

# FINAL REPORT

## ENABLING DIVESTMENT FROM FOSSIL FUELS:

Characterizing Divestment Awareness and Support at Dalhousie University



(Weiskel, 2015)

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## EXECUTIVE SUMMARY

A team of students at Dalhousie University has come together to develop a comprehensive research report on the state of divestment from fossil fuels at their University. Divestment campaigns have recently become popular across Canadian universities. More specifically, student led divestment advocacy groups are gaining traction in the public eye. Developing advocacy groups is a tool used by young people to voice their concerns and take steps towards combating climate change. Divest Dal is Dalhousie University's student led group that pushes for the University to divest its holdings from the fossil fuel industry. In November of 2014, Dalhousie University announced that they would not be divesting from fossil fuels, even after copious efforts from Divest Dal to sway the decision (Dalhousie, n.d.).

This team was curious to explore the reasoning behind this decision and what could be done differently. Based off of these inquiries, our team of students decided to explore the state of awareness at Dalhousie University amongst the student body. To find the answer, a non-probabilistic research style was used as well as questionnaire analysis. The study required both the major and year of study of each participant with their consent. This research was carried out by surveying participants in student buildings across Dalhousie's Studley campus.

Our study found that the majority of the sampled student body was unaware of the Divest Dal movement. However, the majority of the sample was aware of divestment from fossil fuels. Divestment awareness was higher within the faculty of Science as well as within third and fourth years. After analysis of our results, we recommend that the Divest Dal movement work towards raising awareness in the student body in order to increase support and change. With a movement as valuable as divestment, awareness throughout the entirety of the student body should be the goal, regardless of area or year of study. Given the strength in numbers when it comes to the climate change movement, a higher level of divestment awareness could be a catalyst for change on behalf of student-led groups at Universities.

## ACKNOWLEDGEMENTS

Our team would like to thank Buky Adebambo for her support and guidance, which enabled our research to progress and kept us on the right track. We would also like to thank Dr. Chris Green for his input and support of our research project. Finally, we would also like to thank the 202 participating students who took part in this study and made this project possible.

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## 1.0 INTRODUCTION

Divestment is the “removal of your investment from capital stocks bonds or funds” from companies that are involved in fossil fuels (Howard, 2015, para.1). Divestment from fossil fuels is the movement of an institution's money out of oil, coal, and gas and is an example of responsible investment (Howard, 2015). As of today, no Canadian university has completely divested their holdings from fossil fuels (Grant, 2015). Dalhousie University is affiliated with many fossil fuel companies who have donated money towards research at the University; in 2015, Dalhousie accepted a \$100,000 donation from Shell Canada shortly after the campaign to divest, which demonstrates the relationship between Dalhousie and the fossil fuel industry (CBC, 2015). However, many students have been campaigning for Dalhousie University to divest from fossil fuel companies, whose interests are in direct conflict with the future health of our planet and thus with that of future generations. Divest Dal is a collective, student-led organization who is committed to preventing new fossil fuel investments and divesting all of Dalhousie's current fossil fuel endowments. In November 2014, the Dalhousie Board of Governors voted against the motion to divest (Dalhousie, n.d.).

Our research focuses on student body awareness of divestment on campus. We collected our data by randomly administering a short survey to students walking around Dalhousie's Studley Campus. The survey consisted of ten closed-ended questions that were used to gauge the individual's understanding of divestment and awareness of Divest Dal. Due to ethical concerns, our team was unable to delve deeper into understanding the Board of Governors' decision not to divest as well as explore Divest Dal's future plans to revive the campaign. This was to be executed through a series of interviews with key stakeholders involved in the divestment decision at Dalhousie. Following this limitation, this study instead focuses on Dalhousie's student body current level of divestment awareness and serves to inform future divestment campaigns at Dalhousie.

## 1.1 PROJECT DEFINITION

Many universities across North America are actively seeking divestment through student-led initiatives. On-campus divestment campaigns “presen[t] a direct on-campus target while also addressing broader global issues related to climate injustice” (Grady-Benson & Sarathy, 2014, p. 667). Despite the copious efforts of these initiatives, a common trend in the university divestment movement is to not divest but instead to pledge towards minimizing ecological footprints (Howard, 2015). Dalhousie University is not exempt from this trend. In 2014 Dalhousie's student led-initiative, Divest Dal and its supporters, campaigned for the divestment of fossil fuels at Dalhousie (Dalhousie, n.d.). Dalhousie's

Board of Governors' final decision ruled against the Divest Dal campaign (Dalhousie, n.d.). However it was put forth that Dalhousie would still attempt to reduce its ecological footprint through other means (Dalhousie, n.d.).

This project aims to identify the effectiveness and importance of student-led initiatives in Dalhousie's journey towards divesting. Using the current state of fossil fuel divestment at Dalhousie University as its focus, it measured the awareness and support for divestment within the Dalhousie student body. As students are the main advocates for divestment at Dalhousie, their awareness and support is paramount in enabling divestment at Dalhousie. This project is important because it identifies the potential obstacles within Dalhousie's student body in term of divestment awareness and support that future divestment campaigns must address in order for them to be successful.

For the purposes of this research, the following will be defined a such:

**Divestment:** the "removal of your investment from capital stocks bonds or funds"(para.1) from, in this case, companies that are involved in fossil fuels (Howard, 2015)

**Support:** characterised by the participants' evaluation of their support for Dalhousie to divest and/or for the Divest Dal campaign

**Awareness:** having heard of or having a priori knowledge of divestment, fossil fuel divestment, or Divest Dal

## 1.2 RESEARCH QUESTION

Climate change awareness is known to pass through the public's attention cycle, going from euphoric enthusiasm to realizing the cost of progress to awareness gradually declining and disappearing from the public's radar. It has been over two years since divestment dominated campus news at Dalhousie, when the Investment Committee decided not to divest Dalhousie's fossil fuel endowments. Therefore, our research question is as follows:

**What is the general knowledge of fossil fuel divestment within Dalhousie's current student body?**

## 1.3 BACKGROUND & RATIONALE

Divestment from fossil fuels has been a trend across institutions ever since climate change has been observed as an area of concern (Beer, 2016). At a University, a hub for

innovation and knowledge, the principles of sustainable development should be upheld at a policy level. That is, where an institution invests its capital (Beer, 2016). This research will explore the current state of divestment from fossil fuels at Dalhousie. Furthermore, this research will explore the student-led divestment movement at Dalhousie University. For the purpose of this project divestment from fossil fuels will hereafter be referred to as “divestment”. Divestment from fossil fuels is the movement of an institution's money out of oil, coal and gas (Howard, 2015).

Campaigning for the divestment of fossil fuels is important because it is a way to show opposition to industries that contribute heavily to climate change. It also provides a practical way for individuals to participate in climate change activism at the grassroots level who may otherwise be unable to make their voice heard. This is why students are more and more frequently organizing calls for divestment at their University. On-campus divestment campaigns “present a direct on-campus target while also addressing broader global issues related to climate injustice” (Grady-Benson & Sarathy, 2014, 667). Divesting from these companies lends investment to more environmentally friendly areas, such as renewable energy. It is questionable how big of a financial impact divesting has on the companies that are being affected. However, there is an inherent moral impact that cannot be undermined. North America’s postsecondary institutional endowments are estimated at nearly 40 billion dollars USD (Brooks, 2013). This endowment is larger than the annual amount the Canadian Government spends on healthcare or postsecondary education (Brooks, 2013). There is an argument to be made for the “reputational damage”(para. 8) on oil and gas companies that takes place when an institution decides to divest (Howard, 2015). Part of the purpose of this study is to explore the perceived impact of fossil fuel divestment. A common trend of the institutional divestment movement is to pledge efforts towards minimizing ecological footprints in place of divesting, even after copious efforts by student-led initiatives (Howard, 2015). Campaigning for divestment keeps climate change and fossil fuel investments within media headlines, which has an amplified effect when larger institutions or well known Universities are spearheading the campaigns (Richards, 2015). It also puts key stakeholders such as investment boards on display, forcing them to defend their stances and action on divestment issues (Richards, 2015). Dalhousie has followed suite (Dalhousie, n.d.). American Universities believe that “the divestment movement also embraces the idea of an environmentalism that respects and responds to the needs of the most vulnerable human populations” (Bratman, Brunette, Shelly & Nicholson, 2016, p. 680).

The outcomes of this study will serve as a tool for Universities considering divestment, using Dalhousie as a case study. It is important to examine how and why North American Universities have rejected divestment proposals. It is “noted [specifically in the U.S.,] that higher education administrations are ‘digging in their heels against divestment’ as they avoid meetings, delay votes and request numerous academic reports” (Grady-Benson & Sarathy, 2014, p. 673). It appears that there is a large hesitation for institutions to go forward with divestment and this is reflected in the number of Universities that have rejected or ignored calls to divest. There are two observed reasons for rejecting fossil fuel

divestment that are repetitiously used by institutions (Grady-Benson & Sarathy, 2014). First, universities believe that “divestment would result in significant institutional costs given to the structure of one’s endowment, potential to increase risk in the portfolio, and transactional costs of moving assets...[as well as]... divestment will not have an impact on the FFCs or carbon emissions” (Grady-Benson & Sarathy, 2014, p. 673). Secondly, many Universities have adopted the stance that the stability of the institution’s financing is more important in the long term than divestment and that divestment may compromise financial stability (Grady-Benson & Sarathy, 2014). Usually, institutions insist on alternative actions such as research and education on climate and commitment to further reduce institutional carbon emissions (Helferty & Clarke, 2009). Furthermore, the action of divesting makes a public political statement in favour of climate action, no matter how small scale the movements towards change are (Richards, 2015). Campaigns demanding divestment have been important in bringing attention to the problem of investing into oil, gas, and coal. Currently, no Canadian University has pledged to fully divest with an accompanying enforcement plan (SEPN, 2016). Divest Dal campaigned for fossil fuel divestment at Dalhousie in 2014, however, the Board of Governors decided not to divest (Dalhousie, n.d.). The purpose of our research is to determine the awareness of divestment on campus amongst the student body. To accomplish this, the success of Dalhousie’s divestment campaign at educating the student population will be examined. This research will contribute the strengthening of future divestment campaigns at Dalhousie, bringing the the University closer towards completely divesting from fossil fuels and towards investing in green sustainable energy.

## 2.0 METHODS

### 2.1 PARTICIPANTS

A non-probabilistic study of the Dalhousie student body was conducted (Atchison & Palys, 2014, p.113-118). In order to limit the scope of our research, we focused solely on the student body. Participants were randomly selected at the Wallace McCain Learning Commons, the Killam Memorial Library, and the Dalhousie Student Union Building. Students of diverse departments, degrees, and academic years were surveyed throughout campus in order to provide a representative sample of the student body. With a total population of 18,824 undergraduate and graduate students, variation in respondent answers was expected (Dalhousie Analytics, 2016). For a representative sample of the knowledge of divestment on campus, the questionnaire had a target quota of 200 students, which accounts for 1% of Dalhousie’s student body, not including the Agricultural campus. Assuming a 50% decision rule (50% aware and 50% unaware of fossil fuel divestment), a 200 sample had a confidence interval of +/- 6.88 under a 95% confidence level. With 202 respondents, we met our target quota.



## 2.2 RESEARCH DESIGN

The research was organized and manipulated using a funnel approach (Atchison & Palys, 2014, p.125-141). First the broad topical context of the research topic was established, followed by empirical research. A literature review of fossil fuel divestment cases across North America and at Dalhousie was conducted to provide the broad topical context. This ensured that the project proceeded under an informed understanding of fossil fuel divestment and the current state of divestment at Dalhousie (Atchison & Palys, 2014, p.125-141).

Next, we conducted a questionnaire in order to provide the empirical research needed to further assess the current state of divestment at Dalhousie (see Appendix 1). The questionnaire focused on identifying the current state of fossil fuel divestment awareness at Dalhousie amongst the student body. In order to achieve a representative sample, students from a wide range of faculties were asked to participate (Atchison & Palys, 2014, p.113-118). In order to obtain a sample reflective of the actual student body population i.e. proportional to student enrollment in each faculty, questionnaires were conducted in the Killam Memorial Library, Dalhousie Student Union Building, and the Wallace McCain Learning Commons. High volumes of students are generally present within these locations and we believed they consisted of a wide variety of students from different faculties. Considering location in conducting the questionnaire was important as it increased the accuracy of our sample. The questionnaire was conducted in person to ensure that the sample was more representative of various faculties and so that questions from participants could be answered directly (Atchison & Palys, 2014, p.143-149). To ensure a higher response rate, the questionnaire was designed to be short, taking an average of 2-3 minutes to complete. Using a questionnaire further aided in collecting data anonymously and data collection and processing was relatively efficient (Atchison & Palys, 2014, p.143-149).

To statistically compare the questionnaire responses, we used a deductive coding approach (Atchison & Palys, 2014, p.303-306). Based on previous divestment research, each question was designed to produce responses essential to our research. Our codes therefore consisted of the questionnaire questions themselves, and were not deducted further. For participants who indicated that they were unaware of the term divestment, it was not necessary to consider other questions relating to divestment itself. This question was therefore asked before any others pertaining to divestment awareness. For participants who answered that they were not aware of Divest Dal, additional questions on

Divest Dal were not necessary to consider within the analysis. This question was thus asked before others related to Divest Dal. It was also important to include a question that was based on whether the participant thought student initiatives were generally effective as a driver of change at a University. This provided a better understanding of students' awareness of their ability to make change.

After inputting the responses of the questionnaire, we ran general summary statistics and cross tabulations on the dataset (Atchison & Palys, 2014, p.340-345). Questionnaire responses were categorized according to a participant's major and year of study. To condense the data further, we categorized each major on their corresponding faculty. This ensured better representation of the data. The small sample size for some faculties required us to group respondents into science and non-science faculties. Non-science faculties included architecture and planning, arts and social sciences, computer science, dentistry, engineering, graduate studies, health professions, law, management, and medicine. The faculty of science included the following departments: biology, chemistry, earth sciences, economics, environmental science, marine affairs, mathematics and statistics, oceanography, physics and atmospheric science, and the department of psychology and neuroscience.

After these categorizations, the data was broken up into three sections for analysis. The first considered all respondents as it gathered only information on awareness of divestment and Divest Dal and thus did not require prior knowledge of divestment or Divest Dal. This section consisted of question 1, 2, 7, and 8 of the questionnaire (see Appendix 1). The second section included only those participants who were aware of fossil fuel divestment and thus could answer subsequent questions pertaining to divestment, such as what their particular level of knowledge was on the subject of divestment and if they supported divestment at Dalhousie. The second section consisted of questions 3 through 6 of the questionnaire. The third section included only those participants that knew of Divest Dal and could therefore answer whether or not they supported the Divest Dal campaign. This section consisted of questions 9 and 10 of the questionnaire.

We compared the data using first a chi-square test and then a Fisher exact test if a chi-square assumption was violated. This happened when expected counts under 5 totaled over 20% for the chi-square test. Using these tests, the data was visually represented using both pie charts and bar-graphs (Atchison & Palys, 2014, p.340-341). This clearly demonstrated both the absolute and relative frequencies of the answer data (Atchison & Palys, 2014, p.340-341). The number of participants surveyed and a relative comparison of different degrees of awareness amongst the participants was thus represented.

## 2.3 LIMITATIONS

The limitations of this study were mostly associated with the time constraint. After the approval of our ethics application, we had just over 2 weeks to collect our data. The ability for us to collect enough data to reach our target quota presented a challenge. We were therefore limited to a 1% sample of the student population. Low sample sizes became significant during the second and third analysis sections. Namely, the answers used for the second and third sections were limited to those aware of divestment (N=108) and those aware of Divest Dal (N=81), respectively. This caused low expected counts for the chi-square tests and, though Fisher's exact test was used for significance or lack thereof, these results may not have been representative of the student population aware of divestment nor that aware of Divest Dal.

We were further limited by only having time to conduct surveys in three locations throughout campus. Due to the busy schedules of all group members during this time, each of the locations were only surveyed once. The results are thus restricted to the students that were in each location at a particular time. In addition, questionnaires distributed to groups of students were predisposed to an inherent systemic bias as students are more likely to be grouped according to faculty, department, or major. Therefore, the sampling process was not explicitly random.

Finally, due to the time constraint our data collection was limited to one questionnaire. As a result, our data was limited to the scope of the recorded responses (Atchison & Palys, 2014, p.143-149). This enabled us to identify the awareness levels of our respondents. However, we were not able to explain the causal factors of these awareness levels. When analyzing the data, it was also difficult to determine which participants answered honestly and/or answered with a full understanding of what the question was asking (Atchison & Palys, 2014, p.143-149). Therefore there was potential for misinterpreting some of the data. Inputting 202 questionnaires manually, and then processing the data also took a significant amount of time. Given the time constraint, this process was probably more rushed than it would have been with additional time, hence increasing the potential for error (Atchison & Palys, 2014, p.143-149).

## 3.0 RESULTS

### *First analysis section - all respondents (N=202)*

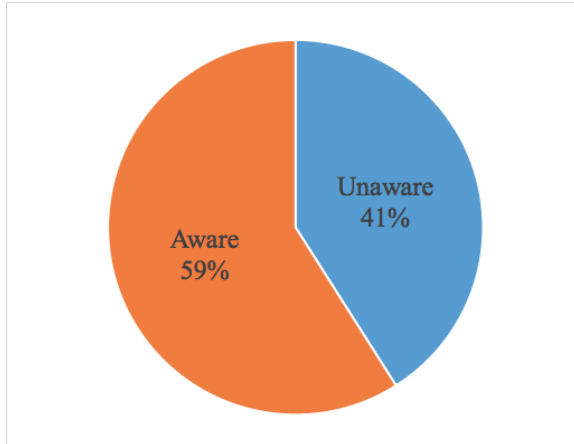
There was a total of 202 questionnaire respondents. All were Dalhousie students and therefore none were excluded from the analysis portion of the study. A total of 118

students (58.4% of the sample) were surveyed from non-science faculties and a total of 84 (41.6%) students were surveyed from the faculty of Science. The distribution of academic years of the 202 respondents is shown in Table 1. Fifth year undergraduates and graduates were not adequately sampled and only accounted for 4.95% of those surveyed. Therefore, we grouped fifth years and graduates with fourth year undergraduates in order to have a representative sample of each year group and therefore be able to perform analysis across academic years. Respondent answers for this analysis section, which includes questionnaire answers 1, 2, 7, and 8, are illustrated in Figures 1-4.

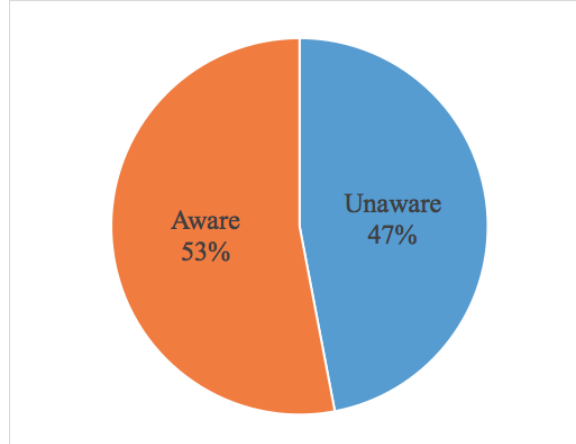
*Table 1 Distribution of questionnaire respondents by academic year*

| Academic year | Number of respondents | Percent of sample (%) |
|---------------|-----------------------|-----------------------|
| 1             | 59                    | 29.2                  |
| 2             | 28                    | 13.9                  |
| 3             | 57                    | 28.2                  |
| *4+           | 58                    | 28.7                  |

\*Note: includes fifth year undergraduates (total sampled=6) and graduate students (total sampled=4)



*Figure 1 Divestment awareness among all questionnaire respondents (N=202)*



*Figure 2 Fossil fuel divestment awareness among all questionnaire respondents (N=202)*

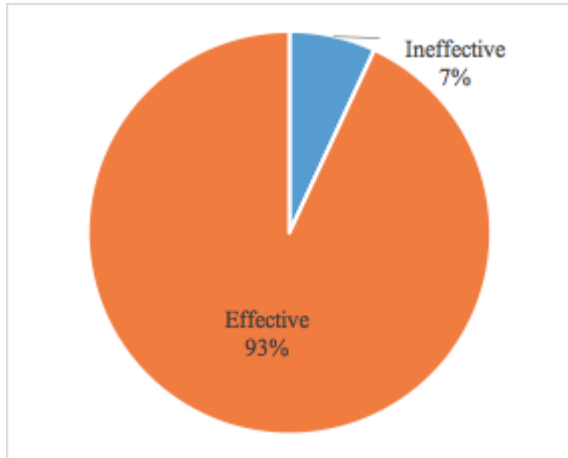


Figure 3 Respondent opinion on effectiveness of student-led initiatives for creating change at a University (N=202)

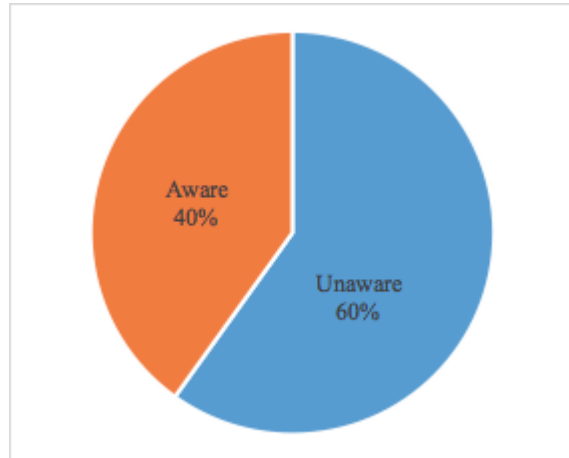


Figure 4 Divest dal awareness among all questionnaire respondents (N=202)

Overall, there was less awareness of Divest Dal than awareness of divestment among respondents. A total of 120 (59.4%) of respondents knew of the term divestment and 108 (53.5%) knew of the term divestment from fossil fuels while only 81 (40.1% of) respondents knew of Divest Dal. Figure 3 illustrates that the overwhelming majority (93%) of respondents agreed that student-led initiatives can be an effective way to create change at a university, with only 14 (6.9%) responding in the contrary. Figures 5-8 compare awareness of fossil fuel divestment as well as awareness of Divest Dal across faculties (science and non-science) and academic years (1, 2, 3, and 4+).

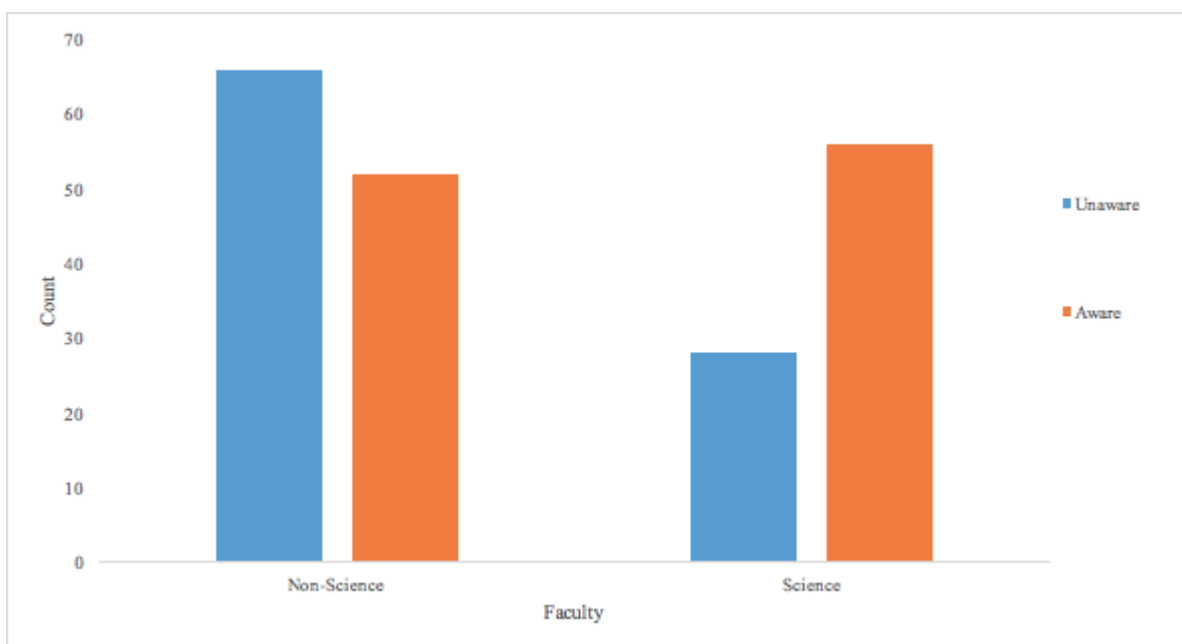


Figure 5 Awareness of fossil fuel divestment between science and non-science faculties ( $p=0.002$ )

A total of 56 (66.7%) of science respondents aware of fossil fuel divestment while 28 (33.3%) were unaware. A total of 52 (44.1%) of non-science respondents were aware while 66 (55.9%) of non-science respondents were unaware. There was a significant association between respondent faculty and their awareness of fossil fuel divestment ( $p=0.002$ ). As a side note, there was also a significant association between respondent faculty and their awareness of the term divestment in general ( $p=0.003$ ).

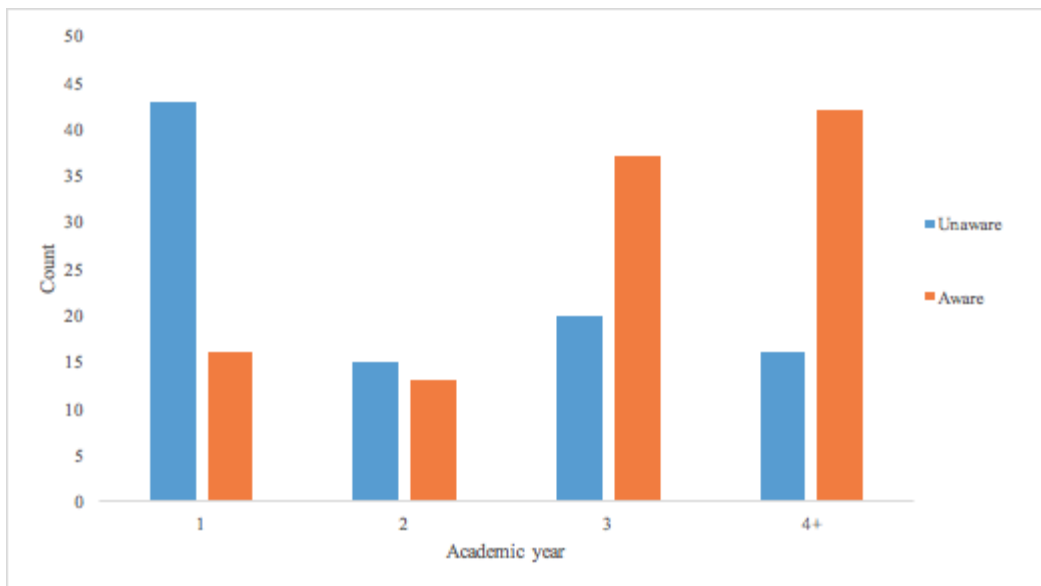


Figure 6 Awareness of fossil fuel divestment according to respondent academic year ( $p=0.000$ )

A total of 16 (27.1%) of first years were aware of fossil fuel divestment, 13 (46.4%) of second years, 37 (64.9%) of third years, and 42 (72.4%) of fourth years or above. There was a significant trend between academic year and awareness of fossil fuel divestment ( $p=0.000$ ). The same level of significance was found for between academic year and awareness of the term divestment in general ( $p=0.000$ ).

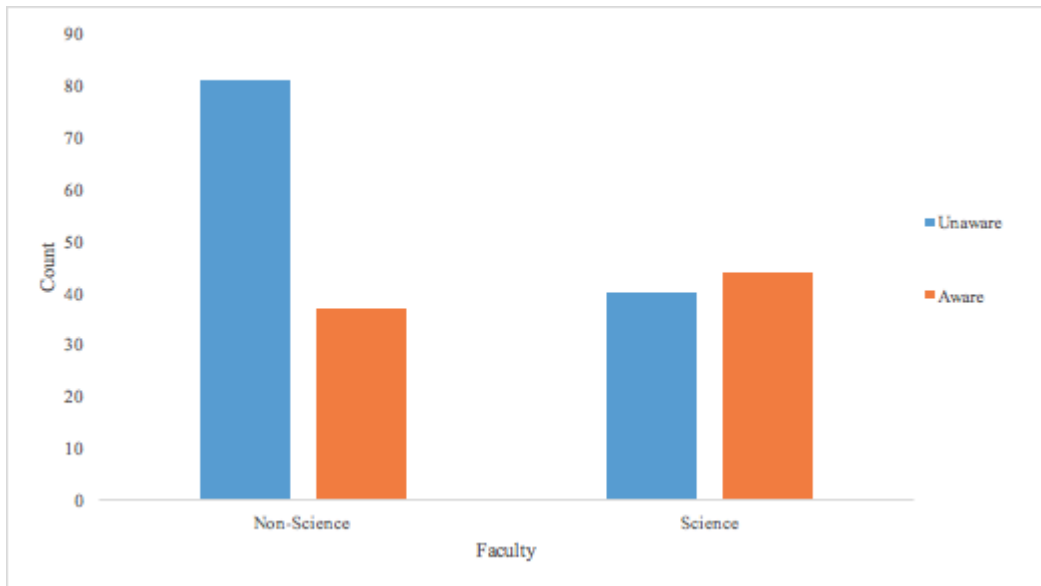


Figure 7 Awareness of Divest Dal between science and non-science respondents ( $p=0.003$ )

A total of 44 (52.4%) of science students were aware of Divest Dal while only 37 (31.4%) of non-science respondents knew of the group. A total of 40 (47.6%) of science students were unaware of Divest Dal while 81 (68.6%) of non-science students were unaware. There was a significant association between respondent faculty and their awareness of Divest Dal ( $p=0.003$ ).

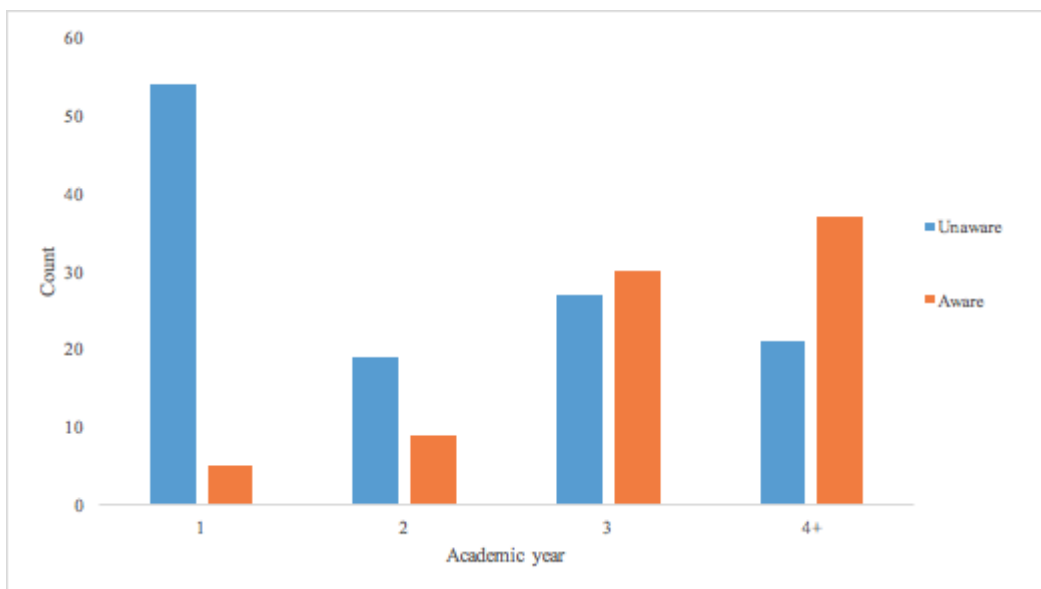


Figure 8 Awareness of Divest Dal according to the academic year of respondents ( $p=0.000$ )

According to academic year, 5 (8.5%) of first years, 9 (32.1%) of second years, 30 (52.6%) of third years, and 37 (63.8%) of fourth years or above were aware of the Divest Dal.

Awareness of Divest Dal was found to be significantly different among academic years ( $p=0.000$ ). We also found a significant association between respondents who were aware of fossil fuel divestment and those who were aware of Divest Dal ( $p=0.000$ ).

*Second analysis section - aware of fossil fuel divestment (N=108)*

Out of the 108 respondents that were aware of fossil fuel divestment (53.5% of the total sample), 56 (51.9%) were in the faculty of science and 52 (48.1%) were from non-science faculties. A total of 16 (14.8%) were in first year, 13 (12.0%) in second, 37 (34.3%) in third, and 42 (38.9%) were in fourth year or above. Figures 9-12 illustrate the distribution of answers from the 108 respondents aware of fossil fuel divestment.

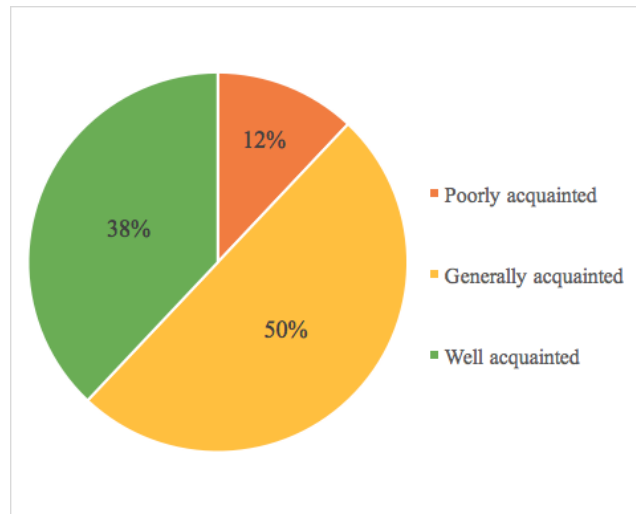


Figure 9 Knowledge level of fossil fuel divestment from those aware of fossil fuel divestment (N=108)

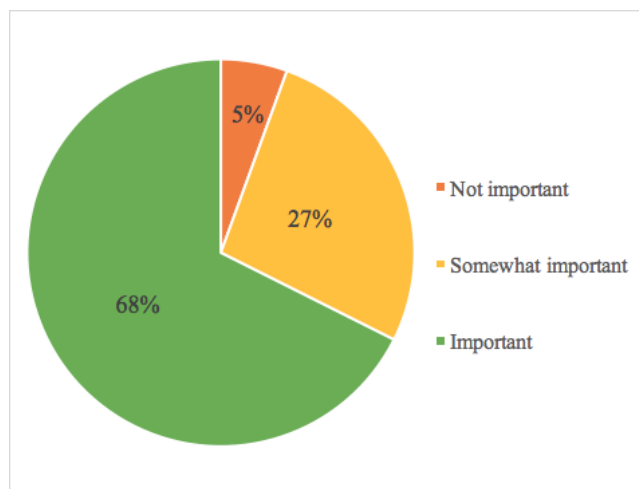


Figure 10 Importance of divestment to those respondents aware of fossil fuel divestment (N=108)



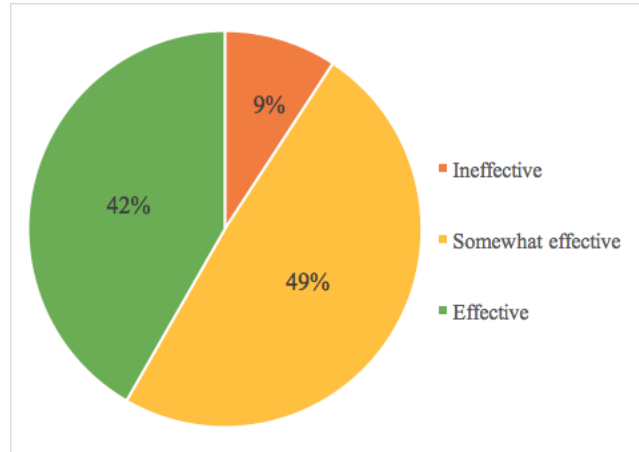


Figure 11 Respondent answers on effectiveness of divestment as a tool for lowering global fossil fuel emissions (N=108)

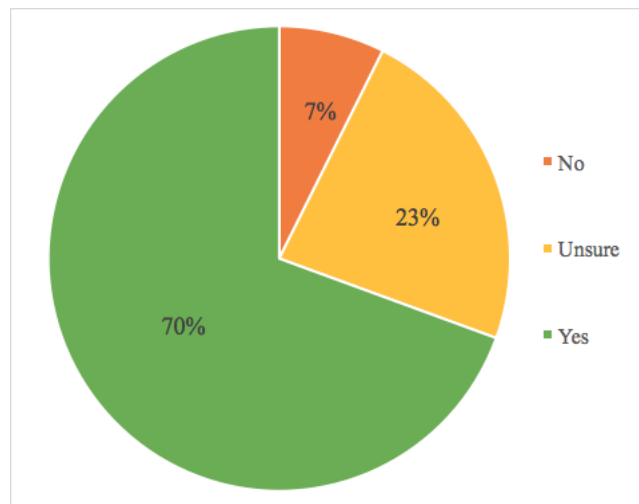


Figure 12 Answers from respondents as to whether Dalhousie should divest from fossil fuels (N=108)

Exactly one half of those aware of fossil fuel divestment responded as generally acquainted with the term fossil fuel divestment, 38 (35.2%) responded as well acquainted, and 13 (12.0%) as poorly acquainted. A total of 73 (67.6%) of these respondents deemed divestment as important to them, 29 (26.9%) as somewhat important, and 6 (5.6%) as not important to them. A total of 45 (41.7%) of the 108 respondents found that divestment was an effective tool for lowering fossil fuel emissions, 53 (49.1%) found it somewhat effective, and 10 (9.3%) found it ineffective. Finally, a total of 75 (69.4%) of these respondents thought that Dalhousie should divest from fossil fuels, 25 (23.1%) were unsure, and 8 (7.4%) did not support divestment at Dalhousie.

Among respondents aware of fossil fuel divestment, there was no significant difference between faculties and level of knowledge of divestment ( $p=0.273$ ), level of importance to them ( $p=0.376$ ), nor effectiveness of divestment as a tool for lowering fossil fuel emissions

( $p=0.630$ ). In addition, there was no significant association between respondent year of study and level of importance ( $p=0.770$ ) nor effectiveness of divestment as a tool for lowering fossil fuel emissions ( $p=0.678$ ). However, there was an association between year of study and level of divestment knowledge. In this case, the chi-square assumption was violated with 33.3% of cells having expected counts less than five. Fisher's exact test was  $p=0.035$  and the association was significant (Figure 13).

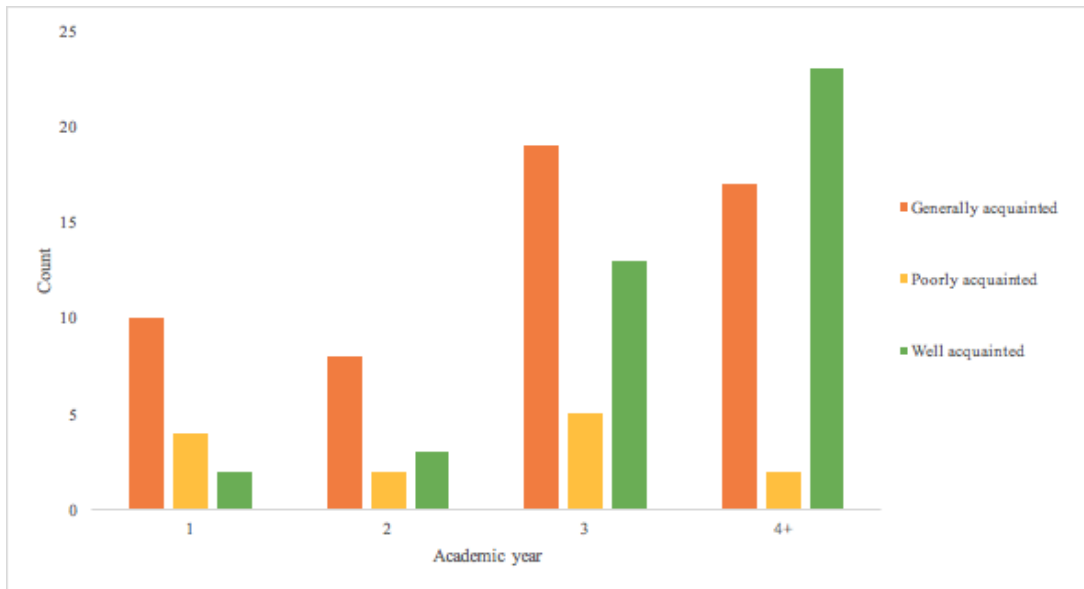


Figure 13 Knowledge level of fossil fuel divestment according to respondent year of study ( $p=0.035$ )

There was no significant association between faculty and support for divestment ( $p=0.591$ ). In other words, respondent opinion on whether or not Dalhousie should divest was independent of faculty. However, there was a significant association between year of study and support for divestment at Dalhousie (Figure 14). Though a total of 50% of cells had expected counts less than 5, the Fisher's exact value mirrored that of Pearson's chi-square value and significance was  $p=0.007$  for both tests. Therefore, support for divestment was dependent on respondent year of study.

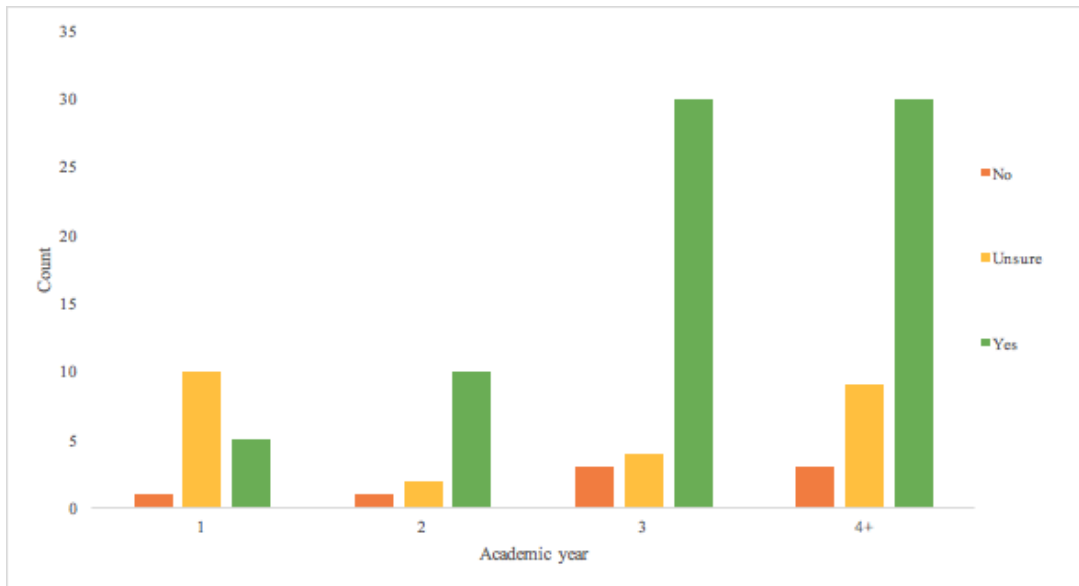


Figure 14 Support for Dalhousie to divest according to respondent year of study ( $p=0.007$ )

*Third analysis section - those aware of Divest Dal (N=81)*

Out the 81 respondents aware of Divest Dal (40.1% of total sample), 44 (54.3%) were in the faculty of science and 37 (45.7%) were in non-science faculties. A total of 5 (6.2%) were in first year, 9 (11.1%) in second, 30 (37.0%) in third, and 37 (45.7%) in fourth year or above. Figures 15 and 16 illustrate the distribution or answers from the 81 respondents.

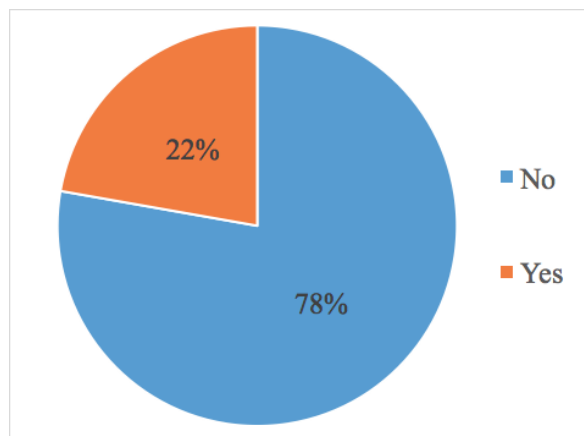


Figure 15 Attendance history (yes or no) of respondents at a Divest Dal campaign event (N=81)

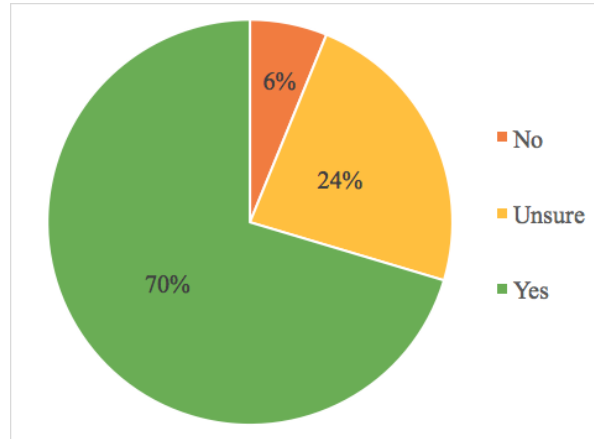


Figure 16 Respondent support for the Divest Dal campaign (N=81)

A total of 63 (77.8%) of respondents aware of Divest Dal had never attended a Divest Dal campaign event while 18 (22.2%) said they had. The majority supported the Divest Dal campaign (57 out of 81 or 70.4%), while 19 (23.5%) were unsure, and 5 (6.2%) were unsupportive.

Among respondents aware of Divest Dal, there was no significant association between faculties and attendance at a campaign event ( $p=0.512$ ) or between faculties and support for Divest Dal ( $p=0.929$ ). In addition, there was no significant difference between academic years and attendance at a campaign event ( $p=0.372$ ) nor between academic years and support for Divest Dal ( $p=0.859$ ). In other words, attendance at campaign events and support for Divest Dal was independent of respondent faculty and year of study.

Finally, there was a significant association between those that supported divestment and those that supported Divest Dal ( $p=0.000$ ). It is important to note that the chi-square assumptions were violated for each test of this, the third analysis section, with all cross tabulations exhibiting over 20% expected counts less than five. Therefore, Fisher's exact test was used to determine the level of significance for all cross tabulations of this section.

## 4.0 DISCUSSION

### 4.1 SUMMARY OF RESEARCH

The aim of our research project was to try and answer the following question: How aware is the current Dalhousie student population about issues of fossil fuel divestment and divestment campaigns on campus? To answer this we distributed questionnaires to a sample of Dalhousie students asking them about divestment and divestment campaigns

on campus. Their responses were collected and analyzed to estimate divestment awareness across the entire student population.

## 4.2 SIGNIFICANT FINDINGS

After evaluating the questionnaires we found several statistically significant relationships. We found that the faculty of science is significantly more aware of divestment and Divest Dal than are non-science faculties. We found an association between the year of study and support for divestment with 3rd and 4th year students showing more support for divestment at Dalhousie. Finally, we found that those participants who were aware of divestment were more likely to be aware of Divest Dal and that participants who supported divestment at Dalhousie were more likely to support Divest Dal. We did not find any significance between faculty and attendance at a campaign event nor between faculty and support for divestment or support for Divest Dal.

Our team believes that the reason 3rd and 4th year students were more aware and more supportive of divestment is most likely due to timing. The decision made by the Dalhousie Board of Governors not to divest was heavily publicized in November 2014 and likely led to a higher awareness among students at the university at the time, causing higher levels of awareness among third and fourth years in the present.

The fact that first and second year students showed much lower levels of support and awareness and that certain faculties were more aware of divestment than others shows that awareness is unevenly distributed among Dalhousie students. Overall, it is fair to say that Divest Dal has not succeeded in bringing widespread awareness and support for divestment to Dalhousie. If Divest Dal wishes to be more successful in their mission of spreading awareness and generating more support for divestment from fossil fuels in the future, our research shows which demographics and faculty should be targeted to maximise results. In particular we found that students in their first two years of study showed a lack of awareness. As such, Divest Dal should focus on raising interest within these groups.

To further our understanding on the distribution of divestment awareness at Dalhousie, a larger sample of students would provide information on specific faculties within the non-science departments as well as departments within the faculty of science. Given a larger sample size of those aware of divestment in particular, a significant association may have been found between faculty and/or academic year of study and attendance at a campaign event and/or support for Divest Dal. However, with only 81 total respondents aware of

divestment, we could not find any significance between faculty and attendance at a campaign event nor between faculty and support for divestment.

### 4.3 COMPARISON TO CASE STUDIES

Two other university divestment campaigns were compared to the divestment campaign at Dalhousie: Université Laval and McGill University.

#### **Université Laval:**

The divestment group Sans Fossiles Laval was successful in their campaign to pass divestment as Université Laval. In February 2017, Laval became the first university in Canada to commit to divesting from the fossil fuel industry (Stewart, 2017). This divestment campaign was much more successful than the Divest Dal campaign, with Laval divesting shortly after Sans Fossiles Laval started their campaign. The Divest Dal campaign has been ongoing for years and the Dalhousie Board of Governors continues to reject their proposal for divestment. Reasons for the difference in success between the two campaigns are multiple and varied. However, one possible reason is the methodological differences in campaign strategies between the two groups. Divest Dal focused their campaign around a sort of moral imperative for the university to divest. They stressed the fact that not divesting is irresponsible, contributes to the destruction of the environment, and the fact that future generations are put at risk by our actions or inactions today. All in all, Divest Dal is attempting to appeal towards the moral responsibility of Dalhousie by making these moral claims towards divestment.

Sans Fossiles Laval took a slightly more balanced approach. Their argument for divestment did include similar moral claims but they were not the central tenet of the divestment argument. Their argument included primarily numbers, figures, and ideas backed by scientific evidence. The financial feasibility of divestment was also highlighted, including the risks of investing in fossil fuels in today's market. Sans Fossiles Laval knew that divestment needed to make financial sense in order for their campaign to be a success. Therefore, they made sure that the Board of Governors knew it was a sound decision. The campaign followed a theme of practicality and rationality towards the issue. Sans Fossiles Laval framed divestment as a business decision and for the most part, kept moral/emotional arguments out of their campaign's spotlight. This may have facilitated collaboration with the Board of Governors.

## McGill University:

The student advocacy group, Divest McGill, has been advocating for McGill University to divest from the fossil fuel industry for the past few years (Divest McGill, 2015). Divest McGill's strategy has been somewhat of a combination of strategies employed by Divest Dal and Sans Fossiles Laval. Divest McGill was unable to convince McGill University to divest in 2016. In its proposal for divestment, Divest McGill mainly talked about all the environmental and sociocultural reasons why the university should divest, and the harm being inflicted on the world if they do not divest. What is understated in the proposal is the financial benefits McGill would receive if they divested. There are only a few paragraphs out of the entire 11 page proposal outlining how divestment makes financial sense (Executive summary of carbon at all costs:..., 2015). McGill University has a responsibility towards its donors and employees to invest its endowment fund responsibly. Therefore, to make such a major financial decision as divestment from fossil fuels, the University must be sure that the decision would not hurt the investment portfolio of McGill. Sans Fossiles Laval did an excellent job of portraying the financial practicality of divesting, which is likely one of the reasons why their divestment campaign has been successful where the campaigns of Dalhousie and McGill have failed. For McGill and Dalhousie to have successful divestment campaigns in the future, campaigners must consider their target audience and make sure that divestment is framed as primarily a financial imperative in addition to the obvious environmental, social and moral imperatives. One area where Divest McGill did better in than Divest Dal involved student engagement. They hosted a fossil free week that actively engaged students across all faculties in the divestment campaign (Open Letter to Suzanne Fortier, ..., 2015). Major events like this were largely absent in the Divest Dal campaign outside of the period when the Dalhousie Board of Governors were making their decision on divestment in early 2014.

Moving forward, Divest Dal can improve their divestment campaign by looking to other institutions with successful divestment campaigns. Based on the strategy employed by Sans Fossiles Laval at Université Laval, Divest Dal can perhaps reframe their argument by focusing on the financial side of divestment. In addition, they can also look to Divest McGill for ideas on how to spur student engagement and increase student support for the divestment campaign at Dalhousie.

## 5.0 CONCLUSION

The study's results indicate an unequal distribution of awareness about the Divest Dal campaign amongst science and non-science faculties as well as amongst year of enrollment. With these results, our team concludes that the awareness among the student

body population should increase if divestment support is to follow. We predict that an increase in awareness among the student population would lead to increased support for Divest Dal. This would in turn strengthen Divest Dal's campaign and further influence the Board of Governors, bringing Dalhousie closer to divesting fully from fossil fuels.

## 5.1 RECOMMENDATIONS

This team's research yielded promising results. It is the hope of this team that the findings are used to inform student-led divestment campaigns at other universities in the future. This study could be replicated to measure the state of awareness of divestment at any university across the nation. Using a non-probabilistic, funnel approach with deductive coding, this study had a research design highly suited to its initiative. In our study, we concluded that there was a significant trend of awareness of fossil fuel divestment among upper year students. This could be due to the press that surrounded the divestment decision in early 2014, three years ago. Awareness of Divest Dal followed a similar trend. Moving forward, this group recommends that Divest Dal and other University campaigns aspire to raise awareness among students regardless of academic year, faculty, time of year, or where divestment resides in the news cycle. With this change, divestment initiatives would strengthen across the nation, putting greater pressure on our institutional leaders to ultimately divest from fossil fuels.



(Northwestdivest.org, n.d.)



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## Appendix 1

### Questionnaire

**Consent agreement: Do you consent to use your academic year, major, and answers in a project conducted by students in Environmental Problem Solving II (ENVS 3502)? In addition, the information may be used to inform future research. You may withdraw your participation and answers at any point during the questionnaire.**

**Yes / No (circle one)**

Academic year: \_\_\_\_\_

Declared major: \_\_\_\_\_

#### Questions:

1. Have you heard of the term “divestment” before this questionnaire? Yes/No
2. Do you know what is meant by the term “divestment from fossil fuels”? Yes/No

If you answered **No** to question 2, please skip to question 7. If you answered **Yes** to question 2, please continue the questionnaire.

3. How well acquainted are you with the term “divestment from fossil fuels”?
  - b. Poorly acquainted
  - c. Generally acquainted
  - d. Well acquainted
4. Based on your current knowledge of divestment, how important is divestment from fossil fuels to you?
  - a. Not important
  - b. Somewhat important
  - c. Important
  - d. Very Important
5. How effective do you think divestment is as a tool for lowering fossil fuel emissions?
  - a. Ineffective
  - b. Somewhat effective
  - c. Effective
6. Do you think Dalhousie should divest from fossil fuels? Yes/No/Unsure
7. Do you think that student led initiatives can be an effective way to create change in a university? Yes/No
8. Have you heard of Divest Dalhousie? Yes/No

If you answered **No** to question 8, please end the survey now. If you answered **Yes** to question 8, please continue with the questionnaire.

9. Have you ever attended a Divest Dalhousie campaign event, including protests? Yes/No

10. In general, do you support Divest Dal? Yes/No/Unsure

