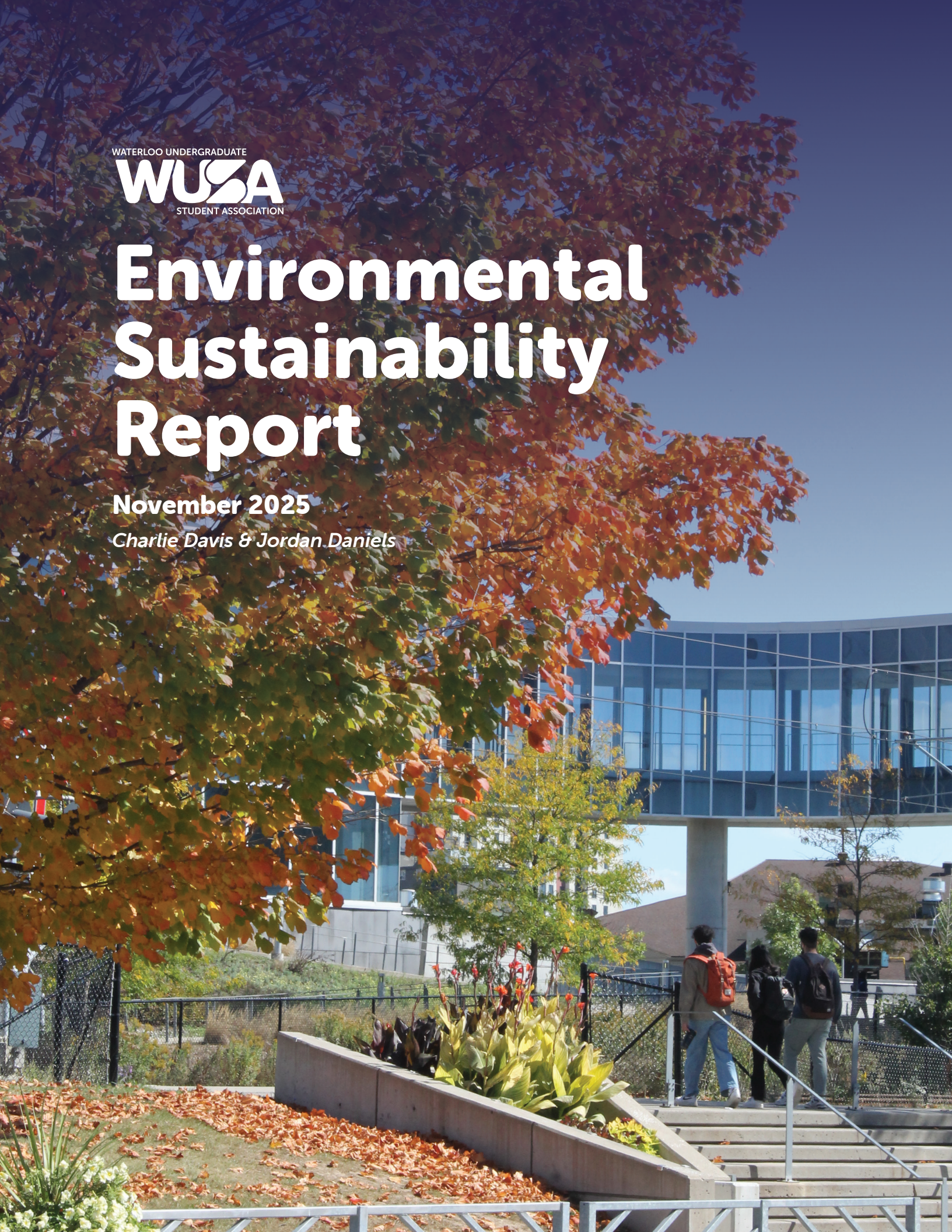




# Environmental Sustainability Report

**November 2025**

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## At a Glance

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### Key Findings

#### Importance and Knowledge of Environmental Sustainability

- Generally, students view environmental sustainability as important with 80.1% of students rating it as either 'very important' or 'important'. Correspondingly, students also frequently considered environmental sustainability with 50.9% of students considering it 'always' or 'often' in their everyday lives.
  - As students' ratings of the importance of environmental sustainability increase, so does their consideration of environmental sustainability in their everyday life.
- Environment students' ratings were higher for consideration and importance of environmental sustainability than all other faculties, while Math students had the lowest ratings of importance and consideration.
- Most students were only 'somewhat knowledgeable' (52.8%) about environmental sustainability issues and wanted to learn more (52.4%) about these issues.
  - The higher the students rated the importance of and their consideration of environmental sustainability issues, the higher they rated their knowledge of environmental sustainability issues.
  - Lower knowledge of environmental sustainability was not associated with a desire to learn more, as students who reported they were 'not knowledgeable at all' were more likely to report they were unsure or did not want to learn more about environmental sustainability issues.

#### Individual Actions and Behaviours

- Most students (95.6%) believe they have at least a 'somewhat' personal role to play in ensuring we live in an environmentally sustainable society.
- We compared the sustainable activities students rated as important and the sustainable activities they engaged in and found the top six activities were the same: recycling, taking public transportation, using reusable containers, composting, reducing energy consumption, and choosing plastic-free options. However, the order the activities ranked in were different, suggesting that some sustainable activities may not be the easiest to engage in despite being important and/or that students engage in sustainable activities despite them not being rated as important for sustainability.
- The biggest barrier to students engaging in more sustainable activities were: 'money, cost or affordability' (n=377), 'lack of time, convenience, or motivation' (n=326), 'availability of sustainable options or opportunities' (n=190), 'individual actions compared to the top 1%, corporations, and societal norms' (n=67), and 'lack of knowledge' (n=64).

#### Climate Change Concerns

- 65.9% of students have personally started to notice the impact of climate change on their everyday life while another 27.3% were 'unsure'.
- Students' concern that climate change will impact their day-to-day life increase with the fur-

ther time frame, with 24.4% of students being 'very concerned' in 5 years, 42.9% in 10 years, and 61.8% in 20 years.

- Almost half of students (45.2%) report that climate change at least 'somewhat' impacted their mental health.
  - Students' mental health was more likely to be impacted if they were from the Health faculty, if they placed more importance on sustainability, and if they more frequently considered sustainability.

## **Sustainability Engagement at Waterloo**

- Only 29.3% of students agreed that they were familiar with the initiatives that the University of Waterloo is taking to advance sustainability on campus and 61.3% 'neither agree nor disagree' that the University of Waterloo is doing a good job advancing sustainability on campus.
  - As students' familiarity with the initiatives the University is taking to advance sustainability on campus increases, so does their agreement that the University is doing a good job at advancing sustainability on campus.
- 55.9% of students 'strongly agree' the University needs to take the necessary steps to implement environmentally sustainable policies, practices and initiatives, while 39.6% 'strongly agree' that WUSA should do the same. Similarly, 37.3% of students 'strongly agree' Waterloo should divest from the oil and gas industry, while 33.8% 'strongly agree' WUSA should do the same.
  - Students' agreement that Waterloo should take these necessary steps are significantly higher for both statements.
- When asked which sustainable activities should be prioritized by the campus community, the top three rated activities were 'renewable energy sources' (M=3.5), 'waste management' (M=3.49), and 'reducing carbon emissions and reliance on fossil fuels'. The lowest rated activity was 'integrating sustainability across the curriculum' (M=2.89).
- When asked whether they would like to be involved in various environmental sustainability opportunities on campus, students most frequently reported they would like to be involved in 'learning about sustainability through integration in courses' (44.6%), which was surprising given that it was ranked as the lowest priority. The following two activities in the top three were 'volunteering with community organizations related to sustainability' (41.4%), and 'volunteering on campus with efforts related to sustainability' (38.5%). Additionally, 16.4% of students stated they were not interested in any environmental sustainability opportunities.

## **WUSA's Role in Environmental Sustainability on Campus**

- When it comes to WUSA programs, 79.8% of students rated the GRT bus pass as 'very important', followed by the Bike Centre, with 46.8% rating it as 'very important', and WUSA Thrift, with 35.9% of students rating it as 'very important'.
- When asked how WUSA should support environmental sustainability efforts on campus, students were interested in all options presented but the top one was 'amplify and support existing programs on campus' (73.2%). Some students wanted WUSA to continue to support WUSA Thrift, the Bike Centre, and the GRT bus pass.



## Key Considerations

There are consistent patterns that emerged throughout the report. It is apparent that students rated environmental sustainability as important and perceived it as a source of distress. This distress was evident in students' definitions of environmental sustainability, especially the 'impending doom' definitions, and in the rates of impact on their mental health. Consistent with the importance given to sustainability, students are engaging in sustainable activities, with many students engaging in multiple activities. However, students seemed reluctant when answering if they were interested in the new sustainable opportunities we proposed. Furthermore, their answers to open-ended questions revealed they held large corporations accountable for climate change and struggled to be more sustainable as busy students. Given their stance, students expressed changes they wanted to see across campus.

### WUSA Programs

- Given how important students view environmental sustainability, WUSA should consider how to integrate throughout its various programs and initiatives, rather than viewing it as a priority in and of itself.
  - Enhancing sustainability at WUSA can include choosing merch and 'swag' that is environmentally friendly, such as being plastic-free, practical, and useful.
- Students viewed the current WUSA programs, such as Bike Centre, the GRT bus pass, and WUSA Thrift as important. Therefore, WUSA should continue to fund them.
  - WUSA could expand WUSA Thrift to create a 'buy nothing' market that includes housewares and items. This initiative could be implemented to divert students' non-broken items that are thrown out during move out.
- WUSA should also consider how environmental sustainability initiatives on campus interconnect with other issues that WUSA prioritizes (e.g., food waste and food security).

### Sustainability Awareness on Campus

- Sustainability could be integrated into course content. Although it was not the most important thing students thought the campus community should do, it was the way they were most interested in getting involved.
  - This integration would increase students' knowledge of sustainability issues without relying on students having to make the time and effort to seek it out, which may also target students who do not want to learn more about these issues.
  - WUSA could work with the faculties and/or the Sustainability Office to advocate for this or share opportunities related to this.
- WUSA to work towards closing the awareness gap by directly promoting sustainability-specific initiatives on campus and in the surrounding community.
  - WUSA could create contests and/or campaigns around things that are already happening on campus (e.g., Earth Day campus clean up) to get more students involved and leverage WUSA's audience to do so.



## Advocacy & Partnerships

- WUSA could partner with Campus Wellness on some programming around mental health and climate change.
  - Acknowledging eco-anxiety and highlighting ways to reduce the helplessness students experience.
- WUSA should commit to creating a resource of all the existing environmentally sustainable programs on campus and in the community.
- WUSA should create best practices for students to incorporate environmental sustainability into their busy schedules.
  - Recommendation that some of the information outputs includes the complexities and nuances of navigating these decisions and guidelines for students to make their own judgements.
  - Information should focus on truly sustainable options, such as using what you currently have in your possession, repairing broken items, and generally reducing buying new items.
  - Information should include positive impacts to counteract the feelings of 'impending doom' when thinking about sustainability.
- WUSA could commit to advocating to the University for more vegetarian and vegan options, less plastic packaging and mitigating food waste.
- Between data collection and the writing of this report, Sustainable Transportation has increased theft prevention measures to reduce bike thefts on campus. Hopefully these measures help make it safer for students to bike to campus. WUSA should consult with Sustainable Transportation to stay informed of effectiveness of these anti-theft measures and work with them to find alternative solutions if necessary.
  - WUSA could also commit to working with Sustainable Transportation to increase the number of charging stations for electric vehicles on campus.



## Introduction

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The purpose of this survey was to assess students' opinions on and engagement with environmental sustainability. The survey was available to students in the Representative Survey Platform (RSP) from October 21 to November 1, 2024, taking roughly 10 minutes to complete. The survey received a total of 1117 responses. After removing incomplete responses, the remaining participant number was 981.

The goals for the survey were as follows:

- Explore students' understanding of environmental sustainability and climate change
- Learn about the actions and behaviours students believe are important for environmental sustainability
- Understand the barriers students face to engaging in these actions and behaviours
- Understand the environmental sustainability opportunities that students are most interested in engaging with
- Understand what students want WUSA to prioritize when it comes to sustainability on campus

## Analysis

The survey included both closed-ended and open-ended questions (see Appendix A for the survey). The closed-ended questions were analyzed via SPSS to calculate statistical differences among variables and/or demographic differences. The purpose of statistical tests is to assess the probability that the differences observed in our data are due to random chance, with low probabilities suggesting that differences are due to other factors, such as demographic differences. A probability of 5%, often written as a 'p value' of .05, is the typical threshold to determine whether a difference is statistically significant. The specific statistical tests and their corresponding p values can be found in footnotes throughout the report.

The open-ended questions were analyzed using NVivo to assign the responses into categories, allowing us to see the overarching patterns. Since students can speak to multiple different topics within their responses, the frequency of students' answers across the categories for a question can exceed the total number of students who answered the question.

## Participant Demographics

The participants' demographics are illustrated in Table 1. For the purposes of this report, we only conduct statistical tests to determine faculty differences. Therefore, Table 1 only displays students' year of study and their faculty. If you would like to see a full demographic breakdown of this report, please see Appendix B.



Table 1. Participants' Demographics

|                      | N          | %          |
|----------------------|------------|------------|
| <b>Overall</b>       | <b>981</b> | <b>100</b> |
| <b>Year of Study</b> |            |            |
| First                | 252        | 25.7%      |
| Second               | 236        | 24.1%      |
| Third                | 245        | 25%        |
| Fourth               | 219        | 22.3%      |
| Fifth+               | 16         | 1.6%       |
| NL                   | 9          | 0.9%       |
| Other                | 4          | 0.4%       |
| <b>Faculty</b>       |            |            |
| Arts                 | 220        | 22.4%      |
| Engineering          | 232        | 23.6%      |
| Environment          | 74         | 7.5%       |
| Health               | 78         | 8.0%       |
| Math                 | 184        | 18.8%      |
| Science              | 193        | 19.7%      |

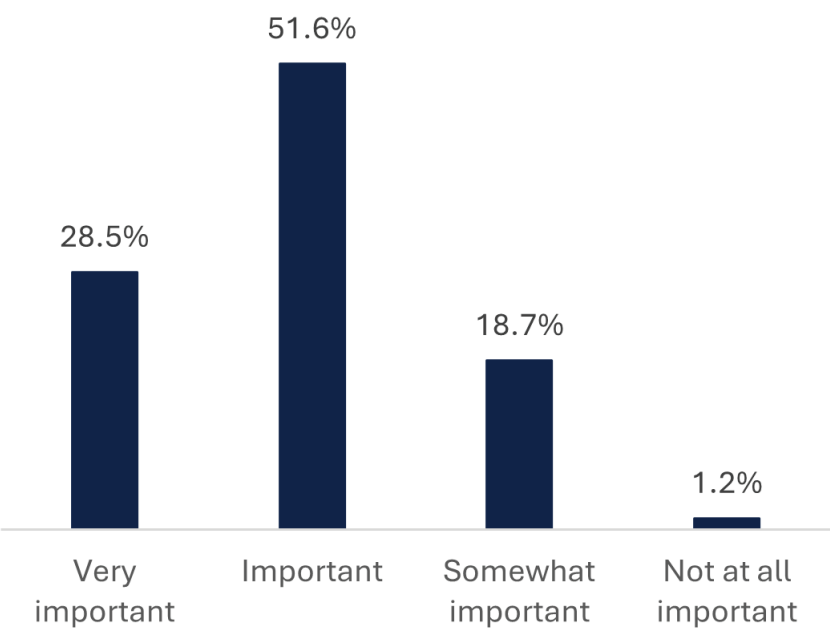
As illustrated in Table 1, 25.7% of the respondents were in first year, 24.1% in second, 25% in third, 22.3% in fourth and 1.6% in fifth year or beyond. When examining the proportions of faculties, the highest proportion of students is from the Engineering faculty (23.6%), followed by Arts (22.4%), Science (19.7%), Math (18.8%), Health (8%) and lastly, Environment (7.5%).

# Importance and Knowledge of Environmental Sustainability

## Importance and Consideration of Environmental Sustainability

Students were asked how important they think environmental sustainability is. Overall, 28.5% of students rated environmental sustainability as 'very important', 51.6% as 'important', 18.7% as 'somewhat important', and 1.2% as 'not at all important', as displayed in Figure 1.

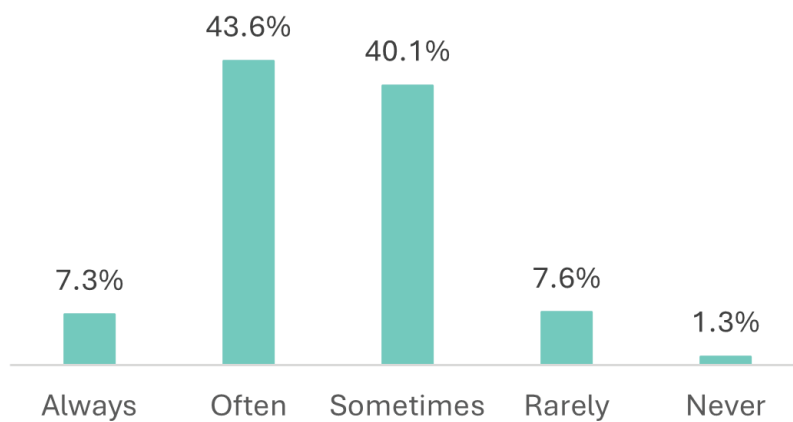
Figure 1. How Important is Environmental Sustainability



Additionally, students were asked how frequently they consider environmental sustainability in their everyday life. Overall, 7.3% of students stated 'always', 43.6% stated 'often', 40.1% stated 'sometimes', 7.6% stated 'rarely', and 1.3% stated 'never', as displayed in Figure 2.

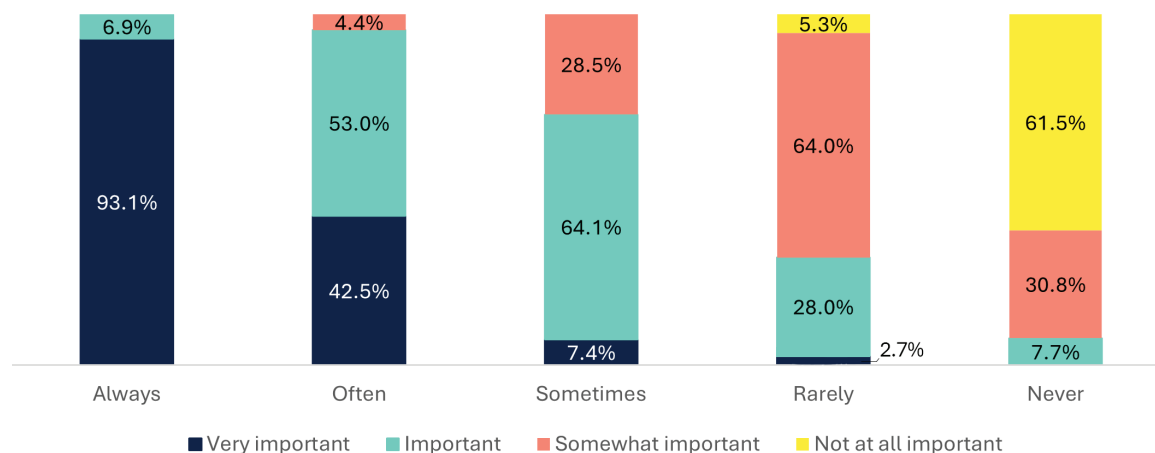


Figure 2. Consideration of Environmental Sustainability



Students' ratings of the importance of environmental sustainability and how frequently they consider environmental sustainability are statistically associated. As students' ratings of the importance of environmental sustainability increase, so does their consideration of environmental sustainability in their everyday life<sup>1</sup>. This relationship is displayed in Figure 3. For example, 93.1% of students who rated environmental sustainability as 'very important' also 'always' consider environmental sustainability, while 61.5% of students who rated environmental sustainability as 'not at all important' also 'never' consider environmental sustainability.

Figure 3. Consideration x Importance of Environmental Sustainability



<sup>1</sup>  $\chi^2(12)=841.989, p<.001$ , Cramer's  $V=.535$

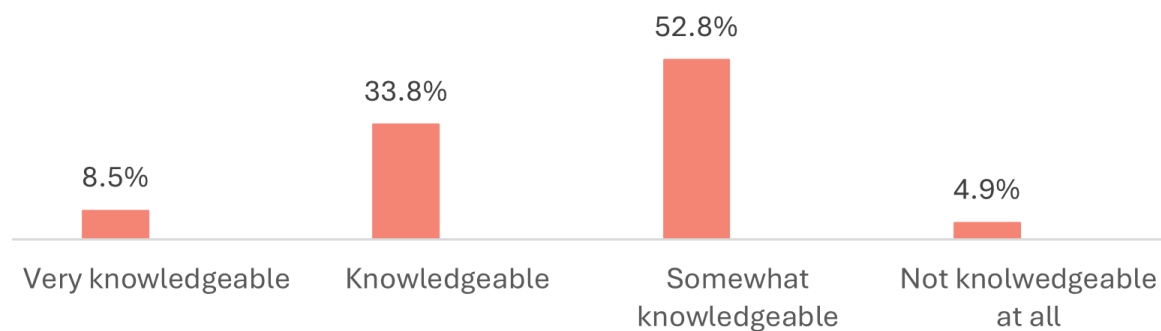
## Faculty Differences

When we examined differences due to faculty, we found that Environment students' ratings were higher for consideration and importance of environmental sustainability than all other faculties, while Math students had the lowest ratings of importance and consideration.<sup>2</sup>

## Knowledge of Environmental Sustainability Issues

We wanted to assess how knowledgeable students are about environmental sustainability issues. Overall, 8.5% of students reported they were 'very knowledgeable', 33.8% were 'knowledgeable', 52.8% were 'somewhat knowledgeable' and 4.9% were 'not knowledgeable at all', as displayed in Figure 4.

Figure 4. Knowledge of Environmental Sustainability Issues



Students' rating of their knowledge was associated with how important they rated environmental sustainability issues<sup>3</sup> and how frequently they consider environmental sustainability<sup>4</sup> in their everyday lives. The higher students rated the importance of and their consideration of environmental sustainability issues, the higher they rated their knowledge of environmental sustainability issues. These relationships are displayed in Figure 5 and Figure 6. For example, among the students who are 'very knowledgeable' about sustainability issues, 65.1% also rated environmental sustainability as 'very important' and 41% 'always' consider environmental sustainability. This pattern can be compared to students who are 'not knowledgeable at all' of sustainability issues, as 2.1% rated sustainability as 'very important' and 0% 'always' considered environmental sustainability.

2 ANOVA:  $f(5, 975)=7.888, p<.001$

3 Correlation:  $r(981)=.426, p<.001$

4 Correlation:  $r(981)=.465, p<.001$



Figure 5. Knowledge of Environmental Sustainability Issues by Importance of Environmental Sustainability Issues

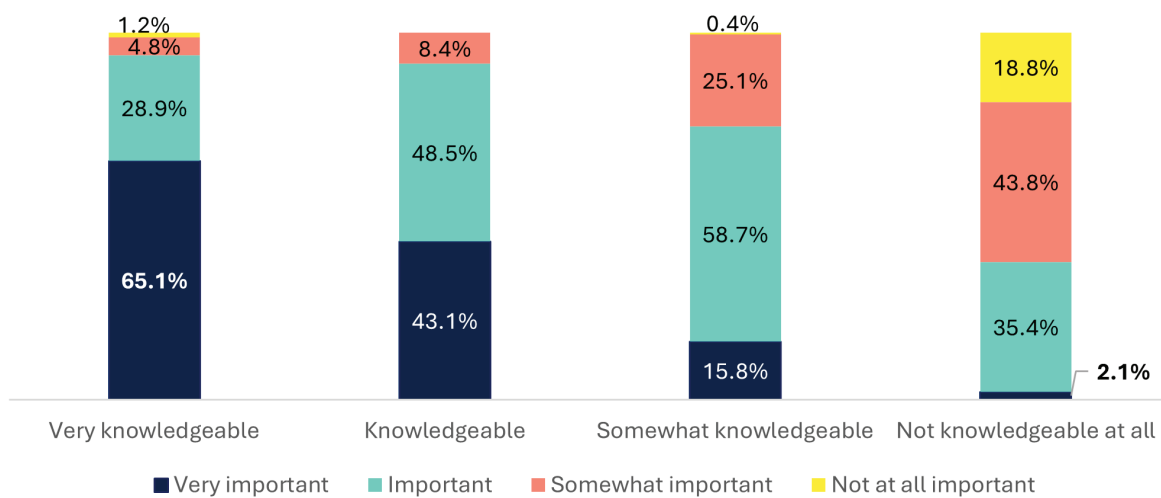
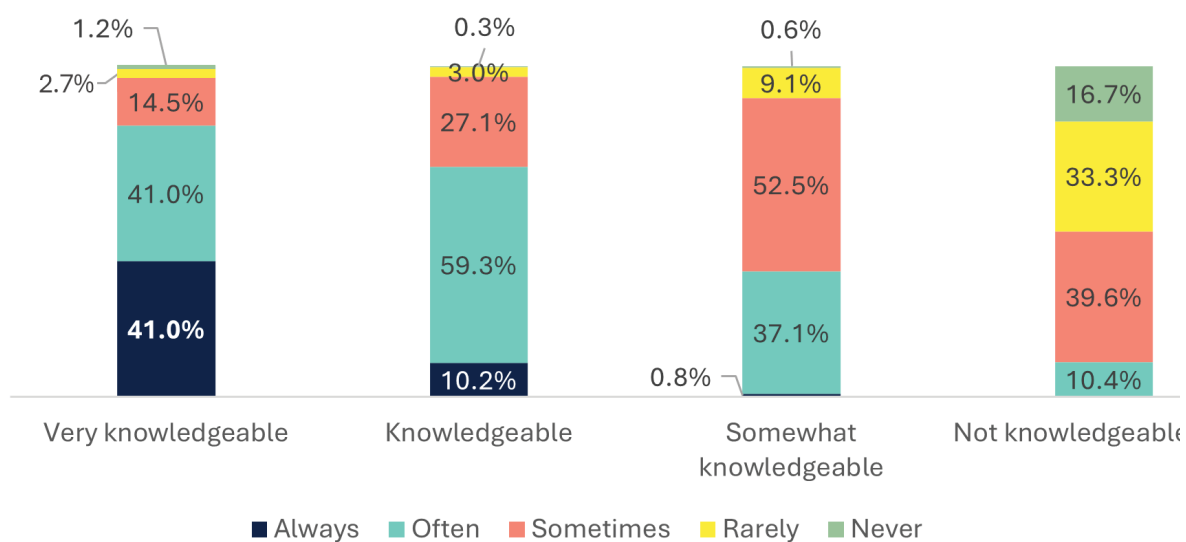


Figure 6. Knowledge of Environmental Sustainability Issues by Consideration of Environmental Sustainability Issues



## Faculty Differences

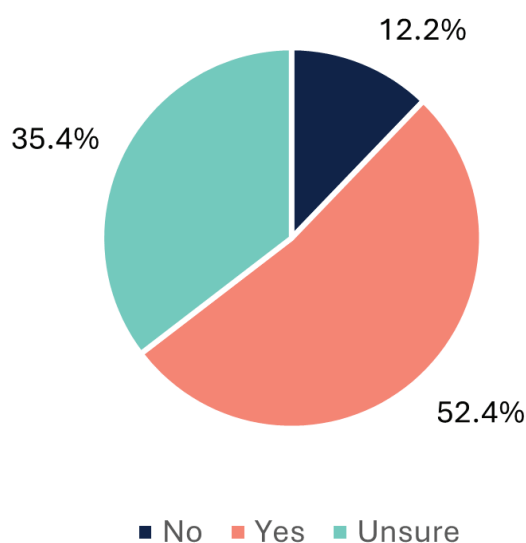
Consistent with previous findings, Environment students had the highest rates of current knowledge of environmental sustainability issues, while Math students had the lowest rates. Furthermore, Environment students had significantly higher rates of current knowledge of environmental sustainability than all other faculties.<sup>5</sup>

5 ANOVA was significant.  $f(5,975)=20.105$ ,  $p<.001$ .

## Desire for More Knowledge

In addition to asking students to rate their current knowledge of environmental sustainability issues, we asked students if they would like to learn more about these issues. Overall, 52.4% of students answered 'yes', 12.2% answered 'no', and 35.4% answered 'unsure', as displayed in Figure 7.

Figure 7. Whether Students Want to Learn More about Environmental Sustainability Issues



When looking at whether current knowledge was associated with a desire to learn more, we found that there was not a clear association that students with less current knowledge wanted to learn more. This relationship is displayed in Table 2. In fact, students who reported they were 'not knowledgeable at all' were more likely to report they were unsure or did not want to learn more about environmental sustainability issues.<sup>6</sup> However, students who were 'somewhat knowledgeable' were more likely to state they wanted to learn more or were unsure if they did want to learn more. This is consistent with the finding that there is a relationship between current knowledge of environmental sustainability and the rated importance of it. Therefore, students who are not knowledgeable about environmental sustainability issues are less likely to perceive these issues as important, thus decreasing their likelihood of wanting to learn more.

There were no differences in students' desire to learn more about environmental sustainability due to their faculty.

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6 Crosstabs:  $X^2(6)=47.686$ ,  $p<.001$



Table 2. Desire for More Knowledge of Issues by Current Knowledge of Issues

|                            | Very knowledgeable | Knowledgeable | Somewhat knowledgeable | Not knowledgeable at all |
|----------------------------|--------------------|---------------|------------------------|--------------------------|
| Do you wish you knew more? |                    |               |                        |                          |
| Yes                        | 8.8%               | 38.3%         | 51.2%                  | 1.8%                     |
| No                         | 13.3%              | 31.7%         | 41.7%                  | 13.3%                    |
| Unsure                     | 6.3%               | 28.0%         | 59.1%                  | 6.6%                     |

## What Students Wish They Knew About Environmental Sustainability

Students were asked through an open-ended question what they wished they knew about environmental sustainability. Overall, 758 students answered this question and their answers were organized into five categories: 'best practices or companies to support' (n=505), 'impacts' (n=111), 'specific questions' (n=78), 'UW-related factors' (n=50), and 'don't know or don't want to know' (n=16). This last category included answers that students do not know what they would want to know more, or they do not want to learn more. Therefore, only the top four categories are explained below.

### Best Practices or Companies to Support

Students stated they wish they knew more about how to incorporate sustainability in their daily lives, the best practices of being sustainable or general tips on how to be more sustainable (n=505). For example, one student stated they wanted to learn 'how to specifically reduce carbon footprint in everyday life', while another student answered, 'more about what is currently being done across the world'. There are also a few answers that stated 'everything', 'anything' or 'all of it'.

Students also wanted to know which 'companies are carbon neutral', allowing students to prioritize supporting businesses that aligned with their values. Additionally, students wanted more guidance for detecting companies that are 'actually sustainable'. For example, one student responded by saying, "What to look at when some product or company says they are "environmentally sustainable"? Is it a marketing strategy or do they actually take some actions?". For the companies that are not operating sustainably, students wanted to learn how to 'apply pressure', 'publicly shame', or 'lobby' them into reducing their carbon footprint.

### Impacts

The second largest category that students wanted to learn more about was the impacts of various actions (n=111), such as the impacts students create when they are both engaging and not engaging in environmentally sustainable activities. For example, one student stated they wanted to learn the "direct impact that non reusable choices have (what is the impact of one plastic cup?)", while another student stated they wanted to learn,

*“The impact of the work I do in terms of environmental sustainability. For instance, if I start bringing my own shopping bags instead of using plastic bags stores provide, what sort of impact does that have? It seems like such a small thing to do, so not knowing the impact can be very discouraging. Something along the lines of why should I do this if big companies who probably have a more detrimental impact on the environment and isn't prioritizing environmental sustainability in their operations?”*

Students want to better understand the impact of their own actions as well as the impact of corporations. Students wanted to understand the impacts of their sustainable actions in relation to the impact of corporations to gauge how much they should prioritize sustainability. Additionally, students wanted to understand how the government impacts how easy or accessibility sustainability is, as well as the impacts of emerging technology on our environment.

### **Specific Questions (n=78)**

The third largest category were specific questions students had about sustainability or specific topics they wanted to learn more about. This category is distinct from the previous two categories because these questions or topics are not specific to best practices or the impacts of environmental sustainability. Rather, students wanted more statistics, more scientific explanations and explanations on specific processes or technologies. For example, some students wanted to learn more about hydrogen power or to receive 'more on the data side of things.' Additionally, students wanted a more critical or nuanced understanding of environmental sustainability. For example, one student answered they wanted to learn more about "trade backsies - 'gas cars are bad cause they use gas but EVs are bad due to lithium batteries'" and another student stated they wanted to learn "more of the surprising facts and how to solve them – for example, plastic recycling being largely fake or ineffective". Given the complexity of some of these topics, it is not surprising that one student asked for a flowchart or another graphic to help students keep track of all the information.

### **University-related Factors (n=49)**

The remaining category were specific questions students had about the University's role in environmental sustainability or how students can engage more while on campus. Students wanted to know 'what actions the University is taking to promote environmental sustainability', including their action plan, how tuition costs are being used to address sustainability, and the implementation of environmentally sustainable initiatives on campus. Additionally, some students wanted to know how they can be more involved in sustainability on campus and areas where they can 'help out'.

## **How Students Defined Environmental Sustainability**

The above findings can be contextualized further by examining how students, in their own words, describe environmental sustainability. To do so, students were asked through an open-ended question how they defined environmental sustainability. Overall, 891 students answered this question, and their answers were organized into four categories: 'green initiatives'



(n=621), 'securing a future' (n=227), 'environmental definitions' (n=20), and 'importance' (n=16). Each of these categories will be explored further.

### **Green Initiatives**

Overwhelming, students' definitions of sustainability included references to green initiatives (n=621). Roughly a third of these definitions included preventing harm to the planet or protecting ecological systems (n=214). Students' definitions included policies, 'taking action' or choosing options beneficial for the planet. For example, one student answered, 'Taking action to ensure that the degradation of the earth's ecosystem and atmosphere is not only stopped, but mended'.

Some students' definitions included sustainable practices, such as green technology or being 'environmentally friendly' (n=157), while other students included 'reduce, reuse, recycle' in their definitions (n=57). These definitions spoke to broad sustainable practices, while some students' definitions of environmental sustainability included sustainable practices that are daily habits (n=122). These daily habits included 'everyday choices', 'day to day decisions', 'lifestyle', or references to individual actions like recycling.

Students' definitions of environmental sustainability also included factors at the institutional or policy level (n=47). These definitions included actions at the institutional or government level, such as building green buildings or recognition that the focus of environmental concerns occurs at the institutional or corporate level. Students' definitions also included consumerism actions (n=18), such as consuming less, not falling into fast fashion trends, etc. Lastly, six students provided definitions of environmental sustainability that were against green initiatives or were asking for more nuance in the discussion of sustainability.

### **Securing a Future**

The second largest type of environmental sustainability definition provided by students was the importance of securing a future for humans, animals, and the planet (n=227). Some students specified that they wanted a world for their children to live in, while other students stated they wanted to secure a healthy planet for 'future generations'. For example, one student answered, "Environmental sustainability means responsibly managing natural resources to meet current needs without compromising the ability of future generations to meet theirs."

### **Environmental Definitions (n=20)**

Students' definitions of environmental sustainability included references to the status of the environment, sometimes through objective measures like no carbon emissions, no greenhouse gases, or no pollution. For most of the students' definitions in this category, these metrics can only be achieved through human action, as explained by one student, "To me environmental sustainability means reducing our carbon emissions/carbon footprint by reaching a goal of net-zero."

### **Importance (or Lack Thereof) (n=16)**

The last category included answers about the importance of sustainability. Most of the answers included in this category state that environmental sustainability is important. For example, one student answered, "It means quite a lot." However, six students answered that sustainability is not important, or it is something they only engage with because 'everyone does it'.

### **Summary**

Overall, 80% of students rated environmental sustainability as either 'very important' or 'important' and over 50% reported they 'always' or 'often' consider environmental sustainability in their everyday life. These two variables were associated with students' rating of their current knowledge of sustainability issues, with students who knew more about sustainability issues more likely have higher ratings of its importance and more likely to consider it.

One interesting finding was that lower knowledge of sustainability issues was not directly associated with a desire to learn more about sustainability issues. As we noted, this finding may be attributed to students who are not knowledgeable about sustainability because they do not think it is important, decreasing the likelihood they would want to learn more.

When answering what they wish they knew about environmental sustainability, most students answered they wanted to learn more about best practices that they could use in their day-to-day lives or the impacts that their decisions have on the environment.

## Individual Actions and Behaviours

We asked students if they believed they had a personal role to play in ensuring we live in a more environmentally sustainable society. Overall, 55.6% said 'yes', 4.3% said 'no', and 40.2% said 'somewhat', as displayed in Table 3.

There were significant faculty differences in students' beliefs about whether they play a personal role.<sup>7</sup> Environment students had the highest rates of 'yes', Engineering students had the highest rates of 'no', and Science students had the highest rates of 'somewhat'.

Table 3. Faculty Differences in Students

|             | Yes   | No   | Somewhat |
|-------------|-------|------|----------|
| Total       | 55.6% | 4.3% | 40.2%    |
| Faculty     |       |      |          |
| Arts        | 62.7% | 2.3% | 35.0%    |
| Engineering | 53.4% | 6.0% | 40.5%    |
| Environment | 71.6% | 5.4% | 23.0%    |
| Health      | 56.4% | 1.3% | 42.3%    |
| Math        | 50.0% | 4.9% | 45.1%    |
| Science     | 48.7% | 4.7% | 46.6%    |

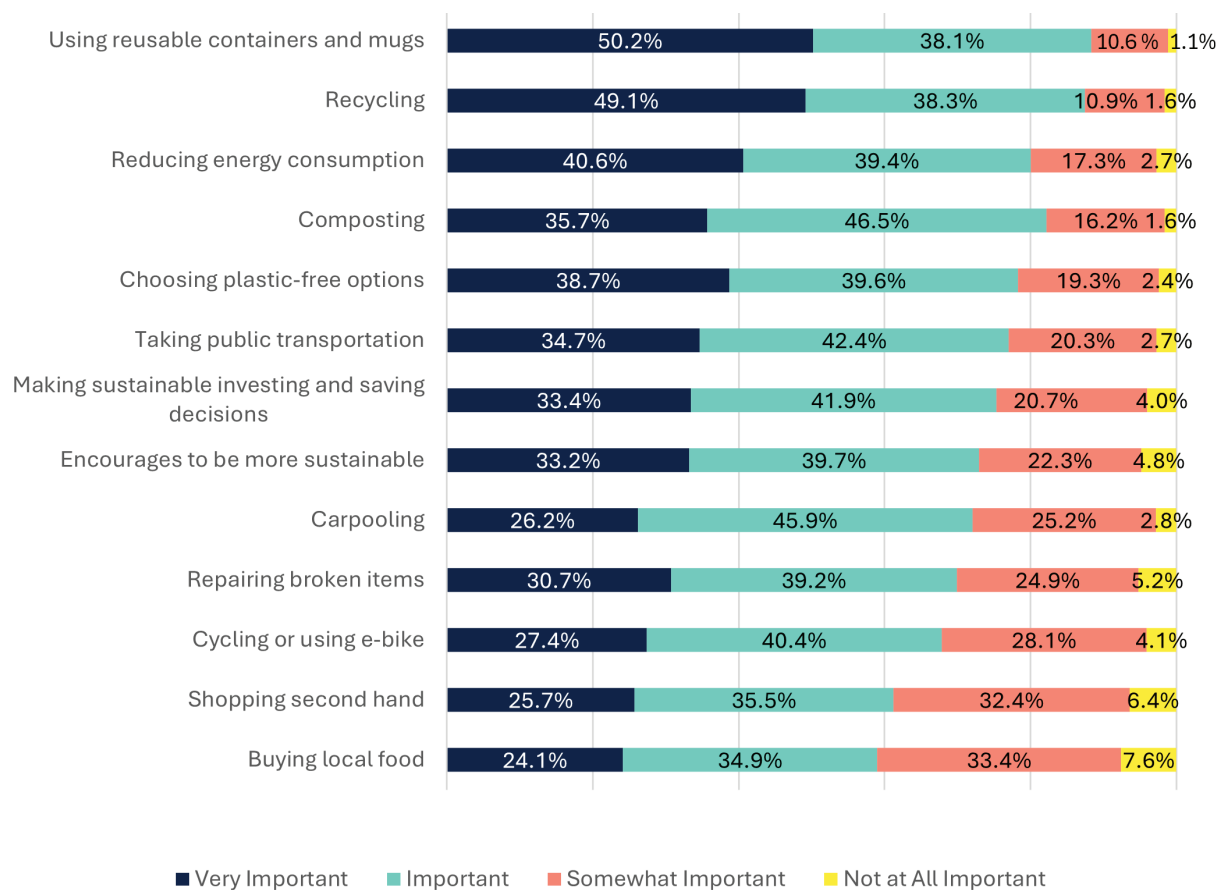
### Importance of and Engagement with Environmentally Sustainable Actions

We asked students how important various environmentally sustainable activities are, by rating them as 'very important', 'important', 'somewhat important', and 'not at all important', as displayed in Figure 8.

<sup>7</sup> Crosstabs:  $\chi^2(10)=24.278$ ,  $p=.007$



Figure 8. Rates of Importance for Environmentally Sustainable Activities



In order to more accurately rank the activities by importance, we calculated an average importance score for each activity. To do this, we converted 'very important' into a '4', 'important' into a '3', 'somewhat important' into a '2', and 'not at all important' into a '1'. The higher the average score, the higher the importance students assigned to the activity. The average scores can be interpreted by comparing them to the original scale labels. For example, 'Using reusable containers and mugs' has an average score of  $M=3.37$ , which can be interpreted as the students' average answer is between 'important' and 'very important', but closer to 'important'. These average scores are displayed in Table 4.

Out of these activities, students rated 'using reusable containers and mugs' ( $M=3.37$ ), 'recycling' ( $M=3.35$ ), and 'reducing energy consumption' ( $M=3.18$ ) as the top three activities, respectively, and rated 'buying local food' as the least important activity ( $M=2.75$ ). It is worth noting that even though 'buying local food' was rated the lowest, an average of  $M=2.75$  can be interpreted as the average student rating being 'somewhat important' and approaching an 'important' rating.

*Table 4. Average Scores for Rates of Importance for Environmentally Sustainable Activities*

|   | Mean |
|---|------|
| Using reusable containers and mugs                | 3.37 |
| Recycling   | 3.35 |
| Reducing energy consumption                       | 3.18 |
| Composting  | 3.16 |
| Choosing plastic-free options                     | 3.15 |
| Taking public transportation                      | 3.09 |
| Making sustainable investing and saving decisions | 3.05 |
| Encourages others to be more sustainable          | 3.01 |
| Carpooling  | 2.96 |
| Repairing broken items                            | 2.95 |
| Cycling or using e-bike                           | 2.91 |
| Shopping second hand                              | 2.80 |
| Buying local food                                 | 2.75 |

In a select all that apply format, we asked students if they engage in these environmental activities, the rates are displayed in Table 5. The activities that at least 50% of students reported engaging in, in order of frequency, are: 'recycling' (92.6%), 'taking public transportation' (82.2%), 'using reusable containers and mugs' (81.4%), 'composting' (65%), 'reducing energy consumption' (59.3%), 'choosing plastic-free options' (56.1%), 'carpooling' (53.8%), and 'shopping second hand' (50.3%). The activity with the lowest engagement is 'cycling or using e-bike' (26.6%). A small proportion of students (0.3%) reported they did not engage in any environmental sustainability activities.

Students were also given an option to report 'other' activities, which 1.4% of students selected. Some of the activities they listed were reducing consumption (n=6), reducing meat consumption (n=4), drive electric vehicles (n=2), and advocacy directed towards corporations (n=2).

We examined whether students engaged in multiple activities, as displayed in Table 6. We found that 18.1% of students engaged in 10-13 activities, 42.7% engaged in 7-9 activities, 31.5% engaged in 4-6 activities, 7.3% engaged in 1-3 activities. This finding highlights that 60.8% of students engage in at least seven environmentally sustainable activities.

*Table 5. Students' Engagement in Environmental Sustainability Activities*

| Environmental Sustainability Activities           | %     |
|---|-------|
| Recycling   | 92.6% |
| Taking public transportation                      | 82.2% |
| Using reusable containers and mugs                | 81.4% |
| Composting  | 65.0% |
| Reducing energy consumption                       | 59.3% |
| Choosing plastic-free options                     | 56.1% |
| Carpooling  | 53.8% |
| Shopping second hand                              | 50.3% |
| Repairing broken items                            | 49.8% |
| Encourages to be more sustainable                 | 38.0% |
| Buying local food                                 | 31.7% |
| Making sustainable investing and saving decisions | 31.1% |
| Cycling or using e-bike                           | 26.6% |
| Other   | 1.4%  |
| None <sup>8</sup>                                 | 0.3%  |

*Table 6. Quantity of Environmentally Sustainable Activities Students Engage In*

| Quantity of Sustainable Activities | % of Engagement |
|------------------------------------|-----------------|
| 10-13 Activities                   | 18.1%           |
| 7-9 Activities                     | 42.7%           |
| 4-6 Activities                     | 31.5%           |
| 1-3 Activities                     | 7.3%            |
| 0 Activities                       | 0.3%            |

### **Importance of vs Engagement in Environmentally Sustainable Activities**

In order to compare students' ratings of importance and their engagement in environmentally sustainable activities, we calculated an average importance score for each activity. Table 7 lists the activities in order of highest importance on the left, and the right side lists the activities in order of highest engagement in the activity. The top six most important and most engaged in activities are consistent; the only difference is the order in which they occur. For example, 'using reusable containers and mugs' is rated as the most important activity but it is the third most frequently engaged in activity. Composting is the only activity that is in the same order.

The activities that have the most discrepancy are: 'making sustainable investing and saving decisions' (5 rank differences), 'taking public transportation' (4 rank difference), 'shopping second hand' (4 rank difference). All other activities are a difference of two ranks or less. The discrepancies between rated importance and levels of engagement might be how accessible or easily attainable some activities are, or how necessary activities are, regardless of the importance to

<sup>8</sup> The 'none' option was exclusive, meaning that students who selected 'none' could not select any other options.



being environmentally sustainable. For example, students may need to commute to campus via public transportation frequently but may not perceive it to be a very important environmentally sustainable activity. Some of the sustainable activities might also have more barriers, such as cycling which is difficult to do in winter and may not be as appealing given the rates of bike theft on campus. Similarly, while students may play importance on 'making sustainable investing and saving decisions' (M=3.05), most students may lack the necessary financial resources.

*Table 7. Importance of vs Engagement in Environmentally Sustainable Activities*

| Importance of Activity                            | Mean | Rank | Engagement in Activity                            |       |
|---|------|------|---|-------|
| Using reusable containers and mugs                | 3.37 | 1    | Recycling   | 92.6% |
| Recycling   | 3.35 | 2    | Taking public transportation                      | 82.2% |
| Reducing energy consumption                       | 3.18 | 3    | Using reusable containers and mugs                | 81.4% |
| Composting  | 3.16 | 4    | Composting  | 65.0% |
| Choosing plastic-free options                     | 3.15 | 5    | Reducing energy consumption                       | 59.3% |
| Taking public transportation                      | 3.09 | 6    | Choosing plastic-free options                     | 56.1% |
| Making sustainable investing and saving decisions | 3.05 | 7    | Carpooling  | 53.8% |
| Encourages to be more sustainable                 | 3.01 | 8    | Shopping second hand                              | 50.3% |
| Carpooling  | 2.96 | 9    | Repairing broken items                            | 49.8% |
| Repairing broken items                            | 2.95 | 10   | Encourages to be more sustainable                 | 38.0% |
| Cycling or using e-bike                           | 2.91 | 11   | Buying local food                                 | 31.7% |
| Shopping second hand                              | 2.80 | 12   | Making sustainable investing and saving decisions | 31.1% |
| Buying local food                                 | 2.75 | 13   | Cycling or using e-bike                           | 26.6% |

## Barriers to Being More Environmentally Sustainable

In order to understand the barriers students faced to living a more environmentally sustainable lifestyle, we asked student through an opened-ended question. Overall, 834 students answered this question. There were six major categories of responses, with some students' responses being categorized into multiple categories: 'money, cost or affordability' (n=377), 'lack of time, convenience, or motivation' (n=326), 'availability of sustainable options or opportunities' (n=190), 'individual actions compared to the top 1%, corporations, and societal norms' (n=67), 'lack of knowledge' (n=64), 'no barriers' (n=59), and 'miscellaneous barriers' (n=13). Since the

answers in the 'no barriers' category consisted of students responding 'no' or 'nothing', only the remaining five categories will be explored further.

### **Money, Cost or Affordability of Sustainable Choices**

Students explained that sustainable options typically cost more, making them inaccessible for students on a budget. Students explained there is often an 'upcharge' on sustainable products and buying local produce can cost more than imported produce. Furthermore, while students know the downsides of fast fashion, it remains a cheaper, and thus more accessible, option when buying clothes.

### **Lack Of Time, Convenience, Or Motivation**

Students stated that sustainable practices were not as convenient, took more time and effort than non-sustainable practices. For example, one student responded, "sometimes the most environmentally sustainable choice is not the most accessible or is difficult to implement into everyday life". Given how busy and stressed students are due to courseload, it is not surprising that inconvenience can play a significant role in whether students adopt more environmentally sustainable habits.

There was an overlap to students' answers that were categorized at both 'money, cost or affordability' and 'lack of time, convenience, or motivation (n=117). This overlap means a lack of time and money are both significant barriers for many students.

### **Availability Of Sustainable Options or Opportunities**

Another major barrier to students engaging more in environmental sustainability is the lack of sustainable options or opportunities for students. Most of the examples provided by students were factors outside of their control, such as lack of bus routes that require them to drive to campus, the lack of recycling and compost where they are living, and not being able to find plastic-free products at the grocery stores.

### **Individual Actions Compared to Rich, Corporations, Societal Norms, Etc.**

This category broadly incorporates all societal factors that impact people's individual actions, such as wanting to fit in, stigma of being 'green', and being discouraged because of the impacts of corporations. The underlining theme is that students are being impacted by external factors that are discouraging them or making environmentally sustainable actions harder. For example, one student responded,

*“It's really expensive to choose more environmentally sustainable choices, like buying local or getting quality clothes that aren't fast fashion. Also, I believe the focus of the problem lies with major cooperations that are causing a million times the waste I am. Calling for change here and not accepting it, is how we can make lasting change.”*

This quote connects to the previous finding that students want more information about individuals' and corporations' impacts on sustainability. This sentiment also being present when students are discussing barriers to being more sustainable highlights that students may be feeling defeated and discouraged to expand the extra effort to be more sustainable.

### **Lack Of Knowledge**

The fifth largest barrier to being more sustainable is lack of knowledge. Most of the students' answers did not include specific topics or information lacking that specifically prevented students from being more sustainable. Rather, students gave general answers, such as a lack of awareness, knowledge or information. Given that 52.4% of students stated they wanted to learn more about environmental sustainability issues, it is surprising that lack knowledge was not listed as a barrier more frequently.

### **Miscellaneous Barriers**

Lastly, students provided barriers that did not quite fit into the previous categories. Some of these answers are hard to interpret the full intention, such as the answer 'news' or include personal barriers, such as the answers 'myself' and 'bad mental health'. The remaining answers were critical perspectives on sustainability, such as them not being as effective, oil being a great resource or sustainable actions are not necessary.

### **Summary**

Overall, students (55.6%) believe they have a personal responsibility to play in ensuring we live in a more environmentally sustainable society. The majority of students routinely recycle (92.6%), take public transportation (82.2%), use reusable containers (81.4%), compost (65%), reduce their energy consumption (59.3%), choose plastic-free options (56.1%), carpool (53.8%), and shop second hand (50.3%). Given that students' biggest barriers to engaging with more sustainable activities are connected to their limited capacities (e.g., time, money) as students, it is clear that most students are trying their best to follow through with the sustainable activities they view as important.

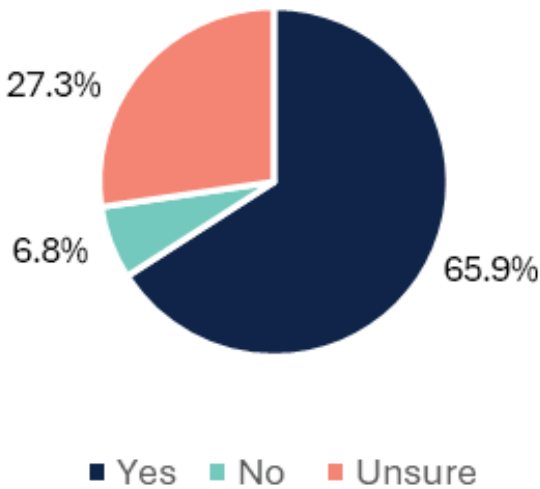


# Climate Change Concerns

## Climate Change Impacts on Everyday Life

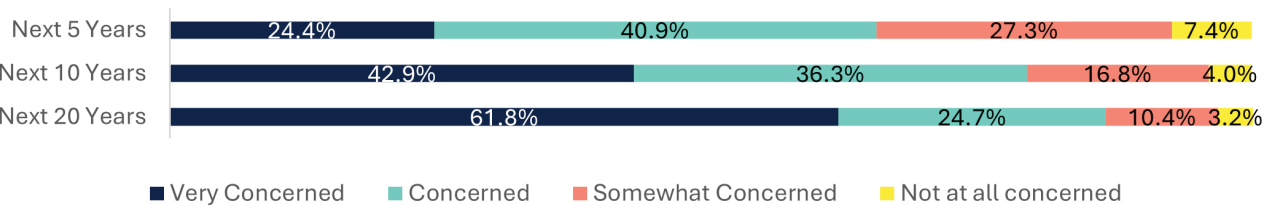
Students were asked if they have personally started to notice the impact of climate change on their everyday life. Overall, 65.9% of students said 'yes', 6.8% said 'no', and 27.3% said 'unsure', as displayed in Figure 14.

Figure 14. Impacts of Climate Change on Everyday Life



We asked students how concerned they were about the impact climate change will have on their everyday life in the next 5, 10 and 20 years, as displayed in Figure 15. Students' rates of concerns increase with the further time frame, with 24.4% of students being 'very concerned' in 5 years, 42.9% in 10 years, and 61.8% in 20 years. Correspondingly, the rates of 'not at all concerned' decrease over time, with 7.4% in 5 years, 4% in 10 years and 3.2% in 20 years.

Figure 15. Students' Rates of Concern in 5, 10 and 20 Years



## Climate Change Impacts on Mental Health

Students were asked if climate change impacted their mental health. Overall, 13.5% of students said 'yes', 31.7% said 'somewhat', and 54.8% said 'no', as displayed in Table 8.

To understand the nuances of the impacts on mental health, we examined if there were differences due to faculty, rated importance of sustainability, frequency of consideration of sustainability, and concern about climate change impacts on their everyday life in the future.

- There were significant differences due to faculty.<sup>9</sup> Environment students had the highest rates of 'Yes' and 'Somewhat', while Math students had the highest rates of 'no'.
- Students' ratings of importance were significantly associated with whether climate change impacted their mental health.<sup>10</sup> As students' rates of importance increased, so did the rates of their mental health being impacted. For example, 28.9% of students who think environmental sustainability is 'very important' have their mental health impacted, versus 0% of students who think environmental sustainability is 'not at all important'.
- Students' frequency of consideration of environmental sustainability is associated with whether their mental health is impacted by climate change<sup>11</sup>, such as the more they consider it, the higher rates of impact on their mental health. For example, 37.5% of students who 'always' consider environmental sustainability reported their mental health is impacted, versus 0% of students who 'never' consider environmental sustainability.
- Students' ratings of concern for the impact of climate change in 5<sup>12</sup>, 10<sup>13</sup> and 20<sup>14</sup> years was associated with their ratings of the impact of climate change on their mental health. As with previous findings, the more concerned students were, the higher their rates of impact on their mental health. Additionally, higher rates of impact on mental health were associated with higher rates of concern in the near future. For example, 32.2% of students who were 'very concerned' about the impact on climate change in 5 years reported climate change having an impact on their mental health, versus 23.5% who were 'very concerned' about the impact in 10 years and 19% who were 'very concerned' about the impact in 20 years.

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9 Crosstabs: X2(10) = 43.566, p<.001

10 Crosstabs: X2(6) = 143.508, p<.001

11 Crosstabs: X2 (8) = 106.655, p<.001

12 Crosstabs: X2 (6) = 216.122, p<.001

13 Crosstabs: X2 (4) = 163.371, p<.001

14 Crosstabs: X2 (5) = 112.738, p<.001

Table 8. Climate Change Impacting Mental Health

|  | Yes          | No           | Somewhat     |
|--|--------------|--------------|--------------|
| <b>Average</b>   | <b>13.5%</b> | <b>54.8%</b> | <b>31.7%</b> |
| Faculty  |              |              |              |
| Arts   | 16.4%        | 47.7%        | 35.9%        |
| Engineering  | 10.8%        | 64.2%        | 25.0%        |
| Environment  | 10.8%        | 40.5%        | 48.6%        |
| Health   | 21.8%        | 42.3%        | 35.9%        |
| Math   | 8.2%         | 67.4%        | 24.5%        |
| Science  | 16.1%        | 50.3%        | 33.7%        |
| <b>Importance of Sustainability</b>                                    |              |              |              |
| Very important   | 28.9%        | 31.4%        | 39.6%        |
| Important  | 8.5%         | 58.3%        | 33.2%        |
| Somewhat Important   | 4.4%         | 78.7%        | 16.9%        |
| Not at all important   | 0%           | 91.7%        | 8.3%         |
| <b>Consideration of Sustainability</b>                                 |              |              |              |
| Always   | 37.5%        | 26.4%        | 36.1%        |
| Often  | 17.5%        | 45.3%        | 37.1%        |
| Sometimes  | 7.1%         | 64.1%        | 28.8%        |
| Rarely   | 2.7%         | 81.3%        | 16.0%        |
| Never  | 0.0%         | 92.3%        | 7.7%         |
| <b>How concerned are you about the impact of climate change: .....</b> |              |              |              |
| <b>5 Years</b>   |              |              |              |
| Very concerned   | 32.2%        | 26.8%        | 41.0%        |
| Concerned  | 10.5%        | 49.6%        | 39.9%        |
| Somewhat concerned   | 4.1%         | 77.2%        | 18.7%        |
| Not concerned at all   | 2.7%         | 93.2%        | 4.1%         |
| <b>10 Years</b>  |              |              |              |
| Very concerned   | 23.5%        | 34.7%        | 41.8%        |
| Concerned  | 7.9%         | 61.8%        | 30.3%        |
| Somewhat concerned   | 2.4%         | 81.8%        | 15.8%        |
| Not concerned at all   | 2.6%         | 2.6%         | 94.9%        |
| <b>20 Years</b>  |              |              |              |
| Very concerned   | 19.0%        | 42.6%        | 38.4%        |
| Concerned  | 5.4%         | 69.4%        | 25.2%        |
| Somewhat concerned   | 3.9%         | 80.4%        | 15.7%        |
| Not concerned at all   | 0.0%         | 96.8%        | 3.2%         |

The more important students consider environmental sustainability to be, the more it impacts their mental health.

The students who are concerned about environmental sustainability in the near future, the more their mental health is impacted.

## Reasons for Impact on Mental Health

The students' whose mental health is impacted by concerns around climate change were asked to explain the reason for this impact. Overall, 372 students answered this question and their responses were categorized into seven categories: 'worried about the future' (n=213), 'feel frustrated or hopeless compared to corporation actions' (n=70), 'emotions' (n=48), 'reasons for impacts on mental health' (n=31), 'feel guilty or responsible' (n=19), 'actions that health mental health' (n=10), and 'no/don't know' (n=6). Since the answers in the 'no/don't know' category consisted of students responding 'no' or 'I don't know', only the remaining six categories will be explored further.

### Worries About the Future (n=213)

The top reason why climate impacted students' mental health is through worrying about the future. Most of these answers, students are speaking about the general sense. For example, one student responded, "Just knowing we might not have a future" and another student answered, "Brings anxiety and worry about the world and it's state in the future".

Some students answered they were worried about worsening weather (n=55). Students mentioned they were worried about extreme weather, the increase of natural disasters, and how being outside or being in nature will soon become inaccessible or impossible due to weather soon. Some students explicitly expressed being concerned what environment or planet their children or grandchildren will be exposed to (n=31).

### Feel Frustrated or Hopeless Compared to Corporation Actions (n=70)

Consistent with the previous finding that students feel limited by the impacts and actions of large corporations, students felt frustrated or hopeless because of how their individual actions cannot be compared larger corporations. For example, one student answered,

*"I dislike thinking about the idea of an apocalyptic future where we've messed up our world enough to be unable to go back. It stresses me out knowing that even if I'm environmentally stable, I have little impact on what bigger companies are doing to spiral us into an irreversible negative future."*

### Emotions (n=48)

This category includes answers of students' emotions, typically when they did not elaborate further. For example, answering 'depressed', 'anxious', 'stressed' or 'worried'. Two students' answers talked about the strength of impact climate change has on their mental health, for example, saying 'greatly' or 'moderately'.

### Reasons for Impacts on Mental Health (n=31)

The fourth category included explanations why climate change was impacting students' mental health. Most of the reasons were related to climate change causing stress, increase of dread or hopelessness. For example, one student explained,



*“It is stressful to think of all the negative effects of climate change that we’re already seeing. Seeing how other populations are struggling to deal with changing climates is difficult to reconcile, even if it’s not happening to me directly.”*

### **Feel Guilty or Responsible (n=29)**

Students described feeling responsible for climate change and feeling guilty for over their individual actions, especially for not doing more to combat climate change. One student explained, “I worry that I am part of the problem so I feel guilty which can make me more depressed or pessimistic.”

Ten students explained that their concerns prompt them to make meaningful action towards climate change or to spend more time in nature. One student explained,

*“Concerns about climate change can cause anxiety and a sense of helplessness, especially when thinking about its long-term effects on the planet and future generations. However, taking small, positive actions can also provide a sense of purpose and hope.”*

## **Students’ Conceptualization of Climate Change**

In order to understand how students conceptualize climate change, we asked them through an open-ended question what ‘comes to mind’ when they think of climate change. Overall, 864 students answered this question and their answers were analyzed into six categories: ‘nature-based conceptualizations’ (n=628), ‘impending doom’ (n=186), ‘government, corporations, misinformation, politics’ (n=129), ‘sustainable initiatives’ (n=30), miscellaneous answers (n=10), and ‘climate change deniers’ (n=7). Each of these categories will be explored further below.

### **Nature-based Conceptualizations (n=628)**

Unsurprisingly, roughly two-thirds of students’ conceptualizations of climate change included descriptions based in nature, climate, or the environment. The most frequently listed aspects of climate change were extreme weather changes, global warming, and forest fires (n=500). Secondly, students referenced changes in the environment that impacts animals, humans and decreases biodiversity (n=186). Thirdly, students listed the state of oceans and the rising sea levels (n=152). Lastly, students referred to the status of the ozone layer, pollution, and emissions (n=131).

These categories were not mutually exclusive, with students listing many of these topics within their answers. For example, one student answered, “When I think about climate change, I imagine rising global temperatures, melting ice caps, extreme weather events, and the loss of biodiversity.”

### **Impending Doom (n=186)**

The second largest category in students’ conceptualization of climate change is a sense of impending doom. Students referred to the severity of climate change and expressed sentiments

that time is running out, the damage to the environment is irreversible and the ‘inevitable doom’.

### **Government, Corporations, Misinformation, Politics (n=129)**

Students also referred to the role of government and corporations in creating climate change, including their role in misinformation and the politicized nature of discourse on climate change. For the most part, students placed the blame on corporations, for example, one student answered, “The earth is going to die and it’s the fault of corporations”. Some students placed the blame on specific industries, such as AI servers and the environmental toll they take.

### **Sustainable initiatives (n=30)**

Students also referred to sustainable initiatives, such as green technology, activism, recycling, or minimizing waste. Some students listed specific environmental activists, such as Greta Thunberg, while others spoke to the changes individuals should make to address climate change. For example, one student wrote,

*“It first has to start as a mindset and you have to actively work towards environmental consciousness to achieve change. It’s not something you wake up being able to do since we live in a world where unsustainable resources are the norm and encouraged to buy.”*

### **Critical Comments on Climate Change (n=17)**

The last category includes comments about the nature of the climate change discourse, such as comments that climate change is “a complex issue”. However, seven students answered that climate change was “an overreacted problem” or is “blown out of proportion”.

## **Summary**

Overall, 65.9% of students have started to notice climate change in their everyday lives. A smaller portion of students (13.5%) indicate that concerns over climate change impact their mental health. These students whose mental health is most impacted by climate change are students who are more concerned about the impacts, especially students who are concerned about the impacts within a 5-year span. Unsurprisingly, students with higher ratings on the importance of climate change and who consider sustainability more are more likely to indicate their mental health was impacted by climate change.

The relationship of these concerns is especially highlighted in students’ conceptualization of climate change, which included a sense of ‘doom and gloom’. Furthermore, students’ mental health is being impacted by climate change because of their fears about the future, whether they or their children will have a future, and a sense of guilt and helplessness that they cannot do more to prevent climate change. One theme that has been especially salient in this section is students’ perspectives that corporations, and by extension, governments, are the main contributors to climate change.

Despite 54.8% of students reporting that climate change does not impact their mental health,

most students conceptualized climate change as the deterioration of the environment or extreme weather. Since students' concerns of the impact of climate change increases with time, it is possible that students' concerns will continue to increase as climate change continues to worsen.

# Sustainability Engagement at Waterloo

## Awareness of Waterloo's Sustainability Initiatives on Campus

We asked students to select their agreement with the statement, 'I am familiar with the initiatives that the University of Waterloo is taking to advance sustainability on campus'. Overall, 6% of students 'strongly agree', 23.3% 'agree', 28.8% 'neither agree nor disagree', 35.7% 'disagree', and 6.1% 'strongly disagree'.

We examined differences due to faculty, as displayed in Table 9. Environment students had the highest rates of agreement, with 44.6% strongly agree/agree, followed by Arts (30.9%), Science (30.6%), Engineering (28%), Health (26.9%), and Math (22.8%).

We also examined differences in agreement due to year of study. First-year students had the highest rates of agreement, with 30.9% strongly agreeing or agreeing, followed by third-year students (30.6%), second-year students (28%), fourth-year students (27%), and fifth-year students or above (25.1%).

Table 9. Students' Rates of Agreement of Familiarity on Waterloo's Sustainability Issues

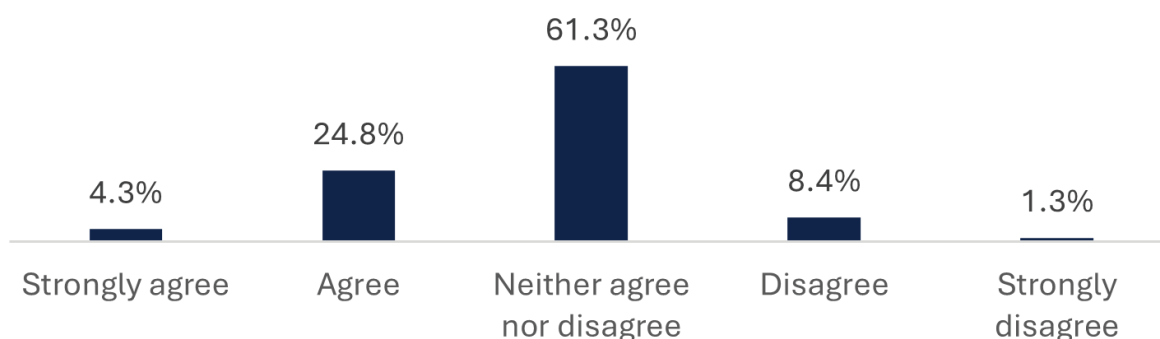
|               | Strongly Agree | Agree | Neither Agree Nor Disagree | Disagree | Strongly Disagree |
|---------------|----------------|-------|----------------------------|----------|-------------------|
| Total         | 6.0%           | 23.3% | 28.8%                      | 35.7%    | 6.1%              |
| Faculty       |                |       |                            |          |                   |
| Arts          | 7.3%           | 23.6% | 31.4%                      | 32.7%    | 5.0%              |
| Engineering   | 5.2%           | 22.8% | 27.2%                      | 34.5%    | 10.3%             |
| Environment   | 8.1%           | 36.5% | 29.7%                      | 23.0%    | 2.7%              |
| Health        | 5.1%           | 21.8% | 26.9%                      | 43.6%    | 2.6%              |
| Math          | 2.7%           | 20.1% | 28.8%                      | 42.4%    | 6.0%              |
| Science       | 8.3%           | 22.3% | 28.5%                      | 35.8%    | 5.2%              |
| Year of Study |                |       |                            |          |                   |
| First Year    | 7.1%           | 23.8% | 24.6%                      | 36.9%    | 7.5%              |
| Second Year   | 5.5%           | 22.5% | 34.7%                      | 33.5%    | 3.8%              |
| Third Year    | 6.9%           | 23.7% | 26.1%                      | 35.9%    | 7.3%              |
| Fourth Year   | 3.7%           | 23.3% | 31.5%                      | 37.0%    | 4.6%              |
| Fifth+ Year   | 6.3%           | 18.8% | 25.0%                      | 31.3%    | 18.8%             |



## Is Waterloo Doing a Good Job Advancing Sustainability on Campus?

We asked students to select their agreement with the statement, 'The University of Waterloo is doing a good job advancing sustainability on campus'. Overall, 4.3% of students 'strongly agree', 24.8% 'agree', 61.3% 'neither agree nor disagree', 8.4% 'disagree', and 1.3% 'strongly disagree', as displayed in Figure 16.

Figure 16. Students' Agreement Waterloo is Doing a Good Job Advancing Sustainability on Campus

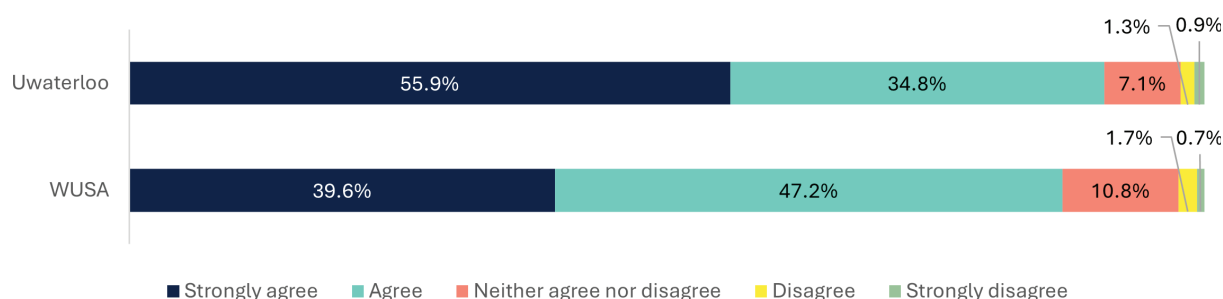


We found a statistically significant relationship<sup>15</sup> between students' ratings of familiarity with Waterloo's sustainability issues and their ratings of whether Waterloo is doing a good job advancing sustainability on campus. As students' familiarity with the initiatives the University of Waterloo is taking to advance sustainability on campus increases, so does their agreement that the University is doing a good job at advancing sustainability on campus. This relationship highlights that the high rates of students stating they 'neither agree nor disagree' that Waterloo is doing a good job advancing sustainability on campus could be attributed to students' lack of familiarity with Waterloo's efforts.

## Implementing Environmentally Sustainable Policies, Practices, and Initiatives on Campus

We asked students if they agreed that it is important that Waterloo and WUSA take the necessary steps to implement environmentally sustainable policies, practices and initiatives. Overall, 55.9% of students 'strongly agree' Waterloo needs to take these steps, 34.8% 'agree', 7.1% 'neither agree nor disagree', 1.3% 'disagree' and 0.9% 'strongly disagree', as displayed in Figure 17. When examining students' ratings on WUSA, 39.6% of students think WUSA should take the necessary steps, 47.2% 'agree', 10.8% 'neither agree or disagree', 1.7% 'disagree', and 0.7% 'strongly disagree'.

Figure 17. Ratings of Whether Waterloo and WUSA Should Implement Sustainable Initiatives

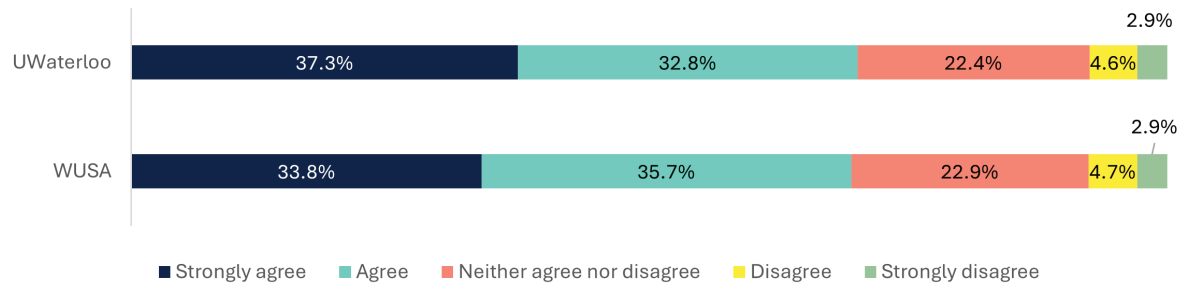


We examined whether students' rating of agreement that Waterloo implement sustainable policies, practices, and initiatives on campus is similar to students' rating of agreement that WUSA do the same. We found that students' agreement that Waterloo should take the necessary steps to implement environmental sustainability initiatives is significantly higher than their agreement that WUSA take the same initiatives ( $M=4.43$  vs  $M=4.23$ )<sup>16</sup>. However, it should be noted that most students (84.1%) still strongly agreed or agreed that WUSA should implement environmental sustainability actions, it was just to a lesser degree than for Waterloo.

### Divesting From the Oil and Gas Industry

We asked students if they agreed that it is important that Waterloo and WUSA take the necessary steps to divest from the oil and gas industry. Overall, 37.3% of students 'strongly agree' Waterloo needs to take these steps, 32.8% 'agree', 22.4% 'neither agree nor disagree', 4.6% 'disagree' and 2.9% 'strongly disagree', as displayed in Figure 18. When examining students' ratings on WUSA, 33.8% of students think WUSA should take the necessary steps, 35.7% 'agree', 22.9% 'neither agree or disagree', 4.7% 'disagree', and 2.9% 'strongly disagree'.

Figure 18. Ratings of Whether Waterloo and WUSA Should Divest from Oil and Gas Industry

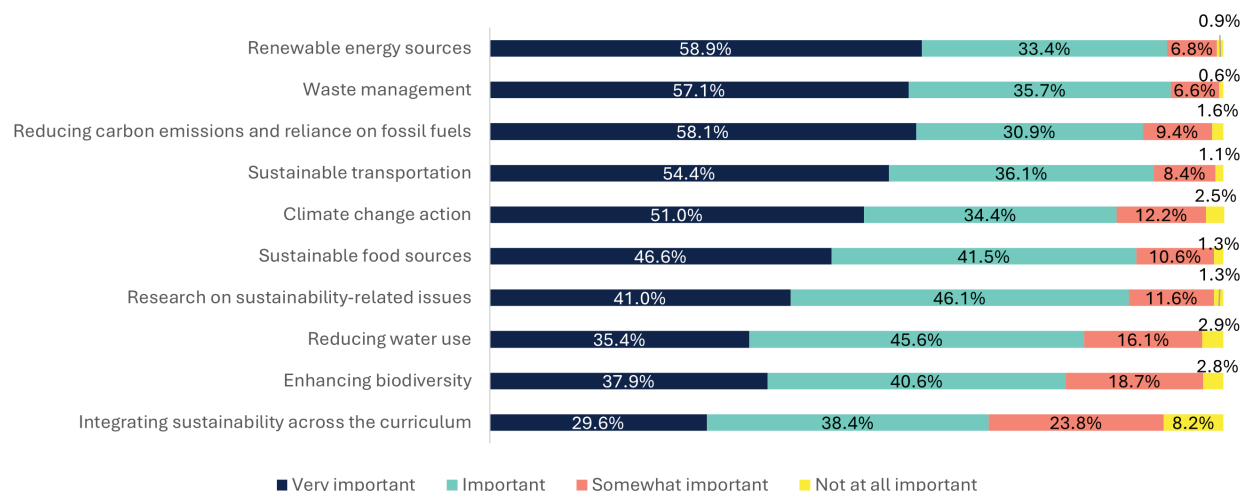


We examined whether students' rating of agreement that Waterloo should divest from the oil and gas industry is similar to students' rating of agreement that WUSA do the same. We found that students' agreement that Waterloo should divest from the oil and gas industry is significantly higher than their agreement that WUSA do the same ( $M=3.97$  vs  $M=3.93$ )<sup>17</sup>. However, it should be noted that most students (69.5%) still strongly agreed or agreed that WUSA should divest from the oil and gas industry, it was just to a lesser degree than for Waterloo.

### Importance for Campus Community Engagement in Environmental Sustainability

Students were asked to indicate how important it is for the campus community to engage in various environmental sustainability activities on a scale of 'very important', 'important', 'somewhat important', and 'not at all important'. These scores are displayed in Figure 19.

Figure 19. Students' Ratings of Importance for Campus Community Engagement in Environmental Sustainability



By converting students answers numerically, we can calculate an average score for each activity. These average scores, displayed in Table 10, allow us to know which activity was rated as more important. The highest rated activity was 'renewable energy sources' (M=3.5) and the lowest rated activity was 'integrating sustainability across the curriculum' (M=2.89). Overall, these values highlight that, on average, students think these activities are 'important', even the lowest rated activity still received a score approximating a 3 or an 'important' rating.

Table 10. Students' Ratings of Importance for Campus Community Engagement in Environmental Sustainability

| Sustainable Activity                                   | Mean |
|--|------|
| Renewable energy sources                               | 3.50 |
| Waste management                                       | 3.49 |
| Reducing carbon emissions and reliance on fossil fuels | 3.45 |
| Sustainable transportation                             | 3.44 |
| Climate change action                                  | 3.34 |
| Sustainable food sources                               | 3.33 |
| Research on sustainability-related issues              | 3.27 |
| Reducing water use                                     | 3.14 |
| Enhancing biodiversity                                 | 3.14 |
| Integrating sustainability across the curriculum       | 2.89 |

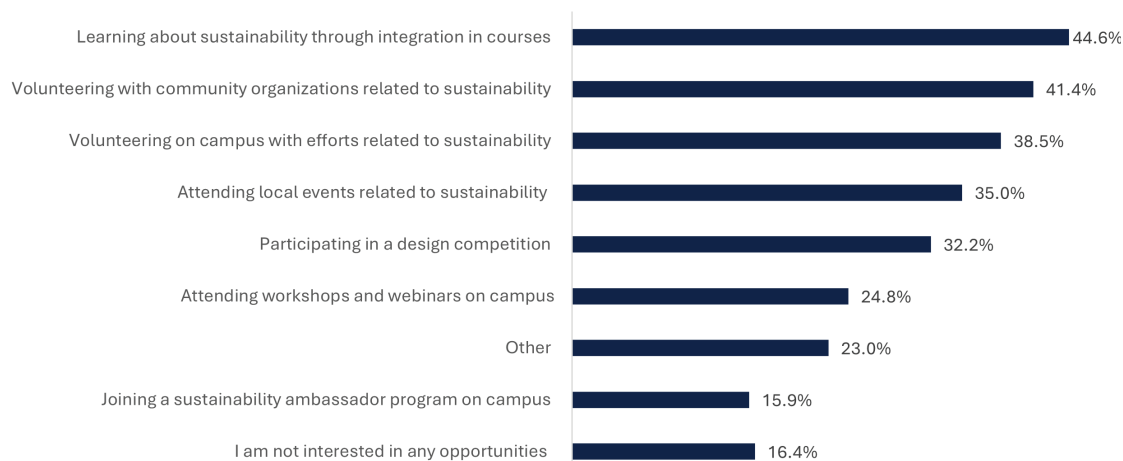
## Student Engagement in Environmental Sustainability Opportunities

Students were asked whether they would be involved in various environmental sustainability opportunities on campus. The activity with the highest interest from students is 'learning about sustainability through integration in courses' (44.6%), as displayed in Figure 20. This activity was followed by: 'volunteering with community organizations related to sustainability' (41.4%), 'volunteering on campus with efforts related to sustainability' (38.5%), 'attending local events related to sustainability' (35%), 'participating in a design competition for addressing environmental challenges' (32.2%), 'attending workshops and webinars on campus related to sustainability' (24.8%), and 'joining a sustainability ambassador program on campus' (15.9%). Additionally, 16.4% of students stated they were not interested in any environmental sustainability opportunities. It should also be noted that, overall, these engagement opportunities have somewhat low rates of interest, with the top rated opportunity still receiving less than 50% of students' interest.

Students were given an 'other' option, which 23% of students selected. Of the students that elaborated on their answers (n=19), the top activity provided was 'protesting or society-level change' (n=6), which included protests, riots, lobbying the government and a recognition that change needs to happen at a 'higher level'. The second largest category was 'community level change, initiatives, or programs' (n=4), which included community competitions and volunteering for sustainable not-for-profits. The remaining activities were 'daily, individual actions' (n=3), 'university-level programs' (n=3), which included embedding sustainable corporations into Waterloo Works, and 'none/don't have time' (n=3).

It is surprising that 'learning about sustainability through integration in courses' was the most frequently selected activity considering 'integrating sustainability across the curriculum' was seen as the least important activity that the campus community should focus on. One interpretation of this seemingly contradiction is that students already have heavy workloads. Therefore, while they think other opportunities are more important, learning through their curriculum is the easiest for them. Another interpretation is that while students do not think Waterloo should mandate sustainability into curriculum, they would like for it to be done.

*Figure 20. Students' Interest in Engaging in Environmental Sustainability Opportunities on Campus*



## Faculty Differences

There were statistically significant differences in students' interest in environmental sustainability opportunities<sup>18</sup> Table 11 displays the differences in the faculties. Regarding most engagement opportunities, Environment students had significantly higher rates than the other faculties. The two exceptions were the 'participating in a design competition for addressing environmental challenges', in which Engineering students had the highest rates, and 'I am not interested in any environmental sustainability engagement opportunities', in which Math students had the highest rates. The faculty with the least rates alternates between Math and Engineering students, with the exception of participating in a design competition, in which Arts students had the lowest rates.

*Table 11. Faculty Differences in Students' Interest in Engaging in Environmental Sustainability Opportunities on Campus*

| Activity   | Average | Arts   | Engineering | Environment | Health | Math  | Science |
|--|---------|--------|-------------|-------------|--------|-------|---------|
| Learning about sustainability through integration in courses***                  | 44.6%   | 43.6%  | 43.5%       | 70.3%       | 46.2%  | 33.2% | 47.7%   |
| Volunteering with community organizations related to sustainability***           | 41.4%   | 46.4 % | 37.5%       | 59.5%       | 46.2%  | 32.1% | 40.4%   |
| Volunteering on campus with efforts related to sustainability*                   | 38.5%   | 41.8%  | 31.9%       | 51.4%       | 41.0%  | 36.4% | 38.9%   |
| Attending local events related to sustainability**                               | 35.0%   | 40.5%  | 25.9%       | 47.3%       | 37.2%  | 32.6% | 36.3%   |
| Participating in a design competition for addressing environmental challenges*** | 32.2%   | 19.5%  | 55.6%       | 32.4%       | 25.6%  | 28.8% | 24.4%   |
| Attending workshops and webinars on campus related to sustainability**           | 24.8%   | 29.5%  | 19.8%       | 40.5%       | 24.4%  | 21.7% | 22.3%   |



| Activity   | Average | Arts  | Engineering | Environment | Health | Math  | Science |
|--|---------|-------|-------------|-------------|--------|-------|---------|
| Joining a sustainability ambassador program on campus***                           | 15.9%   | 13.6% | 13.8%       | 27.0%       | 30.8%  | 10.9% | 15.5%   |
| I am not interested in any environmental sustainability engagement opportunities** | 16.4%   | 16.8% | 15.1%       | 4.1%        | 14.1%  | 23.4% | 15.0%   |

## Summary

Overall, students had little familiarity with Waterloo's sustainable initiatives across campus with less than 30% of students indicating they were familiar. Their lack of familiarity may have attributed to a large proportion of students (61.3%) they 'neither agree nor disagree' that Waterloo is doing a good job to advance environmental sustainability on campus. However, if students were familiar with Waterloo's efforts, they were more likely to agree the university was doing a good job advancing sustainability on campus.

Students believe that Waterloo should implement sustainable initiatives and divest from the oil and gas industry more than they think WUSA should do the same. These findings are consistent with the undercurrent within students' open-ended answers where they hold larger corporations responsible for addressing climate change. This sentiment may also contribute to students' low interest in engagement opportunities across campus. If students hold Waterloo more accountable for advancing environmental sustainability efforts across campus, they may not think their involvement is as necessary. It should be noted that it is also possible students are not interested in the suggested sustainability opportunities because they already engage in multiple activities on their own.

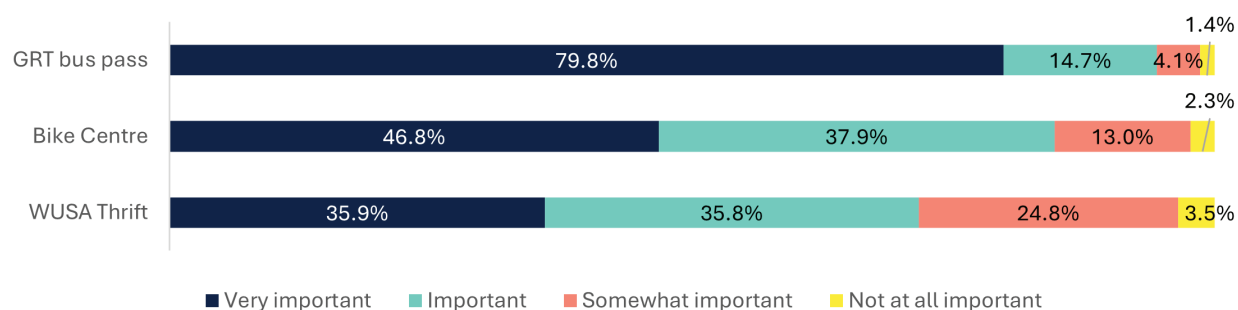
An unexpected finding was that 'learning about sustainability through integration in courses' was the most frequently selected that students would want to engage in, while 'integrating sustainability across the curriculum' was seen by students as the least important activity that the campus community to focus on. This paradox also affirms the interpretation that students are already engaging in the sustainability activities that they can, leaving the activity requiring the least amount of additional effort to be the most appealing to them.

# WUSA's Role in Environmental Sustainability on Campus

## Importance of Current WUSA Sustainability Programs

Students were asked how important it is for WUSA to continue the GRT bus pass, the Bike Centre and WUSA Thrift. Students rated the GRT bus pass as the most important, with 79.8% of students rating this as 'very important', followed by the Bike Centre, with 46.8% rating it as 'very important', and the WUSA Thrift, with 35.9% of students rating it as 'very important'. These results are displayed in Figure 21.

Figure 21. Importance of WUSA's Current Sustainability Efforts

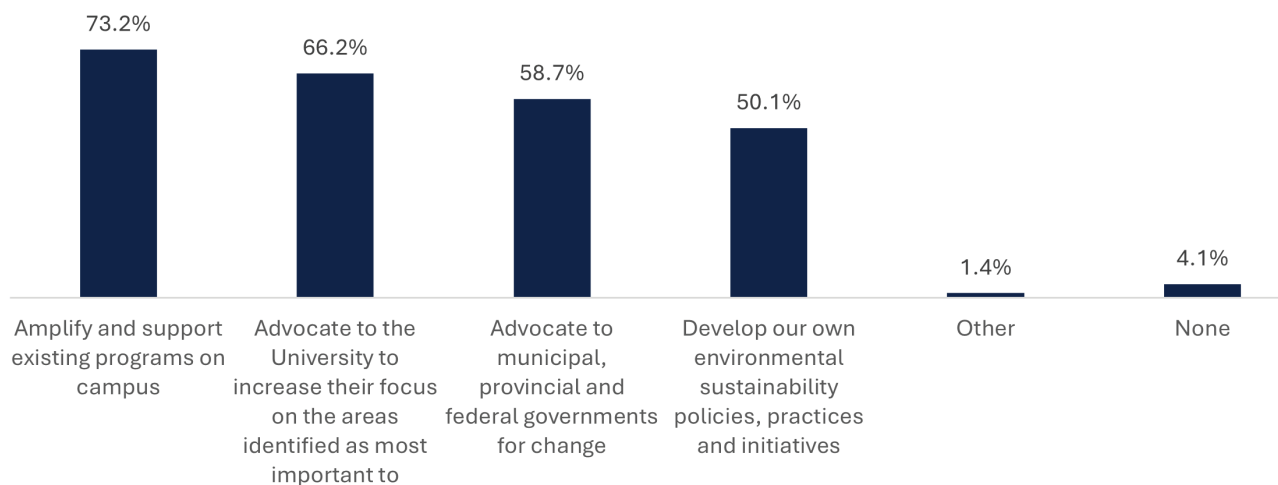


## How Should WUSA Support Environmental Sustainability Efforts on Campus?

Students were asked how WUSA should support environmental sustainability efforts on campus, displayed in Figure 22. The most frequently selected answer was 'amplify and support existing programs on campus' with 73.2%, followed by 'advocate to the University to increase their focus on the areas identified as most important to students' with 66.2%, 'advocate to municipal, provincial, and federal governments for change', and 'develop our own environmental sustainability policies, practices, and initiatives' with 50.1%.

Additionally, 4.1% of students selected 'none', while 1.4% of students selected 'other'. Students were prompted to provide a description when selecting other. The top category was 'advocacy, advocate, organize and protests' (n=4), in which students reaffirmed the need to advocate to the various governments and one student who suggested WUSA advocate for more vegan food options. Another category was 'green transportation' (n=3), which included increasing the number of electric vehicle charging stations, keeping the GRT bus pass, and creating a planned bus route for Aviation students. Another category was 'UW-related initiatives' (n=3), which included designing greener buildings, enforcing fines for littering on campus, and dissolve partnerships with harmful organizations. The remaining category was 'WUSA-related initiatives', which included bringing back the used textbook bookstore, the creation of a 'free store', and a recommendation to critically re-examination WUSA's swag and merch in the context of sustainability.

Figure 22. How Students Would Like WUSA to Support Environmental Sustainability Efforts



### Suggested Prioritization for WUSA

We asked students, in an open-ended question, if there were any other environmentally initiatives they wanted WUSA to prioritized. Overall, 382 students answered this question with a broad range of topics. We had eight different categories: 'no' (n=192), 'Waterloo policies' (n=53), 'tips and information on sustainable topics or events' (n=49), 'greener transportation' (n=38), 'create new sustainable initiatives or supporting new ones' (n=35), 'sustainable food options' (n=24), 'general support for WUSA to be more sustainable' (n=16), 'need to target larger scale solutions' (n=16), 'help off-set sustainable options' (n=9). Since the answers in the 'no' category consisted of students responding 'no', only the remaining categories will be explored further.

### Waterloo Policies (n=53)

The most frequently suggested prioritization for WUSA was to help with advocating for enhanced Waterloo policies to increase environmental sustainability on campus. Thirty-four students wanted WUSA to advocate for better waste management on campus, especially to facilitate adding compost on campus. As one student said, "Waste management is probably the biggest one. As well as ensuring the use and proper disposal of recyclable materials". Thirteen students wanted Waterloo buildings to be more conscious of energy use around campus. As one student said, "Energy use by buildings on campus. I still cannot fathom why we need to keep the lights on all buildings 24/7. Something has to be done to ensure they are closed at night". Other students wanted Waterloo to prioritize lighting the pathways and outdoor walkways across campus over keeping buildings lit overnight.

Students also wanted Waterloo campus to have more greenery around campus, specifically with the intention of enhancing biodiversity (n=7). One student said, "Can we get better grass behind SLC, the reason no body sits there is because the grass is sad and depressing it just shows the sad reality of how sustainable we actually are". For this student, the state of the biodiversity and greenery on campus was a reflection of Waterloo's broader sustainability efforts. Similarly, two students wanted Waterloo to create sustainability-specific policies to enhance sustainability across campus and another two students wanted sustainability curricula.

Lastly, three students wanted Waterloo to increase humanitarian efforts and to divest from the genocide in Palestine. One student explained,

*“I think humanitarian efforts should also be prioritized. The environment matters and there’s no denying that but there are worse things the university has a name as being involved in that are directly impacting peoples lives, homes and families. And a huge ecocide going on in conjunction with that. If Waterloo is a part of that, we cannot claim to care about the environment whilst watching and funding the destruction of natural land and resources of an oppressed group of people!”*

For this student, humanitarian efforts and environmental sustainability efforts are interwoven.

### **Tips, Info on Sustainability Topics or Events (n=49)**

The second most frequently suggested prioritization for WUSA is to provide students with information or tips on how to live more sustainably and to promote sustainable events. Most of the topics that students requested were ways to incorporate more sustainability into their everyday lives. One student explained,

*“Sometimes I do not want to sacrifice my personal way of life (such as free plastic bag in store) for a better environmental sustainability, I wish WUSA can provide guide on how to maintain the traditional way of life while supporting a better world.”*

As evidenced in this quote, some students wanted help to understand how to be more sustainable without making personal sacrifices. Similarly, other students wanted WUSA to be more enthusiastic and encouraging about environmental sustainability on campus while connecting sustainability to other social justice issues.

### **Greener Transportation (n=38)**

Almost half of the students in this category wanted to ensure that WUSA continued to support the GRT bus pass (n=18), while three students wanted the GRT bus pass to no longer be mandatory. The remaining students want more sustainable transportation, such as bike rentals, enhanced GO Bus routes, subsidizing the cost of scooter rentals, and more electric vehicle charging stations.

### **Create new sustainable initiatives or support existing ones (n=35)**

Students also wanted WUSA to either support existing sustainable programs, WUSA Thrift, or create new sustainable initiatives, such as an ambassador program. This code includes suggestions that WUSA create new initiatives, such as contests, or support current initiatives on campus, such as the Bike Centre or WUSA Thrift. However, three students were critical of WUSA Thrift, highlighting that the program does not address overconsumption or reduce the influence of fast fashion. Some recommendations were to expand WUSA Thrift to include a ‘buy nothing’

market of household items, not only to reduce costs for students but also to divert non-broken items from the garbage when students move out.

### **Sustainable food options, utensils, etc. (n=24)**

Students also wanted to increase sustainability in their dining experience on campus. Students wanted reusable food containers and reusable or compostable food utensils, especially given the frequency with which students see plastic utensils littered around campus. Students also wanted more and cheaper vegan and vegetarian options, as well as locally sourced food.

### **Need to target larger scale solutions for advocacy (n=16)**

Some students want WUSA to engage with policies or initiatives outside the scope of Waterloo campus. Consistent with answers from previous questions, students acknowledged the complexity of sustainability issues and recognized change needs to be rooted within corporations and government initiatives. Some students recommended a letter writing campaign to local politicians, advocating for safer bike lanes in Waterloo, advocating at the provincial and federal governments, and creating partnerships between WUSA and local leaders in sustainability.

### **General support for WUSA to be more sustainable (n=16)**

Students stated support for the efforts WUSA has already made as well as their efforts in becoming more sustainable. However, students did not provide specific recommendations or tangible supports they wanted, rather, they are supporting WUSA's broad efforts. For example, one student said, "I think taking any steps to address it is a good first step".

### **Help off-set sustainable options (n=9)**

Lastly, students recommended that WUSA prioritize making sustainable options more affordable and convenient for students to engage in. One student specifically referenced making sustainable food cheaper (e.g., cheaper vegetarian options), while the other students' answers were broader in nature. For example, one student answered, "give students a more affordable way to access sustainability".

## **Summary**

Overall, students perceive WUSA's role in environmental sustainability efforts on campus to be a resource for making sustainable options more accessible for students. Students wanted WUSA to continue offering the GRT bus pass, running the Bike Centre and hosting WUSA Thrift events. Support for these services were also found in students' open-ended responses, especially the utility and importance of the GRT bus pass for students. However, the open-ended responses also highlighted that some students were critical of WUSA Thrift and the mandatory nature of the GRT bus pass.

Additionally, students wanted WUSA to advocate to the University, which was highlighted by 66.2% of students who selected they wanted WUSA to 'advocate to the University to increase their focus on the areas identified as most important to students' as well as in their open-ended



answers. The top category in the open-ended question asking what WUSA should prioritize was 'Waterloo policies', which included enhancing waste management across campus, reducing energy consumption, and enhancing the greenery and biodiversity across campus. Furthermore, students also wanted more sustainability in the food and food packaging options on campus.

There were a few recommendations for other initiatives WUSA could implement. Some recommended an ambassador program, a 'buy nothing' market, collecting and redistributing items left behind when students' move out, and bringing back the used textbook store. However, students wanted WUSA to amplify and support existing programs on campus. In their open-ended answers, students wanted tips and information on how to incorporate sustainability more into their lives but without sacrificing convenience.

## Conclusion

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Overall, most students view environmental sustainability as important, with many even believing they have a personal role to play. Similarly, students also frequently consider environmental sustainability in their everyday lives, and the more importance they place on it, the more they consider it. Additionally, students' ratings of importance for environmentally sustainable activities were fairly consistent with their rates of engaging in said activity. The difference might be how accessible or easy some activities are or how necessary, such as taking public transportation.

The majority of students were 'somewhat knowledgeable' of environmental issues, suggesting that most students may not have understanding of the complexities or the nuances of topics. This implication is supported by students' wanting to know more about the impacts of environmental actions (or inactions), the science behind climate change, and best practices to be more sustainable. Our findings suggest that there is an association that less knowledgeable students want to learn more about environmental sustainability. However, of the students who want to learn more, the students who are 'not knowledgeable at all' are less likely to want to learn more than students who are 'somewhat knowledgeable'. One interpretation of this finding is that students who are not knowledgeable about environmental sustainability also do not place importance on it, decreasing their likelihood of wanting to learn more.

Almost two thirds of students (65.9%) have started to notice climate change in their everyday lives. Additionally, 45.2% of students stated their mental health was at least somewhat impacted by climate change. Students who are more knowledgeable about sustainability, have higher importance rates for sustainability, have higher consideration or are Health students, were more likely to have their mental health impacted. When asked why climate change impacted their mental health, students expressed concern over the future, especially worsening weather, feelings of frustration or hopelessness that their actions cannot undo the damage caused by corporations, and feelings of guilty for not doing more, among other reasons. The recognition that corporations, especially AI technology, were the most influential drivers of climate change was a theme across most of the open-ended questions.

Students believe that the University of Waterloo should implement sustainable initiatives and divest from the oil and gas industry more than they think WUSA should do the same. These findings are consistent with the undercurrent within students' open-ended answers where they hold larger corporations responsible for addressing climate change.

An unexpected finding was that 'learning about sustainability through integration in courses' was the most frequently selected that students would want to engage in, while 'integrating sustainability across the curriculum' was seen by students as the least important activity that the campus community to focus on. This paradox also affirms the interpretation that students are already engaging in the sustainability activities that they can, leaving the activity requiring the least amount of additional effort to be the most appealing to them.

Students perceive WUSA's role in environmental sustainability efforts on campus to be a resource for making sustainable options more accessible for students. Students want WUSA to continue offering the GRT bus pass, running the Bike Centre and hosting WUSA Thrift events. Support for these services were also found in students' open-ended responses, especially the utility and importance of the GRT bus pass for students. However, the open-ended responses also highlighted that some students were critical of WUSA Thrift and the mandatory nature of the GRT bus pass.

There were a few recommendations for other initiatives WUSA could implement. Some recommended programs were an ambassador program, a 'buy nothing' market, collecting and redistributing items left behind when students move out, and bringing back the used textbook store. However, students wanted WUSA to amplify and support existing programs on campus. In their open-ended answers, students wanted tips and information on how to incorporate sustainability more into their lives but without sacrificing convenience.

## Appendix A: Survey

### Knowledge and Awareness of Environmental Sustainability

1. What does environmental sustainability mean to you? [Text box]
  - a. How important is environmental sustainability to you? [MC – Select One]
  - b. Very important
  - c. Important
  - d. Somewhat important
  - e. Not at all important
2. How often do you consider environmental sustainability in your everyday life? [MC – Select One]
  - a. Always
  - b. Often
  - c. Sometimes
  - d. Rarely
  - e. Never
3. How knowledgeable are you about issues related to environmental sustainability? [MC – Select One]
  - a. Very knowledgeable
  - b. Knowledgeable
  - c. Somewhat knowledgeable
  - d. Not knowledgeable at all
4. Do you wish you had more knowledge about issues related to environmental sustainability? [MC – Select One]
  - a. Yes
  - b. No
  - c. Unsure
5. What do you wish you knew more about related to environmental sustainability? [Text box – display only if 5a or c is selected]

### Individual Actions and Behaviours

6. Do you believe you have a personal role to play in ensuring we live in a more environmentally sustainable society? [MC – Select One]
  - a. Yes
  - b. No
  - c. Somewhat
7. How important do you think the following individual actions are for environmental sustainability? [Matrix with options for very important, important, somewhat important, not important at all]

- a. Composting
- b. Recycling
- c. Choosing plastic free options
- d. Carpooling with others
- e. Taking public transportation
- f. Cycling or using an e-bike
- g. Using reusable containers and mugs
- h. Buying local food
- i. Reducing energy consumption (e.g., limiting water and electricity use)
- j. Repairing broken and damaged items
- k. Shopping second hand
- l. Encouraging others to act more sustainably
- m. Making sustainable investing and saving decisions

8. Which individual actions related to environmental sustainability do you engage with? [MC – Select all that apply]

- a. Composting
- b. Recycling
- c. Choosing plastic free options
- d. Carpooling with others
- e. Taking public transportation
- f. Cycling or using an e-bike
- g. Using reusable containers and mugs
- h. Buying local food
- i. Buying reduced items at the grocery store
- j. Reducing energy consumption (e.g., limiting water and electricity use)
- k. Repairing broken and damaged items
- l. Shopping second hand
- m. Encouraging others to act more sustainably
- n. Making sustainable investing and saving decisions
- o. None [Make exclusive – skip to Q11]
- p. Other [Text box]

9. How often do you engage in these actions? [Matrix with options carried forward from Q9]

- a. Every day
- b. A few times per week
- c. Once per week
- d. A few times per month
- e. A few times per year

10. Is there anything that prevents you from making more environmentally sustainable choices?  
[Text box]



## Climate Change Concerns

11. What comes to mind when you think about climate change? [Text box]
12. Have you personally began to notice the impact of climate change in your everyday life?  
[MC – Select One]
- a. Yes
  - b. No
  - c. Unsure
13. How concerned are you about the impact climate change will have on your everyday life in the next 5 years? [MC – Select One]
- a. Very concerned
  - b. Concerned
  - c. Somewhat concerned
  - d. Not concerned at all
14. How concerned are you about the impact climate change will have on your everyday life in the next 10 years? [MC – Select One]
- a. Very concerned
  - b. Concerned
  - c. Somewhat concerned
  - d. Not concerned at all
17. How concerned are you about the impact climate change will have on your everyday life in the next 20 years? [MC – Select One]
- a. Very concerned
  - b. Concerned
  - c. Somewhat concerned
  - d. Not concerned at all
18. Do concerns about climate change impact your mental health? [MC – Select One]
- a. Yes
  - b. No
  - c. Somewhat
19. Why do concerns about climate change impact your mental health? [Text box – display if 17 a or c are selected]

## UW Sustainability Engagement

20. In general, what type of environmental sustainability engagement opportunities would you like to be involved in? [MC – Select all that apply]
- a. Volunteering with community organizations related to sustainability
  - b. Volunteering on campus with efforts related to sustainability
  - c. Attending local events related to sustainability
  - d. Attending workshops and webinars on campus related to sustainability
  - e. Learning about sustainability through integration in courses
  - f. Joining a sustainability ambassador program on campus
  - g. Participating in a design competition for addressing environmental challenges
  - h. I am not interested in any environmental sustainability engagement opportunities
  - i. Other [Text box]
21. Please indicate your agreement with the following statement: It is important that UW take the necessary steps to implement environmentally sustainable policies, practices and initiatives on campus [MC – Select one]
- a. Strongly agree
  - b. Agree
  - c. Neither agree nor disagree
  - d. Disagree
  - e. Strongly disagree
21. Please indicate your agreement with the following statement: It is important that UW takes the necessary steps to divest from the oil and gas industry [MC – Select one]
- a. Strongly agree
  - b. Agree
  - c. Neither agree nor disagree
  - d. Disagree
  - e. Strongly disagree
22. Please indicate your agreement with the following statement: I am familiar with the initiatives that the University of Waterloo is taking to advance sustainability on campus. [MC – Select one]
- a. Strongly agree
  - b. Agree
  - c. Neither agree nor disagree
  - d. Disagree
  - e. Strongly disagree

23. Please indicate your agreement with the following statement: The University of Waterloo is doing a good job advancing sustainability on campus. [MC – Select one]
- a. Strongly agree
  - b. Agree
  - c. Neither agree nor disagree
  - d. Disagree
  - e. Strongly disagree
24. How important do you think it is for our campus community to focus on each of the following areas of environmental sustainability? [Matrix with options for very important, important, somewhat important, not important at all]
- a. Research on sustainability-related issues
  - b. Reducing water use
  - c. Sustainable transportation
  - d. Renewable energy sources
  - e. Sustainable food sources
  - f. Waste management
  - g. Reducing carbon emissions and reliance on fossil fuels
  - h. Enhancing biodiversity
  - i. Climate change action
  - j. Integrating sustainability across the curriculum

### **WUSA Sustainability Engagement**

25. Please indicate your agreement with the following statement: It is important that WUSA take the necessary steps to implement environmentally sustainable policies, practices and initiatives into their operations [MC – Select one]
- a. Strongly agree
  - b. Agree
  - c. Neither agree nor disagree
  - d. Disagree
  - e. Strongly disagree
26. Please indicate your agreement with the following statement: It is important that WUSA takes the necessary steps to divest from the oil and gas industry [MC – Select one]
- a. Strongly agree
  - b. Agree
  - c. Neither agree nor disagree
  - d. Disagree
  - e. Strongly disagree
27. How important do you think it is for WUSA to continue the following programs as part of their sustainability efforts? [Matrix with options for very important, important, somewhat important, not important at all]

- a. GRT Bus Pass
- b. Bike Centre
- c. WUSA Thrift

28. How would you like WUSA to support environmental sustainability efforts on campus? [MC

– Select all that apply]

- a. Amplify and support existing programs on campus
- b. Develop our own environmental sustainability policies, practices and initiatives
- c. Advocate to the University to increase their focus on the areas identified as most important to students
- d. Advocate to municipal, provincial and federal governments for change
- e. None [Make exclusive]
- f. Other [Text box]

29. Do you have anything else to share about the environmental sustainability efforts you think WUSA should prioritize? [Text box]

## Appendix B: Participant Demographics

As illustrated in Table 12, 25.7% of the respondents were in the first year, 24.1% in the second, 25% in the third, 22.3% in the fourth and 1.6% in the fifth year or beyond. When examining the proportions of faculties, the highest proportion of students is from the Engineering faculty (23.6%), followed by Arts (22.4%), Science (19.7%), Math (18.8%), Health (8%) and lastly, Environment (7.5%).

Table 12. Participants' Full Demographics.

|                       | N          | %          |
|-----------------------|------------|------------|
| <b>Overall</b>        | <b>981</b> | <b>100</b> |
| <b>Year</b>           |            |            |
| First                 | 252        | 25.7%      |
| Second                | 236        | 24.1%      |
| Third                 | 245        | 25%        |
| Fourth                | 219        | 22.3%      |
| Fifth+                | 16         | 1.6%       |
| NL                    | 9          | 0.9%       |
| Other                 | 4          | 0.4%       |
| <b>Faculty</b>        |            |            |
| Arts                  | 220        | 22.4%      |
| Engineering           | 232        | 23.6%      |
| Environment           | 74         | 7.5%       |
| Health                | 78         | 8.0%       |
| Math                  | 184        | 18.8%      |
| Science               | 193        | 19.7%      |
| <b>Primary Campus</b> |            |            |
| Waterloo              | 936        | 95.7%      |
| Kitchener             | 14         | 1.4%       |
| Cambridge             | 10         | 1.0%       |
| Stratford             | 18         | 1.8%       |
| <b>Co-op Program</b>  |            |            |
| Yes                   | 740        | 75.4%      |
| No                    | 241        | 24.6%      |
| <b>Disability</b>     |            |            |
| Disabled              | 96         | 10.2%      |
| Non-disabled          | 843        | 89.8%      |
| <b>Gender</b>         |            |            |
| Gender Diverse        | 51         | 5.3%       |
| Woman                 | 636        | 66.0%      |
| Man                   | 276        | 28.7%      |



|                              | N   | %     |
|------------------------------|-----|-------|
| <b>Sexual Identity</b>       |     |       |
| LGBQ+                        | 248 | 27.7% |
| Straight                     | 648 | 72.3% |
| <b>Racialized</b>            |     |       |
| Racialized                   | 664 | 69.6% |
| Non-Racialized               | 290 | 30.4% |
| <b>International Student</b> |     |       |
| International                | 77  | 7.8%  |
| Domestic                     | 904 | 92.2% |

The majority of respondents primarily studied on the main Waterloo campus (95.7%), followed by Stratford (1.8%), Kitchener (1.4%), and Cambridge (1%). We assessed if students were in a co-op program and found 75.4% of students were currently in a co-op program and 24.6% were not.

Students were asked if they were an international student, 7.8% said 'yes' and 92.2% said 'no'. We asked students if they were students with one or more disabilities, 10% said 'yes', and 90% said 'no'.

Students were asked which racial categories they primarily identify with. Students were able to 'select all that apply' to the following: 'Black', 'East Asian', 'Latine', 'Middle Eastern', 'South Asian', 'Southeast Asian', 'White', 'Mixed', 'Biracial', 'Another racial category' or 'I prefer not to answer'. Students who selected 'White' were categorized as 'non-racialized' (30.4%). Students who selected one or more racial categories other than 'white' were categorized as 'racialized' (69.6%). Students who selected 'I prefer not to answer', regardless of whether they selected another racial category, were categorized as 'I prefer not to answer' and excluded from race-related analyses.

Students were asked which sexual identities they identify with. Students were able to 'select all that apply' to the following: 'asexual', 'bisexual', 'gay', 'heterosexual/straight', 'lesbian', 'pansexual', 'queer', 'questioning', 'another sexual identity' or 'I prefer not to answer'. Students who selected 'heterosexual/straight' were categorized as 'straight' (72.3%). Students who selected one or more of the sexuality identities other than 'heterosexual/straight' were categorized as 'LGBQ+' (27.7%). Any students who selected 'I prefer not to answer', regardless of whether they selected another sexual identity, were categorized as 'I prefer not to answer' and excluded from sexuality-related analyses.

Students were asked which gender identity they identify with. Students were able to 'select all that apply' to the following: 'woman', 'man', 'gender non-conforming', 'non-binary', 'agender', 'questioning', 'trans', 'Two-Spirit', 'another gender identity', or 'I prefer not to answer'. Students who exclusively selected 'woman' or 'man' were categorized as 'woman' (66%) or 'man' (28.7%),

respectively. Students who selected 'woman' or 'man' in combination with any of the other gender identities were categorized as 'gender diverse' (5.3%). Students who selected one or more of the following identities, 'gender non-conforming', 'non-binary', 'agender', 'questioning', 'trans', 'Two-Spirit', 'another gender identity' were categorized as 'gender diverse'. Any students who selected 'I prefer not to answer', regardless of whether they selected another gender identity, were categorized as 'I prefer not to answer' and excluded from gender-related analyses.



