Propel Research + Strategy

Institutionalizing Sustainability on Campus

Final Report

April 1 2013

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This report does not contain any confidential content.
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Project Summary

This research project has been conducted by Propel Research + Strategy for the Sierra Youth Coalition (SYC), the largest youth environmental organization in Canada which empowers passionate young people to strive to make Canada more sustainable. Through this collaboration Propel is responsible for undertaking background research and developing strategic recommendations to guide SYC’s Sustainable Campuses (SC) project. The SC project aims to make post-secondary campuses across Canada more sustainable through addressing institutional operations, improving curricula and mobilizing campus and community support (Sierra Youth Coalition, 2012b).

SYC would like to see sustainability institutionalized across all Canadian post-secondary campuses. Broadly, this can be accomplished one of two ways; through legislative mandate from government or through voluntary initiatives implemented nationwide following a grassroots campaign. Our research is aimed at establishing the degree to which each of these approaches is feasible and how SYC might strategically direct their efforts given the current landscape of stakeholder interests and roles.

To accomplish this, our research entailed interviewing individuals belonging to key stakeholder groups including faculty, university administration, staff, environmental non-governmental organizations (ENGOs), university associations and occupational health and safety (OHS) practitioners from industry. Interviewees were limited to information-rich individuals\(^1\) with significant experience pertinent to our research question. In order to characterise and gauge the interests of the student population on Canadian post-secondary campuses we utilized surveys sent to student union representatives across Canada. Data gathered from interviews, surveys, as well as from additional secondary research identified in our academic literature review is analysed through the use of strategic analysis frameworks such as SWOT (strengths, weaknesses, opportunities, threats) and PESTE (political, economic, social, technological, ecological). Recommendations based on these analyses have been developed to guide to the SC project.

1. Introduction to Problem and Research Questions

Through their efforts, the SYC has observed that sustainability-related practices differ considerably from campus to campus; and would like to see sustainability more uniformly and rigorously institutionalized across all Canadian university and college campuses. An example

\(^1\) “Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research... In depth information from small number of people can be valuable if they are information-rich cases” (Patton, 1990, p 169-184)
of institutionalization that SYC is currently engaged in is a campaign to have sustainability offices on every campus in Canada. Other analogous movements which have created social change and have institutionalized offices in both the private and public sector is the OHS movement. This analogous historical movement is deemed critical and relevant to sustainability and thus was studied as part of our background research.

In order to help SYC achieve their goal our research includes a number of lines of inquiry. First, we reviewed literature to learn about the analogous experiences of the OHS movement. This research has allowed the research team to identify that there are two fundamentally different paths in which a Canada-wide adoption of sustainability offices can be achieved: through legislative mandate or voluntarily through support at the grassroots level.

The first of these paths follows the success of the OHS movement, where offices arose in organizations due to legislation. This legislation was developed due to a reaction to reports of high fatality rates in Canadian workplaces and catalyzing events such as the Elliot Lake mine strike (IAPA, 2010). Through this course of action, SYC would build a coalition to lobby regulators to develop a mandate for sustainability to be institutionalized across Canadian campuses.

The second path follows the model of voluntary initiatives, where a campus-by-campus campaign changes the behaviours of key stakeholders on Canadian campuses. This effort would need to focus on communicating and engaging with the appropriate stakeholders to deliver a coherent and compelling case that aligns with each key stakeholder group’s core concerns and motivations. The SC project is currently engaged in such a campaign, however our research aims to critically analyze it in greater depth and systematically lay out the opportunities and challenges facing this route in comparison to the legislation-oriented campaign which is envisaged.

Our research will establish the degree to which each of these approaches is feasible and how SYC might strategically formulate their efforts given the current landscape of stakeholder interests and roles, as well as the challenges and opportunities inherent in creating sustainable institutional change.

2. Project Goals & Objectives

**Overarching Project Goal:**

To identify and synthesize the fundamental components of a successful campaign to institutionalize sustainability across Canadian post-secondary campuses.
1. **Legislative Route:** We explore in detail the potential for sustainability to be mandated on campus through legislation, taking into consideration the history of analogous movements in Canada, in particular that of the occupational health and safety (OHS) movement.

2. **Voluntary Route:** We examine the current state of sustainability on campuses and explore the potential for sustainability to be institutionalized voluntarily by post-secondary institutions according to their own priorities and characteristics.

**Project Objectives**

A. To identify key stakeholder groups relevant to the campus sustainability movement in Canada and provide additional information about these stakeholders for input into existing SYC documents such as their multi-stakeholder guide.

B. To identify and characterize the major challenges and opportunities that face champions of campus sustainability.

C. To define the characteristics and role of campus sustainability offices and how they fit into a broader framework for institutionalizing sustainability on campuses across Canada.

D. To create a pathway for the ‘institutionalization of sustainability’ that is sufficiently tangible and constrained, yet flexible enough to be applied effectively in a variety of on-campus environments.

E. To make recommendations to SYC with regard to the role that they can play in order to effectively contribute to the institutionalization of sustainability on campus.

3. **Context**

   This section reviews the role of post-secondary institutions in pursuing a sustainable course, characterizes progress to date in terms of legislative and grassroots drivers and classifies the key stakeholder groups on campus.

3.1. **What does Sustainability Mean to Post-Secondary Institutions?**

   Sustainability was initially framed in relation to global level environmental and social problems that require collaborative action to solve (WCED, 1987; Meadows & Meadows, 1972). Since it was coined, the term has been applied to local and regional levels (Wright 2004; Goodland 1995), and is often referenced as a ‘prerequisite’ for the robust functioning of
human economic and social systems (Daly & Farley, 2004; Goodland, 1995; Starik & Rands, 1995).

A number of important actions involved in the organizational transition to sustainability can be identified, for instance the importance of buy-in from upper-level decision-makers internal to the organization and of external civil society stakeholders (Kemp, Parto, & Gibson, 2005). In the higher education context, challenges tend to concern the ability of these institutions (who often have long and important traditions and a dense bureaucratic environment within which decisions are made) to adapt to new procedures and objectives (Stephens & Graham, 2009; Tilbury & Whortman, 2008). However, universities and colleges have the responsibility (Wright, 2004) and the resources (Stephens & Graham, 2009) necessary to institutionalize sustainability concepts and frameworks effectively.

The involvement of universities and colleges in the sustainability movement is paramount for a number of reasons, reflecting a wide variety of opportunities to society if institutionalization of sustainable practices and procedures is realized Canada-wide. Higher education institutions can be significant leverage points for change (Bartlett & Chase, 2004). They are responsible for educating future leaders (Moore, 2005), and if students are engaged effectively there is the opportunity that they take what they learn and apply it to the organizations that they join after they leave campus (Cortese, 2003). On top of this, campuses are integral parts of the communities in which they exist, and so their efforts can extend to broader regional initiatives and the creation of a wider macro culture of sustainability than at the micro (campus) level (Bartlett & Chase, 2004). Finally, academic institutes represent large investments in buildings and land, requiring significant resources to maintain and monitor operations (Bartlett & Chase, 2004).

There is creditable reason to think that universities in particular (as they were the main focus of most of the literature) are less well-suited to holistically tackle sustainability than private or other non-profit entities, but there is reason to believe that as institutions of learning they have a greater responsibility to do so (Moore, 2005; Wright, 2004). This makes the application of sustainable practices a vital and necessary objective of environmentally, socially, and financially responsible campuses.

3.2. The Current State of Sustainability on Canadian Campuses

Sustainability assessment tools are a fundamental way in which higher education institutions can implement sustainability-related initiatives and procedures and set industry benchmarks (Clarke & Kouri, 2009; McIntosh, Gaalswyk, Keniry, & Eagan, 2008). An ideal tool should identify important sustainability issues, develop metrics that are calculable and
comparable, move beyond eco-efficiency, stress innovation, measure processes and motivations and focus on comprehensiveness (Shriberg, 2002). Furthermore, for campus sustainability initiatives to be most successful, education, research, university operations, and the external community should be addressed through the implementation of a single framework (Sierra Youth Coalition, 2012a; Cortese, 2003). Currently, the most prominent framework developed specifically for the higher education environment is the Sustainability Tracking, Assessment & Rating System (STARS) which has been developed by the Association for the Advancement of Sustainability in Higher Education (AASHE) (AASHE, 2012). However there are a wide variety of frameworks available, ranging from those which are applicable to organizations in a variety of sectors to those crafted by individual organizations and tailored specifically for their own use.

Though there is no Canada-wide mandate pertaining to campus sustainability, there are examples of provincial legislation that impact campus operations. For example, in Nova Scotia, organic waste is banned from landfills, leading higher education institutions in the province to develop stringent organic recycling processes (Davidson, Morrisey, & Owen, 2011). Other legislation at the provincial level which has helped to catalyze sustainability initiatives on Canadian campuses include British Columbia’s Bill 44 which mandates that all public sector institutions become carbon neutral by 2010, and Ontario’s Green Energy Act (2009) which incentivizes uptake of renewable energy harvesting systems by building and landowners in Ontario.

The OHS movement has been identified as one that has achieved Canada-wide institutionalization through legislation (Government of Ontario, 2011). There are many reasons why OHS and sustainability can been seen as analogous, namely that they often involve limiting or preventing emissions or exposure to various pollutants and implementation of these programs can lead to greater employee engagement and a safer work environment (Fingerhut, Goldstein & Helmer, 2001). However, the main driver of OHS legislation in Canada has been accidents or catastrophic singular events (IAPA, 2010). Such occurrences do not characterise the sustainability issue in the same manner as they do OHS.

On the voluntary side, in 2009 the University of Winnipeg become the first Canadian university to ban the sale of water bottles on campus. This initiative was the result of student action in combination with the efforts of the Polaris Institute, the Canadian Federation of Students and SYC (Winnipeg Labour Council, 2009). Partnerships with ENGOs such as SYC, or industry have historically lead to adoption of proactive voluntary initiatives by post-secondary institutions (Saadatian, Mat, Lim & Sopian, 2012; Shi & Yonezawa, 2012;
Fonseca, Macdonald, Dandy, & Valenti, 2011; Stafford, Polonsky, & Hartman, 2000). Grassroots campaigns traditionally struggle with funding and resources in the absence of such partnerships (Kurland, 2011). In these instances funding need to come from within the university themselves and have been linked with student fees in past instances where sustainability offices have been established. This was the case at Wilfred Laurier University (S. English, personal communication, November 2012). The University of Victoria’s (2012) “revolving sustainability fund” and McGill University’s (2012) Vision 2020 are also examples of voluntary initiatives that are funded by the university itself, though various financing models have been employed to raise funds. The research team dives deeper into how sustainability offices are financed in our recommendations to further satisfy accomplishing project objective four.

It is evident that there are varying levels of commitment to sustainability across Canadian campuses today and various ways in which initiatives arise. However we can discern that the majority are driven by grassroots campaigns (often student-led) which aim to address institution-specific issues.

3.3. **On-Campus Stakeholder Groups**

SYC’s SC project has developed a ‘Multi-Stakeholder Planning Guide’ which identifies and broadly classifies the main stakeholder groups on campus. These are students, faculty, administration, and staff (Sierra Youth Coalition, 2012a). Understanding the particular concerns and interests of each group is important because “evidence has shown that the greatest successes in achieving institutional change (for sustainability or otherwise) exist when all the sub-cultures of the campus community (students, faculty, staff and administration) come together to form a shared vision and organizational alignment in their respective departments” (Sierra Youth Coalition, 2012a, p.3; Sharp 2002)

4. **Research Methodology**

The following section describes and provides justification for our chosen research design. This methodology can be characterised as generally qualitative in nature and reliant upon primary information from interviews and surveys with carefully chosen information-rich individuals within stakeholder groups, as well as complimentary secondary sources of information to fill knowledge gaps that arise following primary data collection and analysis.

4.1. **Overview of Methodology**

The primary research conducted included: online surveys, interviews and a reliance on academic literature to strengthen findings and fill gaps identified through analysis of primary
data. The main goal of the surveys and interviews is to provide an understanding of the urgency and potential for sustainability on campuses based upon information from individuals representing the various stakeholder groups on campus that SYC has already identified (students, faculty, administration and staff). Please refer to Appendix A for stakeholder definitions (Sierra Youth Coalition, 2012a). Interviews were used for three of the four stakeholder groups except for students, where a survey was deemed more appropriate due to the large size, diversity and geographic spread of this group. Surveys were distributed to prominent student representatives at student unions across Canada. Additionally, we identified a number of off-campus stakeholder groups whose perspectives were characterised through interviews. All of these groups—ENGOs, university associations and environmental and OHS practitioners in industry—have experiential information critical to better understand sustainability on campuses. In all, 162 surveys were sent out to Student Union representatives at campuses across Canada in all provinces and territories except Nunavut. A total of 17 interviews were conducted. Nine interviews were completed with on-campus stakeholders including a staff, faculty, and upper administration employee at three universities in Southern Ontario. These Universities were the University of Waterloo, Wilfred Laurier University, and The University of Toronto Mississauga. These universities were chosen because of their proximity to the research team and their historically divergent and distinctive approaches to campus sustainability. Additionally, eight off-campus interviews were conducted with individuals from ENGOs, university associations and industry. For complete lists of on- and off-campus interviewees see Appendix B and C.

In the analysis phase, interviews were transcribed and survey results collected. Inductive themes were generated and all primary data was coded using these themes. Coded interview and survey data were then further strengthened by follow-up research and organized into broad categories representing major findings.

4.2. Geographical Scope

Primary data collection was completed through face-to-face interviews in Southern Ontario (due to travel constraints) along with phone interviews to some off-campus interviewees throughout Canada and the United States. Standardized online surveys were distributed to post-secondary institutions across Canada. Both English and French language surveys were utilized.
4.3. **Justification of Research Design**

To achieve the objectives outlined above, we identified comparative historical analysis as the most promising research design approach. The overarching goal of the comparative method is to establish general empirical propositions which can test a hypothesis or contribute to the discovery of a new hypothesis and to theory building (Collier, 1993; Lijphrat, 1971). The comparative historical method is rooted in offering historically grounded explanations in substantively important events in history (Mahoney & Rueschemeyer, 2003).

**Objective 1: Legislative Route**

We used the history of the OHS movement (obtained through literature and interviews with experts in the field from industry), as well as input from off and on-campus interviewees to determine the viability of the legislative route. This line of inquiry focused on the effectiveness of legislation as a tool for policy change on campus. The sustainability context is historically compared with that of OHS in order to determine the degree to which an OHS-style approach to policy change might be effective for campus sustainability. The perspectives of off-campus interviewees were particularly important to assessment of the legislative route to sustainability institutionalization because most of these interviewees were chosen from organizations which would be likely members of a coalition to push for legislative change.

**Objective 2: Voluntary Route**

Interviews and the comparative historical analysis method were also used to inform the research team on the current status of sustainability on campuses across campus, along with showing the success of prior and ongoing grassroots movements on Canadian campuses. Interviews with on-campus stakeholders from staff, faculty and administration, as well as survey responses from student union representatives were critical to assessing the potential of the voluntary route as these actors would necessarily have to be involved in such a campaign.

4.4. **Approval of research design**

Before conducting any primary research, the research team received approval from the Office of Research Ethics (ORE) at the University of Waterloo. The research team completed the ORE 104 form and received clearance from Susan Santi to move ahead with the collection of primary data (see Appendix D). The ORE approval number was 18640.

4.5. **Online Surveys**

Surveys are a unique form of research design in that they are systematic and standardized. The same questions and potential answers are available to all respondents,
thus they can be particularly useful when looking for specific pieces of information or determining the frequency of a particular perspective or answer (Brenner, 2006; Taylor-Powell & Hermann, 2000).

Surveys were sent to student union representatives at universities across Canada in order to study the student perspective on sustainability in higher education. We distributed 162 surveys in total. Contact information for each institution was derived from a list found on the Canadian Information Centre for International Credentials (CICIC). From this list, the research team investigated each institution’s website to find the contact information of the most relevant student association. In most cases, a direct email was sent to the student union, however if it was not possible, the email was sent to the general information contact address found on the institute’s website. Personal connections between SYC’s national student network and representatives at each institute also aided us in obtaining the contact information of additional potential respondents. In all, the aid of SYC provided us with approximately an additional 43 potential respondents.

Due to the geographical scope of this data collection method we used both English and French language surveys. The English versions of the surveys were translated to French by a French Language Studies Masters student at the University of Waterloo. Please see Appendix E and F for the English and French language surveys.

4.5.1. Limitations of Online Surveys

The quality of answers for an open ended question is the primary limitation of this method. Open ended questions can produce more answers which are less adequate for analysis. This is because respondents can produce non-valid responses or skip questions due to the effort for a required response (Hlebac, Manfreda, Reja, & Vehovar, 2003). Thus, the survey featured a small number of specific close-ended questions.

4.6. Interviews

Interviews can provide researchers with the opportunity to learn from the perspectives of individual respondents and how they interpret order in the world and enable researchers to conduct meaningful comparison of information from respondents (Turner 2010; Guest, Macqueen, Namey & Woodson, 2005). This form of research design seeks to uncover specific experiential information from carefully selected cases rather than sample a large group to identify broad norms as is the case with focus group methods of data collection (Guest et al., 2005). Knowledge can be created from interviews by allowing respondent to express themselves freely by responding to open-ended questions (Geer, 1988). In the
attempt to create valuable responses these questions must be phrased in a descriptive manner, focusing on the “when” and the “who” instead of allowing for yes or no answers (Brenner, 2006).

The interview method aligns well with our research. We conducted interviews with 17 information-rich individuals belonging to the following stakeholder groups: campus administration, faculty, on-campus staff, ENGO representatives, individuals from university associations and sustainability consultancies, and OHS practitioners from industry. Please see Appendix G and H for a complete list of interview questions. These questions were the same for each on-campus stakeholder group and were adjusted individually for off-campus interviewees depending on their individual expertise and experience.

4.6.1. Limitations of Interviews

One drawback with this approach is the time and resource requirements on researchers. Interviews can be time consuming in nature due to the creation of appropriate interview questions, conducting of interviews, transcription of interview recordings, and analysis of trends in responses through the coding process (Adams & Cox, 2008). Consequently, researchers limited the number of interviews per stakeholder group to 2-4 and allocated approximately 30 minutes per interview. An additional limitation of this approach is the bias of individual interview respondents, due to their past experiences and the nature of their profession (Dell, Vaidyanathan, Medhi, Cutrell & Theis, 2012).

4.7. Case Studies

The research team emphasized and focused on on-campus interviews at three universities in Southern Ontario. These universities are 1) The University of Waterloo 2) Wilfred Laurier University 3) University of Toronto Mississauga. Data was collected from staff, administrative and faculty representatives from each institution. These interviews, along with survey responses, allowed researchers to more deeply understand the current state of sustainability on these three campuses, an approach that researchers found complemented the broader results generated in off-campus interviewees. Findings from these three cases were generalized and combined with other findings in the analysis phase and consequently are not presented as individual case studies in the results section of this report.

4.8. Data Analysis

In accordance with Hunger & Wheelen’s (1997) strategic framework (see Appendix I), our research design allows data to be fed into environmental scan (a PESTE analysis) of the sustainability on campus issue, including its key challenges and opportunities. After
conducting the PESTE environmental scan of the problem we completed SWOT analyses for both possible routes to sustainability implementation; legislative and voluntary. Upon analyzing and contrasting these strategic analyses, we finalized recommendations. It is important to note that the two routes are not mutually exclusive and researchers did not begin with the assumption that it will be possible to clearly identify a single course of action preferable to all others.

4.8.1. Survey Data Analysis

The primary purpose of the surveys was to gauge the potential for student engagement in a grassroots movement for campus sustainability. This information was fed into our environmental scan and strategic analyses of the voluntary approach. Survey responses showing significant student interest in sustainability issues and the growth of existing student-led campus sustainability initiatives lend weight to the preference of a voluntary approach (objective two). When searching for these indicators from survey responses we assess commonalities in student sentiment across our survey responses by grouping responses according to survey question and the inductive themes utilized in the coding of interview data.

4.8.2. Interview Data Analysis

Due to the depth of information from interviews and the variety of stakeholders that were interviewed, information from interviews was used to assist in determining the viability of both the legislative and voluntary routes to sustainability institutionalization on campus. Once again, trends and correlations in responses to interview questions was used to finalize recommendations. Ambiguity in presentation of results was minimized through the use of direct quotation of interview responses to minimize biases in the data analysis process.

Once interviews were transcribed (word-for-word) researchers began the coding process. A major issue within this process is inter-coder reliability (differences in how coding is conducted by different members of the research team). Failing to tackle this issue could render findings useless, as Neuendorf (2002) states, “given the goal of content analysis is to identify and record relatively, objective (or at least intersubjective) characteristics of message, reliability is paramount. Without the establishment of reliability, content analysis measures are useless” (pg. 141). To address this important issue, the research team had two researchers work together, simultaneously in a closed location, to create the inductive theme list and code each interview together to ensure that the correct themes were identified and the coding process was congruent across all interviews.
To create the themes for coding, the researchers employed an inductive approach. The inductive approach refers to a process of crafting coding themes after critically reviewing the raw data, as opposed to a deductive method which predetermines coding themes based on an initial literature review (Thomas, 2006). Once the theme codes were finalized (see Appendix J), researchers coded each interview from the start, grouping responses into the theme categories. The results of this coding process were then combined with survey findings and summarized into broader themes for presentation in the results section of this report. Results were then fed into the strategic analysis frameworks discussed earlier and used to generate recommendations to SYC.

4.8.3. Concluding Academic Literature Review

After completion of the data analysis stage, we identified the issue of how sustainability initiatives on campus are financed as a critical gap in data that could be filled through follow-up research of secondary sources of information. Findings from this follow-up research are summarized in the results section of this report and were used to further inform recommendations to SYC.

5. Results

The following section describes commonalities amongst responses by inductive themes determined after all interviews were completed and all surveys responses received.

5.1. Overview of Results

We received responses from student union representatives at 39 of the 162 campuses that were sent a survey (see Table 1 – Survey Response Rates). In addition, 17 interviews were conducted with information-rich informants either in person or over the phone. Nine of these interviews were with on-campus stakeholders and eight more were with interviewees involved in organizations with direct experience in the

<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>Responses/ Sample Size</th>
<th>Response Rate</th>
</tr>
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<tbody>
<tr>
<td>Total Response Rate</td>
<td>39/162</td>
<td>24.1%</td>
</tr>
<tr>
<td>Response Rate With French Language</td>
<td>37/112</td>
<td>33.0%</td>
</tr>
<tr>
<td>Institutions Omitted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>5/19</td>
<td>26.3%</td>
</tr>
<tr>
<td>British Columbia</td>
<td>7/21</td>
<td>33.3%</td>
</tr>
<tr>
<td>Manitoba</td>
<td>5/8</td>
<td>62.5%</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>3/7</td>
<td>42.9%</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>2/3</td>
<td>66.7%</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>2/10</td>
<td>20.0%</td>
</tr>
<tr>
<td>Ontario</td>
<td>10/38</td>
<td>26.3%</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>0/3</td>
<td>00.0%</td>
</tr>
<tr>
<td>Quebec</td>
<td>2/46</td>
<td>04.3%</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>3/5</td>
<td>60.0%</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>0/1</td>
<td>00.0%</td>
</tr>
<tr>
<td>Nunavut</td>
<td>0/0</td>
<td>00.0%</td>
</tr>
<tr>
<td>Yukon</td>
<td>0/1</td>
<td>00.0%</td>
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</tbody>
</table>
area of campus sustainability or OHS compliance. For a one page overview of results see Appendix K.

5.2. Themes Identified in Interview and Survey Responses

The following broad themes characterize interview and survey results. They have been grouped into seven themes: broad considerations on creating sustainable change in organizations, barriers to campus sustainability, opportunities for overcoming barriers, pressures that incite action, legislation and links with OHS, knowledge networks and cross-sector partnerships and sustainability offices.

5.2.1. Broad Considerations on Creating Sustainable Change in Organizations

Sustainability is defined differently by individuals depending on their personal experiences and knowledge. Access to knowledge, personal values, and one’s role within their organization shape what they believe the scope of sustainability to be. This is a fundamental characteristic of the concept and should be acknowledged by those seeking to incite trends toward sustainable practices within their organization.

“Sustainability is not a precisely defined term, and it gets defined contextually, and that context on the campus is critical in defining it.” - Paul Rowland, Executive Director, Association for the Advancement of Sustainability in Higher Education (AASHE)

Respondents also identified collaboration and integrative policy planning as necessary for successful and long-term application of sustainability practices.

“Everybody needs to be working in collaboration and in concert…Because really the implementation of sustainable development is about co-ordination and integration.” - Prof. Ann Dale, Canada Research Chair in Sustainable Community Development, Royal Roads University

Further considerations include the need for a culture of sustainability to permeate the institutions or communities in question and for individuals to have a feeling of personal connection and accountability when it comes to sustainability in their day-to-day activities. Because sustainability is such a multi-faceted issue and connected to a large number of activities on campus these conditions were deemed necessary by a number of our interviewees and by survey respondents. A notable example is recycling, which relies fundamentally on personal actions and changes in behaviours, however minimal, of almost everyone within the organization.

I would say the best thing to do is make people understand how sustainability issues impact them and how they can impact sustainability and if people see that and if it’s important to them then they will embrace it” - Prof. Barry Colbert, Director of P&G Centre for Business and Sustainability, Wilfred Laurier University
“I think the blessing and the curse with sustainability is that everyone on a campus has something to do with it, the blessing is that there is a lot of people to do work, but the curse is that there are many hands that need to know how to do it.” - Paul Rowland, Executive Director, AASHE

5.2.2. Barriers to Campus Sustainability

Interviewees and survey respondents broadly agreed on a variety of barriers facing the institutionalization of sustainability. Chief among these was a perceived natural aversion of humans and human systems, such as institutions, to change.

“I think human beings are generally resistant to change.” - Prof. Ann Dale, Canada Research Chair in Sustainable Community Development, Royal Roads University

“I’d say the biggest thing is people’s resistance to change and to taking risks.” - Raul Rowland, Executive Director, AASHE

“I don’t think that people naturally have an aversion to sustainability but they do have an aversion to change.” - Claire Bennett, Sustainability Officer, Wilfred Laurier University

Also a significant commonality shared between interview and survey respondents was the view that financial and human resource constraints significantly slow progress towards implementing sustainability initiatives. On-campus stakeholders consulted through surveys (see Figure 1 – Challenges to Sustainability) and interviews were particularly cognizant of these barriers and had the tendency to rank financial barriers ahead of man-power deficiencies in terms of its impact on their ability to create sustainable change. Survey responses from student union representatives showed minimal, though variable levels of investment in sustainability related projects by student unions. (see Table 2 – Sustainability Budget).

![Figure 1- Challenges to Sustainability](image)
Another issue that was raised in interviews was an acknowledgement that information regarding the effectiveness of various sustainability policies and programs is not always complete and often unavailable for decision-makers. This can lead to myopic decision-making regarding investments of limited human and financial resources, as well as the perception that a lack of information available to make decisions exists, which is often not the case.

“The biggest issue I think is lack of information or misinformation.” - Paul Rowland, Executive Director, AASHE

In part, this lack of available information likely results from the often decentralized decision making structures (silos) on campuses. Priorities between or even within departments are often not in alignment and the gap between them can be difficult to bridge.

“I think to a large extent one of the biggest problems on campuses moving forward are the silos that separate not just academic departments from one another, but also even within the operations” - Paul Rowland, Executive Director, AASHE

“The other roadblock at a university is that decision making here is very decentralized. Sometimes it is hard to get all the different operating departments and the faculties moving in the same direction…So I think there are some structural issues within the university that may be an impediment now and again.” - Tom Galloway, Director or Custodial & Grounds Services, University of Waterloo

When surveyed on what they felt were the largest barriers to implementing sustainability initiatives on campus, student union representatives clearly indicated a further barrier which was unexpected by researchers; that of leadership turnover. Students spend a limited amount of time at their institution, often fewer than four years. Therefore, outgoing student sustainability champions leave leadership holes which can be difficult to fill. This barrier was confirmed by interviewees, who agreed that leadership turnover impedes the momentum of student-led sustainability initiatives in particular.

Finally, faculty members and off-campus interviewees recognized that the ethos of academic freedom is very strong on university campuses and that inclusion of more sustainability-related content in the curriculum would be at the discretion of individual professors who exercise a great deal of control over course content. However, at the college
level this is not the case. As a prime example, Algonquin College has recently approved a policy which dictates that all new courses must include consideration of sustainability in order to be approved (Y. Herbert, Personal Communication, 2013).

5.2.3. Opportunities for Overcoming Barriers

Sustainability’s broad scope and potential for variability in interpretation of its definition were identified as a significant opportunity by a number of interviewees. A wide range of initiatives can influence campus sustainability (depending on how it is defined), and to date campuses across Canada have implemented a very wide range of initiatives in a number of focus areas (see Figure 2 – On Campus Sustainability Initiatives).

Knowledge sharing, collaboration, and integrated planning were identified as tools for identifying creative and innovative solutions to the sustainability challenges of individual institutions. Multiple interviewees cited the model of horizontal and vertical integration as useful for facilitating knowledge transfer within institutions.

“I would say integrated planning is the most effective strategy to identify the opportunities and innovations.” - Prof. Ann Dale, Canada Research Chair in Sustainable Community Development, Royal Roads University

“The common thing about really successful institutions is integration, there is integration, there is breaking down of silos, the ability and willingness to communicate across tradition boundaries.” - Paul Rowland, Executive Director, AASHE
Sustainability champions also need to look beyond the campus environment when seeking knowledge and resources to create change. Partnerships with external organizations are becoming increasingly common and can provide a further source of innovation, as well as connect post-secondary institutions with the wider communities of which they are a part.

“Community partnerships are both internal and external which are extremely important to us.” - Claire Bennett, Sustainability Officer, Wilfred Laurier University

Finally, in direct response to the issue of high leadership turnover, interviewees made reference to the fact that once policy changes are put in place within an institution they can outlast members of the leadership and help to keep sustainability initiatives—and the culture of sustainability—alive.

“It makes it a whole lot easier for your policies because they become institutionalized. Even if I’m not here next year, then this will still happen.” - Claire Bennett, Sustainability Officer, Wilfred Laurier University

5.2.4. Pressures that Incite Action

On a number of occasions interviewees highlighted initiatives of which they were a part or were aware of which they characterized as highly effective or showing great promise. The pursuit of these initiatives resulted from pressures internal or external to the organization.

The two external pressures identified were from legislation and from grassroots campaigns driven by non-profit groups. In terms of legislation a notable and oft-cited example was that of British Columbia’s Bill 44 and Ontario’s Green Energy Act which are forcing (in the case of BC) and incentivizing (in the case of Ontario) a number of post-secondary institutions to minimize their carbon footprint.

A grassroots campaign that is having success changing university policies at present comes from the Canadian Youth Climate Coalition and 350.org who have begun a campaign to encourage universities to divest their holdings of fossil fuel company shares from endowment funds (Y. Herbert, personal communication, 2013).

Internal pressures which created change included the desire to do something visible in order to improve the institution’s reputation, cost-saving changes to everyday practices, and student petitions. Administration generally is behind the first of these and has the tendency to invest in green buildings and awareness initiatives as a response to this pressure. Generally, on-campus staff drives the second pressure by identifying simple, low-cost solutions to environmental issues that they identify through their day-to-day activities. An example pointed out by one interviewee was that of groundskeepers using spot treatments of pesticides on playing fields rather than as a blanket treatment for all campus green space (T. Galloway, personal communication, 2013). Finally, student petitions and campaigns were identified as
the most influential internal pressure by students that we surveyed, with 88% of survey respondents agreeing that the student body is the main driver of sustainability initiatives on campus.

5.2.5. Legislation and links with OHS

Interviewees identified that jurisdiction over the sustainability-related practices of post-secondary institutions is mostly provincial in Canada because provinces are broadly in charge of education policy. Thus, any effort to lobby for legislation should be targeted at provincial-level lawmakers. Also highlighted was the success of aforementioned provincial legislation in British Columbia and Ontario which has spurred progress on decarbonisation initiatives in post-secondary institutions within those jurisdictions.

The legislative progress is however a slow and highly political process and interviewees who were asked about the possible role that SYC could play in a campaign for the institutionalization of sustainability on Canadian campuses were generally dismissive of any proposal with a focus on lobbying for legislation.

“We have considerable momentum now from larger to smaller scale initiatives… I think connecting student bodies and unions and groups working in this area would be invaluable. But I can’t respond positively to a legislative approach, I just can’t.” - Prof. Ann Dale, Canada Research Chair in Sustainable Community Development, Royal Roads University

On-campus interviewees—particularly staff and administration—generally see legislation as burdensome because it requires expenditure of human resources and time on reporting and complying with regulations, narrows the scope for creative approaches and threatens the autonomy of institutions to make their own decisions.

“I’m not personally a big fan of initiatives that require me to fill out a metric ton of paperwork for very little meaningful action.” - Chelsea Dalton, Environment/Sustainability Co-ordinator, University of Toronto Mississauga

“What [legislation] will do is inadvertently tie our hands and start to mandate certain actions and this is not the subject matter that should be done. You’re going to stifle creativity… All the bureaucratic stuff is money that I cannot be spending on putting a fuel cell as back-up supply. It will be counter-productive. Politically it will read really well in the newspaper, but that’s not what is important in the environment, what’s important is the overall impact of the outcome.” - Paul Donoghue, Chief Administrative Officer, University of Toronto Mississauga

With regard to the subject of OHS and the existence of links or analogies relevant for sustainability there was a sense amongst most interviewees that historic linkages do exist, however the analogy is not perfect, and thus OHS should not be considered a perfect model to follow. A strength of OHS legislation identified by OHS practitioners in industry was that it has resulted in an atmosphere of personal accountability on the part of managers due to the
punitive power of legislation. This has made OHS something that is taken seriously by nearly all relevant organizations in Canada. While such an outcome may sound desirable for sustainability, interviewees cautioned that current OHS practices tend to embody a ‘checklist’ style of approach to implementation, and that this narrow, rigid approach to policy creation within organizations is not appropriate for sustainability because of its broad scope and potential for more creative solutions. Interviewees also warned that a checklist approach might marginalize sustainability and would not act to engrain it into institutional culture.

“...That’s not the focus [of sustainability policy], that is just a checklist. Whereas sustainability is more proactive and it does affect someone in the office because it’s a recycling box, or it’s turning lights off, or it’s transportation policy. And those are more broadly, or could be more broadly picked up than health and safety…I don’t think they reinforce each other, I don’t see that.” - Prof. Steven Young, School of Environment, Enterprise and Development, University of Waterloo

Interestingly however, OHS practitioners from industry who were interviewed pointed researchers toward the relatively recent prevalence of Joint Health and Safety Committees, which have emerged as proactive champions of OHS practices within organizations subject to prior legislation. This suggests that the emergence of broad-based legislation which benchmarks sustainability performance by institutions would not entirely encumber proactive processes, which could be pursued in parallel to legislative performance requirements.

In order to provide a clearer picture of each interviewee’s stance on the appropriateness of a campaign for legislation, we have provided an overview with selected quotes in Appendix L.

5.2.6. Knowledge Networks and Cross-Sector Partnerships

An often repeated response of interviewees when asked about the opportunities available to SYC in facilitating increased sustainability performance by post-secondary institutions was the promise of knowledge networks and the importance of collaboration. Within the institution the most important role of sustainability champions is in building bridges between silos so that collaborative solutions can be sought and objectives accomplished.

“But in order to get projects accomplished, I'm constantly partnering with departments. I've partnered with so many departments which helps further our goals, but also improves resources. The sustainability office is one person, that's only me, so in order to get projects accomplished everyone has to be involved. It's very important for me to be working with every department on campus” - Claire Bennett, Sustainability Officer, Wilfred Laurier University

“So you start that kind of novel network formation that gets people moving because the network doesn’t just get people collaborating, it also gives smaller institutions and communities access to intellectual capital that they wouldn’t necessarily have.” - Prof. Ann Dale, Canada Research Chair in Sustainable Community Development, Royal Roads University
Although lack of information was cited as a common barrier for sustainability by the interviewees, it is likely that many individuals in a position to create change are not aware that they lack information at all, and thus opportunities are missed. External partnerships between individuals in similar positions across Canadian colleges and universities in formal or informal associations can allow this knowledge gap to be filled through the sharing of technical expertise and common experiences. It can also result in the creation of best practices which are crucial to ensuring that prior mistakes and missteps by one institution aren’t repeated by another at the expense of scarce resources. Also noteworthy is the fact that in college and university environments, external expertise is generally regarded more highly than internal expertise, making external partnerships an even more vital piece of the puzzle (A. Dale, personal communication, 2013).

“So we clearly identified [lack of information on best practices] as a barrier and so we pulled together all sorts of Vice Presidents and we created a manual for how to assess these [energy] contracts.” - Prof. Ann Dale, Canada Research Chair in Sustainable Community Development, Royal Roads University

Further opportunities provided by external collaboration included linking the institution’s sustainability strategy with that of the wider community of which it is a part. This was identified as particularly important in the area of transportation policy, but is applicable to a number of types of sustainability initiatives.

Survey results indicated that a number of collaborations with external organizations on the part of universities and colleges in Canada already exist. In all, 69% of respondent institutions acknowledged an existing partnership with at least one local ENGO.

In addition, interviews with University of Toronto Mississauga (UTM) staff and administration indicated a highly successful partnership with a water treatment company, indicating that partnerships with private sector organizations can save money and reduce the environmental impact of an institution (C. Dalton, personal communication, 2013).

5.2.7. Sustainability Offices

Interviewees with experience working as or with a sustainability officer were consulted regarding how employees in this position can best work to push their institution towards a mature model of integration. Interviewees broadly agreed that the sustainability office should have an operations focus (with close ties to grounds and energy decision-makers and staff) as opposed to a curriculum focus, which is the purview of faculty, though links between the sustainability office and faculty-members were also deemed important.
The scope of the sustainability office, which is probably important to mention, is operations. So that includes facility business operations and also planning, design and construction.” - Claire Bennett, Sustainability Officer, Wilfred Laurier University

The sustainability office also has an important role when it comes to advocating the business case for sustainability projects to high-level administration.

“But I think what [WLU’s Sustainability Officer] has done a good job of doing is showing the return on investment…there is commitment to it from administration and from the President’s office.” - Prof. Barry Colbert, Director of P&G Centre for Business and Sustainability, Wilfred Laurier University

A further role that sustainability officers can play is to act as a project management hub for sustainability initiatives. This often requires sustainability reporting because the office has access to information on a wide range of sustainability initiatives on campus and also because reporting activities are time-intensive, requiring a committed staff member to complete.

Despite these technical roles, the sustainability officer’s most important task is one requiring soft skills above all else. The sustainability officer should be a ‘bridge-builder’ within the institution. Through horizontal integration the office can act to draw in other on-campus stakeholders and create a more fertile environment for a culture of sustainability to thrive.

“If the office of sustainability is first reporting at that very highest level that’s number one. Number two is that it sees itself more as a facilitator instead of a command and control. That bridging across the institution is far more effective.” - Prof. Ann Dale, Canada Research Chair in Sustainable Community Development, Royal Roads University

In the case of UTM the sustainability officer position was eliminated after decision-makers within the university concluded that they had reached the next stage of the process toward institutionalizing sustainability. Initially the sustainability officer’s role was instrumental in that it facilitated early sustainability related projects and that it helped to create the conditions where sustainability became engrained in the day-to-day roles of a broader set of on-campus stakeholders. While elimination of the sustainability officer position is not necessarily required, a mature institutionalization of sustainability on campus must result in a more broadly shared responsibility for implementing sustainability initiatives across institutional departments.

“It may have been helpful when that was first established, but became less so because it became fragmented…What we did was integrate it into facilities planning and development…and I think it has been a very effective move. And it is no longer personality dependant or individual dependant, it is now the part of the fabric of the institute and how we operate. It doesn’t require an independent cheerleader because in university no one can really tell anyone what to do. Absolutely I think early on it was important to signal that we were doing this because quite frankly there was a trend that in order to prove that we believe in this were going to appoint a sustainability officer. Okay, so
6.3. On-Campus Stakeholder Profiles

SYC’s existing Multistakeholder Guide provides an overview of the main on-campus stakeholder groups in tabular form. Our research has uncovered a number of potential additions to the existing tables. These are summarized below.

Table 3 - On-Campus Stakeholder Profiles

<table>
<thead>
<tr>
<th>On-Campus Profile Additions to Multi-Stakeholder Guide</th>
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<tbody>
<tr>
<td>Students</td>
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<tr>
<td><strong>Common Experiences</strong></td>
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<tr>
<td>• Are particularly engaged and interested in projects related to waste diversion, local food, and raising awareness of sustainability in general</td>
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<tr>
<td>• Knowledgeable of what sustainability is, but not the opportunities (environmental and economic drivers)</td>
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<tr>
<td><strong>Assets</strong></td>
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<tr>
<td>• The expectations of prospective students can affect institutional policy through choosing not to enroll in universities and colleges who do not have a visible commitment to sustainability (both visible projects and curriculum)</td>
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<tr>
<td>• Take a proactive approach to institutional policy change, as they are not engaged in compliance-related activities</td>
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<tr>
<td>• Often have a significant interest in the branding of their campus as ‘green’ or ‘environmentally and socially responsible’ to attract prospective students who identify these values as important in their decision-making process when choosing an institution</td>
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<tr>
<td>• Faculty members participate and are an active internal stakeholder in pushing for sustainability initiatives on campus. They often become engaged through steering or advisory committees where their conceptual knowledge of sustainability and applied knowledge on the campus environment can be utilized</td>
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<tr>
<td><strong>Obstacles</strong></td>
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<tr>
<td>• Human resources turnover is an issue for on-campus student sustainability groups and hinders their ability to create close, long-standing ties to other stakeholders within the institution</td>
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6.4 Follow-up Research: Financing Sustainability Initiatives on Campus

A common barrier to sustainability identified in both interviews and surveys was a lack of financial resources. Our follow-up research of secondary sources honed in on current post-secondary institutional leaders in sustainability and how they overcame this barrier to fund sustainability initiatives. Funding was generally found to be achieved in one of two ways: a Green Revolving Fund (GRF) and a student referendum that places a small fee on student tuition to raise funds for an office/department of sustainability.

GRFs involve an internal pot of money which is used solely to finance sustainability initiatives. Initial projects undertaken should generate cost savings or operational savings, which are then used to replenish the fund in order to finance the next round of projects (Indvik, Foley, Orlowski, & Devonshire, 2013). This model is becoming more popular; a recent report showed 79 GRFs operating in North America, primarily by post-secondary institutes (Indvik, Foley, Orlowski, & Devonshire, 2013). Institutions in Canada that have adopted this model include the University of British Columbia (UBC), the British Columbia Institute of Technology (BCIT), and the University of Victoria. The GRF’s main advantage is not requiring external financing and addressing capital funding constraints. A recent study by Maioriano & Savan (2012) recommends that senior administrators at Canadian universities develop policies and programs geared towards energy efficiency and establish multi-stakeholder committees that manage the revolving fund.

The other option (of approving student referendums that impose a small fee on student tuition) has also been used by some Canadian universities already. In fact, UBC imposed a $2.25 fee on every student each year (Alma Matter Society, n.d), illustrating that this fundraising approach and the establishment of a GRF are not mutually exclusive. McGill University also established a Sustainability Projects Fund that collects a ‘non-opt-outable’ fee $0.50 per credit (McGill Office of Sustainability, 2012). In both cases the funds are used to finance a sustainability office/department and additional proceeds (for example, projects which have incurred cash inflows run by the office/department) are used to finance additional sustainability initiatives. It should be noted that in UBC’s case, after the “low hanging fruits” were exhausted, they pursued partnerships with FortisBC and BC Hydro to rollout three to four year programs that focused on reducing the university’s water and energy consumption (Podger & Bilodeau, 2012; UBC Sustainability Office, 2009) (UBC Sustainability Office, 2009).
6. Analysis & Discussion

The following section utilizes the data presented in the previous section and synthesizes it into an informative analysis and discussion in a manner which aligns with and fundamentally achieves the project objectives outlined earlier in the paper.

6.1. Overview

Data was analyzed in accordance with Hart & Wheelan’s (2007) strategic framework. This includes utilization of an environmental scanning framework (PESTE analysis) to describe the on-campus environment with regard to sustainability implementation. The PESTE analysis provides a background for determining solutions and evaluating their potential. We identified two potential avenues, relevant to SYC, which constitute broad-based strategies for institutionalizing sustainability on campus: (1) A campaign for provincial-level legislation, and (2) a campus-by-campus campaign for voluntary action on the part of post-secondary institutions. A SWOT analysis has been undertaken for each approach and findings are summarized in the discussion.

6.2. PESTE Environmental Analysis

Table 4 identifies the political, economic, social, technological, and ecological factors that define the sustainability on campus issue. These determinations have been made through the synthesis of data collected from on-and-off campus interviews, survey results, and secondary data collection through desktop research of the relevant literature.

The results of this analysis align well with the literature. We found that social and political factors are important to campus sustainability because universities and colleges are complex institutions with highly bureaucratic and often decentralized decision-making practices. Economic factors are important for driving decision-making in these institutions, which must evaluate priorities and allocate scarce resources accordingly in order to continue to grow and prosper. Having a well-developed financing strategy is therefore crucial to the development of any campaign to significantly increase sustainability initiatives within post-secondary institutions. A plethora of technologies are available to these institutions, many of which have high capital costs but can reduce overall operational costs over the long term through lowering the variable costs associated with the plant operations department. Finally, there is significant heterogeneity between campuses due to institutional factors, and importantly (though rarely mentioned in the literature) ecological and geographical differences between campus environments. It is therefore advised that results from Table 4 be viewed as
a broad overview of the campus sustainability environment, and be further refined at the level of individual campuses in order to guide any specific actions in the future.

**Table 4 - PESTE Analysis**

<table>
<thead>
<tr>
<th>PESTE Analysis</th>
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| **Political**        | • Sustainability has value to post-secondary institutions as a method of branding their institution as ‘green’ or ‘socially and environmentally responsible’ to students  
                      | • The perspectives of internal stakeholders (staff, administration, students, faculty) are key in determining the scope of sustainability within a post-secondary institution  
                      | • Sustainability is impacted by a diverse array of departments and activities across campus  
                      | • Decentralized decision making is common at universities.  
                      | • Priorities often differ between on-campus decision-making bodies  
                      | • Both external and internal partnerships are crucial for the success of sustainability  
                      | • Human resources turnover is an issue for on-campus student sustainability groups and hinders their ability to create close ties to other stakeholders  
                      | • Students are the primary driver of sustainability policy change on-campus  
                      | • Partnerships with NGOs are seen as an attractive avenue for building knowledge and resources in order to create change on campus and bring in new perspectives |
| **Economic**         | • Sustainable practices and investments affect the bottom-line for post-secondary institutions  
                      | • Investment of financial and human resources are necessary for the pursuit of any sustainability activities on-campus  
                      | • Quantifying in financial terms the costs and benefits of sustainability-related projects is crucial for generating buy-in, especially with regard to high-level administration  
                      | • The most successful campus organizations flourish because of passionate administrative leadership, high student interest, and strong financial backing  
                      | • Revolving Green Funds show promise as a financing mechanism available for on-campus sustainability programs and initiatives with high capital costs  
                      | • Referendums to increase student fees in order to fund sustainability offices and programs have been successful in the past (for example at McGill University and Wilfred Laurier University) |
| **Social**           | • Personal values and access to knowledge determine an individual’s definition of what sustainability means. Individuals often come to understand sustainability through linking it to their own lives  
                      | • Sustainable change relies upon a cultural awareness of sustainability and a sensitivity to environmental issues  
                      | • OHS awareness has become high due to routine meetings, training sessions and high visibility associated with connections to policies and legislation which require some degree of understanding across the campus environment  
                      | • In general, internal stakeholders required to participate in campus sustainability could be resistant to change  
                      | • Universities are embedded in communities and can help to create broader social changes if they set an example within the community and engage with others |
| **Technological**    | • Adoption of novel and expensive technology is often used as a method of achieving |
greater sustainability

- Because of high costs, technology adoption often competes with other sustainability practices for resources (especially reporting and monitoring activities which are human resources intensive)
- Capital costs are high when technology is identified as a major component of sustainability activities
- Most Canadian campuses have adopted low-tech solutions (recycling programs, waste diversion, local food, etc.) as a first step towards shaping on-campus policies toward more environmentally beneficial outcomes

| Ecological | A focus on reducing energy-use, waste, processed foods and emissions is common across Canadian university and college campuses
| | Protecting on-campus green space is important to universities and can bring ecologists and biologists together with administrators to create sustainability projects
| | An institution’s geographical location can impact the scope, goals, and policies of sustainability programs on-campus

6.3. **SWOT Analysis: Provincial-level Campaign for Legislation**

Table 5 identifies the strengths, weaknesses, opportunities and threats facing the legislative route (objective one). Through interviews and secondary research we have determined that on-campus sustainability is most appropriately under the jurisdiction of provincial lawmakers, and thus such a campaign should be carried out at the provincial levels. A Canada-wide approach therefore would require the co-ordination of discreet campaigns in individual Canadian provinces and territories.

A legislative approach benefits from the fact that it can create across-the-board standards. Indeed, existing legislation including British Columbia’s Bill 44 and Ontario’s Green Energy Act already impact the sustainability-related duties and opportunities of Canadian post-secondary institutions in a positive way. A number of our interviewees identified the University of British Columbia as an emerging leader due in part to the legislative pressure put on the institution by of Bill 44. However, University administrators and staff members that we spoke to showed a clear distaste for regulatory approaches. Instead they identified a lack of resources, knowledge, and institutional co-ordination as the barriers to the success of sustainability initiatives, not a need for a more clearly defined legislative mandate. Legislation would likely create more paperwork, bureaucracy, and ‘red-tape’, while limiting the scope of potential sustainability initiatives and, ultimately, stifling the innovative capacity of individual institutions to tackle their particular sustainability-related concerns. A ‘one-size fits-all’ or ‘checklist’ approach such as that found in OHS practices would be ill-advised and should not be applied to sustainability according to this view.
Table 5 - Legislation Route SWOT Analysis

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>1. Creates standards across the board</td>
<td>1. Lawmaking is a long and highly political process</td>
</tr>
<tr>
<td>2. Ensures that institutions that would otherwise not pursue sustainability initiatives do so in some manner</td>
<td>2. Political gridlock between federal and provincial governments can slow the process down even further</td>
</tr>
<tr>
<td>3. Creates an incentive to comply due to the threat of punitive action. As in the case in OHS, this can result in a culture of personal accountability on the part of managers which ensures that sustainability is taken seriously within organizations</td>
<td>3. Puts mandatory financial burden on post-secondary institutions</td>
</tr>
<tr>
<td>4. May result in financial assistance from public funds to help institutions comply with more stringent regulations</td>
<td>4. Creates red tape and bureaucratic processes which require investment of resources for reporting activities and paperwork. This can draw resources away from innovation and creative approaches to sustainability implementation</td>
</tr>
<tr>
<td>5. Because of provincial jurisdiction, regulations can be designed to address specific issues at the provincial level</td>
<td>5. Regulations do not always cover all organizations, often only larger institutions are made accountable.</td>
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</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
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<tbody>
<tr>
<td>1. Legislation could be a longer-term vision which is part of a broader effort to institutionalize sustainability in post-secondary institutions</td>
<td>1. Laws can be repealed or amended which may make the regulation ineffective or short-lived</td>
</tr>
<tr>
<td>2. New legislation such as Bill 44 in British Columbia and Ontario’s Green Energy Act is creating champions who may drive change in other areas of the country through leading by example</td>
<td>2. Provincial jurisdiction can result in varying standards across Canada that make creation of best practices information and inter-institution comparability difficult</td>
</tr>
<tr>
<td>3. For organizations having trouble with implementing or starting programs related to sustainability, regulations could act as a guideline or set of best practices for sustainability implementation</td>
<td>3. Legislation threatens the freedom and flexibility of institutions to create their own innovative solutions to their specific sustainability-related concerns</td>
</tr>
<tr>
<td>4. Potential for sustainability to follow the path of OHS and the Joint Health Safety Committees to become more proactive than reactive, even after legislation is put in place</td>
<td>4. One-size-fits-all approach can put some institutions at a disadvantage by unnecessarily limiting scope of projects and programs that count toward sustainable practice under the law. Potential to de-incentivize proactive/voluntary actions</td>
</tr>
</tbody>
</table>

6.4. **SWOT Analysis: Campus-by-Campus Campaign for Voluntary Action**

Table 6 is identifies the strengths, weaknesses, opportunities and threats facing the voluntary route (objective two). This approach to sustainability institutionalization, rather than being targeted at provincial lawmakers as in the legislative route, instead requires coordination of a national campaign which targets individual Canadian post-secondary institutions and lobbies them to increase their investment in campus sustainability programs. In order for such a campaign to be successful, the environmental factors from our PESTE analysis must be accounted for and the knowledge and resources required to holistically tackle sustainability must be at the disposal of these institutions so as to minimize laggards and make voluntary action more attractive to on-campus decision-makers, particularly in high-level administrative roles.
Partnerships and knowledge-sharing are crucial to the voluntary route and can result in the creation of national and international associations that bring together key stakeholders on campus to share best practices information and develop formalized norms of practice. This approach, though less comprehensive than legislation in terms of the number of institutions that would be covered, is believed to be quicker and more adaptable to implement. These strengths were deemed valuable by interviewees and align well with research on the opportunities to overcome barriers to sustainability on-campus which were identified in the results section of this report.

### Table 6 - Voluntary Route SWOT Analysis

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students have the power to shape University and College priorities because they have the power to choose which school to attend</td>
<td>1. The number of campuses participating in voluntary initiatives is likely to be a minority of the total campuses in Canada until more formalized norms of practice become engrained</td>
</tr>
<tr>
<td>2. Creative approaches to sustainability implementation can be sought at the level of single institutions so that specifically tailored programs and projects are pursued which reflect the priorities and challenges faced in specific contexts</td>
<td>2. Requires resources to organize campaigns and create voluntary initiatives. When these initiatives are not mandatory and not in line with priorities of administrators funding and human resources can be hard to ascertain</td>
</tr>
<tr>
<td>3. A bottom-up approach addresses the need for broader cultural change within an institution better than a top-down mandate. Many individuals must become involved in grassroots movements if they are to be successful</td>
<td>3. Coordinating students is often difficult due to diversity of concerns and plethora of student groups</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Partnerships between student-driven sustainability movements on campuses across Canada can lead to a broader Canada-wide campaign</td>
<td>1. Turnover of student (and other) champions can dislocate existing collaborations and stall progress</td>
</tr>
<tr>
<td>2. Implementation of a reward system (“carrot”) to incentivize sustainable action on campus is possible. ‘Green awards’ for staff, faculty, administration, students have been effective at UTM</td>
<td>2. Volunteer fatigue can become an issue, especially within universities and colleges where a number of initiatives compete for student involvement</td>
</tr>
<tr>
<td></td>
<td>3. When a grassroots campaign loses momentum it can take a long time to start back up and regain status as a priority within the institution</td>
</tr>
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</table>

### 6.5. Concluding Discussion

Despite the potential of legislation our research indicates that the pursuit of legislative action is not the best way forward, especially for an organization like SYC who has links with a large network of sustainability experts and on-campus stakeholders. Considerable progress on sustainability has already been made voluntarily by post-secondary institutions through the collaboration of internal and external stakeholders with the shared goal of enhancing sustainability on-campus.
A campus-by-campus grassroots campaign which connects sustainability champions with each other, other stakeholders within their institution, and with external partners would therefore be more effective as it would provide these actors with additional knowledge and resources which can be funneled towards meaningful sustainability programs and projects. SYC, because of its extensive access to campuses and sustainability organizations across Canada is well-suited to act as a network-builder and facilitator of such a campaign.

7. Recommendations

We recommend a four-step process for institutionalization of sustainability on post-secondary campuses (see figure 3). These steps are to be applied on a campus-by-campus basis and are intended to guide at a high level, rather than dictate, the path to a mature model of sustainability institutionalization on campuses across Canada.

Figure 3 – Stages of Sustainability Institutionalization

Figure 4 illustrates a financing model which we have created from secondary research into existing successful financing models for on-campus sustainability programs. We recommend setting up a Green Revolving Fund (GRF) so that all positive cash flows created by sustainability projects are fed back into the sustainability budget. We also recommend student referendums on individual campuses regarding using a small student fee to pay for a sustainability office. This will help provide capital for the sustainability officer's salary and other activities which incur cost but do not generate cash flows directly themselves (such as awareness activities). Stages two and three are intended to create a positive feedback loop.
which ensures that the institutions have adequate financial resources required to continually improve their sustainability performance.

7.1. Institutionalization of Sustainability: A Multi-Stage Process

Step 1: Formation of student-led initiatives

- Support low-cost activities such as recycling programs, local food, garbage clean-up
- High involvement activities which raise awareness and the profile of student sustainability efforts (for example during orientation week)
- Begin to engage and collaborate with potential champions within faculty, staff, administration
- No financing required

Step 2: Creation of Sustainability Advisory Committee

- Representative group composed of 10-20 committed sustainability champions within the student body, faculty, administration, and staff. Committee members should be committed to long-term engagement in sustainability on campus
- Main role is to scope sustainability efforts on campus, set goals, and determine resources necessary to achieve them (scope and goals will necessarily differ between campuses based on their unique priorities and constraints)
- Establishment of regular communication regarding campus sustainability across decision-making bodies and stakeholders on campus
- Bring in external expertise where possible and link with other sustainability efforts in the community in order to further refine and support the achievement of goals
- Link with similar groups on other campuses, especially with regard to administration and staff members whose responsibility it is to implement many of
the operations-based initiatives. Creation of best practices information and collaboration on broadly similar initiatives should be the overarching goal of these partnerships

- Establishment of Green Revolving Fund to finance first round of sustainability projects which are expected to generate cost-savings which will replenish the GRF over the short to medium term

**Step 3: Appointment of Sustainability Officer**

- Full-time project manager role
- Works very closely with advisory committee to deliver on the goals that they set
- Advisory committee helps to link sustainability officer with resources and people necessary to achieve their goals and to create wider network of people supporting the work of the sustainability office on campus
- Raise the profile of campus sustainability initiatives and generate administrative buy-in through conveying business case for increased sustainability performance
- Hold referendum to impose a small fee on students to go toward establishment of the sustainability office and implementation of further sustainability initiatives (especially those which may not be revenue-positive such as awareness and community engagement campaigns. Running orientation week activities that raise awareness of sustainability initiatives on campus are an example of this kind of initiative).

**Step 4: Integration of Sustainability in Day-to-Day Institutional Operations**

- Sustainability Office is subsumed into other relevant departments on campus such as facilities and operations
- Sustainability Officer position can remain on full-time basis or be eliminated depending on whether the institution deems the role necessary or redundant at this stage
- Advisory committee continues its activities indefinitely, but role changes from goal-setter to knowledge facilitator (knowledge-network and information hub). Also provides institutional memory to overcome turnover issues
- Continue to operate GRF and re-invest funds in further sustainability projects

### 7.2. SYC’s Role

SYC should act to facilitate the realization of the 4 step process outlined above on campuses across Canada. Specific actions worth pursuing include:

1. Expand the current scope of engagement for SYC. Specifically, to facilitate linkages between sustainability groups at different institutions to facilitate a collaborative learning process (for example by bringing Vice-Presidents of Operations at Canadian universities
Propel Research + Strategy
Andrew Adams, Zamir Janmohamed, Nigel Moore, James Skuza, Mark Tsou and Alex Xu

together to share their experiences with regard to various specific sustainability initiatives in areas such as waste management and energy). This strategy differs from SYC’s previous focus which is chiefly on enabling student groups.

2. Identify and forge partnerships with external organizations within the local community with the capacity and incentive to support universities and colleges with their sustainability strategies. Organizations with experience creating sustainable change in their own organizations, as well as community groups located near targeted campuses should be the focus of this outreach campaign.

3. Draft a 1-3 page white paper outlining the four-stage process of institutionalization and disseminate to Canadian university and college campuses. The current multi-stakeholder guide, while similarly focused, is over 20 pages long. A document that is more to the point and targeted at a broader audience than student activists would be beneficial moving forward.

8. Conclusion

Through our 17 interviews, 39 survey responses, and in-depth review of secondary information our research team has accomplished our objectives and goals. Our overarching objective of strategically reviewing the potential of both a legislative and campus-by-campus campaign has been carried out and we have determined that while legislation can and has spurred progress on campus sustainability, the voluntary approach is more appropriate for SYC to engage in because of its potential to generate creative approaches to solving campus sustainability issues in a relatively shorter time span. We have also identified the key on-campus stakeholder groups and made additions to SYC’s Multi-Stakeholder profiles (Objective A), characterized the major challenges and opportunities facing campus sustainability campaigners (Objective B), defined the role of sustainability offices and how they fit into a broader framework for institutionalizing sustainability (Objective C), and created a pathway for institutionalization with recommendations for how SYC can expedite the process (Objectives D and E).

While SYC has been engaged in a grassroots campaign like the one we recommend for some time, their approach could be further strengthened in accordance with our recommendations. SYC can become more effective if it broadens it approach beyond enabling and supporting student groups. Because of their links to many other on-campus stakeholders and, crucially, to external expertise in the area of sustainable organizational development, SYC can act as a knowledge broker and campaign facilitator that connects on-campus decision-makers with the information and resources that they require to pursue
meaningful sustainability program implementation on their campus. Our research has made it clear that supporting student groups is only part of this equation.

We recommend that future research in this area bring together larger groups of key on-campus decision-makers (for example operational heads at universities from every province) in focus group settings. The result of these focus groups will be to identify areas where knowledge and resources are needed, and where co-ordination and collaboration is possible between institutions and with external organizations such as SYC. It will also begin the process of building the knowledge networks which will better enable Canadian post-secondary institutions to pursue a sustainable course more proactively and in a co-ordinated and universal effort.
References


Appendix A: On-Campus Stakeholder Definitions (Excerpt from SYC ‘Multi-Stakeholder Planning Guide’)

**Faculty:** A faculty stakeholder would be a professor who is mainly concerned with the success of their own students along with their own quality of research. Faculty members feel pressure in competing for both funding and recognition and consequently are extremely busy. Many faculty members do not participate in campus sustainability issues, yet if they do it is of a voluntary nature and is separate from their teaching (Sierra Youth Coalition, 2012A). Of the three stakeholders that will be interviewed, this group has the strongest relations with the students.

**Administration:** Their roles include knowing and being involved in financial accountability and internal management and external image of the university. In being involved with these processes, they are used to lengthy bureaucratic decision-making and have clear access to organizational information (Sierra Youth Coalition, 2012A). Of these three stakeholders that will be interviewed, this group has the second strongest relationship with the students.

**Facility:** This stakeholder has no direct role in the core academic mission of the institution and is not involved in the academia process. Their responsibility is the day-to-day implementation of the policies and procedures mandate by the campus. Unless a senior management facility person is consulted, usually these stakeholders are not consulted when making operational and planning decisions. Uniquely, these stakeholders have been working on campus for decades and thus contain valuable institutional memory of the evolution of the policies and produces implemented by the university (Sierra Youth Coalition, 2012A). Of the three stakeholders that will be interviewed, this group has the weakest relationship with the students.
## Appendix B: On-Campus Interviewees

<table>
<thead>
<tr>
<th>Organization</th>
<th>Stakeholder Group</th>
<th>Interviewee</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Waterloo</td>
<td>Administration</td>
<td>Dr. Andre Roy, Dean of the Faculty of Environment</td>
</tr>
<tr>
<td>University of Waterloo</td>
<td>Faculty</td>
<td>Dr. Steve Young, School of Environment, Enterprise &amp; Development</td>
</tr>
<tr>
<td>University of Waterloo</td>
<td>Staff</td>
<td>Tom Galloway, Director (Custodial &amp; Grounds Services)</td>
</tr>
<tr>
<td>Wilfred Laurier University</td>
<td>Administration</td>
<td>Claire Bennett, Sustainability Officer</td>
</tr>
<tr>
<td>Wilfred Laurier University</td>
<td>Faculty</td>
<td>Dr. Berry Colbert, Director of the P&amp;G Centre for Business &amp; Sustainability</td>
</tr>
<tr>
<td>Wilfred Laurier University</td>
<td>Staff</td>
<td>James Emary, Grounds Manager</td>
</tr>
<tr>
<td>University of Toronto Mississauga</td>
<td>Administration</td>
<td>Paul Donoghue, Chief Administrative Officer</td>
</tr>
<tr>
<td>University of Toronto Mississauga</td>
<td>Faculty</td>
<td>Dr. Tenley Conway, Associate Professor Department of Geography</td>
</tr>
<tr>
<td>University of Toronto Mississauga</td>
<td>Staff</td>
<td>Chelsea Dalton, Environment/ Sustainability Coordinator</td>
</tr>
</tbody>
</table>
## Appendix C: Off-Campus Interviewees

<table>
<thead>
<tr>
<th>Organization</th>
<th>Stakeholder Group</th>
<th>Interviewee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability Solutions Group</td>
<td>Industry</td>
<td>Yuill Herbert, Director, Sustainable Campuses &amp; Public Engagement</td>
</tr>
<tr>
<td>Siemens Canada</td>
<td>Industry</td>
<td>Roger Blake, Environment, Health &amp; Safety Manager</td>
</tr>
<tr>
<td>Canadian Tire</td>
<td>Industry</td>
<td>Dave Breeze, Project Manager EHS</td>
</tr>
<tr>
<td>Polaris Institute</td>
<td>NGO</td>
<td>Daniel Daoust, Public Education and Outreach Coordinator</td>
</tr>
<tr>
<td>Canadian Federation of Students</td>
<td>NGO</td>
<td>Adam Owad, Chair</td>
</tr>
<tr>
<td>Council of Ontario Universities</td>
<td>University Association</td>
<td>Liz Sutherland, Senior Policy Analyst</td>
</tr>
<tr>
<td>Consortium for Sustainable</td>
<td>University Association</td>
<td>Prof. Ann Dale, Canada Research Chair in Sustainable Community Development</td>
</tr>
<tr>
<td>Development Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Association for the Advancement of</td>
<td>University Association</td>
<td>Paul Rowland, Executive Director</td>
</tr>
<tr>
<td>Sustainability in Higher Education</td>
<td></td>
<td></td>
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</tbody>
</table>
Dear Researcher:

A Request for ethics review of a modification or amendment (ORE 104) to your ORE application:

Title: Making Sustainability on Campuses Famous by Propel Research & Strategy ORE #: 18640
Faculty Supervisor: Goretty Dias (Gdias@uwaterloo.ca) Faculty Supervisor: Amelia Clarke (Amelia.Clarke@uwaterloo.ca) Student Investigator: Andrew Adams (agadams@uwaterloo.ca) Student Investigator: Mark Tsou (mark.tsou90@gmail.com) Student Investigator: James Skuza (j_skuza@hotmail.com) Student Investigator: Nigel Moore (nigelpatrickmoore@gmail.com) Student Investigator: Zamir Janmohamed (zamir.janmohamed@gmail.com) Student Investigator: Chengan Xu (xuchenganjfq@gmail.com)

together with a copy of relevant materials, was received in the Office of Research Ethics on:
18 January 2013 -- The group has revised the on campus interview questions as well as the emails which are now oriented towards a new survey provider.

The proposed modification request has been reviewed and has received full ethics clearance.

A signed copy of the 'Request for Ethics Clearance of a Modification to an Ongoing Application to Conduct Research with Human Participants' will be provided through regular mail. In the case of student research, the signed copy will be sent to the Faculty Supervisor.

***********

Note 1: This project must be conducted in accordance with the description in the application and modification for which ethics clearance has been granted. All subsequent modifications to the protocol must receive prior ethics clearance through the Office of Research Ethics.

Note 2: Researchers must submit a Progress Report on Continuing Human Research Projects (ORE Form 105) annually for all ongoing research projects. In addition, researchers must submit a Form 105 at the conclusion of the project if it continues for less than a year.

Note 3: Any events related to the procedures used that adversely affect participants must be reported immediately to the ORE using ORE Form 106.

Susanne Santi, M. Math.,
Senior Manager
Office of Research Ethics
NH 1027
519.888.4567 x 37163
ssanti@uwaterloo.ca
Sustainability Offices on Canadian Campuses

What is the name of the post-secondary institution your student union represents?

Institution __________________________
Province ____________________________
Student Union Name ____________________

Given your experience as a student leader, what is your understanding of sustainability and its implication on campuses?

[ ]

How important is sustainability to your student body?

[ ] Not Important.
[ ] Somewhat Important.
[ ] Very Important.
[ ] Not sure.

Has your institution experienced difficulty in implementing sustainability initiatives on campus? If yes, please select any and all categories that most reflects the reason:

[ ] Lack of financial support.
[ ] Lack of administrative support.
[ ] Lack of student support and knowledge.
[ ] Other: ____________________________
[ ] N/A

Do you have sustainability organizations on campus?

[ ] Yes, it is administered by students and was established in (year): ____________________________
[ ] Yes, it is administered by the school (i.e. administration and/or faculty) and was established in (year): ____________________________
[ ] No.

If you have an established sustainability organization on campus, what are the main areas of focus?

[ ]

Roughly what percentage of the student union’s budget is allocated to the campus lead sustainability group, initiatives, or programs?

[ ]

If your institution does not have sustainability established on campus, does the student union have any significant plans to implement any sort of sustainable education, program, or initiatives within the next 3 years?

[ ] Yes, we are starting to think about it.
Dear Respondent,

Thank you for taking the time to complete the survey. Your feedback is valuable and will help us to better understand the sustainability efforts at your institution.

Yes, we are in the process of developing a plan.
Yes, there is a plan and implementation is beginning to occur.
No, we have no plans.
N/A

Currently, there is no national mandate requiring sustainability offices, programs, or policies on campuses. What is the student body’s sentiment towards sustainable voluntary initiatives on your campus?

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

Does your school collaborate with local Environmental Non-Governmental Organizations (ENGOs) and/or business on sustainability or sustainable initiatives?

<table>
<thead>
<tr>
<th></th>
<th>Yes (examples)</th>
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<tbody>
<tr>
<td></td>
<td>No</td>
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</table>

What is the most successful student run organization on your campus and what has enabled them to succeed?


Would you agree that your student body is the major driver of any past movements (i.e. Sexual & Gender Diversity, Mental Health & Disability, etc.)


Given the opportunity (i.e. additional funding and/or support), what is one aspect of campus sustainability that you would like to see improved the most?


Are you aware of the activities and mandates of the Sierra Youth Coalition?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
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<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

Best regards,

[Your Name]
Appendix F: French Survey

Sustainability Offices on Canadian Campuses - FR

Quelle institution est-ce que vous représentez comme syndicat étudiant?

Institution:

Province:

Syndicat étudiant nom:

Quelle est votre compréhension de la durabilité et son implication sur les campus, étant donné votre expérience comme leader étudiant?

Quelle est l’importance de la durabilité pour le corps étudiant sur une échelle de 1 à 5 (1 – aucune importance, 5 – très grande importance)?

Est-ce que votre université a eu de la difficulté en exécutant des initiatives de développement durable sur le campus? Si oui, choisissez les raisons qui conviennent le mieux.

- Manque de soutien financier.
- Manque de soutien administratif.
- Manque de soutient étudiant/manque de connaissance.
- Autre:
- N/A

Est-ce que vous avez des organisations de développement durable sur votre campus? Si oui, choisissez les raisons qui conviennent le mieux.

- Oui, c’est dirigé par les étudiants. Quelles années ont-elles été établies?
- Oui, c’est dirigé par l’université. Quelles années ont-elles été établies?
- Non

Si vous avez une organisation de durabilité sur votre campus, quelles sont les domaines auxquels vous vous spécialisez?

Quel pourcent du budget du syndicat étudiant est alloué aux groupes, initiatives ou programmes de développement durable?

Si vous n’avez pas encore d’organisation de durabilité sur votre campus, est-ce que le syndicat étudiant a des projets significatifs pour exécuter un programme d’éducation de développement durable pendant les 3 prochaines années?

- Oui, nous commençons à y penser.
- Oui, nous sommes en train de développer un projet.
- Oui, il y a un projet et on est en train de l’exécuter.
- Non.
Présentement, il n’y a pas de mandat qui oblige la création des bureaux, de programmes ou de règles de développement durable sur les campus. Quel sont les opinions du corps étudiant envers les initiatives volontaires de développement durable sur votre campus?

☐ Désaccord complet.
☐ Désaccord.
☐ Indécis.
☐ Accord.
☐ Accord complet.

Est-ce que votre université collabore avec des organisations non-gouvernementales environnementales (ONGE) et/ou des commerces pour le but d’initiatives de développement durable?

☐ Oui, SVP donnez des exemples: 
☐ Non.

Quelle est l’organisation menée par des étudiants qui est la plus réussite? Qu’est-ce qui l’a permise de réussir?


Est-ce que votre corps étudiant est le moteur de la réussite de mouvements antérieurs (par exemple : la diversité sexuelle, la santé mentale).


Si vous avez l’occasion, quel serait l’aspect de la durabilité sur le campus que vous aimeriez le plus améliorer?


Êtes-vous au courant des activités et les mandats de la coalition Sierra Youth?

☐ Oui
☐ Non
Appendix G: On-Campus Interview Questions

Administration

1. Please state your name and affiliation.
2. Can you please tell me about the history of sustainability practices on your campus?
3. Can you identify any significant roadblocks that have faced sustainability initiatives on your campus?
4. In your experience, would combining health and safety with environmental policies make strategic sense in terms of improving the environmental stewardship of universities and why?
5. What is the level of awareness amongst university administrators of sustainability policies and practices as compared with OHS practices on campus? Please elaborate on possible reasons for differences in awareness levels between the two areas.
6. Are you personally in support of increasing sustainability initiatives on campus and why?
7. Do you believe that your views reflect the views of university administration at your university more broadly? What discrepancies between your views and those of other administrators might exist and why?
8. What level of understanding and involvement do administrators at your university have in sustainability initiatives?
9. Is sustainability an important issue for your university? Why or why not?
10. How is funding for sustainability projects on the campus achieved currently at your university and is funding likely to expand or change significantly in the future?
11. Do you feel that sustainability on campuses is important to your faculty, staff, students and other stakeholders? Can you provide any examples of instances where on-campus stakeholder groups have shown a significant interest in sustainability policy at your university?
12. Have you tried to form partnerships with businesses or other organizations to improve your environmental performance or to secure additional funding for sustainable initiatives?
13. Would mandating sustainability by either the federal or provincial government be necessary for institutionalizing it in your University?
14. Without the existence of a government mandate, what is your evaluation of the capacity of your university to implement sustainability policies and procedures on a voluntary basis in order to improve environmental performance over time.

Faculty

1. Please state your name and affiliation.
2. Can you please tell me about the history of sustainability practices on your campus?
3. Can you identify any significant roadblocks that have faced sustainability initiatives on your campus?
4. In your experience, would combining health and safety with environmental policies make strategic sense in terms of improving the environmental stewardship of universities and why?
5. What is the level of awareness amongst faculty members of sustainability practices at your university as compared with occupational health and safety practices? Please elaborate on possible reasons for differences in awareness levels between the two areas.

6. Are you personally in support of increasing sustainability initiatives on campus and why?

7. Do you believe that your views reflect the views of faculty at your university more broadly? What discrepancies between your views and those of other faculty members might exist and why?

8. What level of understanding and involvement do faculty members at your university have in sustainability initiatives?

9. Should the concept of environmental sustainability be included in the post-secondary education of non-environment university students in any manner and how might this be best accomplished?

10. Do you think it would be reasonable to expect non-environment faculty members invest their time in becoming involved with sustainability initiatives on campus? And if so, what level of involvement in campus sustainability initiatives do you envision being necessary for these faculty members if sustainability is to be satisfactorily institutionalized throughout the campus environment?

11. Do you believe that the time and resources necessary to engage faculty members about sustainability in a similar sense as is done for occupational health and safety procedures is worth it for improving the educational experience of students and work experience of faculty members.

Staff

1. Please State your name and affiliation.

2. Can you please tell me about the history of sustainability practices on your campus?

3. Can you identify any significant roadblocks that have faced sustainability initiatives on your campus?

4. In your experience, would combining health and safety with environmental policies make strategic sense in terms of improving the environmental stewardship of universities and why?

5. What is the level of awareness amongst staff members in your department of sustainability practices at your university as compared with occupational health and safety practices? Please elaborate on possible reasons for differences in awareness levels between the two areas.

6. Are you personally in support of increasing sustainability initiatives on campus and why?

7. Do you believe that your views reflect the views of staff members at your university more broadly? What discrepancies between your views and those of other staff members might exist and why?

8. What level of understanding and involvement do staff members at your university have in sustainability initiatives?

9. How would an increase in mandatory sustainability initiatives on campus impact your job and in what ways do you see this as a positive or negative for your university in general?

10. What are the major gaps and knowledge and resources that you envision enabling you to pursue sustainability on campus in a more meaningful way than at present?
Appendix H: Off-Campus Interview Questions

Yuill Herbert, Sustainability Solutions Group

1. Please state your name and affiliation.
2. Can you tell me briefly about the history of your organization? How it was formed, what is its mandate, and what roles do you play in Post-Secondary Institutes across Canada?
3. What have been some of the most successful initiatives that your organization has been involved with in terms of generating broad action on the part of universities, and if applicable, making their operations more sustainable?
4. In your experience, what are some of the keys to creating a culture of sustainability within organizations and institutions such as Universities and Colleges?
5. Can you identify some significant roadblocks that face Universities and Colleges in the implementation of sustainability initiatives on-campus?
6. What do you feel are the prospects for the creation of legislation at any level of government in North America which mandates higher sustainability performance by post-secondary institutions (or public sector entities more broadly)? What might be likely characteristics of such legislation?
7. Do you think that the occupational health and safety movement is a potential model to follow in this regard?
8. In your view, what are the prospects for building a coalition of public, private, and not-for-profit organizations which is successful in lobbying for such legislation?
9. In order to achieve more widespread implementation of meaningful sustainability initiatives on campuses across North America, do you foresee a voluntary campus-by-campus campaign as most effective, or would a provincial or nationwide lobbying effort for legislation be more effective and why?

Roger Blake, Siemens

1. Please State your Name.
2. How have health and safety regulations and practices evolved from when you first began working in the industry?
3. Can you identify any key health and safety implementation methods that may be transferrable to implementing sustainability and environmental performance practices within organizations today?
4. What is the level of awareness is there amongst your employees of sustainability practices at your organization as compared with occupational health and safety practices? Please elaborate on possible reasons for differences in awareness levels between the two areas.
5. If legislation were to be enacted mandating sustainability practices in a manner similar to H&S Canada-wide, what kind of challenges or opportunities might this pose to your organization and others like it?
6. In your opinion, should Sustainability initiatives amalgamated with Health & Safety and why might this be advantageous or disadvantageous for organizations like yours?
7. What are the top challenges/roadblocks facing the institutionalization of a sustainability-oriented culture within your organization?
8. Would you say that a legislative mandate promoting sustainability by either the federal or provincial government is necessary for institutionalizing it in your organization? Or do you
believe organizations like yours are more successful at implementing such initiatives voluntarily?
9. Do you believe that large private-sector firms like yours would be willing to collaborate with Non-Governmental Organizations and Higher education institutions to lobby for a legislative mandate that institutionalizes sustainability in a similar way to Health and Safety legislation? Why or why not?

Dave Breeze, Canadian Tire
1. Please State your Name.
2. How have health and safety regulations and practices evolved from when you first began working in the industry?
3. Can you identify any key health and safety implementation methods that may be transferrable to implementing sustainability and environmental performance practices within organizations today?
4. What is the level of awareness is there amongst your employees of sustainability practices at your organization as compared with occupational health and safety practices? Please elaborate on possible reasons for differences in awareness levels between the two areas.
5. If legislation were to be enacted mandating sustainability practices in a manner similar to H&S Canada-wide, what kind of challenges or opportunities might this pose to your organization and others like it?
6. In your opinion, should Sustainability initiatives amalgamated with Health & Safety and why might this be advantageous or disadvantageous for organizations like yours?
7. What are the top challenges/roadblocks facing the institutionalization of a sustainability-oriented culture within your organization?
8. Would you say that a legislative mandate promoting sustainability by either the federal or provincial government is necessary for institutionalizing it in your organization? Or do you believe organizations like yours are more successful at implementing such initiatives voluntarily?
9. Do you believe that large private-sector firms like yours would be willing to collaborate with Non-Governmental Organizations and Higher education institutions to lobby for a legislative mandate that institutionalizes sustainability in a similar way to Health and Safety legislation? Why or why not?

Daniel Daoust, Polaris
1. Please state your name and affiliation.
2. Can you tell me briefly about the history of your organization? How was it formed, what is its mandate, and what core strategies does it employ to change the activities of industries and large institutions in Canada, as well as Canadian environmental policy?
3. What have been some of the most successful initiatives that your organization has been involved with and what factors would you say helped lead to that success.
4. Can you identify significant roadblocks Polaris has faced during campaigns to green industries or organizations, and what actions might be taken so as to avoid such problems?
5. Has your organization been involved in campaigns to make universities and colleges in Canada more sustainable and have you had success creating change within these institutions? What have been some challenges you have faced?

6. What do you feel are the prospects for the creation of legislation in Canada at a provincial or national level which mandates higher sustainability performance by post-secondary institutions? Do you think that the occupational health and safety movement is a potential model to follow in this regard?

7. What kind of partnerships has your organization formed in order to achieve its aims? Have you found that coalition-building is necessary for lobbying legislators or industries successfully?

8. In order to achieve more widespread implementation of meaningful sustainability initiatives on campuses across North America, do you foresee a voluntary campus-by-campus campaign as most effective, or might a state/province or nationwide lobbying effort for legislation prove more effective and why?

Adam Owad, CFS

1. Please state your name and affiliation?

2. Can you tell me briefly about the history of your organization? How it was formed, what is its mandate, and what roles do you play in Post-Secondary Institutes across Canada?

3. What have been some of the most successful initiatives that your organization has been involved with in terms of generating broad action on the part of universities, and if applicable, making their operations more sustainable?

4. Can you identify the most significant roadblocks to the implementation of sustainability on campuses?

5. Can you identify and describe any characteristics of on-campus environments which you believe are important factors that may lead to more successful campus sustainability initiatives?

6. In order to achieve more widespread implementation of meaningful sustainability initiatives on campuses across North America, do you foresee a voluntary campus-by-campus campaign as most effective, or would a provincial or nationwide lobbying effort for legislation be more effective and why?

7. Do you believe the CFS would back the institutionalization of sustainability on campuses across Canada?

8. What do you believe would be the best way to ensure successful implementation of sustainability across Canadian campuses?

9. Do you believe sustainability officers or officers would be beneficial for Sustainability within Campuses, or do you feel grass roots initiatives through students would be a better option?

Liz Sutherland, COU

1. Please state your name and affiliation.

2. Can you tell me briefly about the history of your organization? How was it formed, what is its mandate, and what have been some of its key successes and challenges to date?

3. What kind of partnerships has your organization formed in order to achieve its aims? Have you received support from government, industry, and/or non-profit organizations?

4. In your opinion, should Sustainability initiatives amalgamated with Health & Safety and why might this be advantageous or disadvantageous for organizations like yours?
5. Based on the current practices of sustainability and Occupational Health & Safety (OHS) in your organization, which one are your employees more informed about? What identifiable gaps in training programs are there between sustainability and OHS?

6. Can you identify and describe any characteristics of on-campus environments which you believe are important factors with a tendency to lead to more successful campus sustainability initiatives?

7. Can you identify any key health and safety implementation methods that may be transferrable to implementing sustainability within organizations today?

8. What do you feel are the prospects for the creation of legislation at any level of government in North America which mandates higher sustainability performance by post-secondary institutions? Do you think that the occupational health and safety movement is a potential model to follow in this regard?

9. In order to achieve more widespread implementation of meaningful sustainability initiatives on campuses across North America, do you foresee a voluntary campus-by-campus campaign as most effective, or would a state/province or nationwide lobbying effort for legislation be more effective and why?

10. What needs to happen in order for the sustainability movement to be institutionalized to the degree which health and safety is?

11. Do you envision the current sustainability movement becoming as successful as the health and safety movement? If no, what are some of the barriers or challenges you see?

Anne Dale, CCSDR

1. Please state your name and affiliation.

2. In your experience, what are some of the keys to creating a culture of sustainability within organizations and institutions such as Universities and Colleges?

3. Can you identify some significant roadblocks that face Universities and Colleges in the implementation of sustainability initiatives on-campus?

4. Can you identify and describe any characteristics of small communities such as post-secondary campus environments which you believe are important factors with a tendency to lead to better environmental stewardship and adoption of management systems for improving environmental performance over time?

5. In your communication with university administrators, how would you characterize their level of awareness of the opportunities that implementation of more sustainability initiatives bring to their campus? How would you describe their perceptions of these opportunities?

6. How would you describe the perceptions amongst university administrators of the drawbacks or costs of such initiatives and in your experience do these perceptions create reticence to engage with such issues?

7. What do you feel are the prospects for the creation of legislation at any level of government in North America which mandates higher sustainability performance by post-secondary institutions (or public sector entities more broadly)? What might be likely characteristics of such legislation?

8. Do you think that the occupational health and safety movement is a potential model to follow in this regard?

9. In your view, what are the prospects for building a coalition of public, private, and not-for-profit organizations which is successful in lobbying for such legislation?
10. In order to achieve more widespread implementation of meaningful sustainability initiatives on campuses across North America, do you foresee a voluntary campus-by-campus campaign as most effective, or would a provincial or nationwide lobbying effort for legislation be more effective and why?

Paul Rowland, AASHE

1. Please state your name and affiliation.
2. Can you tell me briefly about the history of your organization? How was it formed, what is its mandate, and what have been some of its key successes and challenges to date?
3. What have been some of the most successful initiatives that your organization has been involved with in terms of generating broad action on the part of universities in making their operations more sustainable?
4. Can you identify the most significant roadblocks to the implementation of sustainability initiatives that have faced the Universities and Colleges that you have worked with?
5. Can you identify and describe any characteristics of on-campus environments which you believe are important factors with a tendency to lead to more successful campus sustainability initiatives?
6. In your communication with university administrators, how would you characterize their level of awareness of the opportunities that implementation of more sustainability initiatives bring to their campus? How would you describe their perceptions of these opportunities?
7. How would you describe the perceptions amongst university administrators of the drawbacks or costs of such initiatives and do these perceptions create reticence to engage with such issues?
8. What do you feel are the prospects for the creation of legislation at any level of government in North America which mandates higher sustainability performance by post-secondary institutions? Do you think that the occupational health and safety movement is a potential model to follow in this regard?
9. What kind of partnerships has your organization formed in order to achieve its aims? Have you received support from government, industry, and/or non-profit organizations?
10. In order to achieve more widespread implementation of meaningful sustainability initiatives on campuses across North America, do you foresee a voluntary campus-by-campus campaign as most effective, or would a state/province or nationwide lobbying effort for legislation be more effective and why?
Appendix I: Hunger & Wheelen’s (1997) Strategic Framework

**FIGURE 1.3 Strategic Decision-Making Process**
## Appendix J: Inductive Coding Themes

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>Sustainability</strong></td>
</tr>
<tr>
<td>A</td>
<td>Current definition of sustainability</td>
</tr>
<tr>
<td></td>
<td>according to interviewees (personal</td>
</tr>
<tr>
<td></td>
<td>definition or what the definition</td>
</tr>
<tr>
<td></td>
<td>should be). Also what sustainability</td>
</tr>
<tr>
<td></td>
<td>could embody, for instance as a core</td>
</tr>
<tr>
<td></td>
<td>value in everyone's daily lives.</td>
</tr>
<tr>
<td>B</td>
<td>The knowledge gap between H&amp;S and</td>
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<td></td>
<td>Sustainability, or how it may be</td>
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<tr>
<td></td>
<td>perceived</td>
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<tr>
<td>C</td>
<td>Visibility of Sustainability is</td>
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<td></td>
<td>popular/unpopular or compared to</td>
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<tr>
<td></td>
<td>H&amp;S has the same degree of publicity</td>
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<td></td>
<td>(Branding)</td>
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<tr>
<td>D</td>
<td>Sustainability as responsibility/</td>
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<td></td>
<td>accountability in an organization, from</td>
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<td></td>
<td>managers to operations</td>
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<tr>
<td>2</td>
<td><strong>OHS vs. Sustainability</strong></td>
</tr>
<tr>
<td>A</td>
<td>Occupational Health &amp; Safety history and</td>
</tr>
<tr>
<td></td>
<td>examples of proactive initiatives</td>
</tr>
<tr>
<td>B</td>
<td>Sustainability &gt; OHS in awareness level</td>
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<tr>
<td>C</td>
<td>Sustainability &lt; OHS in awareness level</td>
</tr>
<tr>
<td>D</td>
<td>Sustainability should be its own department</td>
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<td>E</td>
<td>Sustainability should be operated as part</td>
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<td></td>
<td>of H&amp;S</td>
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<td>3</td>
<td><strong>Partnerships &amp; Network building with</strong></td>
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<td>NGO’s or other organizations</td>
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<td>4</td>
<td><strong>Legislation SWOT</strong></td>
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<tr>
<td>A</td>
<td>Strength</td>
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<tr>
<td>B</td>
<td>Weakness</td>
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<td>C</td>
<td>Opportunity</td>
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<td>D</td>
<td>Threat</td>
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<td>Strength</td>
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<tr>
<td>B</td>
<td>Weakness</td>
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<td>C</td>
<td>Opportunity</td>
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<td>D</td>
<td>Threat</td>
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<td>6</td>
<td><strong>Barriers to Sustainability</strong></td>
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<tr>
<td>A</td>
<td>Dealing with people’s resistance or</td>
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<tr>
<td></td>
<td>tolerance to change (full spectrum of</td>
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<td></td>
<td>opinions on Sustainability)</td>
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<td>B</td>
<td>Lack of Resources (e.g. financial, man</td>
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<td></td>
<td>power, or others)</td>
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<td>C</td>
<td>Lack of Information</td>
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<tr>
<td>D</td>
<td>Priorities, types of Decision Making</td>
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<tr>
<td></td>
<td>(Each division operates individually –</td>
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<tr>
<td></td>
<td>silo thinking, lack of collaboration, and</td>
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<td></td>
<td>decision marker’s priorities)</td>
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<td>7</td>
<td><strong>Opportunities to overcome Barriers to</strong></td>
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<td></td>
<td>Sustainability**</td>
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<tr>
<td>A</td>
<td>Engaging &amp; Gathering support from various</td>
</tr>
<tr>
<td></td>
<td>stakeholders (e.g. student support,</td>
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<td></td>
<td>management driven, communication, or</td>
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<td></td>
<td>educating them about what sustainability</td>
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<td></td>
<td>is, or the benefits of undertaking the</td>
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<td></td>
<td>proposed initiative)</td>
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<tr>
<td>B</td>
<td>Increased Management backing by setting</td>
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<tr>
<td></td>
<td>targets, more collaboration, and financial</td>
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<td></td>
<td>resources (e.g. increased budget)</td>
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<td>8</td>
<td><strong>Current Proactive movements in</strong></td>
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<td></td>
<td>Sustainability**</td>
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<td>9</td>
<td><strong>Sustainability Offices (SO)</strong></td>
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<td>A</td>
<td>SYC’s role in implementing SO and</td>
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<td></td>
<td>alternatives</td>
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<td>B</td>
<td>Responsibilities &amp; Scope of a sustainability</td>
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<td></td>
<td>office</td>
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<tr>
<td>10</td>
<td><strong>On-Campus Profiles</strong></td>
</tr>
<tr>
<td>A</td>
<td>Admin</td>
</tr>
<tr>
<td>B</td>
<td>Faculty</td>
</tr>
<tr>
<td>C</td>
<td>Staff</td>
</tr>
<tr>
<td>D</td>
<td>Students</td>
</tr>
<tr>
<td>11</td>
<td><strong>PESTE Analysis</strong></td>
</tr>
<tr>
<td>12</td>
<td><strong>Recommendations</strong></td>
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</table>
## Appendix K: Results Summary

### Overview
- Survey response rate was 24% accounting for 39 of 162 student unions across Canada.
- Interviews were conducted with 17 information rich individuals from Universities, University Associations, NGOs and Industry Professionals.

### Broad Considerations on Sustainability
- Access to knowledge, personal values, and one’s role within their organization shape what they see as the scope of sustainability.
- Sustainability is a multi-faceted approach and it is necessary for it to be engrained within a large number of activities on campuses.

### Barriers to Change
- Four common barriers to implementing sustainability on campuses emerged: Lack of financial support, lack of administrative support, lack of student knowledge, and high turnover of sustainability champions.
- Poor decision making arises from the ineffectiveness of existing sustainability knowledge, policies and programs.
- Silos exist in decision-making structures on campuses which are often decentralized.
- Individual professors would likely be hesitant to incorporate sustainability teachings into their course material.

### Opportunities to Overcome Barriers
- Horizontal and vertical integration of sustainability is key in order to facilitate knowledge transfer within the institution.
- Partnerships with external organizations are becoming increasingly common and can provide a further source of innovation.
- Once policy changes are in place within institutions they should solve the issue of high leadership turnover.

### Pressure Leading to Successful Initiatives on Campuses in the Past
- Two external pressures identified were from legislation and from grassroots campaigns originating in non-profit groups.
- The most notable legislative contributors are British Columbia’s Bill 44 and Ontario’s Green Energy Act both forcing campuses to reduce their carbon footprints.
- The most notable grassroots campaigns are the Chicago Youth Climate Coalition and 350.org both encouraging universities to divest their holdings in fossil fuels.

### Legislation and Links to OHS
- Any effort to lobby for legislation should be directed at provincial level lawmakers.
- The consensus agreed that the legislative process is slow and highly political and was dismissive of this approach to sustainability on campuses.
- There are linkages between OHS and sustainability but the analogy is not a perfect model to follow.
- The consensus agreed that current OHS practices embody a ‘checklist’ approach to implementation that would not be well suited to the broad scope of sustainability.

### Knowledge Networks and Cross Sector Partnerships
- Knowledge networks and collaboration is of most importance to implementing sustainability on campuses.
- It is likely that many people in the position of power to create change are not aware of the lack of sustainability information and thus opportunities are foregone.
- Partnerships between individuals in similar positions across Canadian campuses can allow for knowledge gaps to be filled and best practices to be created.
- External collaboration may also link the institution’s sustainability strategy with that of the wider community.

### Sustainability Offices
- Should have an operations focus as opposed to a curriculum focus.
- Should advocate the business case for sustainability projects to high-level university or college administration and should act as a project management hub.
- Must act as a bridge-builder within the institution. Through horizontal integration the office can act to draw in other on-campus stakeholders and create a more fertile environment for a culture of sustainability to thrive.
## Appendix L: Summary of Interviewee Positions on Legislative Route

<table>
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<tr>
<th>Interviewee (Position, Organization)</th>
<th>Position</th>
<th>Relevant Comments</th>
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</table>
| Dr. Dean Roy (Dean of Environment, University of Waterloo) | Against | "...It is also a lighter organization compared to other universities. You know, we’re more nimble. Let’s say the legislation say you gonna have an office, you gonna have this, you gonna have that, you gonna report this. Well, it may be the style on this university, but it might not be the style for other universities and in the end the idea is to be effective. And in order to be effective, I think each university has to have its own culture to do so, umm, it is a matter of what we have done and be able to show it, and be accountable for it, saying ok this is our goal and this is where we are. So I will probably leave it as such just as an aside as government themselves don’t do a very good job on their own so. Just looking at this week’s report on how we are going to manage these issues on environment and there is a broad legislation there than here..."
|
| Dr. Steven Young (School of Environment, Enterprise & Development, University of Waterloo) | Against | "....To me it strikes me that those functions are ve...they have been structure to meet a letter of the law or the letter of the policy and are there and available, but they are not proactive activities. And I think the ideas of sustainability on campus are going to be more proactive in doing things...."
|
| Tom Galloway (Director of Custodial Grounds Services, University of Waterloo) | Neutral | "...On the positive side, I will just go back to the same things I’ve said before, all these little initiatives that we do on a local basis that have global impacts. If there viable, effective then we should be supporting them, but there are some practical operational considerations to these things. It still kind of boils down to resources...."
|
| Claire Bennett (Sustainability Officer, Wilfred Laurier) | Against | "If you’re just mandating it, it hasn’t happened naturally, realistically, from either the top or the bottom, it’s really hard to make it effective. So if it hasn’t been the students or the senior administration requiring this, then how successful- you may be successful and you’ll probably be successful but more than they had been-that’s just kind of a tricky, loaded question."*
|
| Dr. Barry Colbert (Director P&G Centre for Business & Sustainability, Wilfred Laurier) | Against | "...I would wager that there are very few faculty members there, because faculty members aren’t really five to niners, they aren’t expected to be at their desk all day. You know, we’re planning other things and going around. I’ve got interviews and companies out in the field and other things. If I was sitting at my desk nine to five, I would be looking for a reason to go to a training course, just to get away from my desk and that’s what happens sometimes with staff. But I bet if you look at the enrolment of faculty in those courses, it’s..."*
pretty low. And the reason why it is low, there’s not a lot of big hazards when you are sitting at your desk working on something. If people thought it was really important to their work they would pay more attention to it.

When I was in the manufacturing field and I moved more into the office field and away from the plant, people would come around with your monthly safety contact and everybody just rolled their eyes and just signed it without reading it, as if it didn’t matter to them. So if you’re looking at that as something to look learn off, then I would say the best thing to do is make people understand how sustainability issues impact them and how they can impact sustainability and if people see that and if it’s important to them then they will embrace it...”

James Emary (Grounds Manager, Wilfred Laurier) 

Neutral

“Well I think for certain initiatives making them mandatory is going to be the key. I’m going to come back to recycling within departments and having the central multi sorts and taking away their ability to throw everything into the garbage by their desk. That to me is probably one of the most important things we can do to increase our sustainability as far as recycling goes. I guess we are doing that within each department, but it takes money and time, and that’s just something that takes a little bit longer. But once it’s set up then…”

“There are just certain personalities which buy into sustainability more than others do. I don’t know why that is, but it is still an attitude which certain people have and it also makes it where you would have to make the sustainable practices mandatory to get them implemented and to get them to work.”-James Emary

Paul Donoghue (Chief Administrative Officer, University of Toronto Mississauga) 

Against

“What they will do is inadvertently tie our hands and start mandating certain actions and this is not the subject matter that should be done. You’re going to stifle creativity”

Tenley Conway (Associate Professor Department of Geography, University of Toronto Mississauga) 

Inconclusive

“a lot of health and safety seems to be about making sure that people working safe in labs have information about what procedures they need to follow and paperwork they need to complete to make sure they follow these procedures. Whereas sustainability is different it’s a little bit more initiative driven and less approaching it from HR or legal perspective.”-Tenley Conway

Chelsea Dalton (Sustainability Coordinator, University of Toronto Mississauga) 

Against

“I’m not personally a big fan of initiatives that require me to fill out a metric ton of paperwork for very little meaningful action.”

Yuill Herbert (Director, Sustainable Campuses & Public Engagement, Sustainability Solutions Group) 

Inconclusive

“...I think what has happened in BC with the carbon neutral legislation for the whole public sector has really had a big impact on
<table>
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<tr>
<th>Name</th>
<th>Position</th>
<th>Approach</th>
<th>Comments</th>
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| Roger Blake (EHS Manager, Siemens Canada Ltd.)                       |                                               | Neutral   | “I think it’s like any legislation, if they tell us how to do something it is not necessarily going to give us the capabilities to do things in the most efficient manners for our particular company.”

“So some sort of guidelines are goals from the government could be a good thing and possibly some incentives for companies that do it, or companies a show cities and maybe show consumers how to do it because the impact they can have. I think that there could be a partnership there, but he needs to be written in a way that companies can be smart about it they can be told here’s the goal, what we will believe we can achieve and then they can go figure out how to get there.” |
| Dave Breeze (Project Manager EHS, Canadian Tire)                     |                                               | Against   | “Probably the big one thing that we’ve learned through our internal system is communication. You have to have employees engaged and everyone from top management to everyone down through. The other one is to set objectives and targets that are realistic and key is collaboration between operations and health and safety or environment.”                                                                                                                                                                                                                                                                                                                                                                             |
| Daniel Daoust (Public Education & Outreach Coordinator, Polaris Institute) |                                               | Against   | “…the more you make it mandatory for a company which includes institutions like universities in this case to implement something, the more its considered a cost and a restriction on their operations therefore a barrier to making profit or being successful…so those kind of mentalities need to be challenged…”                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Liz Sutherland (Senior Policy Analyst, Council of Ontario Universities) |                                               | Support   | But I think it is a good thing to get the targets and getting the legislative backing needed to create change in the sector. So I think it is a good thing. Beyond that, energy emissions, I do not see a lot of potential in the short term at any level of government, certainly Canadian government is doing nothing, they are absolutely useless when it comes to environment sustainability                                                                                                                                                                                                                                                                                                                                                                                   |
| Dr. Ann Dale (Canada Research Chair in Sustainable Community Development) |                                               | Against   | “…I think it’s nil with the Harper administration and then in Canada you have provincial-federal gridlock. So the prospects are nil and I wouldn’t waste my time doing it and it’s old-fashioned. That’s one of the reasons I left the federal government because I didn’t feel like I could do anything more.”                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Paul Rowland (Executive Director, AASHE)                             |                                               | Against   | “It’s not necessarily sustainable, laws can get repealed, I don’t think that the best strategies are a legislative approach unless”                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
you’ve got a strong grass roots movement that would support them.”

| Adam Owad (Chair, Canadian Federation of Students) | Neutral | “I think this one again really depends on what the initiative is, so if it’s about building retrofits or institutional practices, then..... I don’t know it depends on the campaign but I think both.” |
**Appendix M: Group Work Checklist**

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<tr>
<td>Please read the checklist below following the completion of your assignment. Once you have verified these points, hand in this signed checklist with your assignment.</td>
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<tr>
<td>1. I have read the full content of the submission and am assured that the content is free of violations of academic integrity.</td>
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<tr>
<td>2. I have identified, in a separate document available for viewing by the instructor, or others (e.g. Deans if requested), my own contribution to the work submitted.</td>
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Signed: Andrew Adams  
Date: April 1st, 2013  
Print Name: Andrew Adams  
UW-ID#: 20293430

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<td>4. I have identified, in a separate document available for viewing by the instructor, or others (e.g. Deans if requested), my own contribution to the work submitted.</td>
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Signed: Mark Tsou  
Date: April 1st, 2013  
Print Name: Mark Tsou  
UW-ID#: 20295143

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Signed: Nigel Moore  
Date: April 1st, 2013  
Print Name: Nigel Moore  
UW-ID#: 20300580

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Signed: Zamir Janmohamed  
Date: April 1st, 2013  
Print Name: Zamir Janmohamed  
UW-ID#: 20314466

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Signed: James Skuza  
Date: April 1st, 2013  
Print Name: James Skuza  
UW-ID#: 20302614

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Signed: Alex Xu  
Date: April 1st, 2013  
Print Name: Alex Xu  
UW-ID#: 20366855