewed to obtain the opinion of the government. Ecocampus is part of the Environment, Nature and Energy department (LNE) of the government of Flanders. Ecocampus was created in order to support sustainable tertiary education and focuses on educators, researchers and students. Furthermore, due to their key position, their opinion on sustainability reporting, benchmarking and sustainability value was asked. The team was contacted through email and an appointment was made to conduct the interview in person (see appendix B).

RESULTS

LITERATURE STUDY

OVERVIEW OF THE CURRENT REPORTING TOOLS

Sustainability reporting tools can be categorized either as general reporting tools or as reporting tools specifically designed for HEIs. For the general reporting tools, the Global reporting initiative and ISO 14000 standards were selected.

GLOBAL REPORTING INITIATIVE (GRI)

GRI was created by collaboration between the Coalition for Environmentally Responsible Economies (CERES) and the Tellus Institute in 1997. The United Nations Environment Programme (UNEP) supported the creation of this project (www.globalreporting.org). GRI is an indicator based framework and entails the environmental, economic and social elements that are associated with the "triple bottom line" of sustainability (Hussey *et al.*, 2001). Currently, the GRI framework is often considered to be one of the most comprehensive frameworks available to do sustainability reporting (Hussey *et al.*, 2001; Lozano, 2006). Today, 74% of the world's 250 largest companies use GRI to report on their sustainability (www.globalreporting.org). The GRI reporting process is described in the official implementation manual as follows (also see figure 1):

The GRI developed ten principles that serve as guidelines to aid in determining the content and the quality of the sustainability report. The four principles that help to determine the content of the sustainability report are the following: Stakeholder inclusiveness, Sustainability context, Materiality and Completeness. The other six principles ensure the quality of the report, i.e. Balance, Comparability, Accuracy, Timeliness, Clarity and Reliability. There are two options for organisations to choose from when they want to report 'in accordance' with the guidelines. The first option is called 'Core' and entails the essential components of a sustainability report and covers the major impacts of the institution's economic, environmental, social and governance performance. The second option is the 'Comprehensive' option and is an extension of the Core option that requires more indicators to be reported on. The preferred option depends on what best fits the need of the reporting institution and that best satisfies the stakeholders' need for information. The content of what institutions need to report on can be split up into General Standard Disclosures and Specific Standard Disclosures. The General Standard Disclosures are relevant to all institutions and can provide context for the sustainability report. It is split into seven categories: Strategy & Analysis, Organisational profile, Identified Material Aspects & Boundaries, Stakeholder engagement, Report profile, Governance and Ethics & Integrity. The Specific Standard Disclosures are arranged in three categories: Economical, Environmental and Social. The Social category entails four different subcategories: Labour practices & decent work, Human rights, Society and Product responsibility. Within every category, we can find what the guidelines call 'aspects'. An organisation only needs to report on 'material aspects', which are aspects that "reflect the organisations significant economic, environmental and social impacts or that substantively influences assessment and decision of stakeholders" (GRI Reporting Principles and Standard Disclosures, 2013). Information on the material aspects can be delivered as so called 'Disclosures on Management Approach' (DMAs) or as indicators. DMAs give an explanation on how impacts of the three categories (economic, environmental and social) on the material aspect are managed. Indicators give information on these impacts. Materiality is an important cornerstone of the GRI guidelines since it omits irrelevant information from the sustainability report. Hence, it makes the report more readable and tailored to the need of not only the organisation, but also the stakeholders. As a consequence of this materiality, there is also no minimum amount of aspects that need to be reported on. As only those that are relevant to the organisation need to be included. The sustainability report can be released as a paper report or as a web-based report. GRI should be notified upon release of the sustainability report and the organisation needs to send GRI a copy of their report and/or register the report to the online GRI database.



FIGURE 1 GRI G4 REPORTING PROCESS AS DESCRIBED IN THE GRI G4 IMPLEMENTATION MANUAL

ISO 14000

This framework is an Environmental Management System (EMS) that consists out of a set of standards that are designed to measure and improve the environmental impact (www.iso.org). The ISO 14000 standards were designed by the International Organisation for Standardisation (ISO) Technical Committee ISO/TC 207 and its various subcommittees (www.iso.org). ISO is an independent, non-governmental organisation and is active in 162 countries. ISO claims any type of organisation, regardless of its activity or sector, can use the framework.

The framework is based on the Deming circle, also known as Plan-Do-Check-Act (PDCA) model (Martin, 1998). PDCA is an iterative management tool that consists out of four steps and is used for the control and improvement of processes and products of an organisation (Martin, 1998). The four stages were described in the unofficial implementation manual by Martin (1998) as follows:

- 1. Plan: review the organisations' processes and determine all elements that potentially have an environmental impact. These environmental impacts are the result of environmental aspects that are not properly managed or controlled. An environmental aspect is defined in the ISO implementation handbook (Martin, 1998) as follows: "element of an organization's activities, products, or services that can interact with the environment". These aspects can be divided into direct aspects that are the result of the organisations' own production process (e.g. hazardous waste generation) and into indirect aspects such as raw material production by suppliers. The identification of all these aspects is important to establish the environmental objectives, goals and targets in an environmental policy. In general, targets are measurable elements (e.g. percentage of energy use) that are connected to the objectives.
- 2. **Do**: implement the procedures that are necessary to achieve the objectives and targets that were set. This also includes describing the responsibilities of those involved, the methods and the timeframe for completion. The goal is also to implement the EMS in the general business management area of the organisation.
- 3. **Check**: monitor and measure the processes that are related to the objectives and targets of the environmental policy and report the results.
- 4. Act: take adequate action to continually improve the processes so targets and objectives can be reached.

To increase the validity of the framework, third party certification is possible. Certification is granted after a thorough on-site audit that confirms all the requirements of the ISO 14000 standards are met (Martin, 1998). The certificate is valid for 3 years and the certificated organisation can use it for marketing purposes (Martin, 1988).

ASSESSMENT INSTRUMENT FOR SUSTAINABILITY IN HIGHER EDUCATION (AISHE)

This tool was developed by the Dutch organization for the advancement of sustainable development in higher education (DHO) in 2000-2001 (Roorda & Martens, 2008). The educational aspect is strongly emphasized because the DHO believes universities' impact on sustainability is biggest through education, due to the effect it can have on society (Roorda & Martens, 2008). The AISHE method can be used to score individual educational programs of universities or colleges. The criteria used in AISHE were based, amongst others, on ISO 9000, ISO 14000, EMAS, BS 7750, the Copernicus declaration, Talloires declaration and Agenda 21 (Roorda et al., 2010). The AISHE method is based on the quality management model designed by the European Foundation for Quality Management (EFQM) which was enhanced by Insituut Nederlandse Kwaliteit (INK : translated as Insitute for Dutch Quality) (Roorda et al., 2010). The AISHE method states that for every criterion that is being considered, the criterion can currently be in one out of five phases, that each consists out of a certain set of conditions (Roorda et al., 2010). These phases refer to the current state of the criterion (activity orientated, process orientated, system orientated, chain orientated and society orientated) and are cumulative, meaning you can only belong to a certain phase if all the indicators of that phase and the previous phases are fulfilled for your criterion (Roorda et al., 2010). There are 20 criteria in total that need to be considered and they are grouped in five different focus areas (Roorda et al., 2010). These focus areas are Vision & governance, Expertise, Educational goals & methods, Educational content and Result measurement (Roorda et al., 2010). In turn, these focus areas are divided among three categories (Plan, Do, Check), based on the Deming circle (Roorda et al., 2010).

The outcome of the method can be a baseline measurement, an external audit or as a quick scan in order to prepare for a full AISHE audit (Roorda *et al.*, 2010). An AISHE audit roughly consists out of a self-evaluation and a document analysis to check the validity of the criteria (Boer, 2013). When an AISHE audit is done for a certain educational program, a specially designed software program is used and there are roughly six steps that need to be followed as described by Roorda *et al.* (2010) (also see figure 2):

During the first step, the internal project leader prepares the audit and the participants for the audit are selected. These participants should include minimally one project leader, between 6-8 members of the teaching staff that teach in different study years, minimally one administrative staff member and between 4-6 students belonging to different study years. In the next step, these participants gather all the information necessary to complete the audit. The third step involves that each participant individually scores the 20 criteria (from phase 1-5). After all the participants finished scoring, the scores are gathered and for each criterion a consensus is reached. It is important that every group member agrees with the final phase score for every criterion. Simultaneously, points of improvement are compiled and prioritization is given to the most important points. The resulting report entails a description of the current situation (which phase the criterion is in) and the desired situation (including

a deadline and list of priorities). As a final step, the audit report and supplementary documents need to be sent to the 'Keurmerkcommissie' (Hallmark commission) of the DHO within a month after the audit in order to receive certification (Roorda *et al.*, 2010). The certificate is based on a star system from 1 to 5 (which matches the five developmental stages) and is valid for three years, after which a re-evaluation takes place (Roorda *et al.*, 2010; Boer, 2013).



FIGURE 2 AISHE REPORTING PROCESS AS DESCRIBED IN ROORDA ET AL. (2006)

SUSTAINABILITY TRACKING, ASSESSMENT AND RATING SYSTEM (STARS)

The STARS system was created by the Association for the Advancement of Sustainability in Higher Education (AASHE) in America and was designed to be used by universities and colleges as a self-reporting framework to measure their sustainability performance (https://stars.aashe.org). There are two versions of the framework available: one gives basic access and allows to track progress and share data. The other full-access version allows to benchmark against other similar institutions and earn a STARS rating yourself (https://stars.aashe.org). The basic option allows you to become a STARS reporter; you do not have to publicize your scores but you can still use the recognition for marketing purposes. The full access version allows you to earn a bronze, silver, gold or platinum score, depending on your overall sustainability score (STARS Technical Manual, 2017). This score is calculated based on the points you earn for each relevant credit in the four categories: Academics, Engagement, Operations and Planning & Administration (STARS Technical Manual, 2017). Not

institutions (STARS Technical Manual, 2017). This measure prevents that institutions are penalized for things that are not applicable to them. For example, a college that does not have dining or catering facilities cannot be rated for this credit and they can omit it from the evaluation. The final score will then be calculated based on the total earned points against the total points that were possible for the institution to earn (STARS Technical Manual, 2017). Also, for some credits the amount of points to be earned can vary depending on the context of the university (e.g. for *Biodiversity & Water use* credits). An institution can also gather a maximum of four bonus points for the Innovation & Leadership credit (STARS Technical Manual, 2017). These points are awarded to institutions that outperform in a certain area or have path-breaking initiatives that are not covered in one of the other credits (STARS Technical Manual, 2017).

The STARS reporting tool can be found online on the STARS website (https://stars.aashe.org). The reporting tool can be used to submit data and gives access to extra resources and guidance (e.g. a glossary, spreadsheets, examples of best practices, etc.). The STARS reporting process encompasses seven steps that need to be fulfilled such as described in the STARS Technical Manual (2017) (also see figure 3):

During the first step, the institution must register for STARS by agreeing to terms and conditions of use and providing contact details of the institution's chancellor or president and the contact details of the institution's primary STARS liaison. Next, a data collection team should be commissioned and a strategy for gathering data should be written. The team must also become familiar with the STARS technical manual and the credits. As a third step, the institution needs to determine which credits can be omitted due to being irrelevant. The data for each credit should be uploaded to the online reporting tool and the accuracy needs to be confirmed by adding data sources or listing the responsible party for each credit. The fourth step is about finalising the data and submitting it to AAHSE. This also includes adding a cover letter from the institution's chancellor or other high-ranking executive in order to confirm the accuracy of the submission has been checked. Next, AASHE staff will review the report and look for inconsistencies in the reported data. The report and subsequent rating score is published to the STARS website after inconsistencies are cleared up. The two final steps include sharing the STARS report with stakeholders and evaluating progress and benchmarking against other institutions (STARS Technical Manual, 2017).



FIGURE 3 STARS REPORTING PROCESS AS DESCRIBED IN THE STARS TECHNICAL MANUAL (2017)

The STARS report and score is valid for three years, after which a new report needs to be submitted. The institution involved can still access the reporting tool and update information during this period (STARS Technical Manual, 2017). The publicly shared data, however, is only updated when a new report is filed (STARS Technical Manual, 2017). Every year, AASHE publishes the "Sustainable Campus Index" in which it recognizes that year's top performing colleges and universities in 17 specific aspects that were measured with STARS. This booklet is publicly available on the STARS website.

GRAPHICAL ANALYSIS OF SUSTAINABILITY IN UNIVERSITIES (GASU)

This model was developed by Dr. Rodrigo Lozano in order to make a graphical presentation of universities' sustainability reports (Lozano, 2006). The goal was to make it easier to analyse as well as to check the progress over time and benchmark against other institutions (Lozano, 2006). In 2003, the team of University Leaders for Sustainable Future (ULSF) proposed a draft containing a modification for the GRI framework that includes the educational dimensions (Lozano, 2006). This draft contained three categories (Curriculum, Research and Service) with in total seven aspects and 13 performance indicators (Lozano, 2006). GASU was largely based on the GRI 2002 guidelines and the ULSF draft that Lozano modified in order to encompass more indicators as well as additional indicators (Lozano, 2006). Therefore, GASU is an indicator-based tool and it reports on 126 indicators in total, making it a very comprehensive framework (Lozano, 2011). The 126 indicators are divided over four domains:

Economic, Environmental, Social and Educational domain (Lozano, 2011). For each of these domains, there are different categories with core indicators and additional indicators. Lozano (2006) defines core indicators as "those relevant to most reporting organisations and of interest of most stakeholders" and additional indicators as "those representing a leading practice in any of the three dimensions, providing information of interest to stakeholders, or being tested to be possible future core indicators".

GASU works with a worksheet where the user needs to grade each indicator on a scale of zero to four (see table 1) (Lozano, 2006).

Score	Interpretation
0	Minimum grade: there is no information for the indicator
1	Poor performance: there is only 25% information available of that what was required
2	Regular performance: there is 50% of the required information available
3	Good performance: there is 75% of the required information available
4	Excellent performance: all the information that was required for the indicator is available

TABLE 1 SCORING SYSTEM FOR INDICATORS IN THE GASU REPORTING TOOL AS DESCRIBED BY LOZANO (2006)

The worksheet automatically calculates the final score and offers three modalities for each category (Lozano, 2006). The first modality is when there are only core indicators in the category and they have a weight of 100% when calculating the score (Lozano, 2006). The second modality is when there are both core and additional indicators present. The core indicators then have a weight of 75% and the additional indicator has a weight of 25%. The last modality is when there are only additional indicators and they get a weight of 100% when calculating the score (Lozano, 2006).

When all the indicators have been graded, the grades are added and divided by the maximum attainable grade for each dimension (44 for Economic, 45 for Environmental, 134 for Social and 83 for Educational) (Lozano, 2006; Lozano, 2011). After these calculations are made, the worksheet generates nine spider charts as output (see figure 4 for an example). The first one is a general chart about the performance of the Economic, Environmental, Social and Educational dimension (Lozano, 2006). The other charts are one for the Economic dimension, one for the Environmental dimension and one for the Educational dimension. The final five charts are for the Social dimension: an overall chart, a chart for the labour practices & decent work, a chart for human rights, a chart for society and a final chart for product responsibility (Lozano, 2006). These charts are (Lozano, 2006). The 2006 paper by Lozano states that the author can be contacted in order to receive the worksheet and it provides a URL where the worksheet can be downloaded. Currently, the URL is unavailable and the author states GASU is now a proprietary tool of his company and does not wish to give additional

information that might be sensitive or commercial (own communication). All freely available information can be found on the website <u>http://org-sustainability.com/eng/gasu</u>.



FIGURE 4: EXAMPLE OF GASU SPIDER CHART OUTPUT. SOURCE: LOZANO (2006)

UNIVERSITY SUSTAINABILITY ASSESSMENT FRAMEWORK (UNISAF-NL)

This tool was created by the Maastricht Green Office and rootAbility. The framework is indicatorbased and encompasses an Educational, Research, Community, Operations and Governance section. It was developed to make sustainability assessments for higher education cheaper, faster and easier (<u>http://rootability.com/assessment/</u>). It is an open-source framework that is freely available and the developers offer guidance on their website. There are 88 indicators that can be reported on in the current indicator list that is available on the rootAbility website (rootAbility, 2017a).

The implementation guide of UniSAF describes six steps for a successful implementation of the tool (see figure 5) (rootAbility, 2017b). During the first step, the institution needs to decide on the goal and the format of the report. Depending on the goal (e.g. creating a sustainability report, raising awareness, inform decision makers, etc.), the institution can select a few relevant (2-4) indicators to be reported on in the format of an infographic or one pager or select relevant indicators from all the dimensions to write a comprehensive sustainability report. Next, the institution needs to determine what it wants to assess. The focus should be on both determining the sustainability performance of the indicators that are relevant to the stakeholders and those that have to do with the major impacts of the institution. Due to the context of the institution it is possible that some indicators have a stronger impact on the

environment than others. Therefore, it is possible that one indicator has a large impact on institution A, while it is less important for institution B. Consequently, it is very important to carefully select the relevant indicators to report on. For example: an institution that is mainly focussed on technical research has more laboratories and thus a larger environmental impact than an institution that does not have laboratories (e.g. a conservatorium). During the third step, data needs to be collected. This can be done by gathering data that has already been calculated, collecting raw data in the form of spreadsheets or carrying out a survey. A database template is available from the rootAbility website in order to facilitate this process. Next, the gathered data needs to be analysed. This can be done by calculating ratios and percentages, identifying different trends and providing context to the trends that were observed. In the best-case scenario, the institution develops quantifiable goals that are based on the assessed indicators. During the fifth step, the observations and recommendations are identified. UniSAF recommends focusing on only 3 to 5 key observations and recommendations, since long lists of recommendations are often not read. UniSAF also advises making specific recommendations that are relevant for the different groups of stakeholders. During the final step, the results are communicated to the relevant stakeholders through a format that is most appropriate to serve its goal and reach the targeted audience. This can be through an interactive website, policy briefs, presentations, infographics, etc. It can also be done by organising activities such as meetings, workshops or pitches (rootAbility, 2017b).

There is currently no certification available for UniSAF.



FIGURE 5 UNISAF REPORTING PROCESS AS DESCRIBED IN THE ROOTABILITY MANUAL (2017)

SIMILARITIES AND DISSIMILARITIES

The main similarity for all tools mentioned above is that they can all be used voluntary and as a selfevaluation. As Shriberg (2002) already mentioned, most of these reporting tools help to set goals and objectives in order to achieve sustainability. All the reporting tools considered here are also mainly focused on decreasing energy, water and material usage (Shriberg, 2002). All the reporting tools were supported by an online website with information regarding the tool. For ISO 14000, AISHE and STARS, a certification can be obtained that is valid for three consecutive years. No certification is possible for GRI, yet they do have an international online database where you can upload your report. GASU and UniSAF offer neither of these services. Both GRI and ISO 14000 series do not include domains specifically applicable to universities, while the other tools do. With the exception of GASU and ISO 14000, a free official implementation manual is available for all the considered tools.

MAIN STRENGTHS & LIMITATIONS

GRI

The main strength of GRI is that it is one of the most comprehensive tools currently available for sustainability assessment and is globally recognized (Hussey *et al.*, 2001; Lozano, 2006). Another advantage is the multi-stakeholder approach by which it was created and frequently revised (Hussey *et al.*, 2001; Bullock & Wilder, 2016) and the division between core and comprehensive indicators. The materiality requirement makes sure only relevant aspects are reported on. The validity of the reported aspects is checked by demanding information for each reported aspect. The extensive online GRI database with over 26.000 GRI reports from over 10.000 organisations also implies that GRI is a well-established sustainability reporting method globally. GRI offers online guidance in the form of an interactive website, an implementation manual, an FAQ and other documents. It is also possible to follow a workshop or seminar in exchange for a fee.

The biggest flaw of GRI in the context of university sustainability reporting is that it was not specifically designed for universities. GRI does not encompass the educational and research aspects, among others, making it less suitable for universities to report on sustainability (Lozano, 2006). Another drawback is that the comprehensiveness of the tool might demotivate smaller universities that do not have a lot of man-hours and resources available for gathering and analysing all the data. Finally, Bice & Coates (2015) note that the GRI framework is successful at determining the universities' environmental impact and benefits, but not for human rights and social concerns.

ISO 14000 STANDARDS

A benefit of the ISO 14000 standards is that it encourages to continually improve the processes involved and that it offers third-party certification.

The main weakness is that - like the GRI standards - the ISO 14000 standards were not designed to cater the needs of universities, but rather those of companies and other organisations. Another weakness is that it mostly focuses on environmental issues, and not as much on the social and economic dimension (Lozano, 2006). Price (2005) also notes that ISO 14001 is complex and demands noteworthy dedication from the organisational level as well as commitment and resources in order to be successful.

AISHE

Shriberg (2002) states that the AISHE framework is flexible and allows comparison between institutions. AISHE is also process orientated which allows the institution to set goals and priorities (2002). Another advantage might be that there are only 20 criteria that need to be checked and this can be done in a short time span, minimizing the man-hours and resources necessary. It is also possible to earn a certification that is valid for three years, which increases the validity of the method. Another strong feature according to Lambrechts & Ceulemans (2013) is the fact that the results are easy to understand and interpret, thus making it an attractive and useful tool for decision makers.

The framework is not suitable to be applied to an institution as a whole. AISHE was designed to apply to a single educational programme at a time (Roorda & Martens, 2008). It would entail excessive costs if an institution would like to certify all its educational programmes according to AISHE. The AISHE manual is available for free, however, the average price for an AISHE consultancy is 4.200ε and includes $\frac{1}{2}$ day of document analysis, on site visit by two auditors (2x1 day) and reporting the results (1/2 day) (www.Hobeon.nl). Lambrechts & Ceulemans (2013) note other weaknesses of the AISHE framework i.e. the underexposure of operations, research and outreach, the lack of real indicators (those that are measurable) and that the results depend on the subjectivity of the stakeholders and the competence of the auditor.

STARS

In current literature, the STARS framework is often claimed to be one of the most comprehensive and suitable framework available for the university sector (Sayed *et al.*, 2013; Saadatian *et al.*, 2011; Maragakis & Van den Dobbelsteen, 2015; Bullock & Wilder, 2016). The main advantage is that it was specifically designed for estimating sustainability in higher education. Another forte is that there are currently 800 universities and colleges from 31 countries registered to STARS (https://stars.aashe.org/pages/about/why-participate.html). This shows that STARS is a globally used method for sustainability reporting with a large number of participants, which adds to its validity. By

requiring a cover letter from a high-ranking executive, the accuracy of the data and support for sustainability is guaranteed. STARS delivers positive feedback and marketing benefits by featuring the top performing institutions in their "Sustainable Campus Index" publication.

However, the fact that STARS only provides positive feedback could possibly interfere with the transparency that the stakeholders desire.

GASU

The main advantage of this tool is the graphical presentation of the different aspects that are being considered. This makes it an interesting tool for policy makers and management since it is clear and easy to understand. Another forte is that it is based on GRI guidelines, which are one of the leading sustainability reporting guidelines, so switching to GASU is but a small step. The tool was designed especially for universities and colleges to do sustainability reporting and with its 126 indicators it is one of the most comprehensive reporting tools currently available.

One of the main disadvantages is that GASU is based on the GRI G2 guidelines that are currently outdated (Bice & Coates, 2015). Another disadvantage is that the website for GASU is difficult to find and does not contain a lot of freely available information. Furthermore, the implementation manual is not freely available. Lozano also vaguely describes the calculation method for the final score in the 2006 article.

UNISAF-NL

Since UniSAF is a very recently released tool (February 2017), there is no relevant literature available yet. The framework was designed for universities and colleges and can be used for a wide array of goals: developing sustainability reporting, snapshot of current sustainability, raising awareness, etc. This allows you to alter the format of your sustainability report depending on the group of stakeholders that are being addressed. The UniSAF toolkit is open-source and can freely be modified and tailored to each university's specific needs. Another strong point is the availability of support in the form of workshops, lunch talks or a final check.

A disadvantage of UniSAF is that the indicators are sometimes vague (e.g. biodiversity: "state type and scope of biodiversity"). Another disadvantage is that there is a risk of greenwashing since you can choose yourself what you wish to report on and thus leave out the indicators you do not score sufficiently on.

FLEMISH UNIVERSITIES INQUIRY

CURRENT SUSTAINABILITY OVERVIEW

There was only one university that had a sustainability report sensu stricto, meaning it is a separate report about sustainability that is based on established sustainability reporting guidelines. One other university had a sustainability report that was based on the environmental report ('Integraal Milieujaarverslag' in Dutch) that is obligatory for every Flemish university. Aside from the environmental indicators, the report also includes topics such as education, gender, internationalisation and sustainable purchases. This university has been voluntarily doing sustainability reporting since 2012. Two out of five universities stated they only did the mandatory environmental report, which mainly handles topics like waste, primary sources, air, water, energy, etc. One university did consider doing a sustainability report if they would get additional resources and staff to do so. Furthermore, there was one university that did not see the added value of a separate sustainability report and stated there was a lack of resources and time available to do reporting. Finally, one of the interviewed universities was planning on writing a sustainability report the following year.

A Green Office can be defined as a sustainability centre within the institution of higher education and is ran by students and staff. The primary goal of a Green Office is to make the HEI become more sustainable in every possible way. Currently, three out of the five interviewed Flemish universities have such a Green Office (albeit sometimes named differently) and one university is planning to start a Green Office next year. There was one university that did not have a Green Office anymore; they did have something similar some years ago, but that project was stopped after the project leader left the university.

GRI was by far the most mentioned sustainability reporting tool during the interviews. One of the interviewed universities was already using GRI for its sustainability report and received guidance and support from a professor that was familiar with the tool. They did modify the tool in order to include research, education and nutrition. The reports were available as a booklet and contained pictures and graphs to make it more appealing. The reports are released biennial and information from the first report that did not change significantly was omitted from the consecutive report. This university specifically chose the GRI reporting tool because it is internationally recognized and prestigious. Another reason was that the report could be uploaded to an online database that not only contains sustainability reports from universities, but from other kinds of organisations as well. Also one of the main reasons for them to start with GRI was due to the influence and efforts of the professor that was already familiar with the guidelines and could offer them the necessary guidance. Furthermore, they stated that GRI's forte lies within its indicators that allow tracking progress rather than merely checking boxes.

One out of five universities was planning on making a sustainability report, but was still in doubt whether or not it would be according to GRI principles. One faculty of this university had already made a GRI sustainability report and complemented it by adding education and research aspects from the AISHE tool. The main reason why this university would opt for GRI is due to it being internationally recognized and that it allows comparison with other universities. One other university did know about the GRI standards, but was still unsure which reporting tool would suit their needs best.

Furthermore, it was striking that three out of five universities stated that lack of time and staff was the main reason as to why they did not report according to existing sustainability reporting tools. One of the universities stated that they were afraid that a separate sustainability report would be so time consuming that there would be little to no time left for actual realisations or projects. An additional reason mentioned by another university was that they did not know the available sustainability reporting tools and that sustainability reporting was not obligatory. Finally, one university stated to only know of the GRI reporting tools.

Out of five universities interviewed, only one has previously used different kinds of sustainability reporting tools. This university used the 'Milieucharter' during the 90's to set priorities concerning the environment and they would receive auditing and an evaluation. A downside of the charter was that it only concerned environmental aspects. Aside from this, they also had a think tank that discussed issues surrounding sustainability with students, staff and other people. This university also participated in the Life project that was endorsed by Ecocampus. However, the shortcomings of this tool were that it lacked scientific indicators and was more about checking boxes, which was not a good representation of the sustainability situation.

All the interviewed universities with the exception of one declared it would be interesting to do sustainability reporting on a campus of faculty level. The universities with more dispersed campuses and faculties did state the main difficulty would be to correct for the differences due to context and inherent characteristics. This includes the difference in age of the buildings, differences in location, shared buildings and differences in mentality. One of the universities added that another potential drawback could be that faculties might be reluctant to allocate funds and staff to do sustainability reporting. The reason why one of the universities did not find it interesting and preferred a global total was due to the fact they only have two campuses and these buildings are shared among all the faculties. Nevertheless, all the universities did desire a global total as well, as it would be easier to obtain. One of the interviewed universities mentioned that it was important to refine the global total to show what processes lie underneath. As an example they stated their university had done a lot of renovation projects and as a result, the energy usage lowered. However, this decrease was undone by

expanding the amount of dormitory rooms on campus. So as a result of the university's constant growth, these nuances were lost in the global total.

BENCHMARKING SUSTAINABILITY

Out of the five interviewed universities, there was only one university that was systematically looking for reports from other universities and takes part in annual international conferences in order to compare results concerning sustainability performance. There was only one university that completely did not compare results, as there was no one to stimulate this. They also stated not to know what needed comparison and that there is a large difference between universities in terms of buildings and students. One interviewed university compared with other universities on different areas, but not yet for sustainability since they are not yet performing well enough. They did hope they could start to compare in the future, after they took additional steps to improve their sustainability. Two out of five universities compared results in an informal way, mostly during meetings. One university claimed it would be interesting to benchmark in the future, as long as everyone involved uses the same standards. They did state that the different context of every university would need to be taken into consideration. This was also a concern of one of the other universities. They said some of the other universities were double their size in student numbers and this difference in scale made comparison difficult. This university did appreciate to do joint sustainability projects with the other universities, such as 'Dagen Zonder Vlees'.

When asked if a scoring system that allows benchmarking would be useful, all the universities stated it could be a positive thing, when used right. One university answered they would only participate in the long run, but not right now. They said that the sustainability domain was relatively new at their university and was not yet of the desired level that would be sufficient for comparison with others. This university stated they strived to achieve excellence in their other domains such as education and innovation, but not yet for sustainability. As long as they do not have the ability to, as a matter of speech, 'win' the sustainability comparison, they would not participate. According to them, the benchmarking would need to be done on an international level and it has to be scientifically sound. However, it would also need to be mandated by the university policy, as otherwise the administration that goes along with it would be a problem. Currently, the university would prefer to use their own tools rather than established tools as they can then choose what they are doing well and not what is not going so well.

Out of the five universities, one university stated an interesting aspect of a scoring system would be the ability to see who is performing best, although this might be a sensitive subject. Furthermore, they mentioned the most important thing was to get things done and they said their idealism went beyond the walls of their own university. For example, they were the first university in Belgium to have a Green Office and help other universities with the start up of theirs. They also said that if other universities would be first or would perform better, it could possibly be used as a leverage to convince the board of directors. Their biggest concern regarding benchmarking and scoring sustainability would be whether the communication would be honest or not. There is always a risk to having to keep up appearances and pretend to perform better than you actually do, due to the increased pressure of the board of directors. They stated GRI helped to alleviate this problem by doing audits once you fall in the highest scoring category, thus eliminating the possibility of bluff. As an alternative to benchmarking they stated it would be educational to establish cooperation between universities, where each university presents an aspect that they do best and help others to achieving this as well. One of the other universities stated something similar; that each university has their own strong and weak points and it could be beneficial to work together on certain themes. Two of the questioned universities said it would be very difficult to do benchmarking due to the differences in context of the universities such as location and scale. One university added that it would probably not make sense to benchmark in Flanders, as there are too few universities and it would be better to benchmark on an international level. There were also two universities that stated the scoring system could be used as a marketing tool or as a way of gaining prestige. One university mentioned a disadvantage of benchmarking and reporting could be that one tends to drown in the reporting and does not have enough time left to do other projects. There was one university that mentioned AISHE and GRI could be used to achieve benchmarking.

When asked about their willingness to participate in a benchmarking project if all the other universities participated, only one university rejected the idea. This university stated they could only be convinced if the ranking or benchmarking had an international and prestigious character. From the other universities, two stated it would be useful if it could also serve as a tool to write out their vision or as a policy making tool. One university expressed its concerns surrounding pressure and keeping up appearances and suggested that even though competition is okay, too much could defeat the purpose. They suggested that it would be beneficial if the benchmarking tool would be visually strong so everyone involved can easily see the progress that has been made. Furthermore, two other universities recommended that the benchmarking tool would have to be user-friendly and unequivocal.

In terms of who should be responsible for the execution of the benchmarking tool, two universities stated it should be an external auditor, two mentioned students, one said it should be self-evaluation. The reasons to choose an external auditor were that it costs less time and that it is necessary if you want to work with a prestigious reporting tool. One university said that an auditor would be too expensive. The benefits of working with students would be that it is a powerful signal towards the board. The system in the Netherlands, where students perform a sustainability ranking of the universities was mentioned as an example of good practice. Two other universities pointed out it would be difficult for students to obtain all the necessary data and the burden would fall back onto the

staff's shoulders. One university suggested that the different Green Offices could work out a benchmarking system, yet less competitive in order to avoid collision between the Offices. Another university suggested Ecocampus has the ideal position to execute such a tool or benchmarking project.

The possibility of having a website that promotes the sustainability scores of each university was unfavourable for two of the universities. One university stated it would not be a good idea to display the scores on a public website in the first stage of the project and that it would be better to focus on visualisation of the process. The other university said it would be better to work on an international level and not just a website for the Flemish universities. Additionally, they stated that there are already certificates available to pursue. Two other universities mentioned a website could be used as a marketing tool or for branding purposes. The last university stated that if you work with a prestigious ranking, it would definitely need to be published on a website. Furthermore, they thought a ranking system would work better than certificates.

VALUE OF SUSTAINABILITY REPORTING

All the universities were asked about the value of sustainability reporting in their institution and what the motivations were to do reporting. The two institutions that already have a sustainability report (whether it is based on official tools or not) gave more or less the same three reasons. The first reason was that it could be used to track progress and policy implementation along the way. The second reason was that it could be used to give advice to the board of directors and get their support to implement sustainability in the university. The third reason was that sustainability reports could be used as a communication tool both internally as externally. One of the two universities that did not yet have a report said it could be valuable to reduce consumption (cf. of energy, water, etc.) and to track progress. The reasons they did not have a sustainability report yet was due to being unfamiliar with the existing tools and not having enough time available for the reporting process. The reasons the other universities gave why reporting could be useful in the future were in line with the answers of the universities that already have a report. They added it could be used to engage all the relevant stakeholders and create more cooperation between the different departments that each have the data necessary for such a report. The university that did not see the added value of a sustainability report expressed this was due to the fear it might end up in a desk without ever being read. They added that they were unsure whether a sustainability report is the right instrument to convince people of the importance of sustainability. According to them, an alternative could be to work with evaluations to check what has already been accomplished and what not.

All the universities were asked about the progress they have made on sustainability, whether this was due to their sustainability report or not. One university stated that, based on its GRI sustainability report, it has made progress in the area of education, energy, transportation and participation. One field where progress was made was the introduction of a multidisciplinary elective named

'Duurzaamheidsdenken' (cf. sustainability thinking). They also tried to incorporate sustainability education in every educational programme. In terms of energy, they strive towards building in an energy neutral way and have plans to build another windmill through energy cooperation, where people are free to participate in. Progress in the transportation area is closely intertwined with the city plans and projects. This includes promoting biking, using a bike messenger for internal correspondence and reducing the amount of car users. There is also an increase in participation and a sustainability commission with the vice-rector as chairman helps to open doors and exert pressure. The other university with a sustainability report said it helped create a general baseline of sustainability knowledge and a more critical mindset among people. They also use the data from the report to lobby with the government for better conditions regarding public transport and mobility. Out of the three universities without a report, one has made significant progress around catering and transportation. An example of success concerning catering was the introduction of 'Duurzame Donderdag', where they offer biological and fair-trade products in combination with MSC labelled fish and vegetarian dishes. Other examples were the sale of reusable water bottles and the introduction of reusable salad cups through a lending system. On the topic of transportation, they focus very hard on the transition to biking and even have a so-called 'mobilotheek' where you can borrow a wide array of bikes for a month. The two other universities without a sustainability report were mostly focused on progress regarding monitoring waste, energy and transportation.

When asked about whether or not there was a demand from stakeholders to have sustainability reporting, two universities stated that there was not. However, one of these universities mentioned there was a need to have a first port of call concerning sustainability and that the board of directors had opened up towards initiatives. The other university stated their students were not preoccupied with sustainability and the board was mostly interested in reducing consumption. The other universities that did experience a demand, stated this mostly came from their students and also from the board, yet not initially. Furthermore, one university declared that academic staff – especially those who teach around the topic of sustainability – voiced their demand for sustainability reporting or related aspects. However, all the universities specified that the demand was not necessarily for sustainability reporting, but rather sustainability issues or policy in general.

The final question of the interview was about how they see the future of sustainability reporting at their university. Both universities with one or another form of sustainability reporting (based on official tools or not) declared they wanted to incorporate the Sustainable Development Goals (SDGs) from the United Nations into their future reports. The university with the two GRI reports stated they initially wanted to grow towards the highest level of reporting with an extended stakeholder analysis, audits and certifications. However, currently they are running behind schedule, yet stated they already made some improvements in their second report in comparison with the first (eg. availability in English). Out of the three universities without a sustainability report, one declared reporting could

only have a future if it could be fitted in the broader communication context surrounding sustainability. A smaller university stated it would participate in reporting if adequate tools would be available that would also aid in reducing consumption. The final institution revealed there would be a sustainability report next year, but was unclear whether or not they would use GRI guidelines or create their own reporting tool.

ECOCAMPUS: VIEW OF THE GOVERNMENT

When the Ecocampus team was asked whether or not they offer sustainability reporting tools to universities, they responded they did have a self-reflection tool available. This tool was called LIFE and is more about how HEIs can undertake certain actions and what they are currently doing than about sustainability reporting in itself. The tool was more focused on what an institution itself found most important, rather than work with a stringent set of indicators. The project ran trial about three years ago in three Flemish HEIs. Information about the LIFE project can still be found on the Ecocampus website. However, the tool is not used anymore in any of the Flemish HEIs. The Ecocampus team stated that defining an optimal reporting tool largely depends on the needs and opportunities of the universities. They stated GRI was the most established reporting tool, but focused mainly on operation. Ecocampus declared they had not found the 'perfect' tool yet because most reporting tools focus less on education, research and service. The team said these core activities are also more difficult to quantify. They themselves feel they have a bigger role to play by supporting universities with projects or structural changes rather than helping them implement reporting tools. They felt that such reporting tools were easier organised or implemented from within universities. The Ecocampus team mentioned a case where a professor tried to implement AISHE on his university and received recalcitrance within the university. Another downside was that after the report was done, no real structural change was made to contribute to sustainability on campus. Therefore, it is important to pay attention where you want to allocate time and resources. The team stated they did not wish to push the use of reporting tools if there is resistance against them. The institutions that are mostly interested in sustainability reporting tools are often those that already score well in the sustainability area. Another reason for those institutions to do reporting is to compare themselves with others. The reason for reluctance to do reporting might be related to the fact some institutions only have one sustainability coordinator that needs to do everything. The reporting might take up a lot of time, and afterwards no tangible results are achieved. The Ecocampus team stated the failure of the LIFE project might be attributed to the fact universities already had to report on many things back then ('visitatiecommissies'). Also, that the LIFE project is very broad and offers less structure to get started with. Other reasons were that institutions did not really see what the return of investment was and that there were already other sustainability projects running. The team mentioned it was difficult to prove the value of the LIFE project on such a short time and that in the future they would focus more on getting more support from the board.

When asked about what could possibly be done to improve the existing sustainability reporting tools, the team answered they think that the tools were not the problem and did not need much improvement. In their opinion the problem lied with the workload and not always having the workforce available to make the report. Ecocampus mentioned there is no agency in Belgium that helps make the report as there is in the Netherlands for AISHE. They added that this would lead to more institutions receiving certification.

The Ecocampus team emphasised they did not actively push universities towards sustainability reporting nor look for the sustainability reports that do get published. According to them, these reports contain too much information on management operations, which is less relevant for them. Nevertheless, they do follow the available newsletters from universities in Belgium.

Ecocampus stated they did not think they could introduce a benchmarking project with a scoring system for the universities in Flanders. They believe the universities would be reluctant to participate but also stated that they often heard contradictory statements around the willingness to benchmark. They thought it would threaten their current role as partner of universities and that it would be too much work so they could not do any other projects. The team mentioned benchmarking could increase adverse competition between universities instead of cooperation. Furthermore, they stated that some universities might do sustainability projects that are not covered by the indicators of a specific tool. Ecocampus felt that universities could learn more from each other through informal dialogue rather than through sustainability reporting. They believed their role lied more within connecting people as an umbrella agency and organizing networking events. However, Ecocampus did mention that a central student body concerned with sustainability benchmarking such as in the Netherlands (cf. Studenten voor Morgen) would be a powerful signal towards university boards to get into it.

Nevertheless, Ecocampus is considering introducing the 'Green Gown Awards' in Belgium. These awards allow universities to participate with a sustainability project in different categories and the best project ultimately wins the award.

The team also stated they think it could be useful to report on sustainability on campus or faculty level because this ensures that decisions that were made higher up trickle through to every level of the university.

The Ecocampus team was not in favour of a website that accumulates all the sustainability results of the Flemish universities. The only reason they would consider such a website was if it would serve a higher purpose in order to achieve sustainability. The website would have to be a mean to achieve it and not the goal itself. For example, they stated it could be useful to compare the degree of sustainability for the same educational program that is given at different universities.

The team stated sustainability in higher education is not only about knowledge, but also about skills and attitude and that these aspects might be more difficult to rank. However, the team did mention they would like to create a website that gathers all the examples of good practices in higher education in Flanders.

The final question of the interview was about how Ecocampus sees its future role in the sustainability narrative and sustainability reporting within universities. The team answered they feel they were already on a good track and their main role is about connecting people and exchanging information. They do not feel they are the protagonists in the sustainability story, yet they hope to inspire and motivate universities to undertake certain actions that benefit their sustainability level.

DISCUSSION

CURRENT SUSTAINABILITY STATUS, MAIN ISSUES REGARDING REPORTING AND PROGRESS

The results of the interviews showed that only two Flemish universities already had a sustainability report. Additionally, out of the five interviewed universities, three already had a Green Office and one was planning on creating one the following year. This shows that even though there is a growing interest in sustainability, reporting is still in an early stage. These findings were also confirmed by earlier research done by del Mar Alonso-Almeida (2015), who states that the diffusion of sustainability reporting is at the beginning stage in universities. Furthermore, del Mar Alonso-Almeida did not immediately expect an extensive diffusion of sustainability reporting. The results of this thesis indicate that even though there is a growing interest in reporting among the Flemish universities, the lack of funds and resources might be a major hindrance. Velazquez (2006) pointed out this problem nearly a decade ago and stated that additional funds and resources needed to be allocated towards sustainability initiatives. Another main concern that was expressed by universities and Ecocampus was that reporting would take up too much time, leaving no room for other projects.

An additional finding was that sustainability is a broad concept and not all universities know how to implement it or only focus on specific and narrow aspects of sustainability such as consumption. This coincides with the findings of Velazquez *et al.* (2005) who states the lack of awareness is one of the factors holding back the transition towards sustainable universities. Furthermore, it was also clear that many universities were unaware of the availability of reporting tools. The only tools that were often mentioned during interviews were GRI and AISHE.

Nevertheless, regardless of the existence of a sustainability report, all the interviewed universities were making progress concerning sustainability issues. The most mentioned fields of progress were transportation, energy and consumption, catering and education. Very often, sustainability efforts were focused on reducing car usage related to commuting and promoting biking, lowering consumption and offering vegetarian meals. These findings are in accordance with the findings of Elder (2008), who

states that most progress has generally been made in campus operations and mainly in the area of energy, sustainable buildings, transportation, water conservation and waste management (incl. chemicals). Despite the fact that these efforts are a positive step towards achieving a sustainable university, sustainability is broader than these aspects alone. A sustainability report could help to identify the different aspects that are related to sustainability and inspire universities to undertake more different actions.

CURRENTLY USED REPORTING TOOLS IN FLEMISH UNIVERSITIES: REASONS AND BENEFITS

Only one university already had a GRI sustainability report. The main motivations were that GRI is an internationally acknowledged reporting method and is based on comprehensive indicators. The two universities that did have some form of sustainability report gave similar motivations for why they do sustainability reporting. The first reason was to track progress and policy implementation. The second reason was that the report could be used to give advice to the board of directors and get their support. The last reason was that the report could be used as a communication tool for both internal and external communication. These reasons largely coincide with the three clusters that Lambrechts and Ceulemans (2013) mentioned as reasons for sustainability reporting: "(1) policy development, (2) mainstreaming sustainable higher education and (3) communication and transparency". Despite the fact that the other universities did not yet have a sustainability report, they did mention the reasons that were given above as to what the main motivations for reporting could be. Another benefit of reporting that was mentioned was that it might be used to engage relevant stakeholders. Other research already mentions that a sustainability policy at the minimum helps to commit students, academic staff and other stakeholders to help in the transition to a sustainable society (Velazquez *et al.*, 2006).

Most interviewed universities also mentioned that a sustainability report could be used for marketing purposes. It was mentioned that sustainability efforts could help in gaining prestige and were positive PR. This coincides with earlier research that mentions sustainability can be used as a marketing tool (Roorda & Martens, 2008) and can be decisive in stakeholder relationships (Baldassarre & Campo, 2016).

THE ROLE OF STAKEHOLDERS IN THE DEMAND FOR SUSTAINABILITY REPORTING

All the interviewed universities and Ecocampus emphasised the important role the board of directors plays in the sustainability narrative. Often, the board and the chancellor would be open to sustainability initiatives, but they have not yet incorporated sustainability in the core mission of the university. The support of the board is important as it gives the mandate and leverage that is needed to successfully implement sustainability initiatives. Velazquez *et al.* (2005) already showed that the lack of support of university administrators is a hurdle that influences sustainability progress in universities. This aspect is also often highlighted by reporting tools such as GRI or STARS that require a cover letter from the chancellor to ensure support of the highest rank in the university.

The results of the interviews also show that a demand for sustainability reporting or sustainability issues generally come from students and to a lesser extent from the board. Students are one of the most important stakeholders for universities. Therefore, it is important that students voice their concerns about sustainability, as they can influence the actions the institution takes. It was also clear from the interviews that some sustainability aspects such as transportation are closely intertwined with the urban policy. Consequently, it might be interesting to establish a close partnership with city officials in order to successfully implement sustainability projects such as proposed by Elder (2008).

ATTITUDE TOWARDS BENCHMARKING: CONCERNS AND BENEFITS

Almost all of the universities had a positive attitude towards benchmarking if all the other universities would join. However, Ecocampus stated they were not in favour of benchmarking. One of the main concerns universities expressed regarding benchmarking was related to the different context of each university and how this would influence scoring. Most of the Flemish universities differ in regard to setting, amount of buildings and age of the buildings (monumental buildings vs. new buildings) as well as the amount of students. This coincides with the findings of Yarime & Tanaka (2012), who stated it would be necessary to develop tools that take these types of differentiations into account since not all indicators are applicable to all types of HEIs. However, some of the tools that were considered in this thesis do take into account the different context of each HEI. For example, STARS and GRI only let you consider the indicators that are relevant for your institution. Additionally, STARS also gives credit points to sustainability efforts that were not covered in one of the other categories. The UniSAF framework also lets you choose which indicators you want to report on and are relevant for your institution.

Some universities also expressed it would only be useful to benchmark on an international level. Both the STARS and GRI tool that were considered in this thesis are internationally recognized and thus comply with this requirement. Some universities also mentioned that if the students would be responsible for such a benchmarking project, it would be a powerful signal towards the top management. In the Netherlands, there already is a student network called 'Studenten voor Morgen' that encourages students to choose a sustainable education programme, lifestyle and career. Furthermore, they annually release a sustainability-ranking list called 'SustainaBul' of Dutch universities and colleges. The questionnaire they send to HEIs in order to determine their ranking score is completely developed and executed by students. Currently, there are 11 Dutch universities and 9 Dutch colleges that participate in the ranking. The results of the ranking clearly show that all the participating HEIs were making progress in the field of sustainability (www.studentenvoormorgen.nl). The creation of a similar network here in Flanders could possibly help to accelerate the implementation of sustainability aspects in universities.

Other universities mentioned the execution of a benchmarking project should be done by an auditing agency. One of the main reasons was that it would reduce the amount of work and increase the validity of the report. Ecocampus said that there was no agency in Belgium that is preoccupied with helping HEIs to prepare a sustainability report such as in the Netherlands for AISHE (Hobéon). According to them, such an agency could lead to more HEIs with a sustainability report or certifications. Most of the reporting tools that were considered in this thesis do have a form of certification that increases the validity of the report. These tools are GRI, STARS, AISHE and the ISO 14000 series. For most of these tools, support is available for a fee.

FLEMISH UNIVERSITIES' NEEDS REGARDING SUSTAINABILITY REPORTING

The majority of the interviewed universities stated they did not systematically compare results with other universities, but did like informal meetings to exchange ideas or work together on certain projects. On this aspect, Ecocampus mentioned connecting people was their main role to play. One university mentioned the frontrunners idea: each university is a frontrunner in one or other area and could teach other universities how to achieve it. This could be a viable alternative to benchmarking, since some universities expressed the fear that benchmarking would lead to competition and window dressing instead of cooperation. Boiral (2013) already pointed out the danger that some sustainability reports underexpose the negative aspects in favour of the positive aspects regarding sustainability. This might also be one of the risks when using the UniSAF tool, since it allows universities to pick the indicators they wish to report on without having obligatory indicators.

One university proposed that it was important to work with a visually strong tool; so all universities could easily see their own progress. The GASU tool developed by Lozano meets this criterion as the results of the indicators are depicted as graphs. However, the lack of a freely available implementation manual and limited information makes this a less accessible tool for universities that are new to sustainability reporting.

Some universities also expressed that the reporting tools should be based on scientifically correct indicators that allow monitoring of each aspect involved. This is in congruence with Lozano's (2006) statements that the forte of indicator-based assessments is that they are measurable and comparable. The following tools that were analysed in this thesis comply with this requirement: GRI, STARS and GASU. All these tools have a comprehensive set of indicators that can be used to monitor relevant aspects. However, GRI does not have indicators on academics, while STARS and GASU do.

Two universities also mentioned they would like to incorporate the SDGs in their report. In 2017, GRI launched a new project in cooperation with UN Global Compact to create an action platform on SDGs. They will release a complement to the GRI standards that is called 'Reporting on the SDGs'. Since one of the interviewed universities was already using the GRI standards, this could be an additional reason for them to continue using GRI standards for their sustainability report.

FLEMISH UNIVERSITIES' FUTURE PERSPECTIVES ON SUSTAINABILITY REPORTING

In conclusion, almost all of the universities did not have a clear path for the future of sustainability reporting. The universities that did already have a sustainability report stated they were going to keep on producing reports and one university without a report stated they would start reporting the following year. However, some universities were unsure about the reporting tool that would be used. Elder (2008) already pointed out that the lack of a clear pathway towards a determinable end is one of the factors that complicates the transformation towards sustainability.

CONCLUSION AND FUTURE PERSPECTIVES

It has been nearly two decades since most of the Flemish universities signed the Copernicus charter, yet the transition towards a sustainable university remains in its early stages. This contradiction is clearly noticeable in the fact only two out of five universities have a sustainability report and only three universities recently created a Green Office. Nevertheless, most universities are taking steps into the right direction and are willing to implement sustainability projects and subsequent reporting. Most of the projects have been on traditional topics such as mobility, catering and energy consumption. The lack of funding and workforce is one of the main reasons why most universities do not yet have a sustainability report. Therefore, it is important that university chancellors not only sign sustainability declarations, but also lend their full support towards sustainability initiatives.

Currently, two Flemish universities mainly did sustainability reporting for three reasons: (1) to track progress and policy implementation, (2) to give advice to the board of directors and (3) to use it as a communication tool. The universities that did not have a sustainability report stated this was due to being unfamiliar with the existing reporting tools and not having enough time available to allocate towards reporting. The university that was planning on making a sustainability report gave similar motives for reporting as the universities that already had reports.

As sustainability reporting is only in its early stages, it might be better initially to invest more in dialogue between the universities rather than ranking them. Most universities also expressed that they were more in favour of informal dialogue rather than systematically comparing results. The results of the interviews showed that benchmarking might evoke an unwanted competitive atmosphere and could lead to window dressing. It was also clear from the interviews that sustainability is a sensitive topic and some universities prefer to avoid negative feedback. Universities need to keep in mind that the main goal needs to be the transition towards a sustainable university. In order to achieve this goal, the Frontrunner idea that was proposed might be a good solution. This idea takes the different context of each university in consideration and lets universities show in which aspect they perform best. This way, the competitive atmosphere is minimized and the focus lies more on the learning aspect. This also allows universities that are already doing sustainability reporting to continue reporting. When the

other universities have caught up on their sustainability policy, the universities that are frontrunners on reporting could then help others by explaining the reporting process, how they managed it and what the difficulties are. In the long run it would be possible to do benchmarking, since most of the universities were not reluctant to this idea. Consequently, for results to be comparable, it could be useful to reach an agreement on which reporting tool should be used by all the Flemish HEIs.

As far as reporting tools are concerned, it seems that GRI would best suit the needs of the universities as it is internationally recognized, indicator based and allows you to focus on relevant indicators. Another reason is that this year (2017), there will be a complement for the GRI standards that handle reporting on the SDGs. However, GRI lacks indicators on education and research, which are the core business activities of universities. Consequently, other indicators would need to be searched in order to complement the GRI sustainability report for universities. Out of the tools specifically designed for HEIs, STARS would best fit the needs of the interviewed universities. STARS is also internationally recognized, demands support from the chancellor and is indicator based. Furthermore, it offers certification and recognition for universities that are performing well. The downside of STARS is that it only provides positive feedback through its award system. For example, institutions with a low sustainability score can opt to be recognized as "STARS reporter" and do not have to release their sustainability score, while still having the prestige of the STARS programme. GASU was another tool that offered a lot of potential, but failed in terms of accessibility. Therefore, it seems that none of the tools that were analysed in this thesis fulfil the full spectrum of requirements in order to be a 'perfect tool'. Based on the outcome of the interviews, the "perfect tool" would be one that is visually strong, indicator-based, flexible towards university context and that can be used to achieve goals and track progress. Long-term goals are also vital when one wants to guide the university towards a sustainable transition. Currently, there is no such tool available that complies with all these requirements. Furthermore, most of the tools that were considered during this thesis were designed to give a snapshot of the current sustainability situation without placing it in the context of long-term goals.

Therefore, it would be valuable to create a tool that has all the characteristics as mentioned above and allows to visually show the current sustainability situation in relation to the long-term goal. The long-term goal would then be the maximum attainable ideal situation a university could reach for a certain aspect. This maximum would need to be determined when an institution starts to use the tool for the first time. This could be done by an auditor or by the universities themselves. The maximum would need to be checked by the organisation that owns the reporting tool in order to make sure it is reliable and realistic. Consequently, such a tool would allow benchmarking of the institutions' own progress towards the long-term goal and allows comparison with the progress made in other universities. By allowing universities to benchmark against their own long-term goal, the problem of differences in context is largely minimized as each university's personal relative progress is showed. By visualising progress as a relative number, the report also becomes more readable for university stakeholders.

Stakeholders could then clearly see what the past situation was, what the current one is and what the ideal future situation will be. By adding a time dimension to the reporting process, the tool is no longer solely useful for snapshotting the current sustainability status, but can also be used as a guide in the transition towards a sustainable university. The format of the results could depend on the desires of the stakeholders: a full sustainability report or a one-pager with spider charts that visually show the sustainability transition. Such a tool could also be interesting for policy makers as it clearly shows where the shortcomings in the policy are and progress is lagged. Aforementioned tool could be created by, for example, making an extension for the current indicator based reporting tools such as STARS or GRI. The visual output of the tool could resemble the visual output of the AISHE tool, but for more parameters (cfr. GASU).

The interviews also showed that these stakeholders - especially students - play an important role in the transition towards a sustainable university as they can exert pressure on the board of directors. Consequently, it is important that in the future more students and other stakeholders raise their voices concerning sustainability. For the future, it would be interesting to form a committee at each university that contains a sustainability coordinator, student representatives, a representative of the city and representatives of the different university departments that are important for data collection. By having people in key positions in the university and the city, the preparation and implementation of sustainability projects could be greatly facilitated. In the same light, it would be interesting to have personal contacts (students or staff) at each campus or faculty that can help with making the implementation of the projects successful and can give immediate feedback. Since the success or failure of a project often depends on the willingness of students to participate (eg. using recycling bins), it could be useful to search for people within student associations. Currently, these associations have representatives for activities such as leisure, culture, party, sports and many others. The advantage of this approach is that almost every faculty has their own student association that plays a prominent role in the student life on campus. By creating a sustainability function within these associations, the students have an accessible first line of contact they can approach surrounding sustainability on their campus. This also leans towards the idea of giving students more responsibilities and integrating sustainability as an equal important part of their student time.

In conclusion it must be said that universities are often seen as cradles of knowledge and play an important role in the battle against current challenges such as climate change and globalisation. Therefore, it is more important than ever that universities stand united and practice what they preach.

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Appendix

Appendix A

Questionnaire Master thesis: Benchmarking sustainability (University version)

General questions

- 1. Is there a Green office at your university?
- 2. Does your university have a sustainability report? Is this part of the annual report or is it a separate report?
 - → If separate report: How many reports have been published?
 - → If part of annual report: Do you consider writing a separate report? Is it publically available?
- 3. Which reporting tools or guidelines does your university use to report on sustainability? Did you make modifications to the tool/guidelines?
- 4. Why do you use this specific tool, what is the biggest motivation? If no tools are used, why not?
- 5. Has your university used other reporting tools or guidelines in the past and why are you not using these anymore? What were the biggest shortcomings?
- 6. Do you think it would be useful to assess sustainability on a faculty level and report an average or do you prefer to report it for the university as a whole?

Sustainability Benchmarking

- 1. Does your university compare results with other universities? Why do you compare or not compare the results?
- Do you think a scoring system would be helpful in order to benchmark progress or benchmark with other institutions?
 2.2 What do you think would be the biggest advantage or biggest flaw of such a system?
- 3. Would you use a reporting tool with scoring system that allows benchmarking if other universities used it as well?
 3.2 Why would or wouldn't you?
 3.3 What could convince the university to use the system?
- 4. Who should be responsible for the execution of such a reporting tool? Would it be the universities themselves, students, an external auditing committee or others?
- 5. Would it be an added value if there was a website were the scoring results are available to the public and certifications would be available? Why (not)?

Value of sustainability reporting

- 1. What is the importance of sustainability reporting for your institution? Can you name the top 3 most important motivations why you report on it or why you do not report on it?
- 2. What realisations/progress have been made based on your sustainability reports?

- 3. Is there a demand for sustainability reporting from community stakeholders (students, employees, funders, ...)?
- 4. What are according to you the characteristics that are needed for a tool/framework to be successful?
- 5. How do you see the future of sustainability reporting at your university?

APPENDIX B

Questionnaire Master thesis: Benchmarking sustainability (Ecocampus version)

- 1. Do you have sustainability reporting tools or guidelines available for universities in Belgium?
- 2. Which sustainability reporting tool or guideline has your preference to be used in universities and why? What is the biggest advantage? What could be improved?
- 3. Have you ever done a project surrounding sustainability reporting in universities before and what happened ?
- 4. Do you actively push universities towards sustainability reporting? How do you do this? How do you handle universities that are reluctant to report?
- 5. Do you follow up the sustainability reports from universities? What is done with this information?
- 6. What do you think about a reporting tool with a scoring system that allows you to rank (benchmark) universities according to their sustainability?
- 7. Who do you think should assess this benchmarking project (universities themselves, students, external auditor, government, others?)
- 8. Do you think this reporting should be done on a faculty level or as a university as a whole?
- 9. Do you think a website for the public containing information on sustainability ranking of universities would be an added incentive/value for universities to report on sustainability and make changes? What about certifications or awards?
- 10. What role do you see for yourself in the future of sustainability reporting in higher education in Belgium?