

# **UIC Office of Sustainability**

## **Report on Energy Saving Concepts and Behavior of UIC Employees**

**UIC Office of Sustainability**

**Carbon Neutral. Zero Waste. Net Zero  
Water. Biodiverse.**

**Prepared by:**

**Yufeng Hu**

**Yaxin Guo**

**Hanxi Zhao**

**Chuan Sun**

**Xiangyun Ma**

**Master of Public Administration**

**College of Urban Planning and Public Affairs**

**University of Illinois at Chicago**

# **Report on Energy Saving Concepts and Behavior of UIC Employees**

## **Client**

**Emily Stearney**



**OFFICE OF  
SUSTAINABILITY**

## **Project Team 6 Members**

**Yufeng Hu**

**Yaxin Guo**

**Chuan Sun**

**Xiangyun Ma**

**Hanxi Zhao**

## **Under Supervision of**

**Jeffrey M. Gawel**

**MPA, PMP, CSM**

**Stephen Kleinschmit**

**Director of Program Development and Engagement**

**Master of Public Administration**

**College of Urban Planning and Public Affairs**

**University of Illinois at Chicago**

**Date: July 31, 2019**

## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>5</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>6</b>
<b>METHODS .....</b>	<b>7</b>
<b>I. INTRODUCTION .....</b>	<b>9</b>
I. BACKGROUND ON THE CLIMATE ACTION IMPLEMENTATION PLAN (CAIP) .....	9
1. <i>Purpose of the CAIP</i> .....	9
2. <i>Who is the plan leader</i> .....	9
3. <i>What is the CAIP</i> .....	10
4. <i>How to make the CAIP</i> .....	11
II. WHAT IS THE POTENTIAL OUTCOMES OF CAIP .....	12
1. <i>Financial Projections</i> .....	12
2. <i>Energy Efficiency and Conservation</i> .....	13
3. <i>Clean and Renewable Energy Sources</i> .....	13
4. <i>Reduced Transportation-Related emissions</i> .....	13
<b>II. EMPLOYEES’ OPINIONS AND VIEWS ON THE SITUATION OF UIC .....</b>	<b>15</b>
<b>III. EMPLOYEE PERSPECTIVE ON UIC RELIABILITY IN ENERGY CONSERVATION .....</b>	<b>24</b>
I. WHAT ACTIONS TO SAVE ENERGY AND REDUCE EMISSIONS ARE EFFECTIVE .....	24
1. <i>Living equipment</i> .....	25
2. <i>Heating or cooling in a classroom or office building</i> .....	25
3. <i>Small investments that pay off</i> .....	25
4. <i>Travel around</i> .....	26
5. <i>Reduce, Reuse, Recycle</i> .....	26
6. <i>Business and community</i> .....	27
II. WHAT IS THE SITUATION OF UIC EMPLOYEES .....	27
<b>IV. UIC EMPLOYEES’ CONCEPT OF ENERGY CONSERVATION IN THEIR DAILY WORK .....</b>	<b>33</b>
I. THE REGRESSION RELATIONSHIP BETWEEN UIC EMPLOYEES’ OPINIONS ON SUSTAINABILITY AND THEIR ACTIONS DURING THEIR DAILY WORK .....	33
1. <i>The regression model between questions 24 and 30</i> .....	33
2. <i>The regression model between questions 27 and 30</i> .....	35
3. <i>The regression model between questions 25 and 30</i> .....	36
<i>Conclusion for the regression analysis sessions</i> .....	38
II. THE DESCRIPTIVE ANALYSIS ON UIC EMPLOYEES’ CURRENT SUSTAINABLE ACTIONS DURING THEIR DAILY WORK AND THE REGRESSION ANALYSIS BETWEEN UIC EMPLOYEES’ SUSTAINABLE ACTIONS AND THE REASONS BEHIND ...	39
1. <i>Descriptive analysis on UIC employees’ current sustainable actions</i> .....	39
2. <i>Regression analysis between UIC employees’ sustainable actions and the reasons behind</i> .....	43



<b>V. APPROACHES AND OBSTACLES OF PROMOTE ENERGY-SAVING .....</b>	<b>46</b>
I. APPROACHES OF PROMOTE ENERGY-SAVING.....	46
II. OBSTACLES OF PROMOTE ENERGY-SAVING.....	49
<b>CONCLUSION .....</b>	<b>51</b>
<b>APPENDICES .....</b>	<b>53</b>
LIST OF APPENDICES .....	53
1. <i>Survey instrument: Qualtrics Survey.....</i>	<i>54</i>
2. <i>Copy of MOU .....</i>	<i>54</i>
3. <i>Copy of database elements (Selected).....</i>	<i>58</i>

## Executive Summary

This report aims to provide data analysis service and related recommendations to UIC Office of Sustainability. UIC Office of Sustainability plans to start a Energy Conscious Campus program, which seeks to reduce campus-wide energy use 1.5% by 2020. As a part of the Climate Action Implementation Plan, the Energy Conscious Campus program is a vital component to the CAIP's energy goals that will help UIC achieve carbon neutrality by 2050.

Before starting the Energy Conscious Campus program, it's necessary to understand current situations about campus-wide energy use and UIC employees' attitudes and their sustainable actions. After all, UIC employees' voice and cooperation is important to Energy Conscious Campus program and CAIP. By knowing these basic situations, UIC Office of Sustainability can do better in decision and policy making.

In order to explore the situations, UIC Office of Sustainability conducted a survey which focuses on UIC employees who work in offices. The survey includes some questions which are about UIC employees' opinions on sustainability and their behaviors. From the survey, a database is established. The research group selects valid and effective data from the database to conduct the analysis. Regression analysis and descriptive analysis are the main statistic tools and most of the outcomes are computed by SPSS. Some outcomes are directly from Qualtrics Survey Software.

Although there are some unavoidable issues that may impact the accuracy (for example, many interviewees skipped some questions), this report is still informative. The recommendations are based on the data analysis outcomes.

## Acknowledgements

The project team put a lot of effort into this UIC Capstone project. However, the completion of this project also depends on the help and support of different individuals and organizations. The project team would like to express our sincere gratitude to them. The project team are highly indebted to our client **Emily Stearney**, instructor Professor **Stephen Kleinschmit**, and Professor **Jeffrey M. Gawel**, for their guidance and constant supervision. The necessary information they supported and provided about the project helped us to complete the project. Finally, the project team would like to thank all the members from the team. Without the concerted efforts of all of them, the project team will not be able to successfully complete the project.

## Methods

Overall, the project team members used descriptive analysis and regression analysis. Most of the data used by the project team came from a default report, which contained 42 questions and answers from more than 300 people. In addition, about 20% of the reports are incomplete, which means that these incomplete reports may affect our models and results. Fortunately, even these incomplete reports still provided answers to the questions most concerned by the team members. Finally, the team members got more accurate answers after modifying the model and re-analyzing the data.

At the beginning, because the project team received the final results of the questionnaire, the team members could only conduct descriptive analysis of different issues. Through descriptive analysis, the project team learned about UIC employees' general attitudes towards sustainability and energy conservation. After that, the project team received technical support from the data website and obtained individual data for each report. These more detailed data helped the team members to enter the next stage of investigation and research.

Project teams get more detailed data, and team members can also make regression analysis, rather than simply descriptive statistics. The project team chose SPSS as the research tool. By calculating the correlation coefficient, team members study the potential relationship between different problems, and predict and estimate the behavior of UIC employees. For individual issues, the project team decided to assign and calculate different options. For example, employees have different attitudes towards

“Individual impacts on climate change.” UIC employees provide different answers, such as indifference, care, or enthusiasm. Team members assign different options. Indifference = -1, Care = 1, enthusiasm = 2. After that, the project team recalculates, and gets the general attitude of UIC employees. The members of group made regression analysis and weighted calculation for each problem, and finally got more accurate results.

This is the general introduction of our research methods and data analysis. More details and more comprehensive data analysis are described in the final report.



# **I. Introduction**

## **i. Background on the Climate Action Implementation Plan (CAIP)**

### **1. Purpose of the CAIP**

The abundant natural resources of the earth have been supporting economic development and a rapidly growing population. However, the distribution and use of these resources is unbalanced among countries and regions around the world, and there are inequitable phenomena. In recent years, the problem of resource shortage is becoming more and more serious, and more and more people realize that resources are not sustainable. Sustainability is a prominent issue, so it is very important to pay attention to sustainable development. Because of this, UIC made a CAIP to encourage individuals and organizations to improve the climate. The main objective of the Climate Action Implementation Plan (CAIP) is to help UIC accelerate through the phases of implementing tangible solutions.

### **2. Who is the plan leader?**

Under the background of the concept of sustainable development of the United Nations, every college student should have the consciousness of sustainability, and give back to the society as a global citizen. In order to enhance students' awareness of sustainable development, the University of Illinois at Chicago established the Office of Sustainability. The office is committed to creating a resilient campus and recognizes the impacts of climate change. The University of Illinois at Chicago (UIC) is a unique hybrid of a diverse student body and a high level of faculty research and service, in the

third largest city in the United States.

### **3. What is the CAIP**

The CAIP is based on the Climate Commitments which are made by UIC Office of Sustainability to implement the sustainable development into the university's functions. The Climate Commitments consist of aspirational goals that offer visionary solutions for the future, short-term action items that ensure progress over the next five years, UIC's existing accomplishments, and a discussion on how teaching and learning on campus can support the institutional response to global climate change, and offer educational experiences that train students to address 21st century problems.

**Carbon Neutral Campus** - UIC will strive to achieve carbon neutrality with net zero greenhouse gas (GHG) emissions through reducing and offsetting emissions related to operations and travel. The build of Carbon Neutral Campus contains five aspirational goals. Firstly, reduce building GHG emissions related to building operation by 8,500 metric tons CO<sub>2</sub> equivalent (mtCO<sub>2</sub>e) per year over the next five years. Secondly, purchase renewable energy through a long-term power purchase agreement. Integrate solar power electricity generation into campus structures, such as roofs, parking lots and structures. Thirdly, use parking lots and structures as an environmental asset to generate and save energy. Fourthly, optimize use of on-site cogeneration to maximize efficiency.

**Zero Waste Campus** - The UIC Climate Commitment of Zero Waste Campus refers to UIC's goal of diverting 90% of landfill-bound material through techniques

such as source reduction, materials reuse, recycling, and composting. There are four aspirational goals about the zero-waste campus. a) Increase waste diversion rates divert 90% of waste from landfills. b) Shape a new culture of closed-loop waste management operations. c) Serve as a resource for the City of Chicago. d) Enhance Zero Waste Education.

**Net Zero Water Campus** - The UIC Climate Commitment of Net Zero Water Campus refers to UIC's goal of using the same amount of water in its operations (irrigation, plumbing, etc.) as the amount of natural rainfall on UIC's campus. There are three aspirational goals about this part. a) Manage and reduce stormwater runoff through design and retrofitting. b) Capture stormwater for Irrigation. c) Explore design for Greywater Infrastructure – Create a pilot project within a new construction project at UIC.

**Biodiverse Campus** - The term biodiversity refers to the variety of all forms of life such as plants, animals, and microorganisms in an ecosystem. In its commitment to be a biodiverse campus, UIC will take steps to protect and support health and diversity of ecosystems on campus. The purpose of the biodiverse campus commitment is promoting consumption of local food on campus – explore contracting options with local and regional food vendors and opportunities for on-site food production.

#### **4. How to make the CAIP**

The UIC Climate Action Implementation Plan (CAIP) integrates the Aspirational Goals and Short-Term Action Items of the UIC Climate Commitments into seven major

strategies containing 33 data- driven solutions.

Strategy 1.0 - Energy Efficiency and Conservation, Strategy 2.0-Clean and Renewable Resources, and Strategy 3.0 -Reduced Transportation-Related Emissions all derive from the first UIC Climate Commitment—Carbon Neutral Campus.

Strategy 4.0 - Natural Resources and Ecosystem Services combine the third and fourth UIC Climate Commitments—Net-Zero Water Campus and Biodiverse Campus (respectively) to help UIC realize the goal of consuming no more water than what naturally falls on its surfaces, as well as building upon our biodiversity portfolio.

Strategy 5.0 - Sustainable Materials and Reduced Waste Streams provides achievable solutions to the second UIC Climate Commitment—Zero Waste Campus, as a means to help UIC reach it's 90% diversion rate goal of land all-bound material through recycling and other waste-reducing techniques.

Strategy 6.0 - Teaching and Learning takes the recommendations from the UIC Climate Commitments.

Strategy 7.0 - Climate Resiliency, will add actions that help UIC as well as the greater Chicago region to be better prepared for the likely impacts that will be experienced due to climate change.

## **ii. What are the potential outcomes of CAIP?**

### **1. Financial Projections**

If the project team uses financial projection to measure the profit of UIC, it would be found that if UIC invests roughly \$9.8 million per year through 2028, Utilities would

achieve an approximate \$204 million savings in Energy Purchases over the 10-year time frame of the CAIP (2018-2028); a Total Cash Flow (savings) of \$107 million for UIC by 2028. Furthermore, this investment would reduce UIC GHG emissions by an average of 15,900 MTCO<sub>2</sub>e per year (a total of 159,000 MTCO<sub>2</sub>e by 2028).

## **2. Energy Efficiency and Conservation**

Investment in the CAIP Portfolio will keep UIC on track to meet its GHG emissions reduction goal of 50% by 2028. Furthering reductions beyond this 10-year time frame will become increasingly complex, and must be met with a robust commitment to achieving the UIC Climate Commitments.

## **3. Clean and Renewable Energy Sources**

Through the CAIP program, UIC no longer needs to buy traditional hybrid power from the grid, but directly purchases renewable energy. Generators are not delivering renewable energy to contractors, but selling electricity directly to the grid and accepting open market prices, which is fair. Furthermore, with the update of CAIP the options for supporting the development of Illinois-based sources of solar (and other renewable sources of energy) are enhanced, and increasingly competitive.

## **4. Reduced Transportation-Related emissions**

UIC can support all recommendations set forth by CAIP including prioritizing pedestrians; supporting a connected network of safe and efficient bicycle-friendly routes and constructing secure facilities to encourage bicycle commuting; and increasing transit ridership by making transit an efficient and cost-effective option for

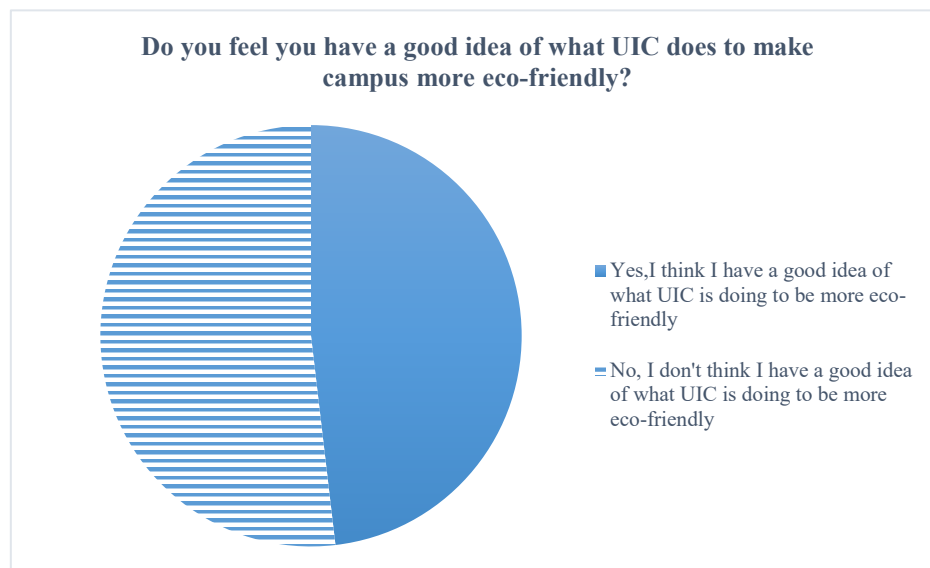
all campus users.

## II. Employees' Opinions and Views on the Situation of UIC

In order to understand UIC employees' attitudes towards the current status of UIC in detail, this study uses Q19-Q23 in the questionnaire to conduct a descriptive analysis.

**Q19. Do you feel you have a good idea of what UIC does to make campus more eco-friendly?**

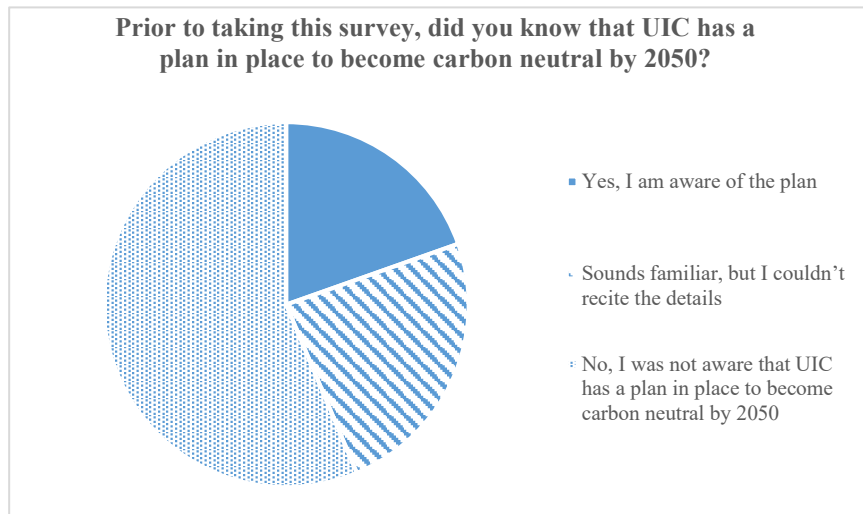
**Figure 2-1**



From the figure 1-1, it can be seen that the number of employees with positive attitudes is less than that with negative attitudes. The number of employees with positive attitudes is 117, accounting for 37%; the number of employees with negative attitudes is 126, accounting for 39.9%. And the missing value is 73. This means that there is still much room for improvement in the sustainable plan of UIC. Employees still have a negative attitude towards the current results.

**Q20. Prior to taking this survey, did you know that UIC has a plan in place to become carbon neutral by 2050?**

**Figure 2-2**

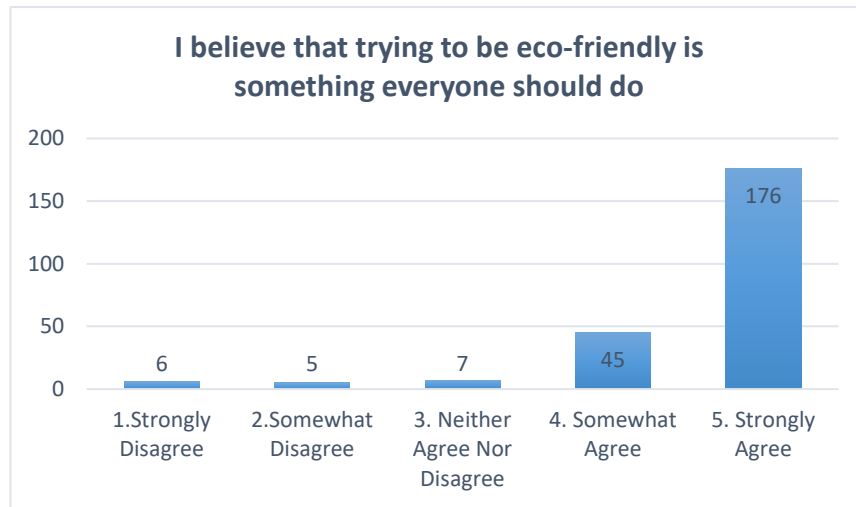


From the graph, the project team could see that the “No, I was not aware that UIC has a plan in place to become carbon neutral by 2050” is more than 50% of the total answers, the exact figure is 138, accounting for 43.7. However, only 48 people (15.2%) chose the answer “Yes, I am aware of the plan, while 59 (18.7%) chose the answer “Sounds familiar, but I couldn’t recite the details”. The missing value is 71. From the distribution of the answers, it can be seen that the respondents have insufficient understanding of the CAIP. The UIC should strengthen its publicity efforts to let more people know about the project and how to contribute to it.

**Q21-1. I believe that trying to be eco-friendly is something everyone should do.**

**Figure 2-3**

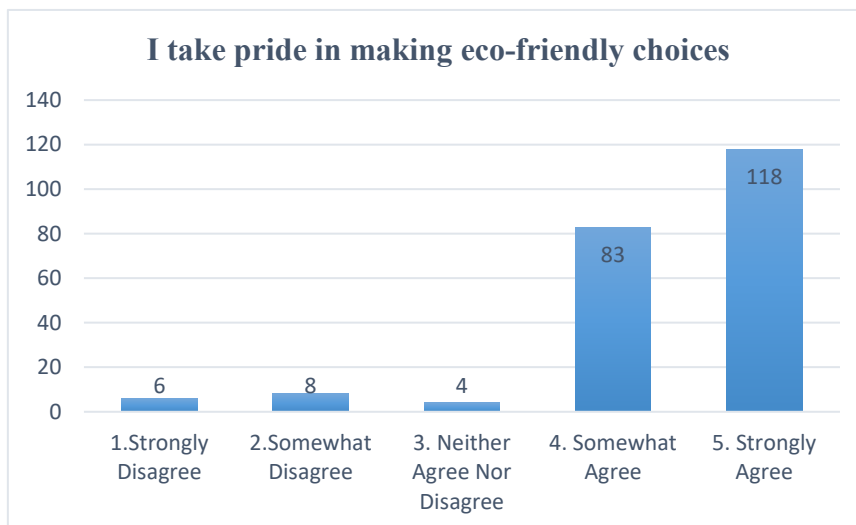




From the figure2-3, it can be seen that there are 176 people (55.7%) choose “Strongly Agree”, 45 people (14.2%) choose “Somewhat Agree”. The total number of the respondents agreed with the proposal is 221, accounting 69.9%, which indicates that all the respondents had a high awareness of environmental protection, and it is beneficial to the promotion of CAIP program.

**Q21-2. I take pride in making eco-friendly choices.**

**Figure 2-4**



From the figure 2-4, it can be seen that over 60% people take pride in making eco-

friendly choices. The number of respondents choosing “Strongly Agree” is 118, choosing “Somewhat Agree” is 83, while only 14 people show negative attitudes. This means that many people are willing to participate in environmental protection.

**Q21-3. Working for an organization that prioritizes sustainability is important to me.**

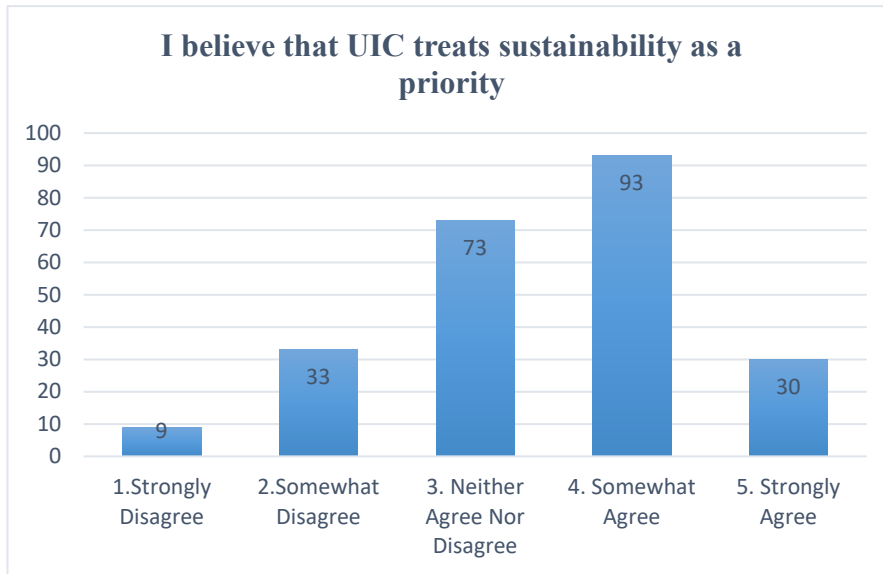
**Figure 2-5**



From the figure 2-5, many people want to work for an organization that prioritizes sustainability. There are 191 people think it’s important to them to join an eco-friendly program.

**Q21-4. I believe that UIC treats sustainability as a priority.**

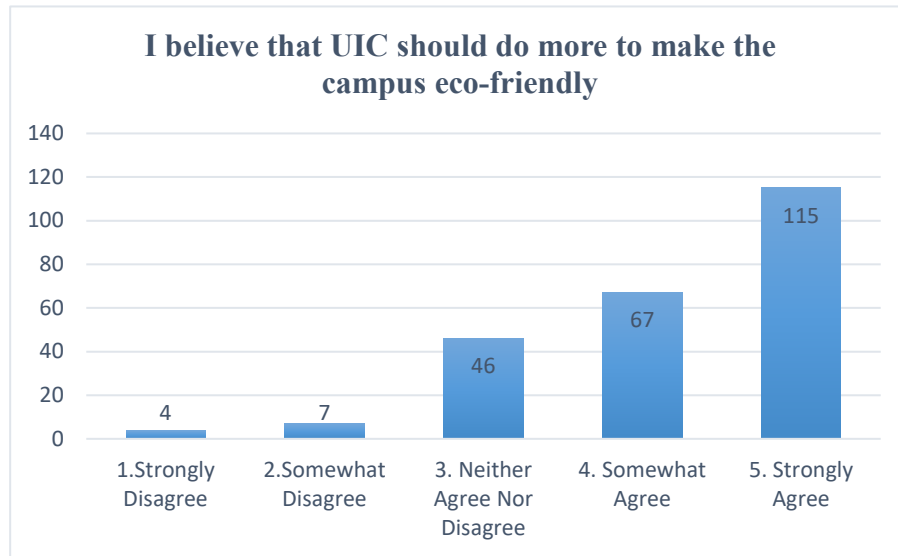
**Figure 2-6**



As can be seen from the figure, the number of people who choose “Somewhat Agree” is the largest, followed by “Neither Agree nor Disagree”, and the number of people who choosing “Strongly Agree” is 30. It shows that, overall, the respondents agree with the sustainable work of UIC, but the proportion of people who agree with it needs to be improved, indicating that UIC still needs to devote more energy to sustainable work, or at least that UIC needs to devote more energy to publicizing the sustainable work it is currently doing

**Q21-5. I believe that UIC should do more to make the campus eco-friendly.**

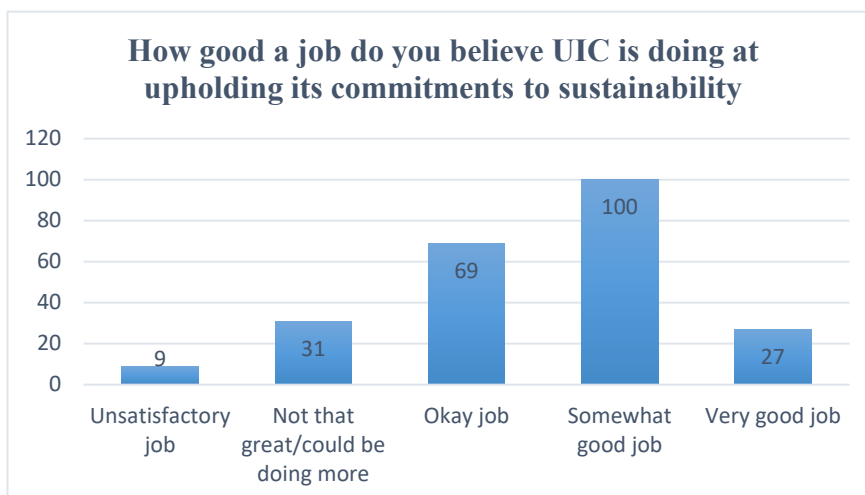
**Figure 2-7**



As can be seen from the figure, more than 50% of people think that UIC needs to devote more energy to maintaining the campus environment, indicating that most people still have doubts about the UIC environmental protection. UIC needs to pay more attention to this problem, so as to better improve the campus ecological environment.

**Q22. Based on your experience working for UIC so far, how good a job do you believe UIC is doing at upholding its commitments to sustainability?**

**Figure 2-8**

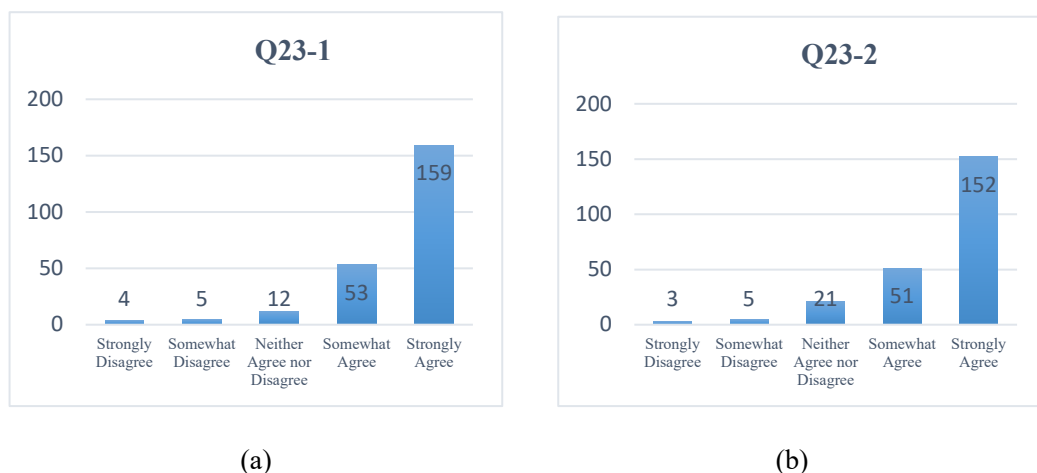


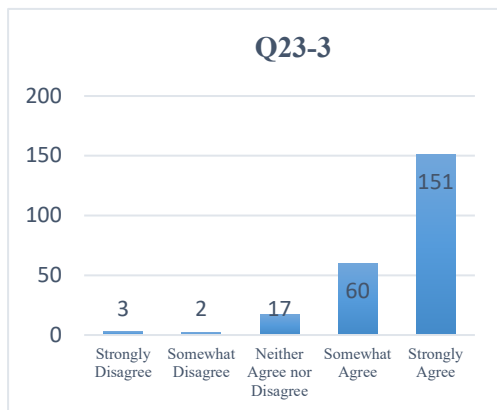
As can be seen from the figure, most employees think that UIC is doing good at upholding its commitments to sustainability. There are 27 people (11.4%) choose "Very good job" and 100 people (42.4%) choose "Somewhat good job". The proportion of the two options is more than 50%. But at the same time, the project team should also notice that there are still a large number of people who believe that the sustainability of UIC is acceptable. There is room for improvement in the sustainability of UIC, and the university should pay attention to it.

**Q23- Attitudes about UIC makes a coordinated effort to minimize the amount of campus waste sent to landfills by recycling and composting/reduce the amount of energy consumed on campus /produce some of its own energy through renewable sources, such as solar panels or wind turbines /minimize its overall carbon footprint.**

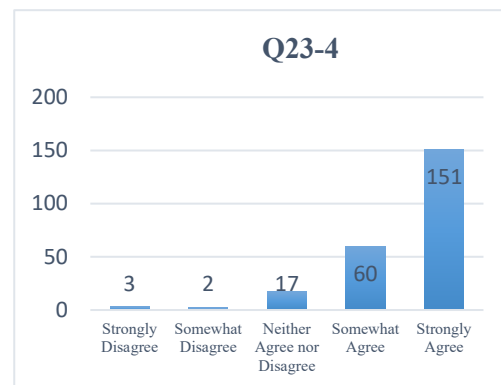
This question contains four parts, which are sorted out according to the results of the questionnaire. The results are shown in the figure 2-8.

**Figure 2-8**





(c)



(d)

As can be seen from the four figures, employees are eager to make efforts on environmental protection of UIC. Whether in reducing carbon emissions or producing new energy sources, most of them agree that UIC needs to make a coordinated effort. For the first question, 159 people (68.2%) chose “Strongly Agree” and 53 people (22.7%) chose “Somewhat Agree”, the two options accounting for 90.9%, which means that minimize the amount of campus waste sent to landfills by recycling and composting is very important to the employees. For the second question, 152 people (65.5%) choose “Strongly Agree”, while only 3 people (1.3%) choose “Strongly Disagree”. This obvious contrast shows that the respondents are extremely urgent to reduce the amount of energy consumed on campus. For the third question, there are 146 people (62.7%) choose “Strongly Agree” and 57 people (24.5%) choose “Somewhat Agree”, while only 5 people (2.1%) with negative attitude. The project team can see that it is important for the people that UIC makes a coordinated effort to produce some of its own energy through renewable sources, such as solar panels or wind turbines. For the fourth question, there are 151 people (64.8%) holding a supportive attitude, only 3

people (1.3%) strongly disagree with it. It also reveals that it is important to the people that UIC makes a coordinated effort to minimize its overall carbon footprint.

To sum up, the project team can see from the attitude of UIC employees towards the UIC CAIP that most of the employees are in favor of building eco-friendly campuses, and they hope UIC makes efforts to build an eco-friendly campus. However, judging from the current UIC implementation of the CAIP project, most employees do not have a deep understanding of this project. At the same time, it also reflects that the publicity of CAIP plan implemented by UIC still needs to be improved. UIC should use reasonable and effective ways to promote the project and let more people participate in it.

### **III. Employee perspective on UIC reliability in energy conservation**

The research team summarized some preliminary views based on the important information gained from the analysis of the data before the report. From the attitude of UIC employees towards UIC CAIP, it can be found that most of them are in favor of building an eco-friendly campus and hope that UIC will strive to build an eco-friendly campus. However, judging from the current UIC implementation of CAIP projects, most employees do not have a deep understanding of the project. This part of the analysis and description is about what actions UIC employees believe are trustworthy in terms of energy conservation and emission reduction, for the Office of Sustainability. Of course, in other words, it can also be understood as what actions UIC employees think are effective in the Office of Sustainability.

#### **i. What actions to save energy and reduce emissions are effective**

First of all, in general, what the Capstone Team wants to study and investigate in advance is what actions are effective in saving energy and reducing emissions. Although these partial reports do not provide detailed and appropriate recommendations to the UIC, large sample data do not represent the real needs of UIC employees. But the general situation in the United States and most of the data can still serve as a reference for our report. Based on estimates of large sample size and the majority of the population, it can provide us with inspiration to solve problems and guide an efficient direction of action. So, the group think it's necessary for us to give a brief introduction here.



The team consulted a large number of reports and surveys and found that Eco Mall provided some interesting information. It can be roughly classified into the following aspects.

### **1. Living equipment.**

Manual power regulation of electrical appliances and replacement of old equipment are both direct and effective ways. Specifically, when replacing old equipment, please choose the most energy-saving model. Look for Energy Star labels - Ensure that products save energy and prevent pollution. Buy products that meet your typical needs - not the biggest ones. Investing in ordinary household solar energy equipment can save 4.9 tons of carbon dioxide per year.

### **2. Heating or cooling in a classroom or office building**

Don't overheat or overcool the room. In winter, set the thermostat to 68 degrees during the day and 55 degrees at night. In summer, keep it at 78 degrees. Reducing the thermostat by two degrees in winter can save 6% of heating-related carbon dioxide emissions. Replacing air filters is also an important method. Energy is lost when air conditioners and hot stoves have to work harder to inhale air through dirty filters. Clean dirty air conditioning filters can save 5% of energy.

### **3. Small investments that pay off**

In real life, there are many small things that few people pay attention to, which can bring us tremendous energy savings. Specifically, it is a wise choice to buy energy-saving lamps. Although they are initially expensive, in the long run they use only a

quarter of the energy of ordinary incandescent bulbs and last eight to twelve times as long. An energy-saving bulb can save 260 pounds of carbon dioxide a year, compared with ordinary bulbs. Another very important thing is to reinforce the doors and windows of the room. In winter, to enhance the thermal insulation of the house, so as to save air conditioning or coal consumption.

#### **4. Travel around**

Everyone knows that not driving cars and flying fewer planes will save resources and make the environment better. But we also admit that it's hard to reject the conveniences that science and technology bring, so we only cover very short trips here. Whenever possible, people should walk, ride bicycles, or use public transport. Because every gallon of gasoline saved avoids 22 pounds of carbon dioxide emissions.

#### **5. Reduce, Reuse, Recycle**

Similar to the one mentioned above. It's a good thing that everyone recognizes and understands, but it's very difficult to implement in the real world. Because some residents do not understand the recycling and utilization of garbage, it brings high costs to the government or garbage recycling companies. At the same time, the high cost of garbage recycling and inefficient reuse also increase the economic losses of non-profit organizations.

It is worth mentioning that the 'Reduce, Reuse, Recycle' method on UIC campus is doing very well. In most campus corners, there are garbage sorting and recycling systems. Both students and UIC employees are willing to take action.

## **6. Business and community**

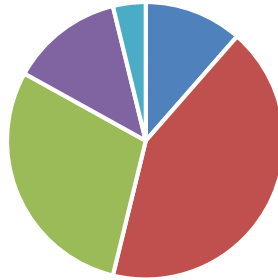
Work with your employer to implement these and other energy-saving and waste reduction measures in your office or workplace. Form or join local citizen groups and work with local government officials to see if these measures are taken in schools and public buildings.

The Office of Sustainability is such a good partner to work with in this community. The CAIP is a plan that draws the attention of all organizations or individuals concerned about the environment and sustainability.

### **ii. What is the situation of UIC employees**

Overall, most employees think that UIC is doing a good job in fulfilling sustainability initiatives. About 53% of employees choose “Very Good Job” and “Somewhat Good Job”. But there are still nine employees (about 4% of the total number of respondents) who think the work of the Office of Sustainability is unsatisfactory. Although in practice, these employees are likely to misunderstand some the Office of Sustainability policies, I still think their suggestions will be helpful.

How good a job do you believe UIC is doing at upholding its commitments to sustainability

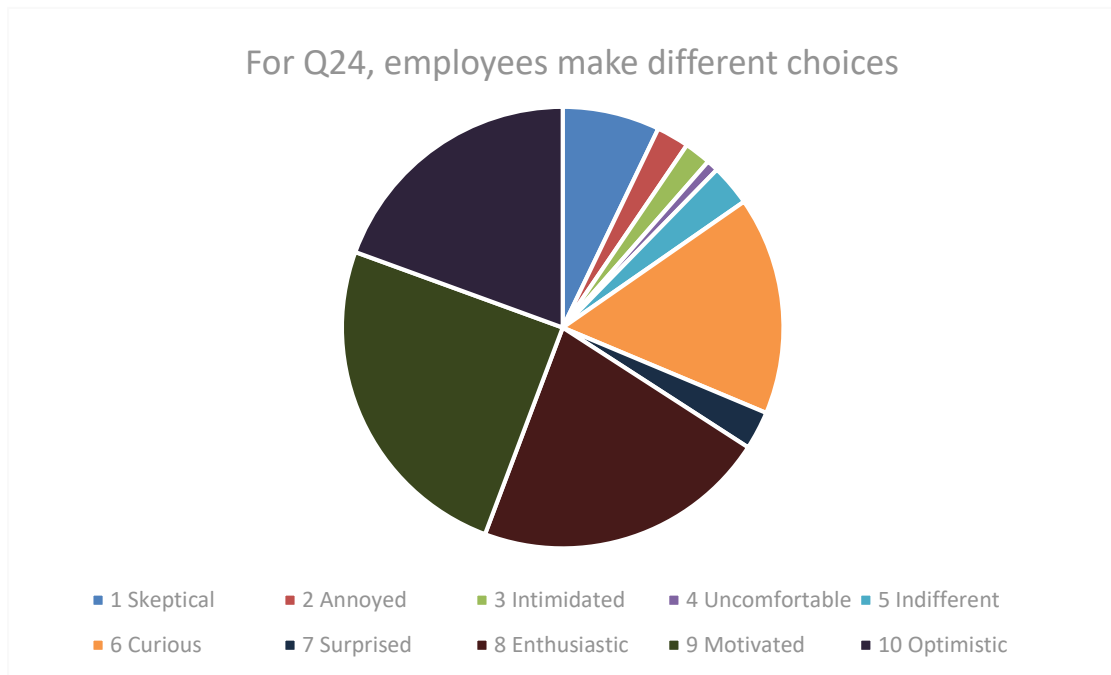


■ very good ■ some what good job ■ okey job ■ not great ■ Unsatisfactory job

Next, the project team studied employees' emotions and their overall attitudes towards sustainability. In other words, that is, the intrinsic link in Questions 24-38 of the questionnaire report. The team analyze each individual data and give different emotional weights (more positive emotions are given higher weights), then rank all 11 emotions. At the same time, the team developed a regression model to study the sustainability attitudes of each employee member by choosing many different emotions in question 24. (Specific models and data analysis will be mentioned later.) In general, the emotional factors of UIC employees can effectively guide their sustainable action. In other words, employees' choice of question 24 and 25 will directly affect their sustainable actions.

Specifically, for question 24, **“When someone suggests I should do something because it is good for the environment, I am:Check all that apply.”** 475 UIC employees selected 10 different options. From the images it clearly shows that 45% (225 employees) of employees have very positive attitudes (like enthusiasm and

motivation) towards environmental protection. This shows that if the office can conduct good publicity or guidance, at least 40% of employees will actively participate in these sustainable activities.



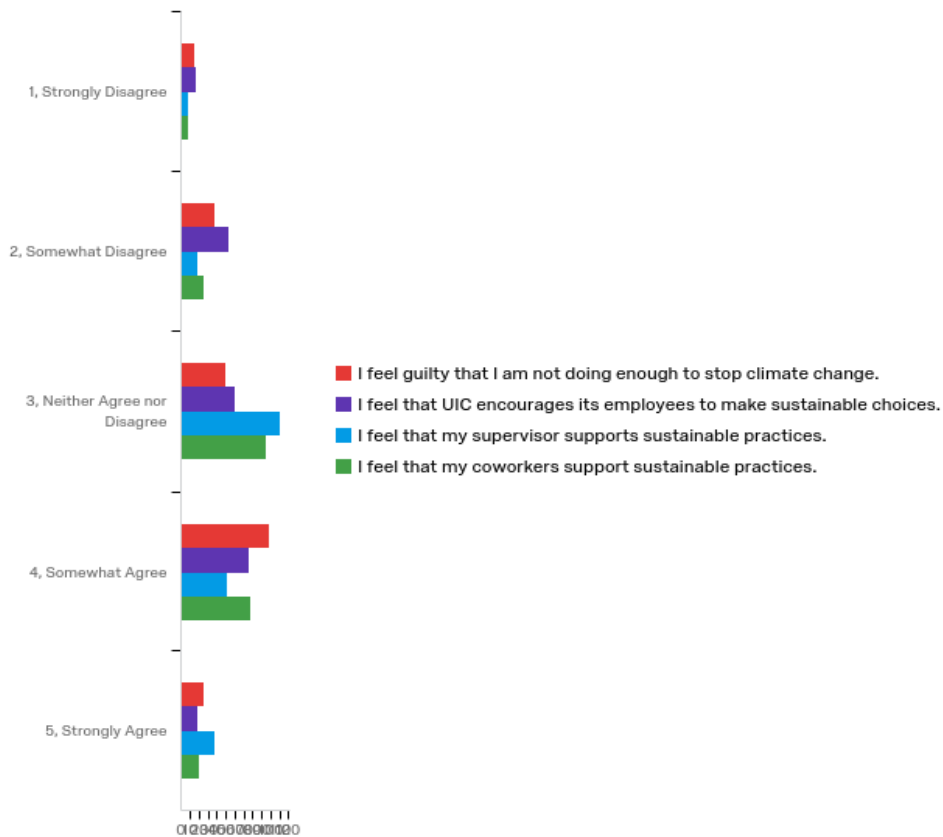
On the contrary, about 20% of employees still have negative attitudes towards environmental protection and sustainable behavior protection. Seventy employees are skeptical, indifferent, and even annoyed about environmental protection. Of course, it's hard to change their attitudes quickly. But the office can tell them about the benefits of environmental protection in a simpler way. For example, in a month, employees turn off the lights at random, which can save their office a lot of benefits. Or how much carbon emissions will be cut by employees choosing public transport trips, while leaving a lot of money for themselves.

Similarly, **Question 25, 26** gives us similar information and suggestions. In the

later data analysis, the group can know that there is more than 70% correlation between them.

**Q28** is a study of UIC employees and their colleagues around them. It investigates the general situation of the employees themselves, their superiors and UIC encourages. Because this is a cross-sectional questionnaire, the same person will be evaluated many times (for example, a department supervisor), which will aggravate the impact of the supervisor in the results of the questionnaire. This will inevitably lead to errors, but in general it is accurate.

Through **Q28**, the team can analyze that, on average, 35% of employees' attitudes are ambiguous. They believe that their attitudes towards sustainable action, whether they are themselves or their colleagues and leaders, are unclear. In particular, nearly 50% of employees think their supervisor is indifferent to sustainable action, and 40% of employees do not know their colleagues' attitudes towards sustainable action. But the encouraging news is that about 55% of employees feel ashamed when they have not made a positive contribution to climate change. 40% of UIC employees think their colleagues and supervisors are working hard to do what they can for climate change.

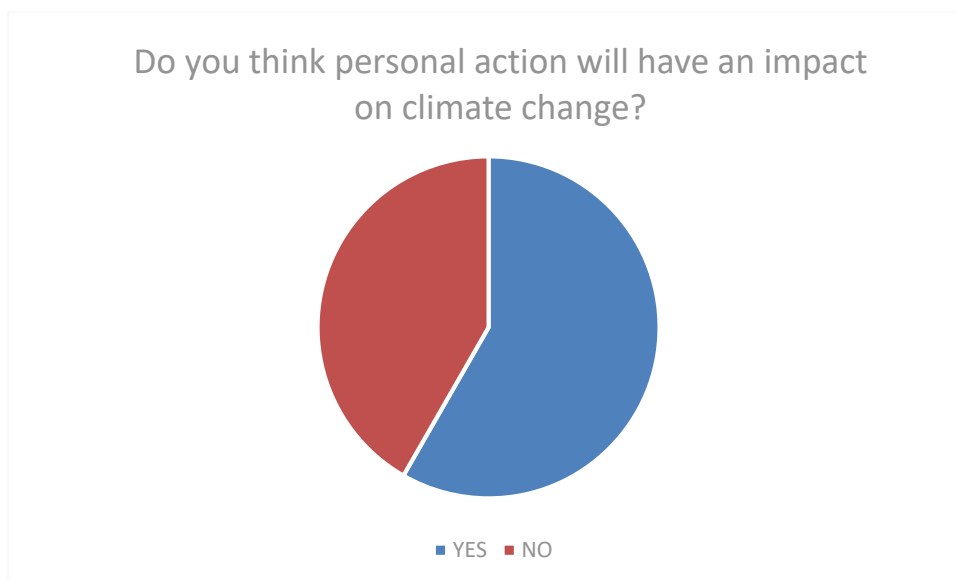


Overall, based on the available data, it's a good idea to develop managers' attitudes towards sustainability. Because supervisors' actions can easily influence the culture of the workplace, and supervisors can also monitor employees' behavior. This is fast and efficient, by contrast, it is complex and difficult to educate all UIC employees about sustainability.

About Q30 to Q32 these are some of the details of UIC employees. Q31 surveyed what employees usually do to save energy at work. Many things are listed, such as turning off the lights and the computer after you leave the office. However, 1% of employees do nothing and leave directly. On the contrary, only one employee will leave the office if he or she finishes all possible energy-saving tasks on the list.

**Q32** asked employees about their motivation for sustainable action. 91.6% of employees do these things because they protect the environment or save money for the office. Still, 1.4% (7) of employees did nothing.

**Q27** is a summary of UIC employees' attitudes towards sustainable action. Fifty-nine percent of UIC employees thought their actions would have an impact on climate change, while the remaining 41 percent did not.



So, the team regards that advocacy for sustainable action as very important. More people, besides UIC employees, should know how much impact individual contributions can make to climate change. The project team believe that if UIC introduces some activities or projects directly with economic benefits, people will accept the concept of sustainable development more quickly, and they will also invest in practical actions on energy conservation and environmental protection more quickly.



#### **IV. UIC employees' concept of energy conservation in their daily work**

##### **i. The regression relationship between UIC employees' opinions on sustainability and their actions during their daily work**

In general, it's believed that people's opinions can guide their actions. Basing on that, a hypothesis would be that the employees that hold more positive emotions would be more active in making sustainable choices during their daily work; the employees that hold more negative emotions would be less active in making sustainable choices, can come up with.

In order to proving this hypothesis, it's pretty useful and necessary to conduct a regression analysis between UIC employees' attitudes and their actions in their work. In the survey, questions 24 to 30 mainly focus on UIC employees' individual actions and their attitudes toward sustainability. So this part will mainly focus on the regression analysis among these questions. The most representative questions would be selected to finish the regression analysis.

##### **1. The regression model between questions 24 and 30**

As every employee may select many different emotions in question 24, to conduct the regression model, the research group gives different emotions different scores (more positive emotions would be issued higher score) and then ranks all the 11 emotions. The average score is issued to the option, "other". By computing the average score of every interviewee, his/her general attitude towards sustainability can be found.

After transferring interviewees' options in question 24 into their general attitudes,

the research group does the regression analysis between the new variables and question

30. The result is shown following:

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	Q24 <sup>a</sup>	.	Enter

a. All requested variables entered.  
b. Dependent Variable: V19

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.270 <sup>a</sup>	.073	.069	.485

a. Predictors: (Constant), Q24

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.049	1	4.049	17.217	.000 <sup>a</sup>
	Residual	51.499	219	.235		
	Total	55.548	220			

a. Predictors: (Constant), Q24  
b. Dependent Variable: V19

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.128	.132		16.061	.000
	Q24	.071	.017	.270	4.149	.000

a. Dependent Variable: V19

According to the model summary, the R equals to 0.27, which means that the correlation coefficient between UIC employees' attitudes and their actions. In other words, if an employee gets 1 point higher in his attitudes, his/her action will be improved by 0.27. The number of R-square shows how many observations can be explained by this regression model. In this test, 73 percent of the observations can be explained by this model (the total observation is 316 but there are some invalid answers because some interviewees skip questions 24 or 30).

Overall, it's obvious that UIC employees' emotional factors, which are about others' suggestions, can be very effective in guiding their sustainable actions. Over 70

percent interviewees’ actions conform to their emotions and attitudes toward sustainability. Holding positive emotions towards others’ sustainable advice help these employees save more energy use in their work. However, it’s necessary to notice that some interviewees skip the 2 questions, so there is no way to measure their emotions and action. That situation may influence the results.

## 2. The regression model between questions 27 and 30

In the question 27, 130 interviewees believe their individual contributions are important to the general climate change; 93 interviewees are doubtful that their individual actions can significantly contribute to the general climate change; the rest of interviewees skip this question, so their opinions are not reflected.

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Q30 <sup>a</sup>	.	Enter

a. All requested variables entered.  
b. Dependent Variable: Q27

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.245 <sup>a</sup>	.060	.056	.480

a. Predictors: (Constant), Q30

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.193	1	3.193	13.859	.000 <sup>a</sup>
	Residual	49.994	217	.230		
	Total	53.187	218			

a. Predictors: (Constant), Q30  
b. Dependent Variable: Q27

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.943	.175		5.379	.000
	Q30	.241	.065	.245	3.723	.000

a. Dependent Variable: Q27

Repeating the same process, which is used to analyze questions 24 and 30, the results above are produced. For this time, R=0.245 which means every unit weight changed in question 27 will lead to 0.245-unit score change in question 30, however, in

this test, the R-square equals to 0.06, which figures out that only 6% observations can be explained by this regression model. In conclusion, these employees' opinions on the influences of their actions hardly impact their actions.

Comparing with section 1, it can be concluded that it's not all emotional factor can significantly make effects to these employees' actions. That suggests in the next sessions, it's needed to find out which emotional factors can conduct significant influences on UIC employees' sustainable actions.

By the way, it's found that about 100 interviewees have skipped the question 27. As the total number of this survey's observation is 316, so many interviewees skipping questions can seriously impact the accuracy of this analysis.

In this survey, question 27 mainly shows the interviewees' attitudes toward the climate change. As sustainability includes many things and climate change is only a small part of sustainability, perhaps question 27 can only indirectly reflect interviewees' opinions on sustainability. Basing on the last session's conclusion, it can be guessed that people's opinions on climate change may not effectively impact their sustainable actions in their daily life.

### **3. The regression model between questions 25 and 30**

In order to prove above hypothesis, the research group conducts the regression model between questions 25 and 30. Totally there are 14 different kinds of emotions are listed in question 25. For better regression analysis of employees' attitudes towards climate change, the fourteen options were grouped into three ranks, that is, positive,

neutral and negative. And a more positive attitude would be issued higher weight. Besides, the general attitude towards the climate change would be clear by computing the average weight of interviewees.

Based on the regulation of interviewees' options, the attitudes towards climate change were transferred and applied as the variable to do the regression analysis with question 30. The result came out as follows:

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.173055324							
R Square	0.029948145							
Adjusted R Square	0.025518685							
Standard Error	0.496029746							
Observations	221							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	1.663544933	1.663545	6.761127	0.009951			
Residual	219	53.88396638	0.246046					
Total	220	55.54751131						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	2.532334905	0.059564345	42.51427	8.84E-108	2.414942	2.6497276	2.414942197	2.64972761
X Variable 1	0.121626298	0.046775446	2.600217	0.0099506	0.029439	0.2138139	0.029438658	0.21381394

According to the test results, the R-value, which is the multiple correlation coefficient, equals to 0.173. That also means when the employee got 1 point higher towards his/her attitude, his/her sustainable choices at work would increase by 0.173. This correlation coefficient suggests that interviewees' emotions and attitudes on climate change don't significantly influence their daily sustainable actions. What's more, the R-square equals 0.03, standing for that three percent of the observations could be explained by the model. In other words, that suggests interviewees' attitudes toward climate change is not an effective factor which can be used to research the interviewees' sustainable actions. By the way, the overall survey result is 316, but there are some

invalid answers due to the situation of skipping questions 25 or 30.

In general, there is no significant correlation between UIC employees' attitudes to climate change and their choice of sustainable actions at work. Therefore, it is necessary to carry out hypothesis analysis of other key factors based on continuing to pay attention to the changes in employees' attitudes. At the same time, it is worth mentioning that some respondents skipped these two questions, which may lead to errors in the results.

### **Conclusion for the regression analysis sessions**

At the beginning of regression analysis part, the research group assumes that the interviewees' subjective emotional factors can significantly guide their daily sustainable actions. After several sessions, this research group found that it's not all of emotional factors can effectively make impacts.

According to these last several regression analysis, our research finds out that subjective emotional factors toward other people's sustainable suggestions can effectively impact these interviewees' sustainable actions in their daily work. If a UIC employee is more positive to hear others' sustainable advice, he/her will be more likely to select sustainable choices in his/her work; or he/she will be less active in sustainability.

Although climate change is one of the most important parts of sustainability, interviewees' attitudes and emotions on climate change can hardly influence their actions. On the one hand, the correlation coefficients are pretty little, which means the changes in interviewees' emotions on climate change can't lead to many changes in

their actions; on the other hand, there is no regression relation between them for most of these interviewees.

Finally, it's obvious that emotion and attitude can be good tools to improve UIC employees' sustainable actions, however, it's not all of emotional tools are effective.

In this survey, questions 31 to 33 reflect these interviewees' sustainable behaviors in their daily work and the reasons behind their behaviors.

**ii. The descriptive analysis on UIC employees' current sustainable actions during their daily work and the regression analysis between UIC employees' sustainable actions and the reasons behind**

**1. Descriptive analysis on UIC employees' current sustainable actions**

Basing on the survey, the research team believes that the questions 31 to 33 can reflect the general trends in UIC employees' sustainable behaviors and their reasons to do so. In order to know more about UIC employees' sustainable behaviors, it's pretty necessary to do descriptive analysis.

#	Field	Choice Count
1	I turn off my office lights when I leave the room	35.22% 187
2	I turn off my computer and/or screens when I leave the room	17.51% 93
3	I power down my computer at the end of the day	17.33% 92
4	I unplug my chargers once I'm done using them	13.56% 72
5	I turn off or unplug power strips at the end of the day	2.64% 14
6	I close the blinds during the day in the summertime	9.79% 52
7	I don't do anything to conserve energy at work	0.94% 5
8	Other:	2.82% 15
9	All of the above	0.19% 1

As for these sustainable actions which are listed in the survey, “turning of the lights in offices when leave offices” is the most popular options. Totally 187 interviewees of the 316 interviewees (35.22%) select they will turn off lights when leave rooms; About 17% of the 316 interviews said that they turn off their computers and power down computers at the end of the day; About 13.56 % interviewees mentioned they unplug their chargers when they don’t use them; much fewer interviewees (2.64%) interviewees turn off power strips at the end of the day; near 9.79% people close the blinds during days in summer; 5 interviewees state they never do anything about sustainability; only 1 person said he/she does all above; by the way, 15 interviewees said they do other sustainable actions.

To identify the general trend in UIC employees’ sustainable behaviors, the research group also makes use of a special computing method. First, the research groups assume that every option in question 31 worth 1 points. If a person only selects 1 option, he/she gets 1 point; if he/she selects 2 options, he/she gets 2 points... higher points means being more active in sustainable behaviors. As there are 15 people select “other”, the research group checks their answers one by one. If they have described their other sustainable actions in their answers, they will get one point. By doing so, the question 31 is translated to a new question which can reflect general trends in UIC employees’ sustainable actions.



**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Q31	316	.00	6.00	1.6804	1.46354
Valid N (listwise)	316				

According to the result, it's obvious that the minimum value is 0. Considering there are some interviewees skip this question, the minimum can't reflect the truth. The maximum value is 6, however, considering there is one employee select "all of the above", the maximum is also invalid. The mean equals to 1.6804, which tells that in general, UIC employees are not very active in sustainable behaviors. The standard deviation is about 1.46; on the one hand, standing on the absolute perspective, the differences among different individuals are not very large; however, standing on the relative view point, it can be found that the mean is about 1.68. Considering about this situation, the differences within the observations are pretty large. In other words, in general, there is bipolar distribution of sustainable behaviors among UIC employees.

Next, what are the powerful reasons that support UIC employees make sustainable choices in their daily work? To answer this question, the research group does a very simple but effective descriptive analysis (frequency analysis) on question 32, which mainly focuses on the reasons. According to the result, 188 (38.21%) people make sustainable choices because they think they do right things; 98 (19.92%) people think sustainable actions can save money; 165 (33.54%) people believe sustainable actions are environmental-friendly. These 3 options are the most popular and they occupy the absolute majority of the observations' answers. Besides these 3 options, 7 people think

sustainable actions save their time; 12 people are influenced by their coworkers; 7 persons are influenced by their bosses; 7 responses show they never do sustainable behaviors; 8 interviewees select the option of “other”. By knowing the reasons behind sustainable actions, it’s much easier to conduct sustainable policies.

#	Field	Choice Count
1	I believe it is the right thing to do	38.21% 188
2	I believe it will save my office and/or UIC money	19.92% 98
3	I believe it will help the environment	33.54% 165
4	It saves me time	1.42% 7
5	My coworkers make sustainable choices, so I'm more inclined to	2.44% 12
6	My supervisor or boss likes it when the office makes sustainable choices	1.42% 7
7	I don't do anything to conserve energy at work	1.42% 7
8	Other:	1.63% 8
9	All of the above	0.00% 0

But it’s also needed to understand what are the reasons that prevent UIC employees from doing sustainable actions. In the survey, question 33 mainly collect the answer to this question. In this question, 98 employees (35.51%) express they don’t think about sustainability at all until it’s too late; 28 people never think about sustainability at all; 26 interviewees state that sustainable behaviors take them too much time; 64 persons don’t believe they have enough resources to realize sustainable actions; 26 responses don’t believe individual actions can make big difference; only 1 person said he/she is influenced by coworkers; 32 interviewees come up with other reasons; only 1 person express all of these reasons can impact his choices. After the analysis, the research group finds that the distribution of selections in question 33 is quite

symmetrical (especially by comparing the answers of question 32 with the answers of question 33). Being likely to question 32, knowing these reasons can also help UIC Office of Sustainability make suitable and effective sustainable policies to improve current situation.

#	Field	Choice Count
1	I don't think about it until it's too late.	35.51% 98
2	I don't think about it at all.	10.14% 28
3	Doing so would take up too much time	9.42% 26
4	I don't have the resources to (no recycling bin, the lights stay on, etc.)	23.19% 64
5	I don't think it will make a big enough difference	9.42% 26
6	My coworkers would question me, call me out, or make me feel weird for it	0.36% 1
7	Other:	11.59% 32
8	All of the above	0.36% 1

## **2. Regression analysis between UIC employees' sustainable actions and the reasons behind**

Basing on the prior descriptive analysis, this research has already identified the general situations in UIC employees' sustainable behaviors. Then, it's pretty worthy to explore that if there is any relationship existing among these questions. In order to get the answer, the research group does regression analysis between question 31 and question 32.

The research group assumes that every option in questions 31 and 32 worth 1 point. Then compute every individual's total points for the 2 questions respectively. By doing so, the research group successfully transfers questions 31 and 32 into 2 new questions

which are possible to conduct regression analysis. Question 32 is used as independent variable and question 31 is dependent variable. By operating regression analysis in SPSS, the following results are listed:

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Q32 <sup>b</sup>	.	Enter

a. Dependent Variable: Q31

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.692 <sup>a</sup>	.479	.478	1.05767

a. Predictors: (Constant), Q32

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	323.459	1	323.459	289.149	.000 <sup>b</sup>
	Residual	351.259	314	1.119		
	Total	674.718	315			

a. Dependent Variable: Q31

b. Predictors: (Constant), Q32

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.462	.093		4.957	.000
	Q32	.783	.046	.692	17.004	.000

a. Dependent Variable: Q31

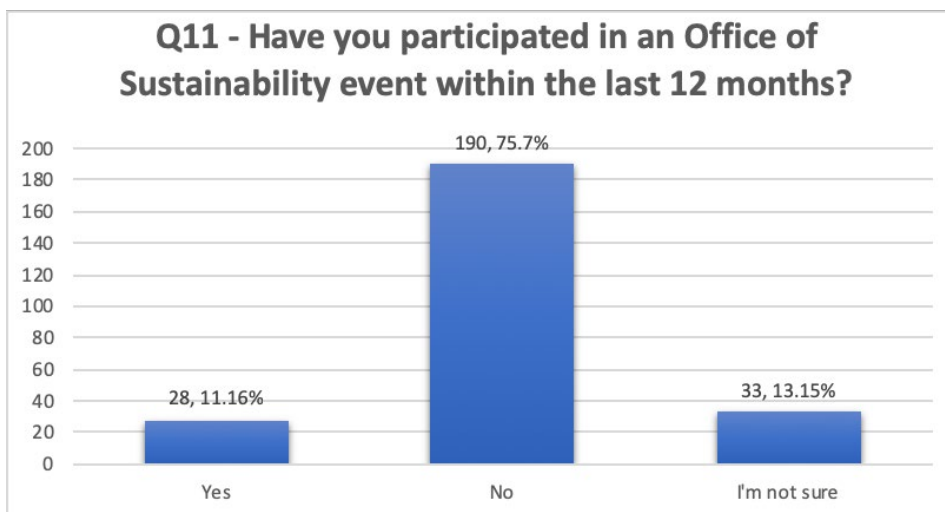
According to the figures above, it's obvious that the regression coefficient, R, equals to 0.692. That number shows that if an interviewee gets 1 point higher in question 32, he/she gets 0.692 point higher in question 31. In this analysis, the R-square equals to 0.479. That suggests that about 47.9% observations can be explained by this regression model. Regarding to these outputs, it's possible to conclude that the reasons behind sustainable actions can partly impact UIC employees' sustainable choices. In

other words, if a UIC employee selects more reasons to support him/her to do sustainable behaviors, he/she is likely to select more sustainable actions in his daily work. Although it's not all of the employees can be explained by this model, at least it can be sure that about half of the interviewees are influenced by these "reasons".

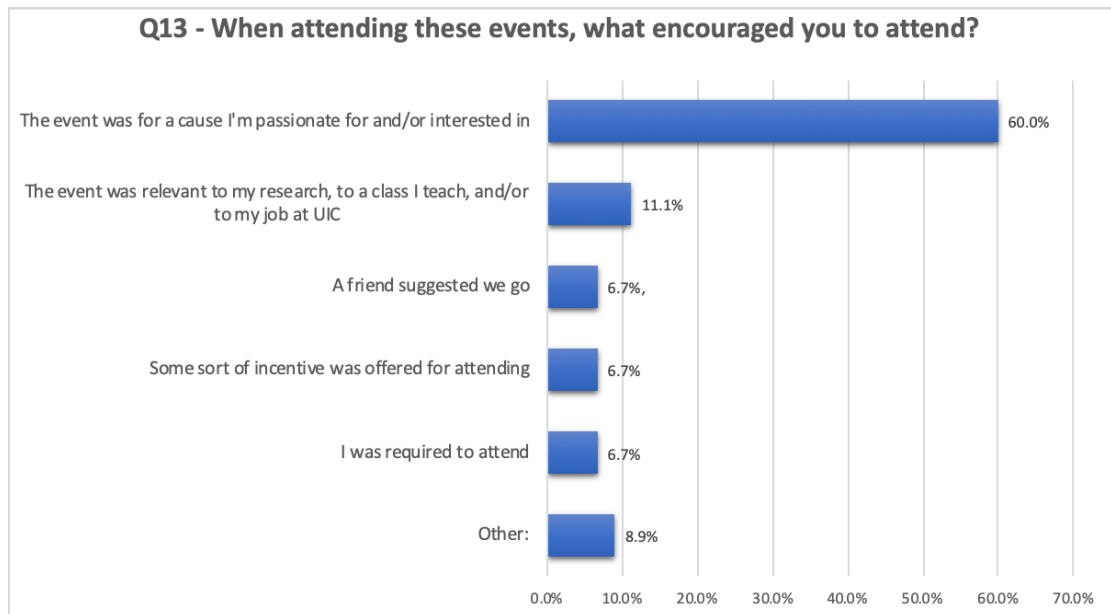
## V. Approaches and Obstacles of Promote Energy-saving

### i. Approaches of Promote Energy-saving

In the survey of the Office of Sustainability (Q11), as can be seen in the figure, there are up to 75.7% of the respondents did not participate in the events held by the Office of Sustainability. Only 11.2% were sure that they participated in the Office of Sustainability events. Another 13.15% said not sure. This shows that the Office of Sustainability events have not been well publicized, and most UIC employees do not know about the events held and the participants recruited.



In order to find the best way to promote energy conservation, the project team further studied the motivation of participants in the Office of Sustainability events. The project team found that the main driving force is passion and interest, which accounts for 60% of the respondents. Next is relevant to research and/or job, accounting for 11.11% of the respondents. This indicates that interest or relevance is the main motivation for UIC employees to participate in energy-saving activities.



In addition, the project team studied the reasons why the respondents did not participate in the Office of Sustainability events. Only a very few (1.18%) express that they are not interested in sustainability. Among them, 34.22% of the respondents said that "didn't know events were happening", which proves that these events are not well publicized. In addition, 29.79% of respondents said that don't have time to go to events, which reflects the limitations of offline activities.

In conclusion, the main motivation for participating in the Office of Sustainability events is interest-oriented. At UIC, the vast majority of employees are interested in sustainability. The main reasons for the lack of active participation are the lack of publicity about the events and time conflict. Therefore, in order to find the best way to promote energy conservation, the project team will consider both promoting publicity and time scheduling.

The project team define the purpose of events promotion as three aspects, which are to acquire new participants, improve the enthusiasm of existing participants and reduce the loss of participants.

To acquire new participants, the project team suggest increasing publicity and promotion through both online and offline approaches. **Offline promotion** approaches include road shows, presentations, and seminars, etc., to strengthen the knowledge of UIC teachers and students about sustainability and sustainability-related events. **Online promotions** include banners on the site, emails to potential participants and event news. Whether online or offline promotion, the purpose is to stimulate the interest of potential participants, so as to get new participants.

The best way to increase the motivation of existing participants is to make them deeply feel the significance and meaning of the activity. During the event, if the contribution made by participants to sustainability can be quantified, the participants may be motivated to participate in the event again. In addition, after the end of the event, the review and commemoration of the event should be timely published to strengthen participants' sense of participation.

As for reducing the loss of participants, it is to try to maintain event participants. Our suggested approach is to build up a database of participants after each activity, maintain it regularly and inform them of new developments. Maintaining event participants can also create a sustainability atmosphere by building community.

The above is the way the project team consider the promotion of events from the



perspective of publicity. They can operate independently or exist simultaneously. When they work together, the effect would simply much greater.

Time schedule is one hand, On the other hand, many respondents said they did not like to participate in any offline activities (Q14). Both pieces of evidence point to the need to increase the proportion of online events. Online events are very timing-flexible and convenience to participate in, thus increasing participation. In addition, online activities are more convenient for organizers to publicize and promote. More participants in online activities mean the better promotion of energy conservation.

## **ii. Obstacles of Promoting Energy-saving**

Overall, the main factors that influence the UIC office sustainable behavior include the incomplete and asymmetric information dissemination, the lack of good schedule communication, the narrow range of publicity and the insufficient eco-friendly awareness.

### ***Question 14***

According to the question 14, the employees' main reasons why employees do not participate in Office of Sustainability events focus on the two major issues. One is knowing nothing about the occurrence of events, and the other one is having no time though they are willing to participate. In details, 34.22 percent interviewees said that they were unaware of the events. And 29.79 percent of respondents were unable to participate in office sustainability events that interested them due to lack of time. In other words, more than 60 percent interviewees did not participate in the event due to

the above two reasons. That undoubtedly led the research group to ponder about inadequacy of the communication and exchange of information.

### ***Question 18***

In addition, question 18 is about the reasons for choosing not to donate to the Office of Sustainability donation drive, shows the similar deficiency. Of the 296 interviewees who provided effective answers, 144 employees said they did not have access to information about the donation. That is to say, nearly half of the employee did not even know about the donation. The data shows the huge gap in the publicity of the donation events. And if the UIC sustainability office is not able to reach out to its employee in terms of access to information, it will be very difficult to motivate donations.

### ***Question 19***

Moreover, the deficiency of employees' eco-friendly awareness should not be ignored. In the Q19, more than half of the employees think that they do not familiar with what UIC is doing to be eco-friendlier. And just 47.93 percent employees think they have good idea of what UIC is doing to be eco-friendlier. Such a big gap has existed in the self-perceived evaluation of UIC eco-friendly awareness, illuminating that the actual situation of environmental protection awareness must be worse. People's awareness can influence their actions a lot. Therefore, it is essential to improve the UIC eco-friendly awareness, laying a good foundation for voluntary environmental protection.

## Conclusion

In general, the report is based on the need of UIC Office of Sustainability to understand current on-campus energy use, UIC employees' attitudes, and their sustainability actions. Through the questionnaire survey of UIC office employees, a database that contained related information was established. The research group used Excel and SPSS to process the data for regression and descriptive analysis. In addition, the group obtained partial results from Qualtrics. These results of analysis provide the fundamental support to the relationship between UIC office employees' attitudes toward sustainability and their behavior.

As can be seen from the distribution of the questionnaire, although many respondents approved of UIC's sustainable work, they did not know enough about CAIP and the target of carbon neutral. Although many interviewees approve of UIC's sustainable work, they still believe that UIC needs to pay more attention to sustainability. At the same time, interviewees showed a lack of understanding of sustainable development projects such as CAIP and the carbon neutral target.

Basically, the analysis of the attitude of UIC employees shows that most of them have a positive attitude towards the sustainable development of UIC. More than half of employees hope that UIC can make efforts to build an eco-friendly campus. But judging from the current implementation of the CAIP by UIC, most employees do not have a deep understanding of the project. It also reflects the weakness of UIC in promoting and sharing the information about sustainability. UIC should promote the project in a

reasonable and effective way to get more people involved. There is no doubt that the problem needs to be solved urgently.

To increase the awareness of sustainability programs among UIC employees, the research group put forward the following recommendations:

- Promote the positive factors of UIC employees towards sustainable, eliminate or avoid the negative factors.
- Improve the publicity of UIC Office of Sustainability through various approaches, including the efforts made by UIC on sustainable development and the activities organized by UIC Office of Sustainability.
- Increase the publicity of environmental protection behavior, improve the environmental protection concept of UIC employees and students.

## **Appendices**

### **List of appendices**

- a) Survey instrument: **Qualtrics Survey**
- b) Copy of MOU
- c) Copy of database elements

1. Survey instrument: Qualtrics Survey
2. Copy of MOU

## Memorandum of Understanding

**Agency Name:** UIC Office of Sustainability

**Agency Contact:** Emily Stearney

**Agency Contact Information:** [stearney@uic.edu](mailto:stearney@uic.edu) or 312-996-6889

**Primary Team Contact:** Yufeng Hu

**Team Members and Preferred Contact Information:**

Name	Email	Phone Number
Yufeng Hu	<a href="mailto:yhu60@uic.edu">yhu60@uic.edu</a>	312-973-6298
Yaxin Guo	<a href="mailto:yguo67@uic.edu">yguo67@uic.edu</a>	872-222-0182
Chuan Sun	<a href="mailto:csun41@uic.edu">csun41@uic.edu</a>	312-647-4096
Xiangyun Ma	<a href="mailto:xma47@uic.edu">xma47@uic.edu</a>	773-683-4300
Hanxi Zhao	<a href="mailto:hzhao51@uic.edu">hzhao51@uic.edu</a>	312-292-6776

**Project Starting Date:** May 20, 2019

**Project Ending Date:** August 9, 2019

**Description of Project and Objectives:**

The University of Illinois is the largest education provider in the State of Illinois. University of Illinois at Chicago (UIC) is one of the most important branches which compose University of Illinois System. As time goes by, the sustainability of human civilization is becoming a more and more significant topic. As one of the most influential and largest universities in Chicago metropolis area, UIC tries to make its own contributions to saving energy and reducing emission. The UIC Office of Sustainability looks forward to starting the Energy Conscious Campus program, which seeks to reduce campus-wide energy use 1.5% by 2020. As part of the Climate Action Implementation Plan, the Energy Conscious Campus program is a vital component to the CAIP’s energy goals that will help UIC achieve carbon neutrality by 2050.

As the Capstone team for the summer of 2019, the project team will assist the UIC Office of Sustainability to initiate the program. Our Capstone team will research the UIC employees' attitudes toward the current situations of sustainability at UIC, their feelings about their choices at work pertaining to sustainability and if they make sustainable choices at work. What's more, our team will also analyze the relationships between UIC employees' attitudes towards sustainability and their actions. Basing on those research and analysis, our team will offer some suggestions to the UIC Office of Sustainability in order to helping related decisions makers conduct effective strategies and plans for the Energy Conscious Campus program.

### **Scope of Work:**

The major action steps needed to successfully complete the project are as follows:

#### *1. Survey and data collecting:*

- a. Research the basic current situations about energy use and emission at UIC.
- b. Collect the opinions of UIC employees about UIC's sustainability efforts by survey.
- c. Find out what actions would make UIC employees feel that UIC and its related offices are worthy to trust in sustainability. And find that how much UIC employees trust/don't trust UIC in sustainability as is.
- d. Identify if UIC employees pay attentions to sustainability in their daily work and if they hold strong beliefs in sustainability during their daily works.
- e. Collect the opinions of UIC employees about what are the best ways to spread sustainability on campus. And find out what are the barriers that stand in the way of making sustainable decisions? (very important)

#### *2. Data analysis*

- a. Descriptive statistics. Find out the general trends of UIC employees' opinions toward sustainability, potential strategies and current situations.
- b. Regressive analysis. Identify the relationships between UIC employees' beliefs

to sustainability and their actions.

3. *Develop material and recommendations*
  - a. The final report
  - b. Recommendation
4. *The work that is not listed above is not responsible by the Capstone team.*

**Team Project Deliverable:**

(1) Data analysis report:

- a. Includes:
  - i. Original data from client
  - ii. The general trends of UIC employees' opinions toward sustainability, potential strategies and current situations.
  - iii. The relationships between UIC employees' beliefs to sustainability and their actions.
  - iv. Recommendation
- b. Date delivered:
  - i. Draft report: July 19, 2019
  - ii. Final report: July 26, 2019

(2) Presentation:

- a. Date delivered: 1-3 p.m., July 31, 2019

**Communication between the team and the client:**

- a. The Capstone team will email a status report to the client on every Friday in order to making sure the capstone team is accountable to the client.
- b. The team leader, Yufeng Hu, is the only person who is authorized to contact the client. If the client has some feedback, please also contact the team leader.
- c. Email is the default method of communication. The Capstone team and the client should reply to each other's emails within 48 hours (except holidays). Or the



Capstone team and the client reserve the right to conduct communication by phone call.

- d. Under some unexpected and emergency situations, the Capstone team and the client can directly make phone call to each other (no earlier than 9 am and no later than 9 pm).
- e. If necessary, the Capstone team and the client have the right to schedule meeting in person with each other by email.

### **Disclaimer**

This document and the research that supports it were undertaken by Master of Public Administration (MPA) students of the Department of Public Administration at the University of Illinois at Chicago (UIC) as part of their capstone course project. This work was conducted over a 11-week period between July 24, 2019 and August 9, 2019. The primary client of the research was the UIC Office of Sustainability. The findings and recommendations contained within the document represent the outcomes and opinions of the students engaged on the project and do not represent the opinions of UIC or the UIC Office of Sustainability. The content of this document is intended for the use of the UIC Office of Sustainability and cannot be distributed without their expressed consent.

The data contained in this report has not been independently verified. The students and faculty supervisor of the project believe that reasonable efforts have been made to ensure the accuracy of the document. It is intended for discussion purposes only and is provided without warranty. The Department of Public Administration disclaims any responsibility to update any information, including any new organizational, procedural or technological developments. The information is not intended to and does not constitute legal, financial, or other professional advice.

The Capstone team reserves all the right to make any explanations.

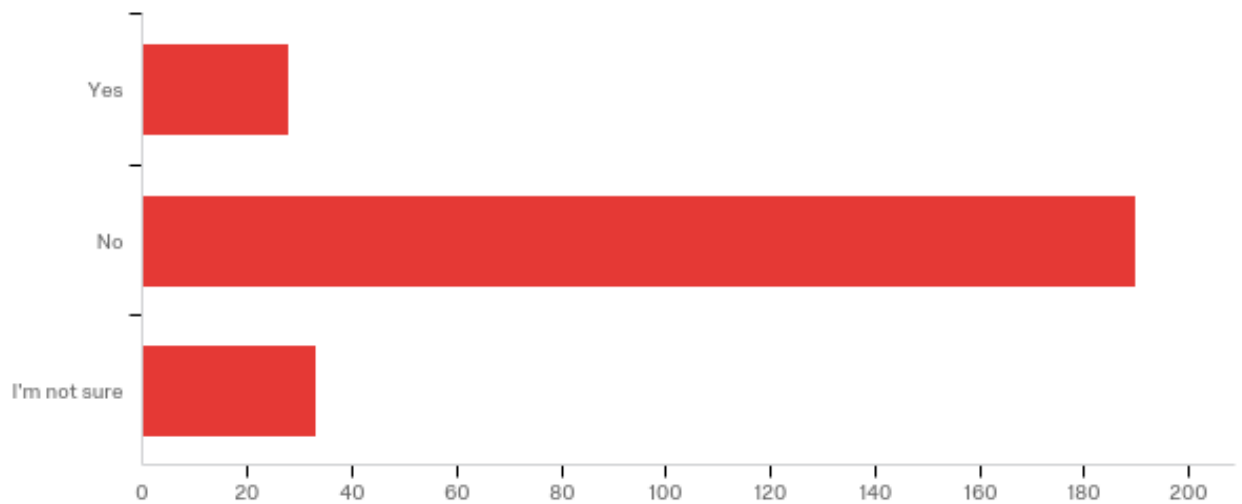
**3. Copy of database elements (Selected)**

# Default Report

*Building Occupant Survey*

June 5th, 2019, 4:01 pm MDT

## Q11 - Have you participated in an Office of Sustainability event within the last 12 months?



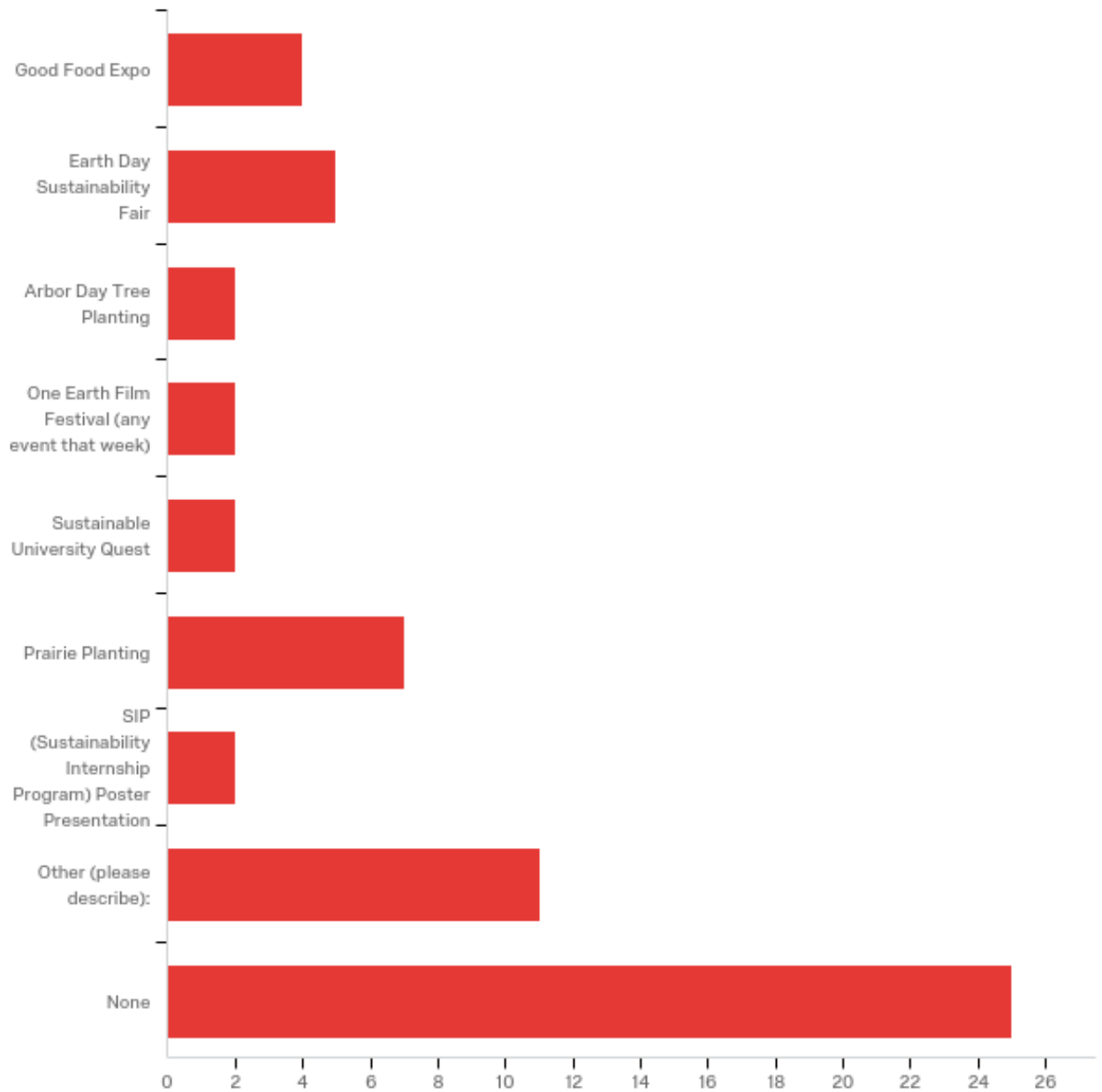
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Have you participated in an Office of Sustainability event within the last 12 months?	1.00	3.00	2.02	0.49	0.24	251

#	Answer	%	Count
1	Yes	11.16%	28
2	No	75.70%	190



3	I'm not sure	13.15%	33
	Total	100%	251

**Q12 - If so, which ones? Check all that apply.**



#	Answer	%	Count
1	Good Food Expo	6.67%	4
3	Earth Day Sustainability Fair	8.33%	5
4	Arbor Day Tree Planting	3.33%	2
5	One Earth Film Festival (any event that week)	3.33%	2

6	Sustainable University Quest	3.33%	2
9	Prairie Planting	11.67%	7
10	SIP (Sustainability Internship Program) Poster Presentation	3.33%	2
7	Other (please describe):	18.33%	11
8	None	41.67%	25
	Total	100%	60

Q18\_7\_TEXT - Other (please describe):

Other (please describe): - Text

Webinar on recycling

electronics recycling

Biking quiz with prizes, CCSE meetings

Had a sustainable lunch

Bike census

UIC Day of Service

Bike Census

webinar about recycling

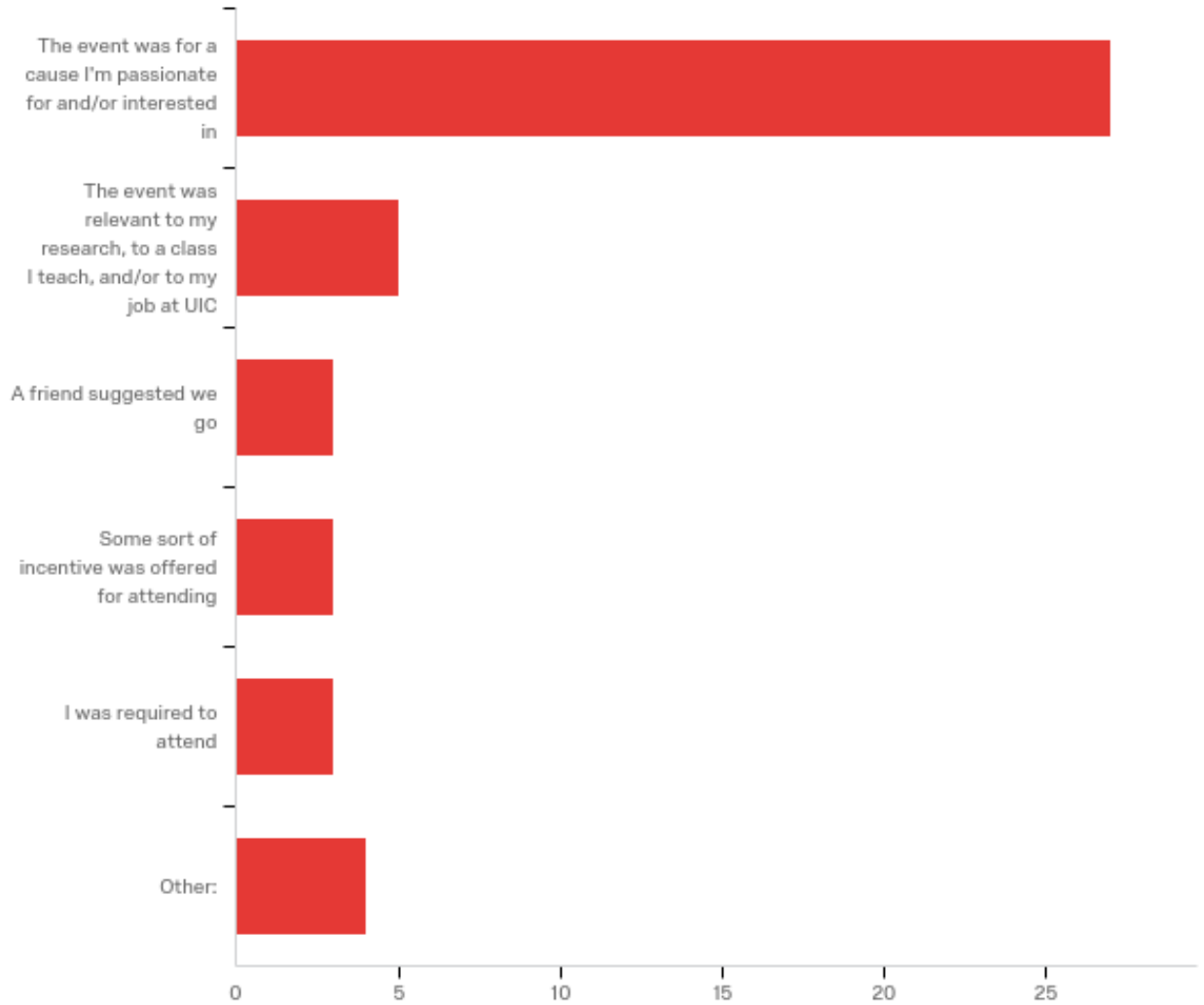
Clothing Swap

Clothing swap

counting bikes on bike racks

**Q13 - When attending these events, what encouraged you to attend?**

**Check all that apply.**



#	Answer	%	Count
1	The event was for a cause I'm passionate for and/or interested in	60.00%	27
2	The event was relevant to my research, to a class I teach, and/or to my job at UIC	11.11%	5
3	A friend suggested we go	6.67%	3
4	Some sort of incentive was offered for attending	6.67%	3
5	I was required to attend	6.67%	3



6	Other:	8.89%	4
	Total	100%	45

Q19\_6\_TEXT - Other:

Other: - Text

---

I did not attend

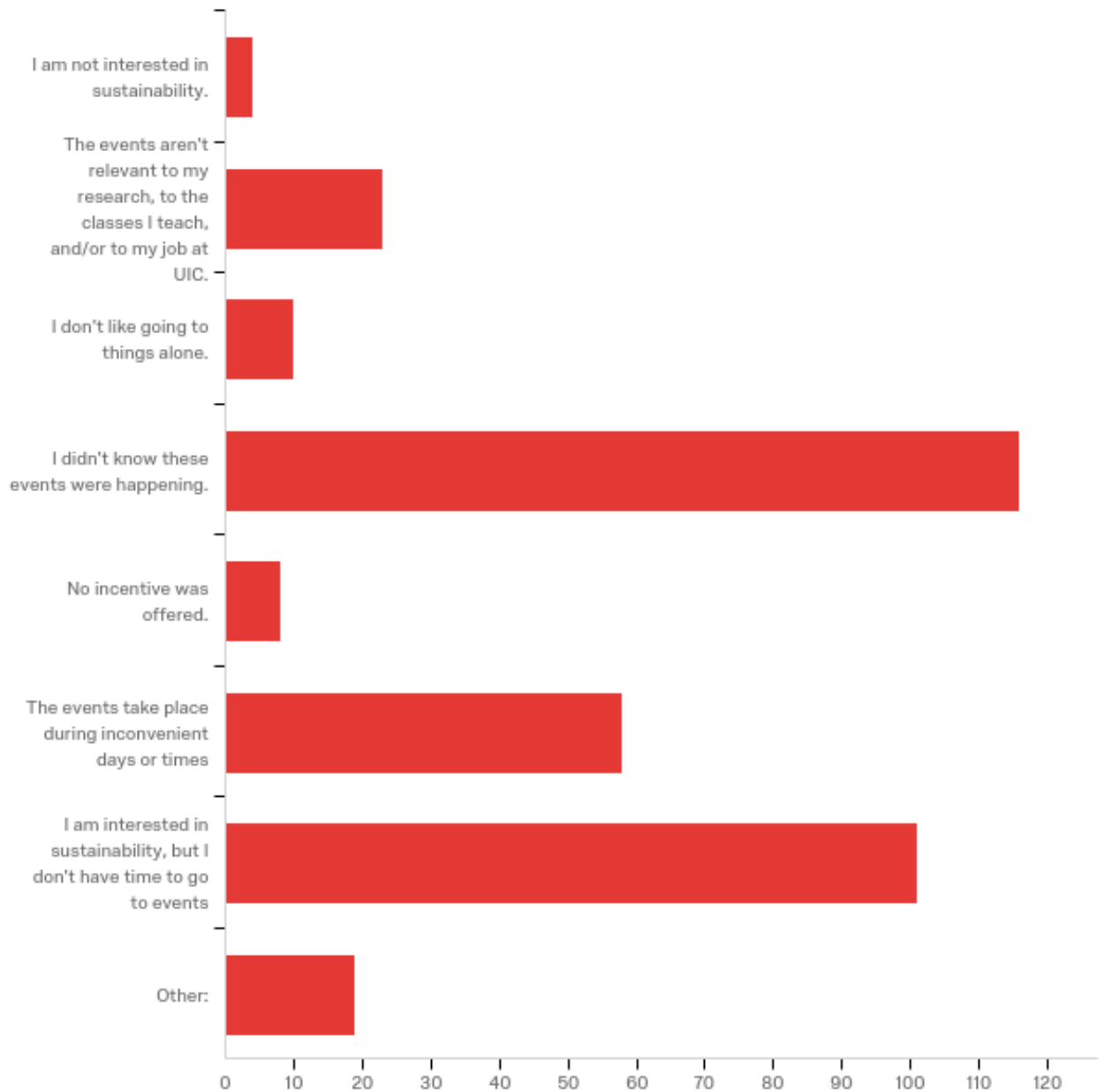
---

I had clothes that I wanted to donate

---

Support of another dept

**Q14 - For all of the times that you chose not to attend an Office of Sustainability event, what are the reasons why? Check all that apply.**



#	Answer	%	Count
1	I am not interested in sustainability.	1.18%	4
2	The events aren't relevant to my research, to the classes I teach, and/or to my job at UIC.	6.78%	23





3	I don't like going to things alone.	2.95%	10
4	I didn't know these events were happening.	34.22%	116
5	No incentive was offered.	2.36%	8
6	The events take place during inconvenient days or times	17.11%	58
7	I am interested in sustainability, but I don't have time to go to events	29.79%	101
8	Other:	5.60%	19
	Total	100%	339

Q20\_8\_TEXT - Other:

Other: - Text

Office is short staff hard to get away.

Need to do my job

It was on the West Campus.

I don't think any have taken place since I've started

I am not at all interested in attending events.

I used to be an ecorep so I used to go more. I don't recall an event last year that I could make, or that I was truly interested in

Why bother? This is not an institution that cares about input

Climate change requires big changes, personal action is too little too late.

Time

started 10 months ago, didn't know about sustainability

New Employee

I'm interested in sustainability, but I don't have the energy to go to events. All consumed at work.

I recently started

I'm at work to work!

I have not been able to attend due to scheduling.

I just started

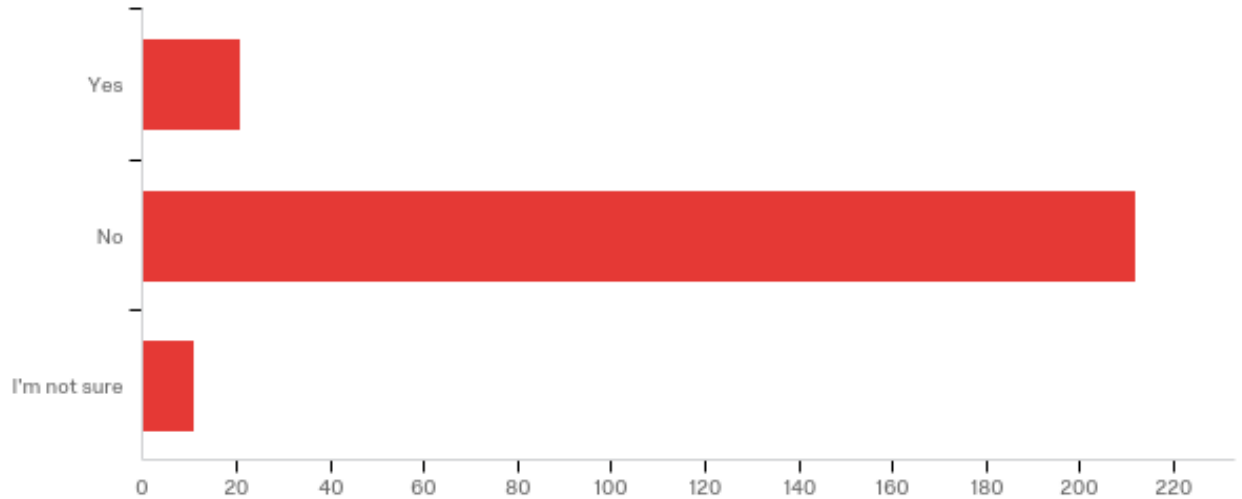
---

New to my position

---

events took place the same time as our public programs.

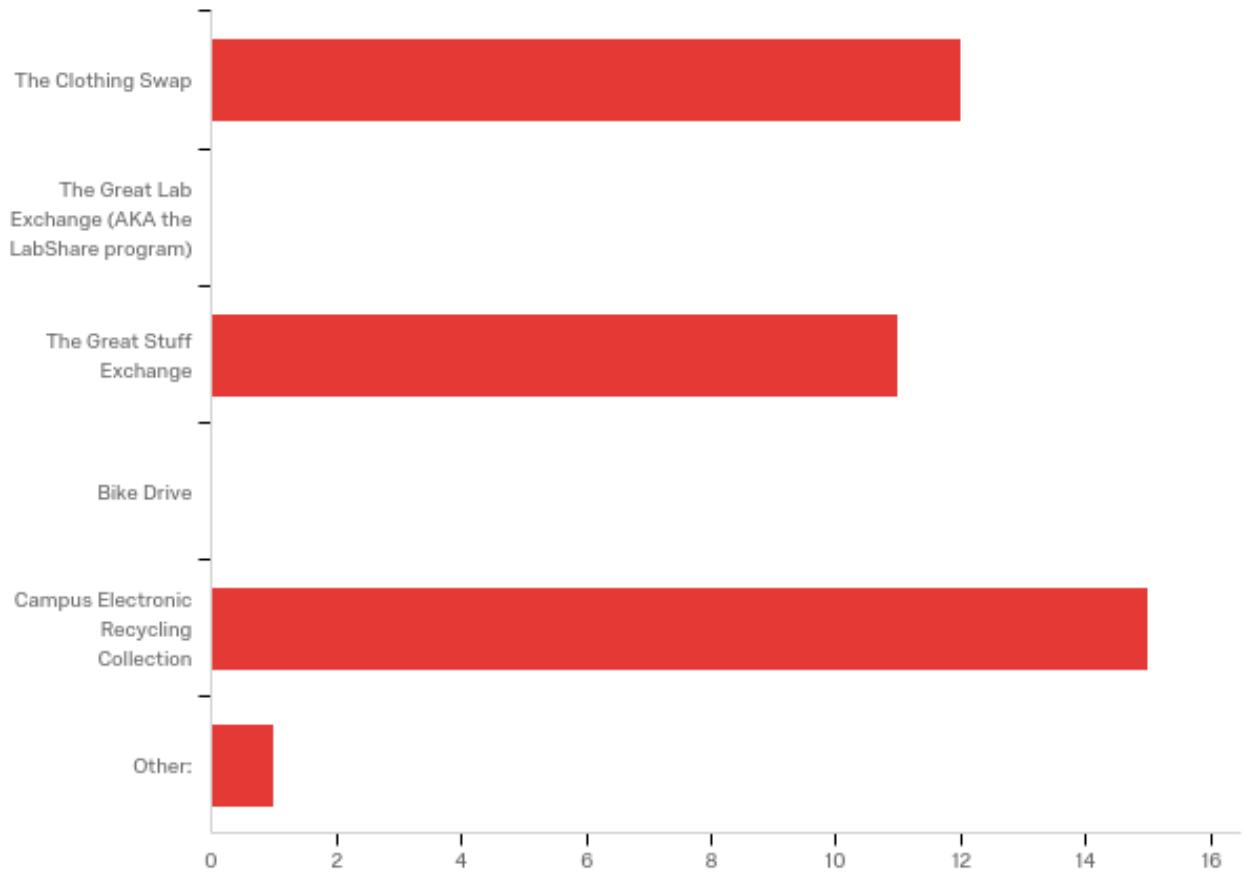
**Q15 - Have you donated anything to the Office of Sustainability's donation drives within the last 12 months?**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Have you donated anything to the Office of Sustainability's donation drives within the last 12 months?	1.00	3.00	1.96	0.36	0.13	244

#	Answer	%	Count
1	Yes	8.61%	21
2	No	86.89%	212
3	I'm not sure	4.51%	11
	Total	100%	244

### Q16 - Which donation drives have you donated to?



Data source misconfigured for this visualization

#	Answer	%	Count
1	The Clothing Swap	30.77%	12
2	The Great Lab Exchange (AKA the Lab Share program)	0.00%	0
3	The Great Stuff Exchange	28.21%	11
4	Bike Drive	0.00%	0
5	Campus Electronic Recycling Collection	38.46%	15
6	Other:	2.56%	1
	Total	100%	39

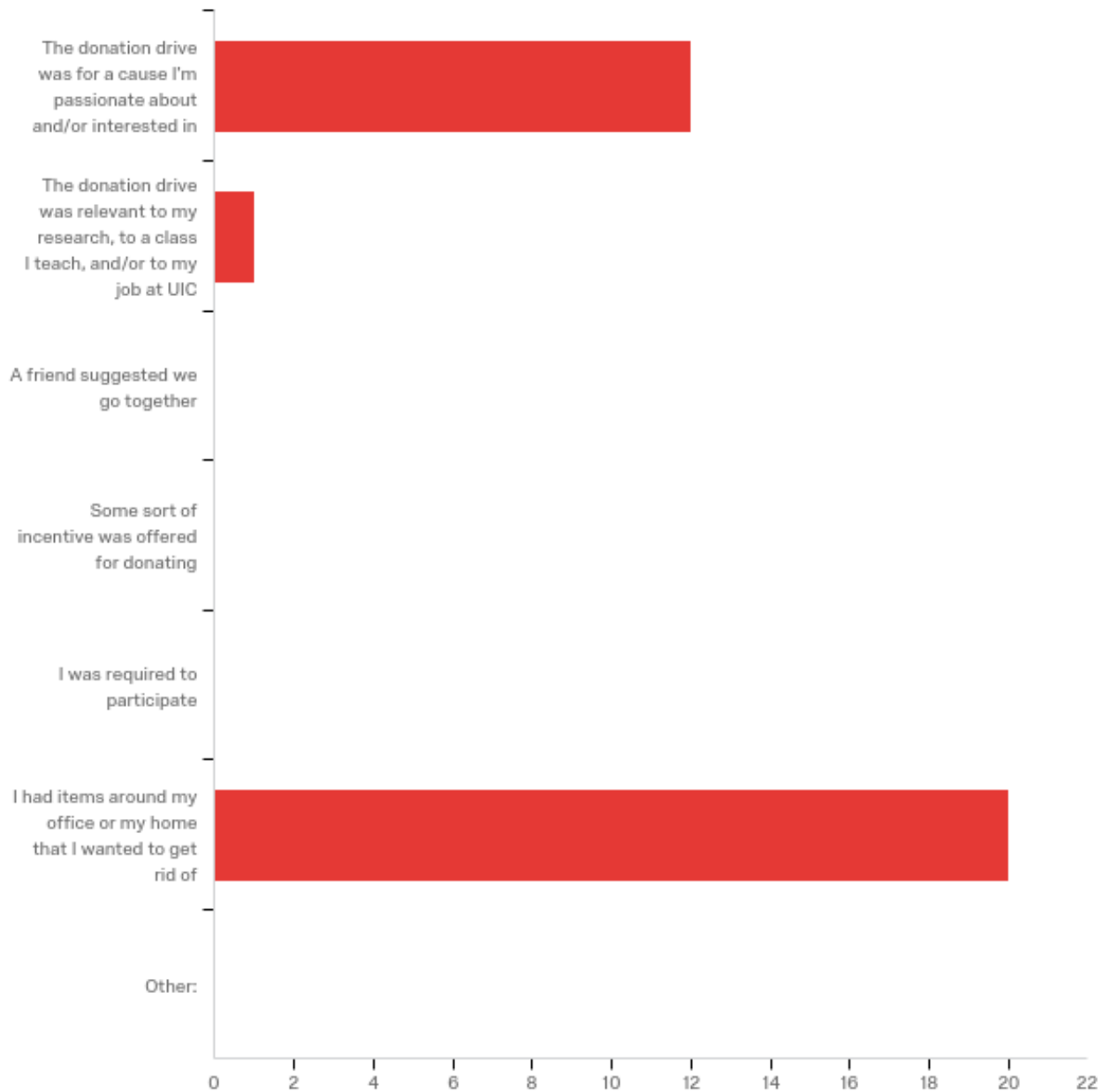
Q22\_6\_TEXT - Other:

Other: - Text

---

food

**Q17 - For all the donation drives you donated to, what encouraged you to participate? Check all that apply.**



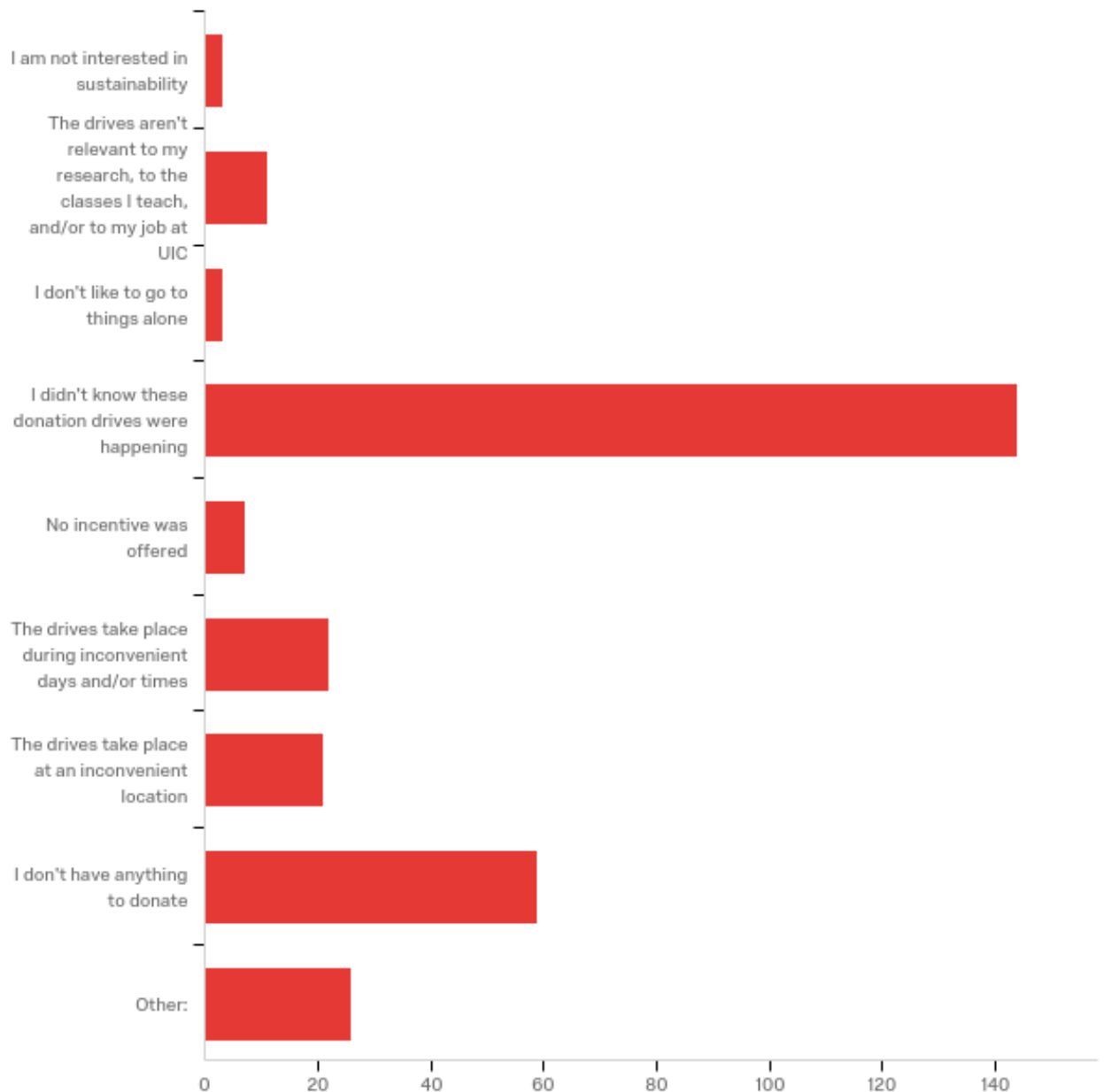
#	Answer	%	Count
1	The donation drive was for a cause I'm passionate about and/or interested in	36.36%	12
2	The donation drive was relevant to my research, to a class I teach, and/or to my job at UIC	3.03%	1

3	A friend suggested we go together	0.00%	0
4	Some sort of incentive was offered for donating	0.00%	0
5	I was required to participate	0.00%	0
6	I had items around my office or my home that I wanted to get rid of	60.61%	20
7	Other:	0.00%	0
	Total	100%	33

Q23\_7\_TEXT - Other:

Other: - Text

**Q18 - For all the times you chose not to donate to an Office of Sustainability donation drive, what are the reasons why? Check all that apply.**



#	Answer	%	Count
1	I am not interested in sustainability	1.01%	3



2	The drives aren't relevant to my research, to the classes I teach, and/or to my job at UIC	3.72%	11
3	I don't like to go to things alone	1.01%	3
4	I didn't know these donation drives were happening	48.65%	144
5	No incentive was offered	2.36%	7
6	The drives take place during inconvenient days and/or times	7.43%	22
7	The drives take place at an inconvenient location	7.09%	21
8	I don't have anything to donate	19.93%	59
9	Other:	8.78%	26
	Total	100%	296

Q24\_9\_TEXT - Other:

Other: - Text

need advanced notice to gather items

I can donate closer to home and not have to carry items on public transportation

I donate to other campus activities

I have set up my charitable giving for reoccurring monthly donations and I do not give to drives

I take public transit and hauling material to UIC is not feasible.

I don't know the purpose of the office thus purpose of drives

Competing donation opportunities at UIC

Our office might have stuff to donate, but that is not my role.

I'm not interested in donating.

didn't know about it

I am interested in being a participant in maintaining a green campus, but not in events surrounding sustainability

I am broke

I donate household items in my home municipality

Participation has slipped my mind.

Too new to the University. I'm sure I will at some point

---

didn't know about it

---

Busy at work

---

My \$\$ gifts go elsewhere.

---

I recently started here

---

my focus is on my daily tasks and meetings

---

I give to my college

---

None have come up while I have worked for UIC

---

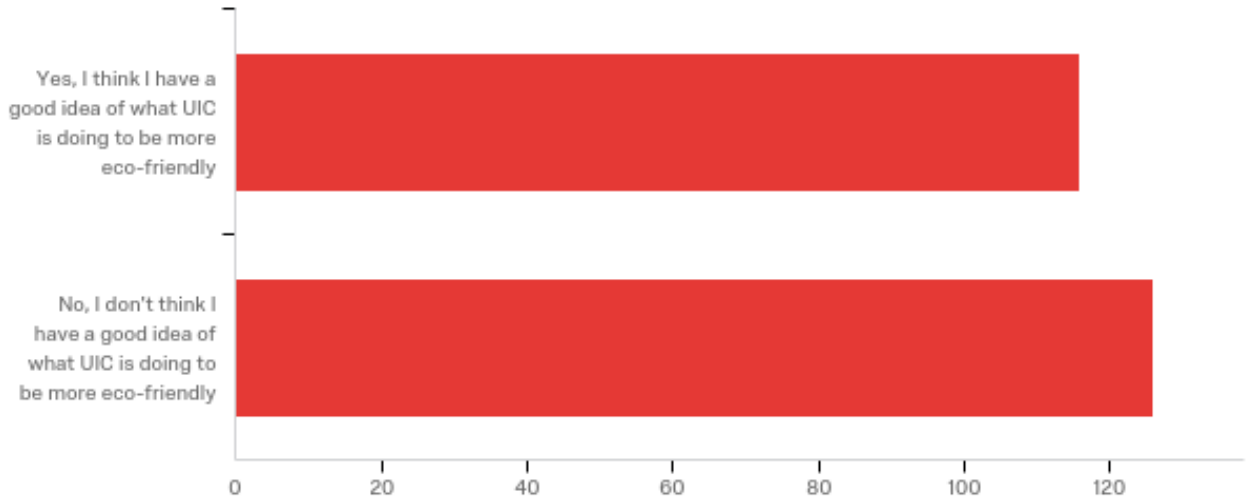
I just started

---

New to my position



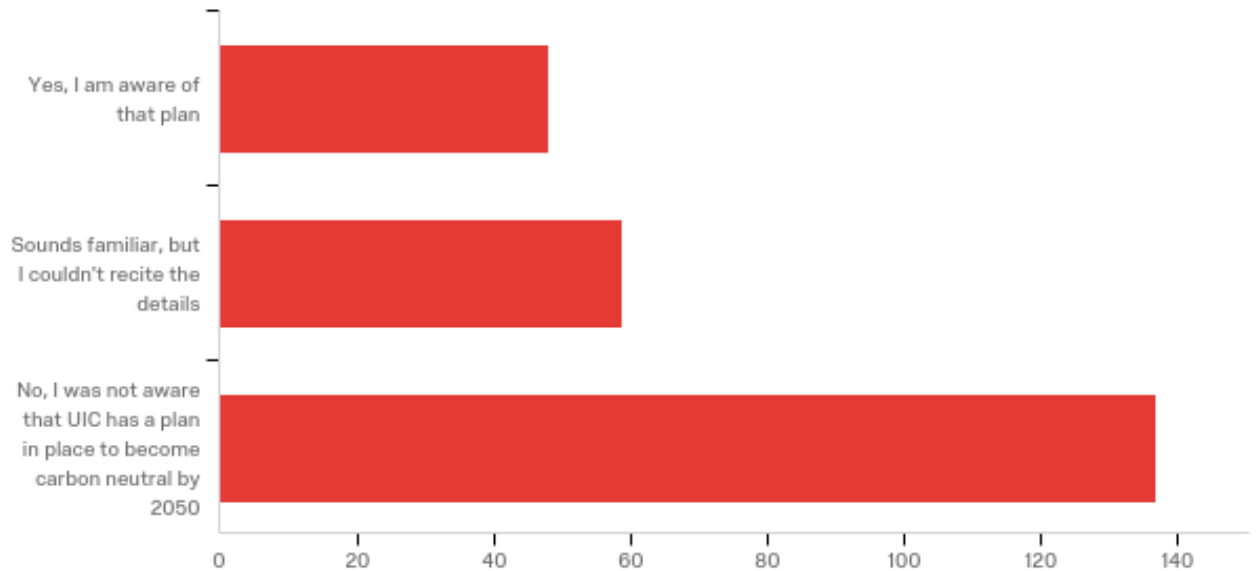
**Q19 - Do you feel you have a good idea of what UIC does to make campus more eco-friendly?**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you feel you have a good idea of what UIC does to make campus more eco-friendly?	1.00	2.00	1.52	0.50	0.25	242

#	Answer	%	Count
1	Yes, I think I have a good idea of what UIC is doing to be more eco-friendly	47.93%	116
2	No, I don't think I have a good idea of what UIC is doing to be more eco-friendly	52.07%	126
	Total	100%	242

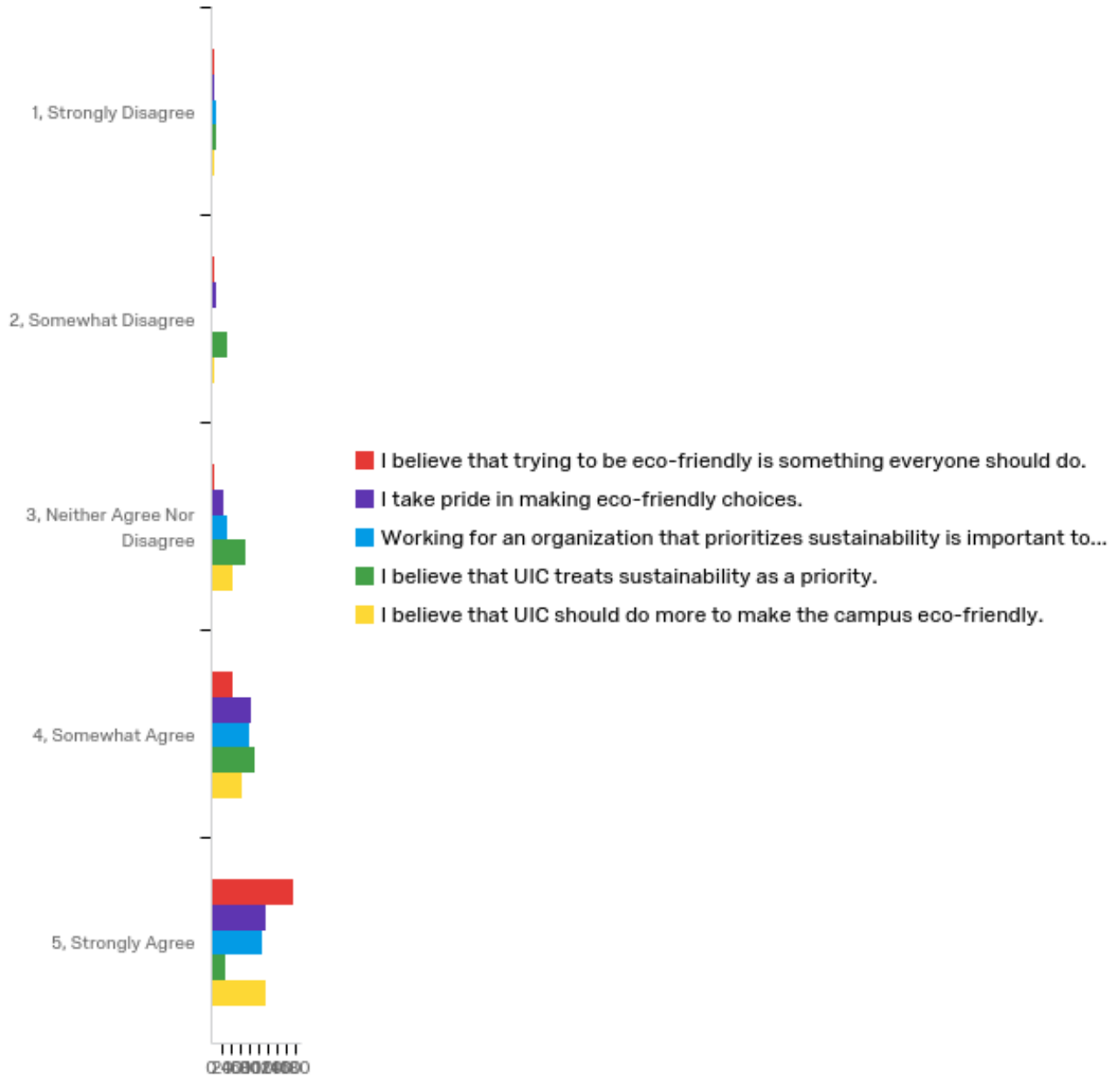
**Q20 - Prior to taking this survey, did you know that UIC has a plan in place to become carbon neutral by 2050?**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Prior to taking this survey, did you know that UIC has a plan in place to become carbon neutral by 2050?	1.00	3.00	2.36	0.79	0.63	244

#	Answer	%	Count
1	Yes, I am aware of that plan	19.67%	48
2	Sounds familiar, but I couldn't recite the details	24.18%	59
3	No, I was not aware that UIC has a plan in place to become carbon neutral by 2050	56.15%	137
	Total	100%	244

**Q21 - On a scale of 1 to 5, 1 being strongly disagree and 5 being strongly agree, Please answer the following questions:**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I believe that trying to be eco-friendly is something everyone should do.	1.00	5.00	4.59	0.85	0.73	239



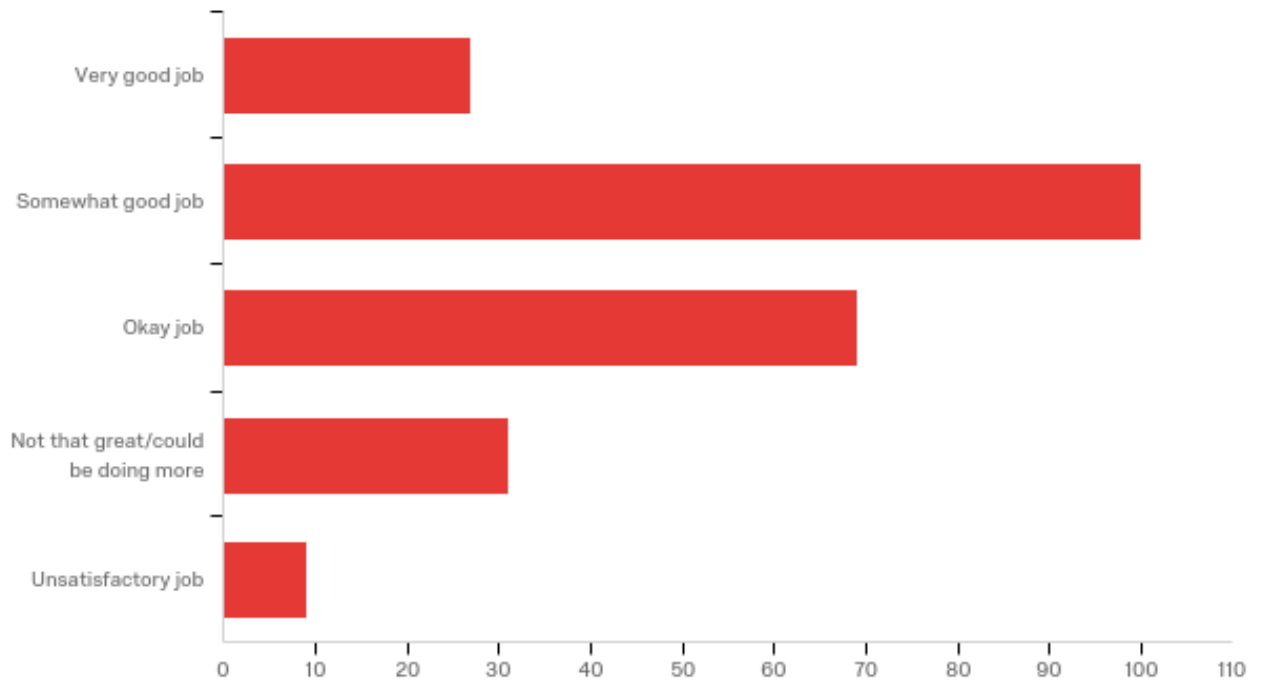
2	I take pride in making eco-friendly choices.	1.00	5.00	4.25	0.94	0.89	239
3	Working for an organization that prioritizes sustainability is important to me.	1.00	5.00	4.16	1.02	1.04	238
4	I believe that UIC treats sustainability as a priority.	1.00	5.00	3.43	1.00	1.00	238
5	I believe that UIC should do more to make the campus eco-friendly.	1.00	5.00	4.18	0.95	0.91	239

#	Question	1, Strongly Disagree	2, Somewhat Disagree	3, Neither Agree Nor Disagree	4, Somewhat Agree	5, Strongly Agree	Total
1	I believe that trying to be eco-friendly is something everyone should do.	2.51% 6	2.09% 5	2.93% 7	18.83% 45	73.64% 176	239
2	I take pride in making eco-friendly choices.	2.51% 6	3.35% 8	10.04% 24	34.73% 83	49.37% 118	239
3	Working	4.62% 1	1.26% 3	13.87% 3	34.03% 8	46.22% 11	238



	for an organization that prioritizes sustainability is important to me.		1			%	3		1	%	0	
4	I believe that UIC treats sustainability as a priority.	3.78%	9	13.87%	33	30.67%	73	39.08%	93	12.61%	30	238
5	I believe that UIC should do more to make the campus eco-friendly.	1.67%	4	2.93%	7	19.25%	46	28.03%	67	48.12%	115	239

**Q22 - Based on your experience working for UIC so far, how good a job do you believe UIC is doing at upholding its commitments to sustainability?**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Based on your experience working for UIC so far, how good a job do you believe UIC is doing at upholding its commitments to sustainability?	1.00	5.00	2.56	0.98	0.97	236

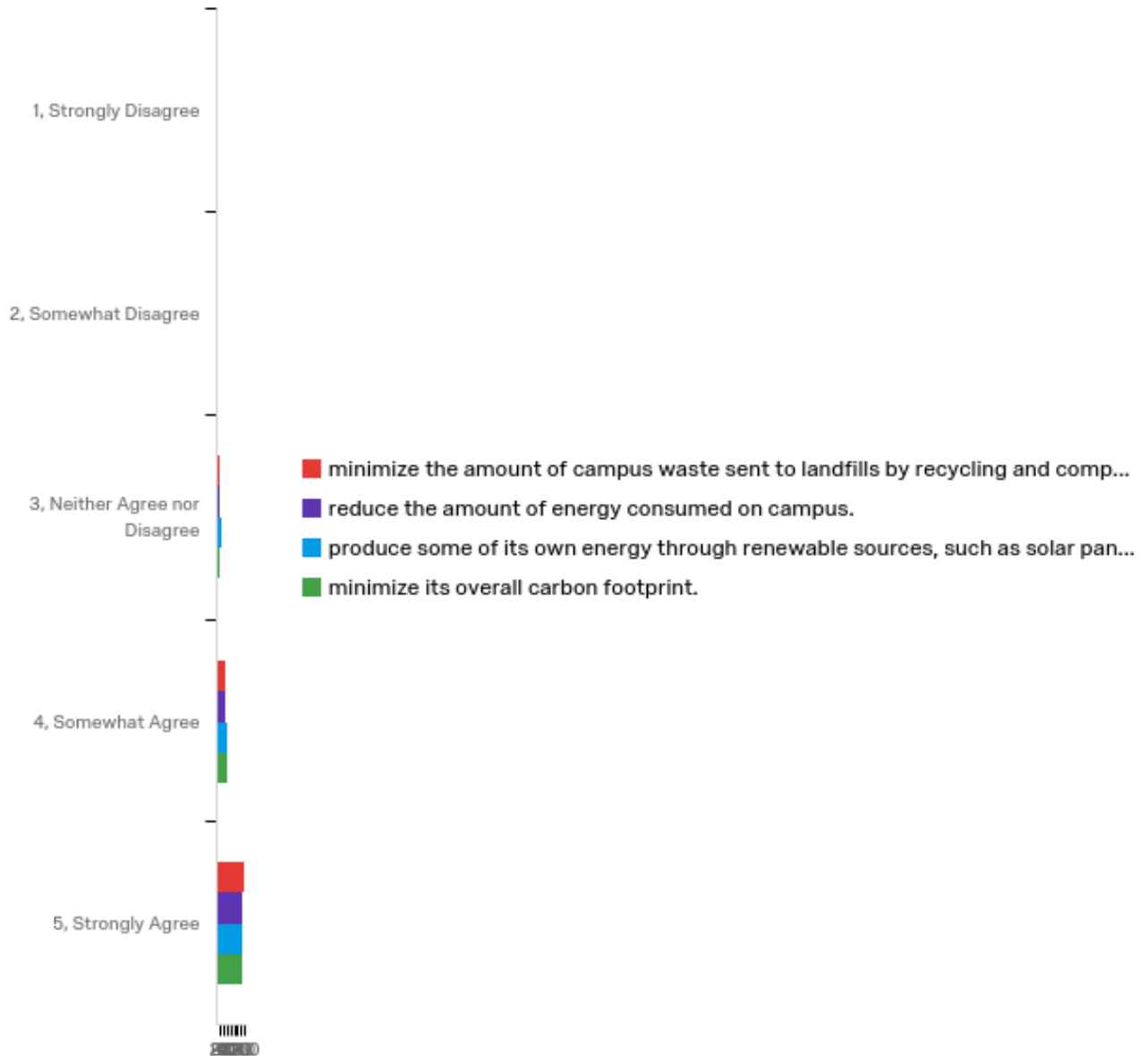
#	Answer	%	Count
1	Very good job	11.44%	27
2	Somewhat good job	42.37%	100





3	Okay job	29.24%	69
4	Not that great/could be doing more	13.14%	31
5	Unsatisfactory job	3.81%	9
	Total	100%	236

**Q23 - On a scale of 1 to 5, 1 being strongly disagree and 5 being strongly agree, Please answer the following questions. It is important to me that UIC makes a coordinated effort to...**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	minimize the amount of campus waste sent to landfills by	1.00	5.00	4.54	0.83	0.69	233



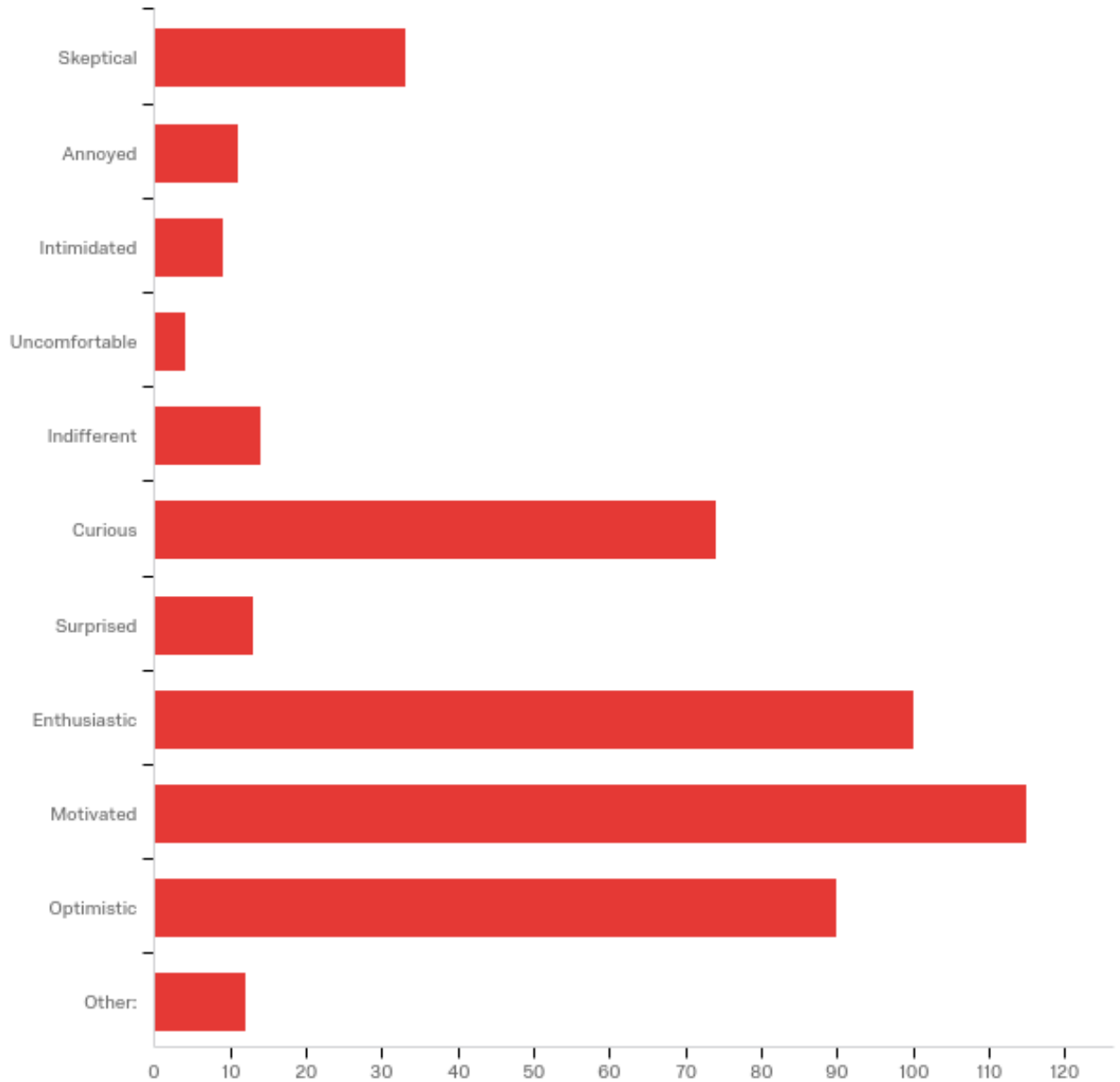
	recycling and composting.						
2	reduce the amount of energy consumed on campus.	1.00	5.00	4.48	0.85	0.72	232
3	produce some of its own energy through renewable sources, such as solar panels or wind turbines.	1.00	5.00	4.45	0.86	0.74	233
4	minimize its overall carbon footprint.	1.00	5.00	4.52	0.78	0.60	233

#	Question	1, Strongly Disagree	2, Somewhat Disagree	3, Neither Agree nor Disagree	4, Somewhat Agree	5, Strongly Agree	Total
1	minimize the amount of campus waste sent to landfills by recycling and composting.	1.72% 4	2.15% 5	5.15% 12	22.75% 53	68.24% 159	233
2	reduce the amount of energy consumed on	1.29% 3	2.16% 5	9.05% 21	21.98% 51	65.52% 152	232



	campus.											
3	produce some of its own energy through renewable sources, such as solar panels or wind turbines.	2.15%	5	0.43%	1	10.30%	24	24.46%	57	62.66%	146	233
4	minimize its overall carbon footprint.	1.29%	3	0.86%	2	7.30%	17	25.75%	60	64.81%	151	233

**Q24 - When someone suggests I should do something because it is good for the environment, I am: Check all that apply.**



#	Answer	%	Count
1	Skeptical	6.95%	33
2	Annoyed	2.32%	11
3	Intimidated	1.89%	9

4	Uncomfortable	0.84%	4
5	Indifferent	2.95%	14
6	Curious	15.58%	74
7	Surprised	2.74%	13
8	Enthusiastic	21.05%	100
9	Motivated	24.21%	115
10	Optimistic	18.95%	90
11	Other:	2.53%	12
	Total	100%	475

Q38\_11\_TEXT - Other:

Other: - Text

Encouraged

Sometimes Challenged

concerned that environmental impact will happen through policy but not measurably because of individual choices

sometimes can be annoying b/c I think there are fads and people are uninformed or misinformed about certain issues.

I'm fine with it (have my masters in environmental management) but know it doesn't go over well with everyone

feel that I can't do it / don't have the resources / knowledge

in agreement

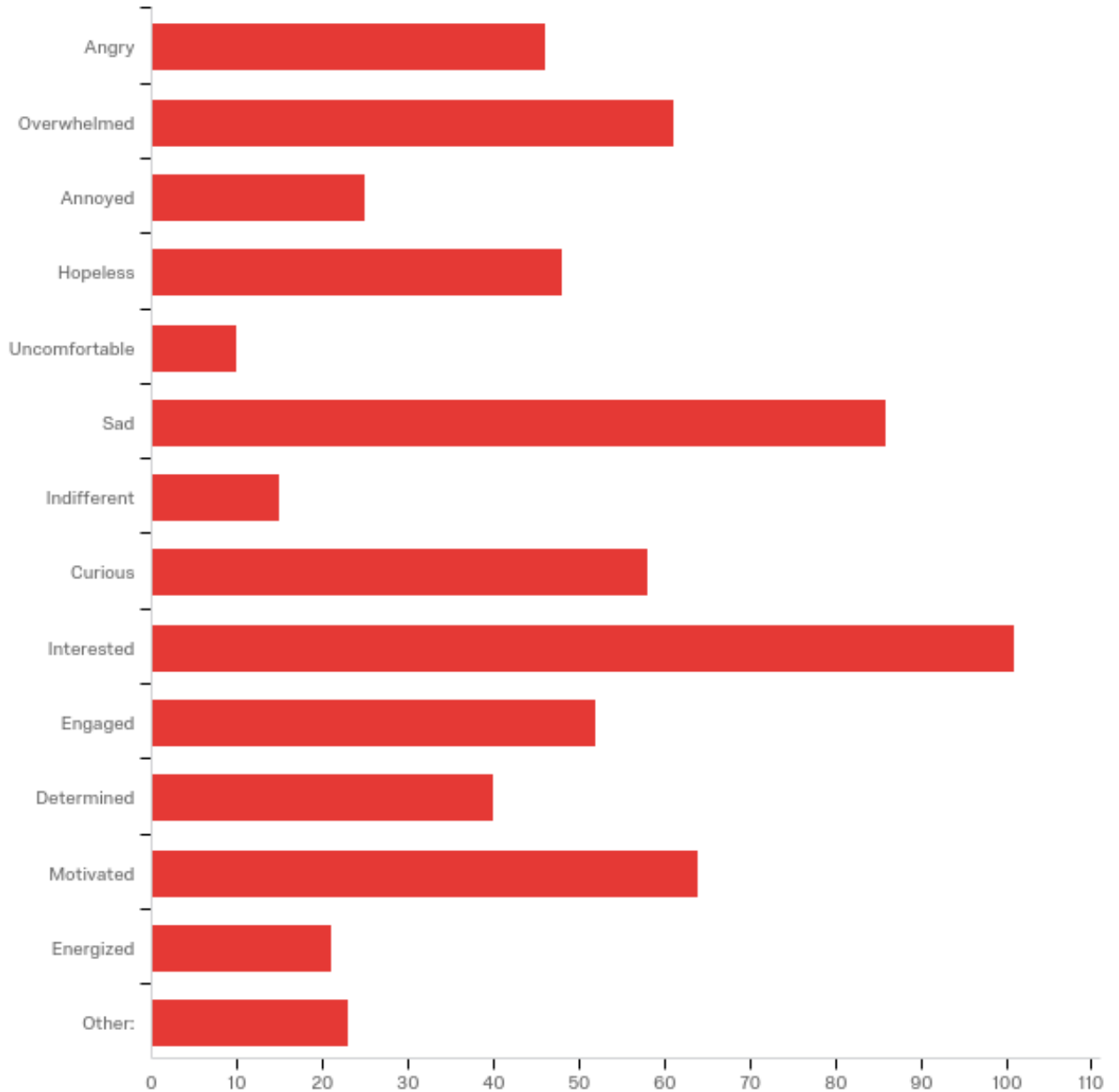
This should be an independent choice

Interested

in agreement

Only annoyed/uncomfortable when it's an annoying person suggesting it.

**Q25 - When I hear about, read about, or participate in a discussion about climate change, I feel: Check all that apply.**



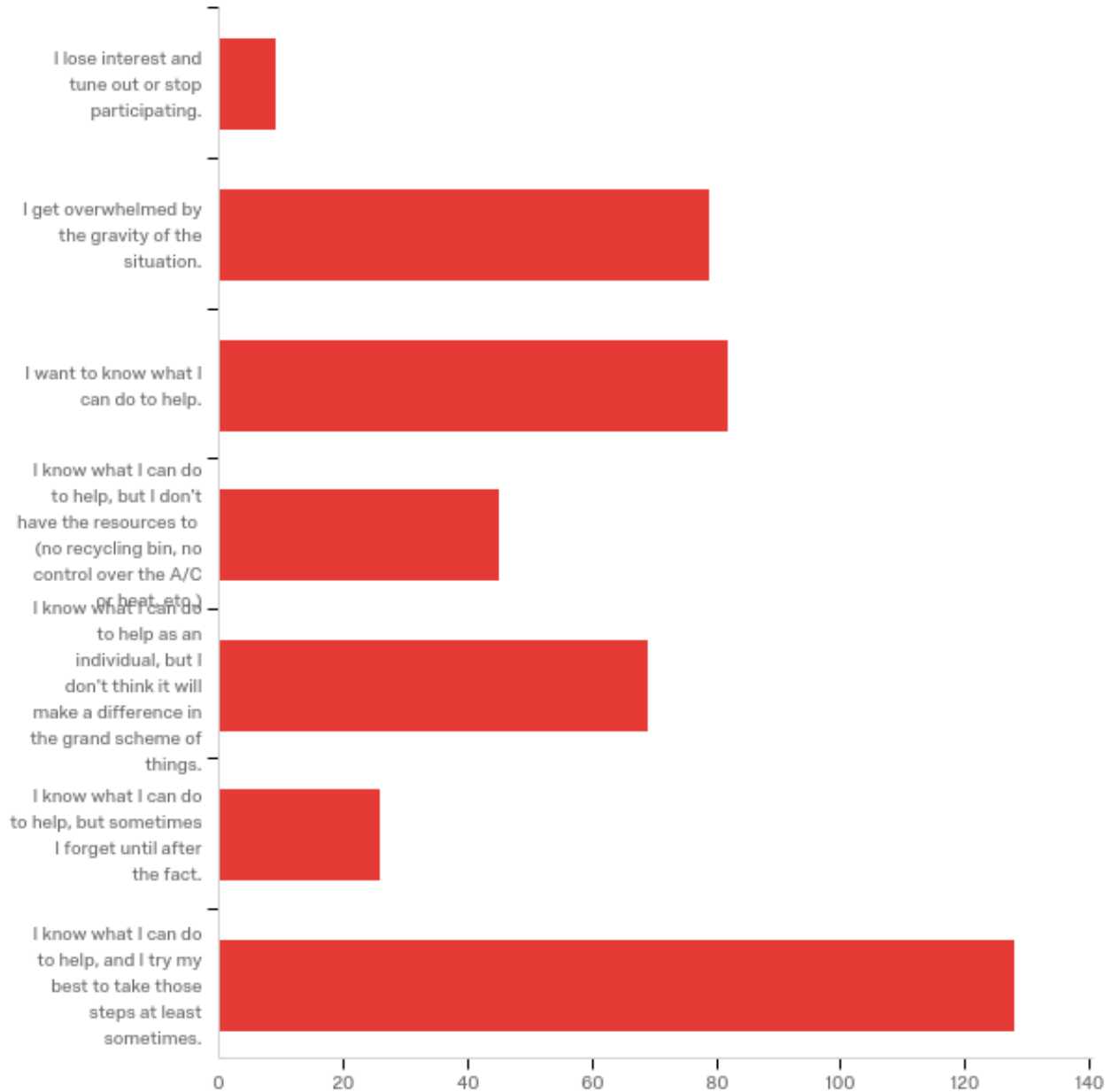
#	Answer	%	Count
1	Angry	7.08%	46
2	Overwhelmed	9.38%	61

3	Annoyed	3.85%	25
4	Hopeless	7.38%	48
5	Uncomfortable	1.54%	10
6	Sad	13.23%	86
7	Indifferent	2.31%	15
8	Curious	8.92%	58
9	Interested	15.54%	101
10	Engaged	8.00%	52
11	Determined	6.15%	40
12	Motivated	9.85%	64
13	Energized	3.23%	21
14	Other:	3.54%	23
	Total	100%	650

Unable to export widget. Please contact Qualtrics Support.



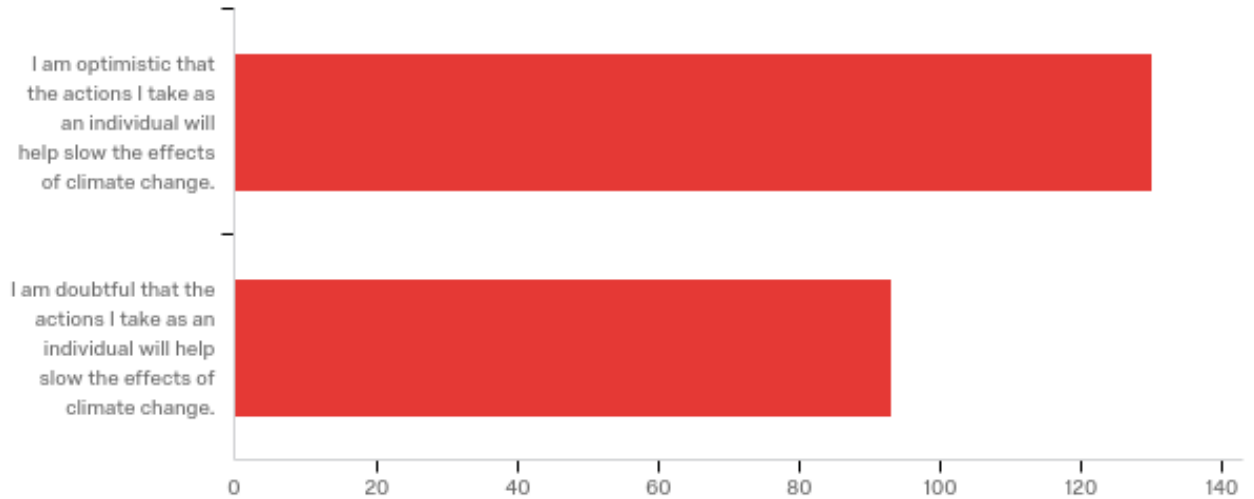
**Q26 - When I hear about, read about, or participate in a discussion about climate change... Check all that apply.**



#	Answer	%	Count
1	I lose interest and tune out or stop participating.	2.05%	9
2	I get overwhelmed by the gravity of the situation.	18.04%	79

3	I want to know what I can do to help.	18.72%	82
4	I know what I can do to help, but I don't have the resources to (no recycling bin, no control over the A/C or heat, etc.)	10.27%	45
5	I know what I can do to help as an individual, but I don't think it will make a difference in the grand scheme of things.	15.75%	69
6	I know what I can do to help, but sometimes I forget until after the fact.	5.94%	26
7	I know what I can do to help, and I try my best to take those steps at least sometimes.	29.22%	128
	Total	100%	438

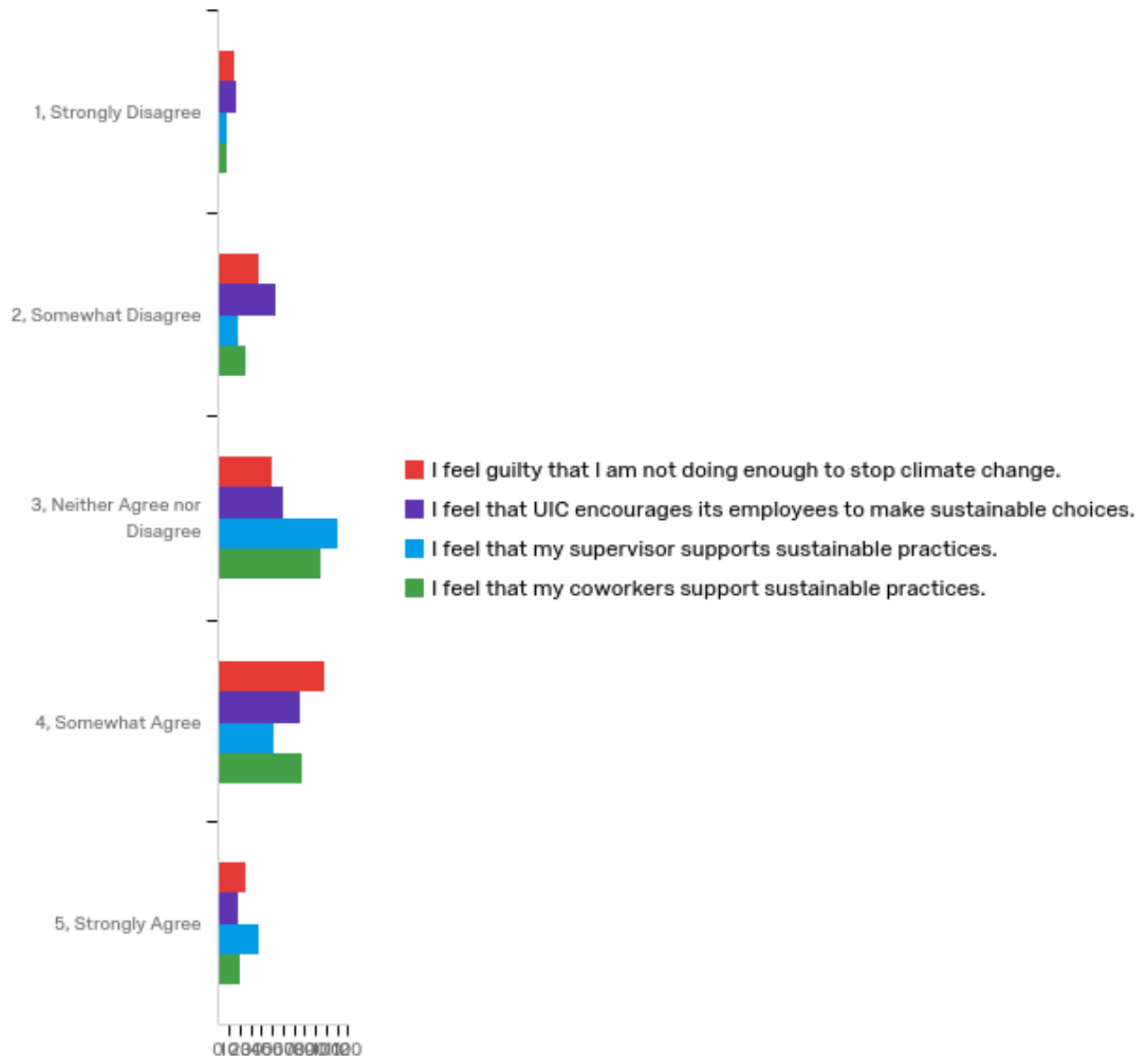
**Q27 - Generally, how do you feel about individual actions making a difference in slowing the effects of climate change?**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Generally, how do you feel about individual actions making a difference in slowing the effects of climate change?	1.00	2.00	1.42	0.49	0.24	223

#	Answer	%	Count
1	I am optimistic that the actions I take as an individual will help slow the effects of climate change.	58.30%	130
2	I am doubtful that the actions I take as an individual will help slow the effects of climate change.	41.70%	93
	Total	100%	223

**Q28 - On a scale of 1 to 5, 1 being strongly disagree and 5 being strongly agree, please answer the following questions:**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I feel guilty that I am not doing enough to stop climate change.	1.00	5.00	3.36	1.08	1.16	225
2	I feel that UIC	1.00	5.00	3.13	1.09	1.18	225



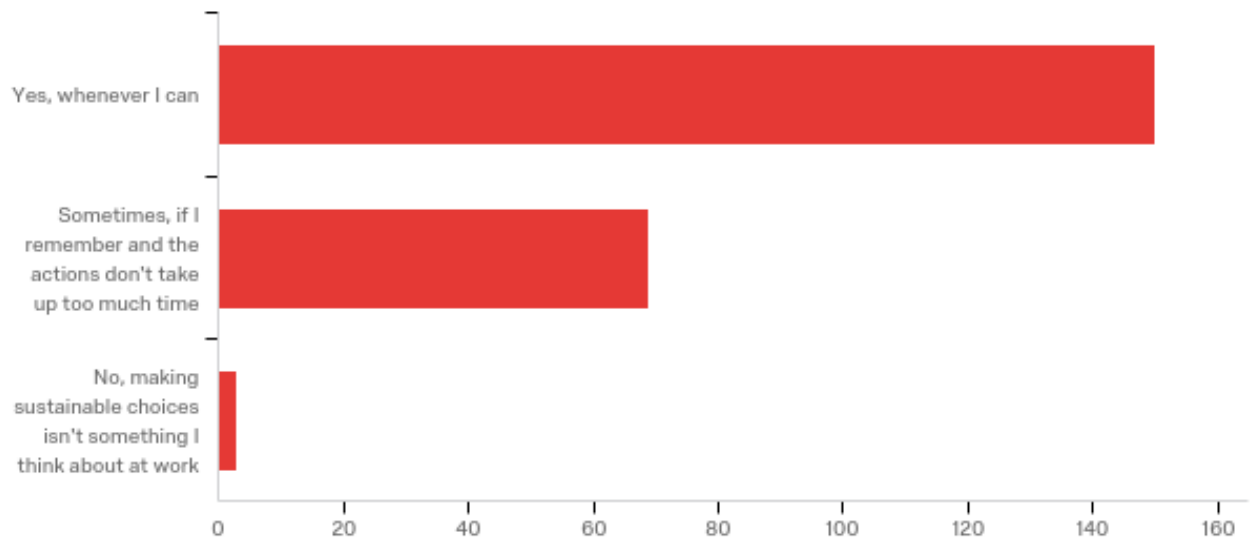
	encourages its employees to make sustainable choices.							
3	I feel that my supervisor supports sustainable practices.	1.00	5.00	3.42	0.96	0.93	225	
4	I feel that my coworkers support sustainable practices.	1.00	5.00	3.34	0.91	0.84	225	

#	Question	1, Strongly Disagree	2, Somewhat Disagree	3, Neither Agree nor Disagree	4, Somewhat Agree	5, Strongly Agree	Total
1	I feel guilty that I am not doing enough to stop climate change.	6.22% 14	16.89% 38	22.22% 50	43.56% 98	11.11% 25	225
2	I feel that UIC encourages its employees to make sustainable choices.	7.11% 16	23.56% 53	27.11% 61	33.78% 76	8.44% 19	225
3	I feel that my supervisor	3.11% 7	8.00% 18	49.33% 111	22.67% 51	16.89% 38	225



	or supports sustainable practices .											
4	I feel that my coworkers support sustainable practices .	3.56%	8	11.11%	25	42.22%	95	34.22%	77	8.89%	20	225

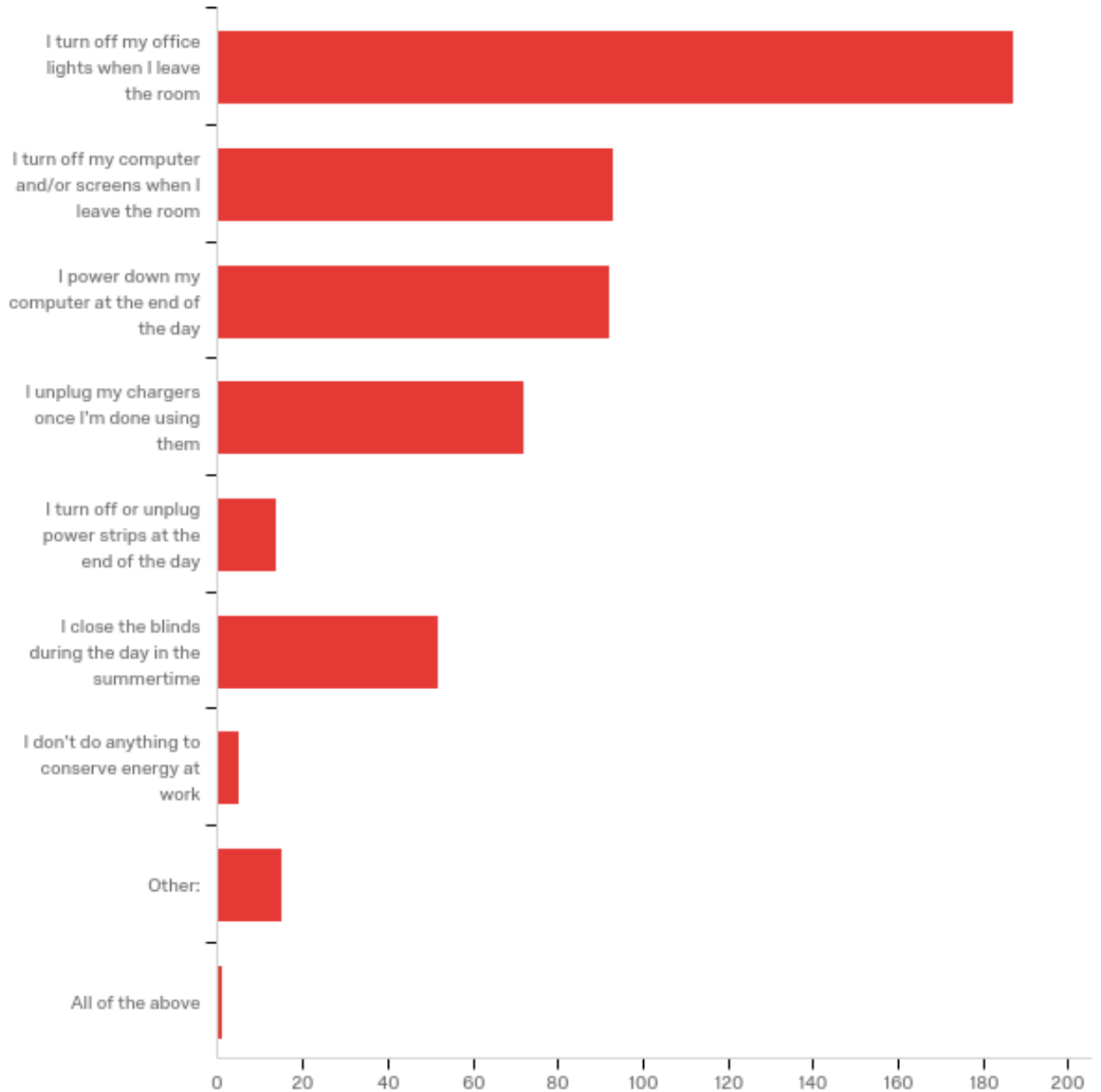
**Q30 - Generally, do you make an effort to make sustainable choices at work?**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Generally, do you make an effort to make sustainable choices at work?	1.00	3.00	1.34	0.50	0.25	222

#	Answer	%	Count
1	Yes, whenever I can	67.57%	150
2	Sometimes, if I remember and the actions don't take up too much time	31.08%	69
3	No, making sustainable choices isn't something I think about at work	1.35%	3
	Total	100%	222

**Q31 - Which of the following things do you do to conserve energy at work? Check all that apply.**



#	Answer	%	Count
1	I turn off my office lights when I leave the room	35.22%	187
2	I turn off my computer and/or screens when I leave the room	17.51%	93



3	I power down my computer at the end of the day	17.33%	92
4	I unplug my chargers once I'm done using them	13.56%	72
5	I turn off or unplug power strips at the end of the day	2.64%	14
6	I close the blinds during the day in the summertime	9.79%	52
7	I don't do anything to conserve energy at work	0.94%	5
8	Other:	2.82%	15
9	All of the above	0.19%	1
	Total	100%	531

Q48\_8\_TEXT - Other:

Other: - Text

power down PC only on weekends

we are encouraged to leave our computers on so that they backup - I would like to know if I need to do this

Put computer in sleep mode when I will be gone for an extended period

Ride a bike to work and around campus rather than use a University vehicle.

Use stairs instead of elevators (except in University Hall)

I turn off classroom & conference room lights whenever they're not in use

I use low wattage lamps instead of overhead lights.

Why bother? My window doesn't even close all the way. It's drafty and cold in the winter, hot in the summer. I recycle paper and soda cans but really, why bother with something like unplugging a charger?

Cannot power down computer because of automatic data backup

I bring home my compostable waste, I minimize the amount of paper I print, I reuse cover sheets as scratch paper, I don't use a car to travel between campuses (or to commute to campus), I turn off lights in communal spaces (ie conference rooms) when they are unoccupied, and I use the hand dryers instead of paper towels

avoid use of heater or fan if at all possible

recycle all paper, minimize use of in room trash so that plastic liner can be used for atleast a week

Use natural light

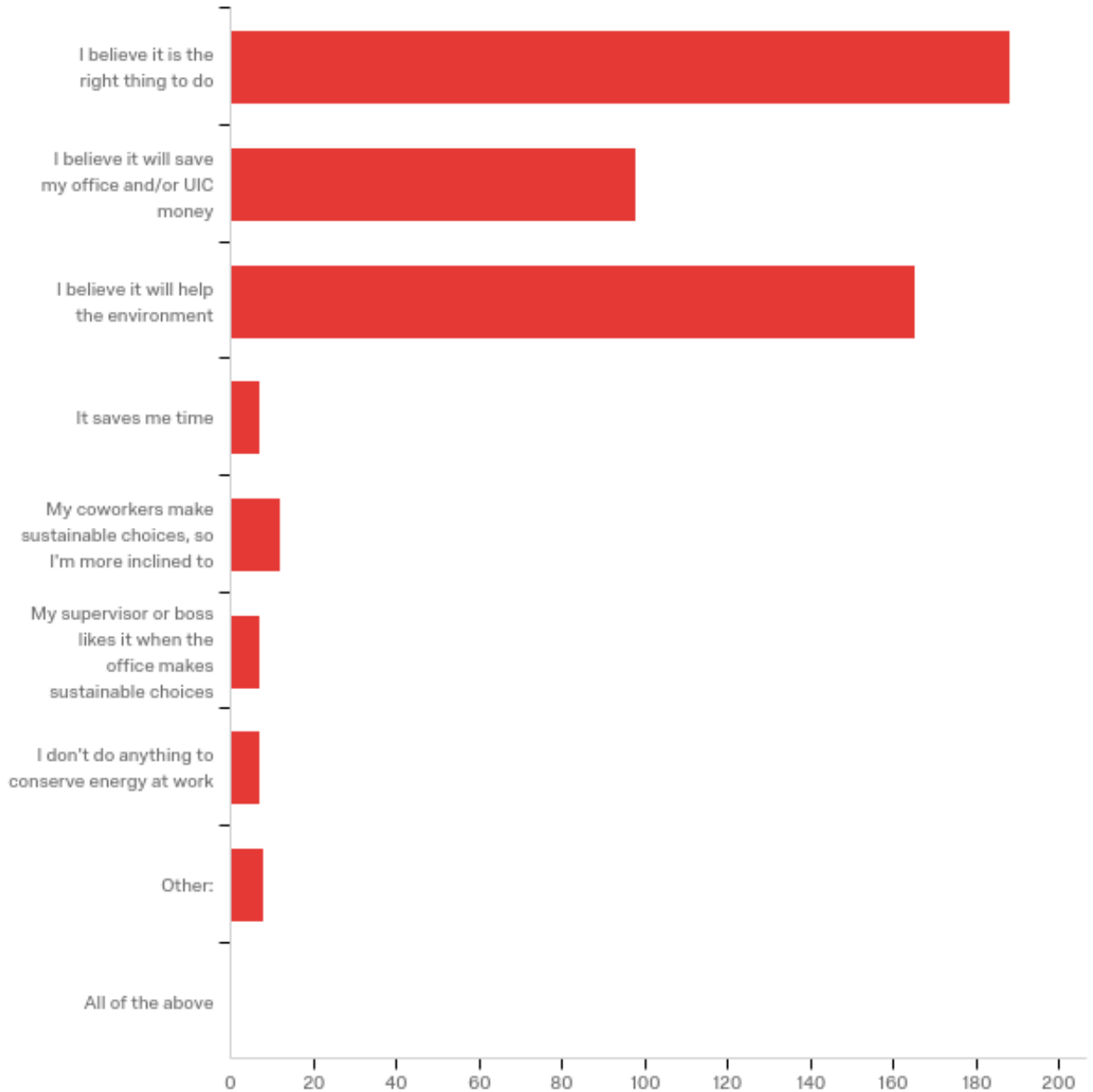


I place my computer into sleep mode

---

I recycle

**Q32 - When you make choices that conserve energy at work, why do you do so? Check all that apply.**



#	Answer	%	Count
1	I believe it is the right thing to do	38.21%	188
2	I believe it will save my office and/or UIC money	19.92%	98



3	I believe it will help the environment	33.54%	165
4	It saves me time	1.42%	7
5	My coworkers make sustainable choices, so I'm more inclined to	2.44%	12
6	My supervisor or boss likes it when the office makes sustainable choices	1.42%	7
7	I don't do anything to conserve energy at work	1.42%	7
8	Other:	1.63%	8
9	All of the above	0.00%	0
	Total	100%	492

Q49\_8\_TEXT - Other:

Other: - Text

I have to power down and unplug the computer because I use my personal notebook at the office and take it home after work.

I don't like to waste.

Habit

I try to be an example to others

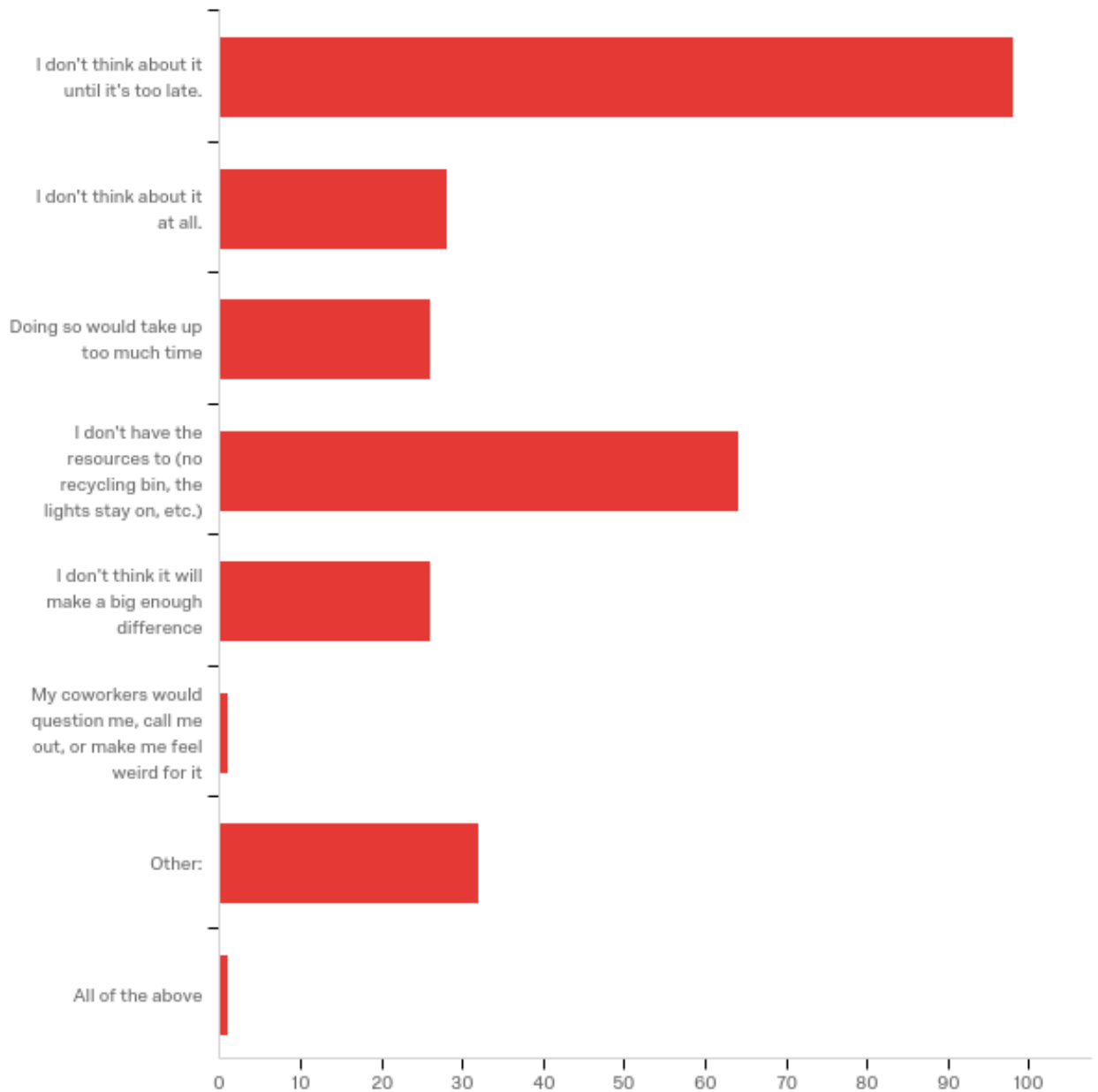
Habit

Habit - I do similar things at home

confidentiality

My mom always yelled at me for leaving lights on so I turn them off

**Q33 - During the times that you don't make sustainable choices at work, why don't you? Check all that apply.**



#	Answer	%	Count
1	I don't think about it until it's too late.	35.51%	98
2	I don't think about it at all.	10.14%	28

3	Doing so would take up too much time	9.42%	26
4	I don't have the resources to (no recycling bin, the lights stay on, etc.)	23.19%	64
5	I don't think it will make a big enough difference	9.42%	26
6	My coworkers would question me, call me out, or make me feel weird for it	0.36%	1
7	Other:	11.59%	32
8	All of the above	0.36%	1
	Total	100%	276

Q50\_7\_TEXT - Other:

Other: - Text

Hard on knees to unplug or turn off power strips; I use PC remotely

I am told to leave my computer on always

Too expensive to buy more eco-friendly supplies

Some items that people claim are "sustainable" don't actually help

Lights don't turn off

Choices must be reasonable; powering computers on and off daily is not good for the electronics; power strips are not easily accessible

Lights turn off automatically, computers need to be on.

I have not witnessed the recycle bin contents being kept separate from the non-recycleables

I rarely don't

I've been taught that turning off computers actually wastes energy...

My computer cannot be turned off in order for me to remote connect

I have a heater on when the AC is way too strong in the summer. I refused to have one for several years and caved after a while.

co-worker often wants lights on all day in several rooms "for the plants"

Ordering food comes with plastic, etc. and there are not a lot of options

Some lights required to be on. HVAC is terrible (too hot/cold)

Im in a rush and forget

Actually, our shared recycling bins vanished for over 6 months. Nothing was provided for my office so I brought spare bins from home.

For the last few years, I used a computer that could easily take 20 minutes or more to start up, log me in, and be fully usable if I powered it down each night. I never turn it off unless I know I won't be using it for longer than just overnight. I have also seen a variety of bins and signs re. recycling, many with seemingly contradictory information about what can be recycled and when.

---

option conflicts with other priorities, e.g. computer automatic backup

---

our recycling cans are not clearly marked with what to do with certain types of waste

---

Trying to get eco-friendly products can be expensive

---

Computer needs to be on for daily backup

---

need to leave computer on at night for remote access

---

confusion around what really are sustainable choices

---

It's beyond my control - old, drafty windows; manager's choices; lack of Departmental funds

---

Did not think leaving a power strip or charger plugged in impacts energy usage

---

We're supposed to leave our computers on, but logged out for AITS updates.

---

Campus catering and food vendors use so many plastics/disposables, and it is more \$\$ to request re-usable, or biodegradable products

---

inconvenient (e.g., powering down my computer means I can't remote in and use it if I'm at home or on a different side of campus

---

More time to reboot in the morning

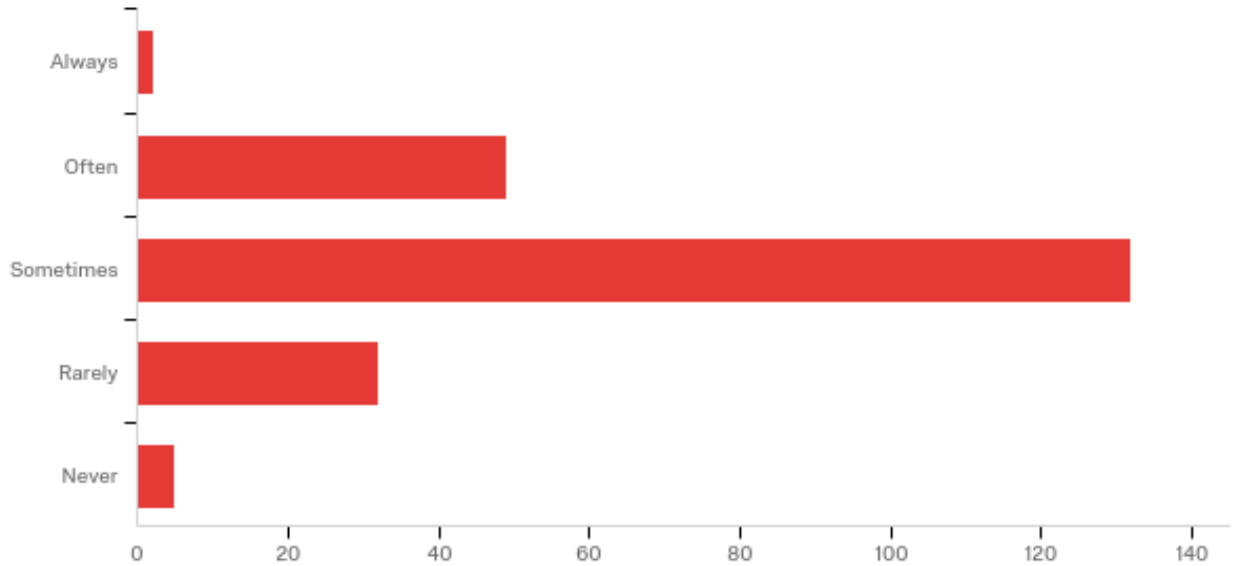
---

I am asked to leave my computer on for overnight updates

---

Eco-friendly choices sometimes conflict with choices that make me more able to do my job most effectively

**Q34 - How often do you observe your coworkers making eco-friendly choices at work?**

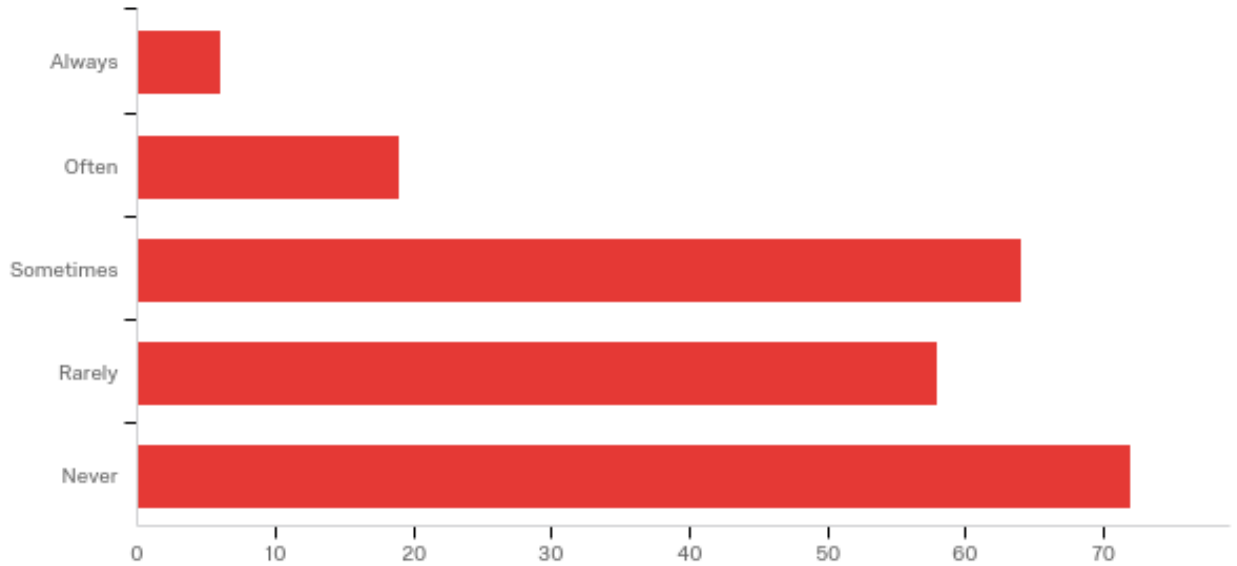


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How often do you observe your coworkers making eco-friendly choices at work?	1.00	5.00	2.95	0.70	0.49	220

#	Answer	%	Count
1	Always	0.91%	2
2	Often	22.27%	49
3	Sometimes	60.00%	132
4	Rarely	14.55%	32
5	Never	2.27%	5
	Total	100%	220



**Q35 - How frequently does your boss or supervisor verbally advocate for making sustainable choices in the workplace?**



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How frequently does your boss or supervisor verbally advocate for making sustainable choices in the workplace?	1.00	5.00	3.78	1.08	1.17	219

#	Answer	%	Count
1	Always	2.74%	6
2	Often	8.68%	19
3	Sometimes	29.22%	64
4	Rarely	26.48%	58
5	Never	32.88%	72
	Total	100%	219