

DALHOUSIE UNIVERSITY INVESTMENT COMMITTEE

Fossil Fuel Investment Review

February 12, 2019

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Introduction:

Climate change is not only a risk to the planet's sea levels, weather patterns, and eco-systems, it also presents significant sustainability and financial risks to many business enterprises and societies. The Investment Committee ("IC") long has shared concern over the Fund's climate change risk ("CCR") exposure, in addition to a number of other risks, which led to the IC adopting integration of environmental, social and governance assessment ("ESG") factors in 2013. Although the IC has CCR concerns that many constituencies share, it has chosen an ESG approach to manage and mitigate the exposures, rather than avoiding any industrial sector where there may be a potential risk. The IC appreciates the fact that although there is near unanimous agreement on the dangers of CCR, there is not full agreement on approaches to address and mitigate the risks. Whatever approaches are adopted, they are continually reassessed, leading to further evolution and improvement.

Dalhousie's ESG integration has evolved significantly over the subsequent years. When Dalhousie adopted ESG integration, a number of its investment managers had some form of informal ESG process. Dalhousie actively pursued formal integration of ESG with its investment managers, where today 25 strategies representing 78% of the Fund's assets have integrated ESG factors in the investment assessment process. Passive and quantitative strategies that do not deploy ESG assessment but follow ESG in the engagement phase account for another 20% in the engagement process, Feedback from investment manager's acknowledged Dalhousie as a driving force behind their formal adoption of ESG. One investment manager wrote Dalhousie before publicly announcing their adoption of ESG "I am sharing this with you first as our discussions with you were instrumental in moving this forward".

Dalhousie for the last number of years has been posting a listing of its directly and indirectly held publicly traded securities at each fiscal year end. Also, ESG ratings for the Fund as a whole, by asset class, and by strategy are now included in the Fund's risk dashboard. The IC has held the premise that in order for any enterprise to exercise sound governance, it must be able to identify and manage both the societal and environmental opportunities and risks that are material to that business. CCR is one risk that can be material to a number of enterprises.

The IC appreciates the fact that although there is complete agreement on the dangers of CCR, there is not full agreement on methods to address and mitigate the risks. Despite possible differences in opinion on methods, the IC continually reassesses its approach, and it welcomes the opportunities to share and exchange other thoughts and viewpoints. The IC found the discussions with Senate representatives and student Board member representative to be thoughtful and productive. This has led the IC to identify further improvements to its overall approach to address not just CCR, but other ESG factors as well.

Fossil Fuel Investment Review Request:

The Dalhousie University Investment Committee ("IC"), then a committee of the Board of Governors, was requested by the Board early in 2014 to review a fossil fuel divestment proposal put forward by a group named Divest Dal. After a number of months of review, the IC issued a report in November 2014 (Appendix 1) with its conclusions and recommendations from its review. The recommendations from this report were:

i. that the Board reject the proposal that Dalhousie divest holdings in the 200 companies identified by Divest Dal;

- ii. a commitment to greater openness and transparency with regard to Dalhousie's investments by annually listing all publicly-traded securities that are either directly or indirectly held;
- iii. provide an investment option that allows donors, should they elect, to direct their endowments to environmentally sustainable investments;
- iv. to continue to develop the integration of environment, social and governance ("ESG") factors in the investment process that the IC had adopted in its investment policies in the previous year.

These recommendations were made with the recognition that climate change poses not only a real risk in environmental and social terms, but in financial outcomes as well. It was the IC's opinion that a number of fossil fuel companies still provide a benefit to society, and that ESG factor integration would be more effective in assessing and addressing climate change risk to the portfolio than what an indiscriminate full divestment action would achieve. The Board agreed with the IC's assessment and approved the recommendations provided in the report.

In February 2018, members of the Board requested a further discussion on fossil fuel investments by the University. After discussion, the Board of Governors agreed to and passed the following motion that requested the IC to undertake a follow-up review:

BE IT RESOLVED that the Investment Committee assess a third-party search for fossil free investment funds for Dalhousie to conduct its dealings with, and report back through the Finance, Audit, Investment and Risk Committee to the Board of Governors on its findings by March 2019.

By this request, the IC was given an assignment within a framework that defined:

- i. this was not another divestment review of specific industries, but rather an assessment of investment risk impact posed by climate change;
- ii. an assessment of what had changed since the November 2014 report;
- iii. an assessment of other potential investment approaches.

With the above framework, the IC developed a task schedule that entailed identification of and discussion with a number of stakeholder groups, review of the Canadian university fossil fuel investment landscape, and an identification and assessment of some low carbon intensity investment strategies for institutional investors. The IC's review activities over this year are summarized in Appendix 2.

IC Review Conclusions:

The IC has come to the following conclusions following its review and discussions:

1. Dalhousie's ESG integration includes climate change risk assessment along with other risks to improve performance.

Dalhousie formally adopted ESG integration in 2013 to enhance risk-adjusted returns by identifying and assessing additional risks and/or opportunities that are not captured by the traditional financial metrics. A portfolio of companies with better sustainable business models will be achieved with the consideration and evaluation of additional ESG factors (Appendix 3). Climate change risk is considered under the "E"

component, and this risk is assessed for all industries where it is material – it is not restricted to the energy sector.

Dalhousie has a diversified portfolio, deploying 23 external investment firms to provide 28 different investment strategies. Formal ESG factor assessment by Dalhousie's investment managers has grown significantly since the University adopted ESG, and as previously mentioned now covers over 78% of the portfolio. Over this period of time, the fund's investments in companies listed in the Carbon Underground 200 has declined from 3.3% of the fund to 1.3%. This was not resulting from divestment decisions, but rather from active management that has included the assessment of risk/reward opportunities. As illustrated by Appendix 4, ESG integration has also been a favored approach by a number of other Canadian universities.

2. Better communication on Dalhousie's ESG integration and related activities is required.

It became very clear from IC discussions with the Senate members and the student member, as well from survey responses from Board members that Dalhousie's adopted ESG integration was not understood very well, or in a number of cases not known at all. Although Dalhousie was an early adopter of ESG among Canadian universities and other institutional investors, its public proclamation was lacking. To this end, the IC suggests that the new Treasury & Investment Office website include communication on ESG:

- What ESG is (and isn't)
- How Dalhousie administers and manages ESG integration in the investment process.

A draft of this suggested communication is provided in Appendix 5.

3. Dalhousie become a signatory to the Principles for Responsible Investing ("PRI")

The PRI started as a United Nations-supported network of investors (both investment firms and fund owners) that encouraged the application of six primary principles for responsible investment. These principles embrace the integration of ESG factors in the investment process, emphasizing promotion and engagement. It does not advocate divestment.

Dalhousie has embraced these six principles, but has not signed to date as it has felt that it can't directly meet all of the principles (especially engagement) with its limited resources, and is very reliant on the external investment firms it hires. A summary of the six principles and reasons behind Dalhousie's prior reluctance to sign are listed in Appendix 6.

However, staff has had some discussions with PRI over the past year and has been advised that Dalhousie is much further ahead on the PRI than others who have signed on. Dalhousie has been a member of the Responsible Investment Association for a number of years, and has used this relationship to participate with other investors in various forms of engagement such as opining on the design and materiality of various key performance indicators that stock exchanges should require listing issuers to provide; an ask for greater climate change risk reporting from companies; labor standards; and food safety concerns. In retrospect, this is an approach to engage.

In discussions with segments in the Dalhousie community, there appears to be some question to Dalhousie's commitment to ESG and the PRI. Signing on to the PRI should provide a strong message on Dalhousie's commitment.

4. Provide specific Climate Change Risk ("CCR") communication.

Staff and the IC have had a number of discussions with a Senate ad hoc committee ("SAHC") that was reviewing fossil fuel investments from an academic impact perspective. The SAHC eventually determined that a broad, indiscriminate industry-wide divestment approach would not be particularly effective, or necessarily desirable. The SAHC concluded that while there were companies that ignored climate change risks and the impact their operations have on the environment, there are others who benefit society by not only meeting society's energy needs, but also provide critical R&D for energy alternatives.

That said, the SAHC was of the opinion that Dalhousie's investment policies should include specific CCR language. The IC believes that CCR is adequately addressed under the ESG language in the policies. The IC also believes that there is risk in placing specific reference to just one singular aspect under ESG as there is a danger that investment managers may misinterpret this policy emphasis, resulting in lower coverage of other ESG factors that may be relevant and material to other enterprises in the portfolio. The IC is however comfortable in adding additional CCR measures outside of the policies. The IC suggests that the staff's formal reviews of investment managers include specific questions on CCR in the respective mandates. In addition, the investment website could include the following statement:

Dalhousie University believes that anthropogenic climate change poses substantial risk ("CCR") to human and natural systems, and that local and international efforts to reduce dependence on fossil fuels are critical to addressing this risk. Dalhousie University believes how companies respond to this risk, and to efforts, is an important consideration when assessing long-term value. Companies which deny the reality of climate change and fail to take actions to address this risk, or oppose actions to mitigate climate change, may pose an unwarranted risk to the Endowment Funds. Staff's formal reviews of investment managers will include specific questions on CCR in the respective investment strategies. Consistent with the Principles of Responsible Investing, related measures will be reviewed and reported on an ongoing basis.

Likewise, subject to assessment of business strategy, management and financial metrics, opportunities in alternative energy and other technologies to mitigate the impacts of CCR have the potential to be good investments.

5. Continue to add private investments in renewable and clean-tech that have promise to meet return threshold targets.

Dalhousie has private investments that include renewable energy production such as wind and solar, and alternative clean technologies. Other approaches such as utilization of waste energy capture have been evaluated as to soundness of business case, financial structure, and return targets. Projects that

have stable contracted revenues, provide inflationary protection and net returns of 9% or more have been on the search list. Projects with development risks will be limited and will demand returns in the mid to high teens.

Investment Committee Review Activities:

1. Review of fossil fuel investment discussions at other Canadian universities

A question was on what other Canadian universities have addressed or are in the process in addressing fossil fuel investments, and how they are addressing the matter. A review identified fifteen other Canadian universities that have had a review of fossil fuel investments as shown in Appendix 4, and all were subsequent to Dalhousie's own review that occurred in 2014. Just one university has made a decision to divest, and that university is now working on how to implement. It is notable that seven have responded by incorporating ESG factors into their investment process. Dalhousie was the first on the list to incorporate ESG factors, doing so in 2013. In addition, Dalhousie incorporated ESG factors before the fossil fuel divestment question was raised. Four of these institutions also followed Dalhousie in setting up separate funds for low carbon/clean tech/fossil fuel free investments, as Dalhousie did in 2015.

It is also important to note that all use external investment firms, as does Dalhousie, to manage specific investment mandates by selecting securities to construct portfolios. Seven of the universities have been comfortable enough with these arrangements and their reliance on external investment managers to sign the PRI.

2. Meetings with Senate ad hoc committee and student board member

The IC invited members of the Senate ad hoc committee and a student Board member to a number of IC meetings to discuss fossil fuel investments. Both representative groups also had a number of separate meetings with staff and IC members.

Much of the discussions centered around a SAHC report on fossil fuel investments (Appendix 7). The SAHC had been established to address student concerns, while recognizing that investment responsibility lies with the Board of Governors. The SAHC had been examining how investments impacted research and academic programs at the University. After a number of meetings with staff, the ad-hoc committee concluded that divestment of entire industries would not be productive in addressing climate change. The report suggested that divestment was a complex issue, and that divestment of an entire industry sector was not necessarily desirable as society was still dependent on fossil fuels and that not all companies operate the same nor exhibit identical behaviors. Instead, this Ad Hoc Committee implied that a more nuanced approach might be preferable. The SAHC report suggested that climate change deniers be avoided while positive filters that rewarded/approved those firms that provided

transparency, R&D efforts in alternatives, and active in addressing climate change. As such, the ad-hoc committee felt that climate change language in the University's investment policy could be more explicit by adding specific language on climate change and fossil fuels. The Senate ad-hoc committee was appreciative of the fund's structure and complexities, and appeared to recognize the challenge of implementing an industry-wide divestment. The ad-hoc committee, while supportive of ESG integration, suggested that the University could be more vocal on its ESG efforts and the shared view regarding climate change risks.

It was suggested that Dalhousie have a look at how some other institutional and university investors were doing in the area of fossil fuel investments. The Student Board member volunteered to assemble some information and subsequently submitted a report that listed approaches taken by various institutional investors (Appendix 8). Of the eight "decarbonized approaches", four proposed full divestment, whereas the remainder had more nuanced approaches. For the remaining four that described nuanced approaches such as thermal coal, it was noted that Dalhousie's funds would be in compliance with the defined targets.

There was discussion on whether the University's investment objective was to optimize risk-adjusted returns or to provide a social activist role. It was agreed that achieving strong investment returns is the prime objective for Dalhousie. Dalhousie's holdings in Carbon Underground 200 companies (CU200) was discussed. CU200 companies represent the 200 oil and coal companies that have the largest carbon reserves. Dalhousie posts on its website at each fiscal year-end its holdings in both directly-held and indirectly-held publicly traded securities. Dalhousie holdings in CU200 securities represents just 1.3% of its total investment fund.

The IC felt that these meetings were productive as the discussions provided open sharing of ideas and beliefs. It was productive in that there appears to be common ground in promoting and advancing the ESG integration for what has been described as "enhanced ESG". This means more vocal and public communication of Dalhousie's leadership in the integration of ESG.

3. Survey of Board members

As part of the Investment Committee's ("IC") follow-up review on fossil fuel investments, a questionnaire was sent to all members of the Board of Governors to obtain their input on the relationship of the University's mission, the IC's investment mandate, climate change, and fossil fuel investments. Specifically, the following questions were posed:

- i. How should Dalhousie consider fossil fuel divestment in the context of its mission? Does the mission require amendment?
- ii. Is the IC's mandate appropriate? If not, how have these responsibilities changed?
- iii. In light of the current level of investment in fossil fuel companies, should Dalhousie pursue divestment, and if so, to what degree?

iv. Are fossil fuel companies the sole source behind climate change risk, or are other industries also a source of harmful carbon emissions?

Thirteen Board members submitted responses. Some major points drawn from the responses:

- i. Dalhousie's mission is appropriate, and promotes open discussion and debate;
- ii. Dalhousie sustainability initiatives are much more than investment holdings campus operations have a larger impact;
- iii. Broad-based and indiscriminate divestment of entire industries is not seen as consistent with the University's mission, nor is it an effective tool;
- iv. Diversification and sustainability assessments as part of the investment process will address investment risk;
- v. Dalhousie's efforts in incorporating ESG is not widely known nor understood well although an early adopter and leader, Dalhousie has not promoted as subsequent adopters have done.

Most felt that Dal's mission was fine as is, and that its mission is not an appropriate place to add nor define divestment targets. It was also mentioned that a key aspect of Dal's mission is open discussion and debate, and that firm divestment positions ends discussion. Sound and sustainable investments can be made with the current mandate. In addition, the majority believed that the IC's current mandate is appropriate, although there were questions on whether ESG or a social responsibility statement were formally incorporated in the IC's investment policies. There was also some unawareness that a carbon footprint of Dalhousie's overall fund and individual mandates are included in its risk dashboard. These last points also highlight the need for better communication on Dalhousie's ESG integration.

There was an assertion that equated divestment to responsible investment. Divestment or exclusions typically fall under ethical investments, while the responsible investment umbrella comprises other approaches including socially responsible investments, impact investing, and ESG integration. This again highlights the need for better communication.

There were comments on the small percentage of fossil fuel investments (CU200) in the Dalhousie Fund, leading to the question of why not eliminate the holdings, if they were such a small part. Approximately 70% of Dalhousie's investments in publicly listed securities are made via co-mingled funds, where Dalhousie does not directly own the securities, but rather holds units in a fund with other investors. Dalhousie engages investment managers that integrate ESG factors in the investment process, but do not deploy sector exclusions. The use of co-mingled funds allows Dalhousie to gain cost-effective access to many markets that would be cost-prohibitive to invest by itself.

There were comments that investments are one small part of the University's sustainability actions and initiatives, and that other direct actions on campus to address its own emissions and sustainability are a bigger part of the entire story. As illustrated in Appendix 9, Dalhousie has invested in a number of sustainability initiatives to not only reduce its environmental and carbon footprints, but to achieve increased efficiencies and cost savings as well. Investments of \$93.6 million have been in 55 projects made over the last 10 years that have reduced the University's GHG emissions by 20%, reduced water consumption by 47%, and have diverted over 100 tonnes of garbage from the landfill. These efforts have also provided \$3.3 million in annual savings.

4. Initial identification and assessment of institutional low carbon investment strategies

At the direction of the IC, staff contacted an external consultant to provide a listing of institutional decarbonized or fossil fuel free global equity funds that had a minimum track record of five years. Typically Dalhousie requires a ten-year track record for assessment to provide a better sense of the product's performance, and a greater chance that a market downturn is included in the history of the strategy. However, as low carbon investment strategies are a relatively new offering, a shorter track record requirement was set in this situation so as not to be so restrictive that only a few strategies might be identified.

The following product strategies available to Canadian institutional investors were provided:

As of June 30 2018			Annualized Returns				Annualized Monthly Standard Deviation			Max Drawdown			wn
Product Name	RM	1 Year	3 Years	5 Years	7 Years	10 Years	5 Years	7 Years	10 Years		5 Years	7 Years	10 Years
AB Sustainable Global Thematic	Gross	15.03					_						-
BlackRock Fundamental Global Dividend	Gross	0.49	8.70	12.32	12.80	8.74	9.46	8.62	10.33		7.43	7.43	29.2
Essex Global Environmental Opportunities Strategy (GEOS)	Gross	4.77	3.96	10.02	10.05		12.01	13.04			14.01	14.01	-
Genus Capital Fossil Free CanGlobe Equity Fund	Gross	12.29	10.30	15.19	-	-	8.54		-		8.26		-
Genus Capital Fossil Free Dividend Equity Fund	Gross	9.22	8.87	12.03	-	-	6.86	-	-		4.52		-
Morgan Stanley Global Franchise	Gross	14.31	15.15	17.19	16.95	14.90	11.04	10.13	10.41		7.85	7.85	15.8
Morgan Stanley Global Opportunity	Gross	35.69	24.09	31.10	23.48	19.68	13.55	13.77	15.66		11.86	11.86	35.4
OFI Global Asset Management Global Focus	Gross	16.27	11.87	15.20	15.37	14.94	12.48	12.97	17.96		13.99	13.99	45.0
Pax Global Environmental Markets Strategy	Gross	6.79	10.64	15.40	14.42	10.11	10.19	10.92	13.47		8.55	14.46	30.3
Schroder Global Climate Change	Gross	15.25	11.92	15.51	13.24	7.61	11.25	11.56	13.90		10.82	14.01	35.1
Wellington Climate Strategy	Gross	3.10	8.22	14.05	12.97	5.77	10.70	10.94	14.52		8.73	14.14	43.3
Acadian Global Sustainability	Gross	14.49	10.17	14.99			9.36				10.23		-
AllianzGl Global Equity Sustainability	Gross	12.71	11.66	15.53	14.13	8.81	9.95	10.30	12.06		9.36	11.81	33.7
Boston Common Global Equity	Gross	12.19	10.36	14.92	13.70	8.90	9.67	9.85	11.38	_	9.14	10.72	30.3
Hermes Global Equity ESG Strategy	Gross	13.64	10.39	16.37			10.10				10.32		-
Northern Trust Global Sustainability Fund Strategy	Net	11.59	10.03	14.35	13.55	8.90	9.12	9.19	11.41		8.63	9.73	32.8
Schroder Global Sustainable Growth	Gross	15.03	12.20	15.79	15.29		10.81	11.12		_	10.24	11.10	-
Stewart Investors Worldwide Sustainability Strategy	Net	9.32	11.99	14.16			10.51				7.02		-
MSCI ACWI-GD	Index	12.75	10.69	14.96	13.45	9.17	9.03	9.26	11.43		8.92	10.73	32.9
MSCI World-GD	Index	13.14	11.01	15.54	14.41	9.68	 9.26	9.28	11.35		8.92	9.86	32.2
DALHOUSIE Global Equities Ex-Canada Performance Data Frequency: Monthly		19.71	12.7	16.21	14.77		7.79	9.18			8.98	9.86	

Results displayed in USD													
As of June 30 2018		Annualized Returns						Annualiz	ed Monthly S Deviation	tandard	Ma	x Drawdo	wn
Product Name	RM	1 Year	3 Years	5 Years	7 Years	10 Years		5 Years	7 Years	10 Years	5 Years	7 Years	10 Years
Trillium Portfolio 21 Global Equity Fund	Net	12.41	9.83	9.17	7.68	5.97		9.81	11.22	15.29	9.25	16.51	40.03
Stewart Investors Worldwide Leaders Sustainability Strategy	Net	8.80	10.41	10.31	9.71	6.29		9.63	12.68	16.48	9.13	15.24	44.22
MSCI ACWI-GD	Index	11.31	8.78	10.00	8.54	6.37		10.18	12.05	16.41	13.07	17.33	46.39
MSCI World-GD	Index	11.70	9.10	10.55	9.46	6.86		10.04	11.71	15.98	11.64	16.52	45.50

Performance Data Frequency: Monthly

There were only a few funds that demonstrated significant return improvement over Dalhousie's current structure, but did not exhibit Dalhousie's lower volatility and maximum drawdowns.

More details on these identified product strategies are provided in Appendix 10.

5. Advancement Office – Donor investment expectations and wishes

As part of this review, the IC solicited input from the Advancement Office to capture the donors' perspectives on fossil fuel investments. To gain this, the IC posed a number of questions:

a) What are the donors' long-term investment return expectations of the donors?

Philanthropic investors (donors) are seeking maximum return on their investments. The financial earnings of their endowed funds is a proxy for what they are truly seeking, and that is impact. Often the Advancement Office explains that, while donors feel they may be able to earn a greater return than Dalhousie's 4.25% annual spending allocation, Dalhousie makes it a priority to protect capital and reinvest surplus earnings so that spending allocations can at least keep pace with inflation. Donors have sought to maximize return on philanthropic investments.

b) Do donors have questions on how their gifts are invested?

The more investment savvy the donor is, and the greater their gift amount, the more information they request, generally. As above, they tend to be very interested in how their funds are likely to perform financially.

c) Do they have social impact objectives for the investments in addition to spending objectives?

A donor has not yet brought this up or questioned anything other than how conservative or aggressive our investment strategy is. Their social objectives are met by what they want the earnings of their endowments to be spent on. In other words, the greater the return, the greater the funding available for the societal impacts they care about.

d) To date there have been no donors to date selecting the Low Carbon investment option. How is the investment option addressed with prospective donors?

The low Carbon investment option was publicized when the fund was launched and it appears on the Advancement website. The investment guidelines often appear as an appendix to gift agreements for endowed funds. Donors have been interested in diversified portfolio structures that provide good risk-adjusted returns, which has led to selection of the main investment pool.

In Closing

The Investment Committee was very appreciative of input provided by the Board, the Senate ad hoc committee, the student Board member, and the Advancement office. The Investment Committee also wishes to recognize the substantial effort and thought of the student Board member and the Senate ad hoc committee. The active participation and discussion with the Senate ad hoc committee and student Board member has been productive in identifying common understanding and objectives. A clear message was received from a number of parties to improve communication and publicity on not only how Dalhousie has integrated ESG, but also its efforts to promote ESG. This process has reinforced the University's decision to formally adopt ESG integration in 2013, and the need to manage its further evolution.

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Dalhousie University Board Investment Committee Report to the Board of Governors November 25, 2014

The Proposal to Divest Dalhousie's holdings in 'carbon-holding' companies

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Executive Summary: The Investment Committee Report on Fossil Fuel Divestment

Over the past several months, Dalhousie University's Investment Committee (IC) has considered the merits of fossil fuel divestment, that is, of eliminating or limiting its holdings in publicly-traded companies that are large carbon producers. The IC has also reviewed a proposal from Divest Dal that the university divest any holdings in 200 publicly-traded energy and coal companies which are judged to hold substantial carbon assets and are therefore said to be major contributors to global climate change.

IC members thoroughly investigated and researched the issue of fossil fuel divestment in preparing this final report to Dalhousie's University's Board of Governors. In addition, the IC met three times with the Divest Dal group, which has produced thoughtful reports in support of divestment. Like Divest Dal, Dalhousie does recognize the need for the nations of the world to address the issues surrounding climate change, and to reduce the emissions which contribute to it.

As this report shows, the IC also recognizes that Dalhousie has a continuing role to play in addressing climate change issues, as it does now through its sustainability initiatives. The committee has therefore decided to step up its efforts to work with fund managers who respect environmental, social and governance (ESG) investment principles, and to investigate options for donors who want assurances that their endowments will be invested outside the fossil fuel sector.

However, the IC strongly recommends that Dalhousie not divest any of its current holdings in the 200 large "carbon companies" identified by Divest Dal. The Investment Committee is of the opinion that fossil fuel divestment will not be an effective method to impact climate change. Divestment is not expected to influence the operations of major fossil fuel companies nor change consumer behavior in relation to the use of fossil fuels. The Investment Committee believes that engagement with the companies on its behalf and by other like-minded investors will have greater influence and chance for success.

Our full reasons for reaching this determination are fully outlined in this report. Here are three key factors, from the IC's perspective:

 Dalhousie's mission focuses on teaching and learning excellence, research and innovation, and enabling our students, staff and faculty to connect with and serve local, national and global communities. The University fulfils that mission by acting independently, by welcoming diverse views, and by being open to new ideas and initiatives. In that spirit we considered the proposal of Divest Dal, and in the same spirit Dalhousie listens to opposing views and is open to pursuing other options.

One such option, which the IC endorses, is to continue working with a company like Total S.A., one of the five largest integrated petroleum companies in the world. Total, which Dalhousie holds indirectly in its endowment, is a public advocate of action to curb climate change. Total is developing carbon capture technologies and alternative energy sources. In Nova Scotia, Total and the Gates Foundation provide major funding on research to develop reliable storage for renewable energy. This collaborative research project involves a partnership which brings together LightSail Energy, Watts Wind Energy, Innovacorp, and Dalhousie University.

The IC believes this kind of collaborative work is vital, and consistent both with Divest Dal's primary goal of reducing carbon emissions and with Dalhousie's mission focus on research and innovation. It is not consistent, however, with a divestment strategy which the IC believes might exclude the university from this kind of progressive research project.

- 2. IC members fully endorse the view that the fiduciary duty of the Board is to generate optimal, risk-adjusted returns from a diverse portfolio of investments. Divestment would restrict the diversity of fund holdings. In fact, 10 percent of global and 25 percent of Canadian securities would be excluded. As a result of divestment, the University would lose significant benefits including lower transaction fees, diversity of investment, and access to global managers and investment through pooled funds which hold approximately 80 percent of Dalhousie's investments. In the committee's view, Dalhousie must not sacrifice the three chief benefits of being shareholders in large pooled investment funds: cost-effectiveness, access to professional fund management at the highest level; and portfolio diversification.
- 3. The IC agrees with a view that has been expressed by Divest Dal itself namely, that divestment would have little or no impact on climate change, despite the charged symbolism a divestment decision would carry, and the impact of such a decision on Dal's reputation. Our relatively small investments will not impact the capital structure or resources of the companies in question, and any shares that the Dalhousie endowment sells will be purchased by another investor.

In citing those arguments, the IC would also like to stress that Dalhousie's goals align with those of Divest Dal, starting with reductions in GHG emissions. The committee simply doesn't believe that divestment will advance the goal of reduced carbon usage. Dalhousie itself is advancing that goal, however, through its Sustainability Initiatives – that is, through actions that are tangible.

During the past five years, Dalhousie has invested more than \$45 million in 39 initiatives, in addition to new green building construction, to reduce its carbon footprint. Dalhousie's overall GHG emissions have been reduced by 20 percent against its 2009/10 baseline. This is, quite literally, leadership in action.

The IC is also recommending two more initiatives as a result of its collaboration with Divest Dal. As referenced above, the IC also recommends that it be mandated to investigate ways to allow new donors to direct their endowments to non-fossil-fuel investments, and commit to openness and transparency with regard to our investments. The IC would henceforth report annually on all holdings in publicly-traded companies.

In addition, we will press fund managers to respect ESG principles, which will continue to be a cornerstone of the IC's investment approach. ESG principles are based on those set out in the United Nations Principles for Responsible Investing (UNPRI):

- 1. Incorporate ESG issues into investment analysis and decision-making processes.
- 2. Be active owners and incorporate ESG issues into our ownership policies and practices.
- 3. Seek appropriate disclosure on ESG issues by the entities in which we invest.
- 4. Promote acceptance and implementation of the principles within the investment industry.
- 5. Work together to enhance effectiveness in implementing the Principles.
- 6. Report on activities and progress towards implementing the Principles.

Today, 10 of Dalhousie's investment managers accounting for 39 percent of Dalhousie investments have developed ESG policies and procedures. Eight of those ten are UPPRI signatories. An additional 8 managers representing 49 percent of investments are in formal or informal stages of developing and adopting ESG policies. Only 12% of assets (invested primarily in hedge funds and real estate) are with managers that have no ESG policies.

In brief, the IC will continue to encourage fund managers to adopt ESG principles, while the university as a whole identifies additional sustainability initiatives that have a positive impact on climate change. The IC recommends this two-track approach and cannot endorse a divestment strategy which would have little impact on climate change.

<u>Divestment – A History in Brief</u>

Divestment as a tool of social change

Economic levers, including divestment, have been credited with changing the course of history. The most striking and often cited example is the end of apartheid rule in South Africa. Beginning in the 1960s, organizations and nations applied economic pressure to the South African regime by divesting themselves of economic interests and investments. Colleges and universities were part of this movement, particularly after large numbers of North American students took to the streets to protest the 1976 Soweto Massacre. By the late 1980s, 167 educational institutions – including Dalhousie in 1986 - had divested holdings in three companies with links to the South African regime.

By the time apartheid ended with multiracial elections in 1994, South Africa had endured virtual economic isolation as a result of the divestment movement and of international trade actions at the state level. Certainly, the decision of several major nations, particularly the U.S., to impose sanctions on the apartheid regime had a telling effect. The United Kingdom did maintain economic relations with the apartheid regime and worked behind the scenes for change throughout this period. However, Nelson Mandela and others have said the divestment campaign was vital to apartheid's demise.

Divest Dal also credits divestment efforts for changes in tobacco laws. They note American states, municipalities and universities have restricted or divested investment in tobacco. Certainly the widespread attention paid to the public health impact of smoking did result in social policy change which has had a lasting impact.

At the same time, contrary evidence suggests that divestment has limited impact on corporate performance. In 2008, Fabozzi, Ma and Oliphant produced a report on six industries that have long been subject to divestment and ethical exclusionary screens - the alcohol, tobacco, gambling, adult entertainment, weapons and biotech sectors. The study found that this portfolio of stocks generally outperformed the broad world market by more than 11 percent annually. This suggests that the effectiveness of divestment is inconclusive.

In addition, a recent study by Oxford's Smith School of Enterprise and the Environment concluded that divestment is likely to have limited impact on fossil fuel company profits, equity pricing and debt financing, but would damage corporate reputations and affect the social license to operate.

The Divestment Movement in North America

Divest Dal says there are currently 300 active divestment campaigns at North American universities, and to date 13 colleges and universities have agreed to divest. Divest Dal also says that its proposal offers Dalhousie an opportunity to take the world stage as a sustainability leader - as the first university in Canada to take this action.

IC research identified active divestment campaigns at the University of Toronto; UBC; McGill; Simon Fraser; Trent and the University of Victoria. While no Canadian schools have divested assets, some are inclined to modify investment policies to extend influence to social and environmental factors. UBC, for example has committed to incorporate environmental, social and governance (ESG) factors in its investment policy. Members of the Dalhousie Board of Governors will recall that a year ago, following very detailed investigation, Dalhousie adopted ESG practices in its 3.

investment policies and has been actively promoting these practices with fund managers. (ESG incorporates objective assessment of environmental, social and governance risk and opportunities in evaluating the merits of investments. ESG also advocates shareholder engagement and encourages sustainable value creation.)

A number of American colleges are pursuing active shareholder engagement, an approach the Dalhousie IC also favours. Yale, Harvard and the University of California group of schools have rejected divestment. Harvard President Drew Faust was unambiguous in a statement reflecting the need to address climate change, while rejecting divestment:

"... we hold our endowment funds in trust to advance (the university academic) mission, which is the university's distinct way of serving society. The funds in the endowment have been given to us by generous benefactors over many years to advance academic aims, not to serve other purposes, however worthy. As such, we maintain a strong presumption against divesting investment assets for reasons unrelated to the endowment's financial strength and its ability to advance our academic goals."

At the other end of the spectrum, Stanford announced it would divest holdings in companies whose primary business is mining coal for energy generation. Stanford's divestment criteria were applied – theoretically – to Dalhousie's portfolio, and would not result in removal of any holdings.

The Investment Committee's Review Process

The IC received the initial Divest Dal proposal early this year, and has since been reviewing and discussing issues pertaining to divestment. The summary below provides a brief overview of the recent divestment conversation for Dalhousie University:

- In February 2014, Dalhousie University received a proposal from Divest Dal to divest any investments that the University may have in certain fossil fuel companies. (A summary of their presentation's key points was included in the report to the Board of Governors dated June 2014).
- Divest Dal proposed that Dalhousie freeze and subsequently eliminate investment in any public company
 that appears on a list of 100 coal companies and 100 oil and gas companies that are reported to have the
 largest carbon reserves.
- The Board of Governors asked the Investment Committee (IC) of the Board to consider the proposal as part of its ongoing mandate and to report back in fall 2014.

- The IC met with Divest Dal in February, July, and November (2014) to discuss the principles, merits and effectiveness of divesting any investments in those companies with the largest carbon reserves that the University may have in order to reduce the impact on global climate change.
- The IC, in preparation for the July 2014 Divest Dal meeting, invited the group's input with a list of questions.
- The IC presented the Board with an interim report on its review in October, 2014.
- This is the committee's final report and recommendation.

In all, three meetings were held with Divest Dal to discuss the principles, merits and effectiveness of divesting the University's interests in any of the 200 companies. We have found Divest Dal to be a perceptive, serious and committed group, deserving of the full attention and respect of the University. Divest Dal came from the Halifax Environmental Justice Collective (HFX EJC), a working group of the Nova Scotia Public Interest Research Group (NSPIRG). The proponent is part of a wider movement focused on this issue through organizations such as 350.org.

Divest Dal is specifically proposing that the University freeze and subsequently eliminate any investment in any publicly-traded company that appears on a list of 100 coal companies and 100 oil and gas companies that are reported to have the largest carbon reserves. From Divest Dal's perspective, these reserves represent the greatest adverse contribution to climate change.

Although the IC recommends that the Board of Governors reject divestment, it agrees that greenhouse gas (GHG), particularly carbon, emissions are a primary source of a great environmental risk to the world: climate change.

The committee would also stress that its research and deliberations have confirmed that the climate changes issues facing world leaders are dauntingly complex, given the underlying challenge of reducing global dependence on fossil fuels while meeting the world's energy needs. Simple solutions are vexingly elusive.

Committee's work related to this proposal:

In addition, the IC investigated the logistical challenges presented by the proposal and the subsequent costs and diminished access to investment strategies that would follow its adoption. Dalhousie's participation with other institutions in pooled funds gives the university access to managers and global investment opportunities that would not be available otherwise. In addition, transaction costs are spread across the investment pool, significantly reducing Dalhousie's costs. Adoption of the proposal would require Dalhousie to sever investments from these pools and, in effect, dismantle its current investment structure.

The committee considered the impact of the proposal on the University Community including students; alumni; funding partners, both government and industry; research partners and granting agencies; and on future, present and past donors. By definition, a university is a free market in ideas, and the attitudes of Dalhousie's stakeholders can be expected to cover a wide spectrum of opinion on the issue of divestment.

We do know this much, however, Dalhousie has heard directly from students, faculty, donors and alumni who would strongly oppose divestment. In addition, Dalhousie continues to educate students who want to work in resource-extraction industries and attend the university to be educated as geologists or earth scientists. It is important to note that the curriculum of these faculties also reflect environment values, with a focus on minimizing environmental impacts of activities such as petroleum exploration. This raises key questions the Board should consider, "Should the

university educate students to work in resource industries in which it would no longer invest?" "Would doing so be consistent and ethical?"

At the same time, Divest Dal does represent a cohort that is arguably much wider than its direct membership. Dalhousie's internal research also shows the student body includes a cohort of students, an idealistic group that wants to succeed while making positive contributions to their communities and their country. It is difficult to measure the likely impact of divestment on this cohort or other groups, but it would likely enhance Dalhousie's reputation with some stakeholders, including some members of the university community.

In the IC's considered opinion, resource industries would be less likely to support the university directly, or to sponsor independent research, if divestment were to go forward. We know that Divest Dal holds a contrary opinion on this issue; we respectfully but firmly disagree. The IC and the Board must also consider the impact of divestiture on the attitudes and actions of the wider university community. Would a new class of investment stakeholders be created – individuals, organizations and foundations that would support the universities because of divestiture?

It is difficult to assess the attitude of our primary financial supporter – government – to divestment. The Government of Nova Scotia certainly supports responsible offshore oil and gas exploration, for instance, but it is taking a much more cautious approach to exploration activity on land. The federal government has actively promoted Canada as an energy superpower, and at the same time strives to demonstrate to the international community that it is taking a responsible approach to GHG emissions and climate change. Certainly, the IC and the university administration would have to better understand the government perspectives before it took any steps toward divestment.

In our view, Dalhousie's reputation among all stakeholders will depend as much on how it acts as it does on an investment strategy based on sound ESG principles. The university is rightly proud of the fact that it has created a College of Sustainability to educate students who will be tomorrow's leaders in building a more sustainable society. In addition, Dal is taking a leadership role today through its Office of Sustainability, with its mandate of ensuring the university operates as a steward of the environment in its day-to-day operations.

Finally, the IC should add that it researched and debated the efficacy of divestment relative to GHG emissions and climate change. We reviewed the 200 companies targeted by 350.org and Divest Dal and quantified the extent of the University's interests in those companies. The members of the committee are confident the review has been thorough and fair, and that our conclusions and recommendation will withstand scrutiny based on the same standards.

This report is to inform the Dalhousie University Board of Governors as to the findings of the IC's review of all matters we found relevant to the proposal, for the further consideration of the Board. In addition, this report provides the IC's recommendation, arrived at after completion of its research, consultations and deliberations.

The Divest Dal Case and IC Response

As stated the Divest Dal proposal is compelling, thoughtful and thought-provoking. In this section, the IC summarizes some of the arguments made by Divest Dal and provides its responses to those arguments.

1. Unanimity on Climate Change: Given virtual unanimity in the scientific community that GHGs are the cause of climate change, a rapid shift to low and no carbon energy sources is imminent. Proven carbon reserves far exceed limits required to contain global warming to two degrees Celsius, considered the maximum increase allowable while maintaining a habitable earth climate.

The 200 companies on the list hold enough carbon to surpass the two-degree C budget. An effective global response to the climate change crisis will render those companies' reserves "stranded assets." This is generally called the "carbon bubble." As a result, Dalhousie and other investors with holdings in those companies are at financial risk. The proponents note that coal and energy stocks, over the past five years, are underperforming prime market indicators.

IC Response: The "carbon bubble" risk is real, but not imminent. The Divest Dal position underestimates the continuing and substantial reliance on carbon-based fuels. The transition to new energy technologies will not occur overnight. In addition, the divestment position appears to assume that once the endowment invests in a company, it holds that investment in perpetuity. Dalhousie's securities are held a relatively short time. The endowment's turnover exceeds 35 percent annually – which equates to an average three-year hold.

The endowment's professional managers assess and evaluate the merits of each holding continuously.

6.

Among the risks managers assess are emerging developments, including "stranded asset" risk, the impact of potential carbon pricing regimes, costs of environmental protection and climate change regulation. Many of the 200 listed companies are making efforts to advance alternatives. The professional investment manager's job is to assess each company's prospects and intrinsic value relative to its market price. Reliance on the professional judgment of a diverse group of carefully selected and monitored investment experts is seen by the IC as a better defence against "carbon bubble" risk than blanket exclusions.

2. Perspective on Fossil Fuel Industries: Divest Dal draws similarities between anti-apartheid and fossil fuel divestment campaigns. In both cases, universities and colleges were targeted because, unlike corporations, they are accountable to broad constituencies, notably students. "Intermediate" organizations like colleges and universities are able to reach broad audiences and impact distant corporations and states.

The success of a divestment campaign depends on a contagion effect, whereby action spreads with "amplified momentum" as one school imitates another. Citing authorities, Divest Dal concedes that divestment alone will not fix the problem, but as part of a broader strategy, will influence others and become effective.

IC Response: The anti-apartheid and fossil fuel comparison is strained. Apartheid was an abhorrent injustice. The 200 companies targeted for divestment are publicly-traded corporations involved in the supply of a product most of the world consumes daily.

Dalhousie readily accepts its accountability and responsibility to many diverse constituencies, notably students in 12 faculties, including engineering and other disciplines which may see graduates assume positions in the companies on the list. This raises the question: "Should a university educate students to work in industries in which it will not invest on moral grounds?" "Would doing so be ethical?"

Divestment may be part of a broader strategy, but it is the only part Dalhousie has been asked to consider. The IC and Divest Dal agree that the University's divestment will have little or no impact on climate change. Our relatively small investments will not impact the companies.

3. Intergenerational Equity: Divest Dal says fiduciary duty extends to future students and intergenerational equity; that universities have a mandate to consider broad social, environmental and ethical factors as opposed to a focus on profit.

IC Response: Dalhousie recognizes its duty to future students, intergenerational equity and consistently considers broad social, environmental and ethical factors in its decisions. Nothing underlines this commitment more than Dalhousie's overall efforts in support of environmental sustainability and commitment to address climate change. In 2007-08, Dalhousie launched Canada's first College of Sustainability, bringing distinguished thinkers and problem-solvers together in a new way to examine and take action on today's most urgent global issues.

That same year, the University opened its Office of Sustainability, which works to incorporate sustainability concepts and criteria into policy and planning, building and retrofit projects, and operations. The Dalhousie Student Union also opened its own Sustainability Office to help create a culture of sustainable practices within the DSU's operations and across the University. The three organizations collaborate through the President's Advisory Council on Sustainability.

Through mutual understanding and a shared sense of ownership, Dalhousie has managed to build an approach to sustainability that's unique among North American universities. The University has launched innovative new programs, won several awards and recognitions and, together with its partners, invested more than \$45 million over the past five years to improve sustainability in campus operations, resulting in substantial action and positive outcomes. Through this work, Dalhousie has demonstrated its commitment to environmental sustainability and to reducing our own dependence on and use of fossil fuels to meet our energy needs.

4. Shareholder Engagement: Divest Dal maintains that shareholder resolutions are not effective as instruments of change in the fossil fuel sector, because companies' business plans revolve around burning more carbon. Shareholder resolutions that limit company profits are often disallowed by the Securities Exchange Commission. For these reasons, Divest Dal says shareholder engagement will not be effective.

The IC Response: The IC must challenge the premise, given a number of the carbon-holding companies on the list are actively engaged in development of alternative, non-fossil fuel energy sources. In addition, a number of the companies on the list have large holdings in coal, but burning it is not a major component of their business. The list makes no distinction between thermal and metallurgical coal. In other cases, companies in the energy sector have devoted resources to explore and develop alternative technologies to reduce carbon emissions. In other words, these companies can, and in many cases are, part of the solution to greenhouse gas emissions.

Dalhousie's endowment, for example, has holdings in Total S.A., a petroleum company, and public advocate of action to curb climate change. Total is developing carbon capture technologies and alternative energy sources. In Nova Scotia, Total provides funding to research and develop reliable storage for renewable energy, in collaborative with LightSail Energy, Watts Wind Energy, Innovacorp, and Dalhousie University. It would be inconsistent for Dalhousie to disassociate itself from Total by divestment, while benefitting from its research funding.

The IC believes shareholder engagement can and does motivate change. Shareholders own the companies, and the real ability to influence decisions is in the boardroom not the news. Finally, our committee cannot stress too much that while Dalhousie can only divest its "carbon" holdings once, it can advocate for positive change year-after-year as an engaged shareholder.

5. The Direct Impact of Divestment: About \$20.3 million of Dalhousie's \$486 million endowment – or 4.3 percent - is invested in companies on the list of 200. Divest Dal makes the point the financial impact would be small, but the social impact – the symbolism – would be significant.

IC Response: Approximately 80 percent of Dalhousie's endowment is invested in pooled funds. In order for Dalhousie to divest and exclude the 200 companies from future investment, the University would need to separate from the pool. The complexity of this challenge cannot be understated: Dalhousie's overall investment approach consists of 26 separate investment strategies

Dalhousie, its donors, its students and researchers, benefit from the University's participation in the pool funds in a number of ways. The two most significant are transaction costs and portfolio diversification. Transactions costs are greatly reduced because they are spread across the pool. The IC estimates that annual transaction costs would increase by \$1.2 million were Dalhousie to segregate its investments from the pool.

The pooled funds provide access to international managers and investment opportunities Dalhousie could not access on its own. Those managers enforce minimal thresholds of investment that are beyond Dalhousie's financial reach. Divestment would, in effect, disqualify 10 percent of global and 25 percent of the Canadian public equities. Divestment would directly and negatively affect Dalhousie's financial position.

6. Benefits of Divestment: Climate change and other environmental considerations are exerting increasing influence in the marketplace, and that trend will increase and accelerate, according to Divest Dal. The proponents argue that the first U.S. schools to divest are reaping benefits. Organizations at the fore of the divestment campaign will benefit greatly as more people are influenced by, or base their market decisions, on environmental considerations. Divest Dal predicts that the divestment movement will be seen as one of the turning points of the 21st Century and Dalhousie has an opportunity to be in the vanguard of that change.

IC Response: Consumers are more conscious of and influenced by environmental and social responsibility. Dalhousie can stand by its record as an educational and research leader in environmental and social responsibility and sustainability.

7. The Indirect Impact of Divestment: Divest Dal emphasizes that the impact of divestment will be greater across the University's community of influence than on Dalhousie. A decision to divest "would set a precedent for challenging environmentally damaging activity."

IC Response: As noted, the negative financial impact on Dalhousie would be significant. In addition, divestment could be precedent-setting for the Board of Governors, and invite pressure to impose boycotts on other legitimate activities and investments.

Dalhousie, its students and faculty must be free to promote open discussion and engage in novel research. An official position on a political, social or economic issue can place limits on open and free discussion and research activity. Divestment would constrain free discussion, and (as previously discussed) risk excluding Dalhousie from partnership in useful research projects like that being funded by Total S.A.

8. The Leadership Question: The proponent says Dalhousie, and other institutions can influence wider public policy by taking a lead in opposing carbon emissions.

IC Response: Dalhousie, and other institutions, should focus on research to find practical and realistic alternatives to carbon-based energy, and educate those who will be dealing with environmental problems. The university's role in public policy lies in analysing it; identifying flaws and proposing alternatives; finding answers to pressing questions through research; and educating an engaged population. The University cherishes its ability to make positive change in the world, but believes that opportunity comes through education and research.

9. Impact on Research: Divest Dal says divestment will have little or no impact on Dalhousie's research capacity or freedom.

IC Response: Companies that develop and use fossil fuels have been involved in university research for

9.decades. Most recently, many have put significant financial and technical resources behind research into new, clean energy technologies. These companies see the future and want to be in a position to bring clean energy to the commercial market.

Our economy, if not our society, remains tied to carbon-based fuels. Can and will an effort aimed only at the supply side change global warming? Is it fair? Isn't change also required on the demand side?

10. The Sustainability Argument: Divest Dal says the University is operating in "bad faith" as a signatory and participant in a number of declarations and actions on sustainability, while holding investments that will remain profitable only if action on climate change is limited or delayed. Dalhousie has to take strong, farreaching action – a stronger public stance – against climate change. The actions of the University to date are not enough.

IC Response: Dalhousie's participation in a range of sustainability initiatives are good faith statements of the University's commitment to a sustainable future. The university will continue to seek out new ways to reduce carbon emissions in its own operations, consistent with sustainability policies and principles.

Conclusion

The dedicated and committed people who make up Divest Dal will, we trust, agree that Dalhousie is a place where all views can be heard and if they have merit, as Divest Dal's proposal does, they will receive due consideration. Divest

Dal made us think. In the end, we agree with Divest Dal that issues of climate change must be addressed, but differ on the means of achieving progress.

As stated at the outset, Divest Dal and the IC also agree that divestment is symbolic. Symbolism is tied inexorably to reputation. In the long term, however, Dalhousie's reputation will depend not merely on symbolic gestures but also on actions. The university is proud of actions it has already taken – proud of the College of Sustainability, which educates students to be tomorrow's leaders in building a more sustainable society, proud of marine, oceans, materials, engineering, earth sciences and other researchers who are global leaders in seeking solutions to environmental issues.

Dalhousie's overall efforts to reduce its own environmental impact include \$45-million in investments, including biomass energy production at the Truro campus; energy savings (from fossil fuels) of more than \$3 million per year; conservation gains in the Life Science refit and aquatron modifications; fleet management to reduced fuel consumption; LED lighting to replace burned out bulbs; the campus bike centre; the campus master plan and more, all undertaken or planned for maximum energy savings and conservation. In addition, all new campus buildings meet LEED standards.

Dalhousie continues to take a leadership role through the Office of Sustainability and its mandate to ensure the University operates as a steward of the environment in its day-to-day operations.

Dal's Duty to its Donors

Despite the complexity of many issues discussed in this report, one thing is clear: The IC does have a clear fiduciary duty to generate optimal risk-adjusted returns from Dalhousie's investments. One of the methods to assure this outcome is diversification, another is the professional advice we contract. Portfolio holdings are constantly reevaluated by our investment managers to mitigate risk and seek enhanced opportunities. The exclusion of any legitimate sector or holding could have a negative impact on the portfolio and might constitute negligence of duty. Just as importantly, Dalhousie will intensify its efforts to work with fund managers to assure ESG principles are adopted as an integral part of their practices.

Dalhousie also has a legal and moral obligation to the benefactors who have made more than 1,300 gifts to the University, valued at close to \$500-million. More than half of that money will support students through bursaries or scholarships. Dalhousie will continue to honor the directions of donors, but will not accept contributions that violate the University's own code of ethics, or tie spending to values that the university does not share and promote. Dalhousie recognizes that endowments are gifts to the future. As such they are invested to retain value and provide annual support - 50 percent of which is directed to students, about 30 percent to research and academic appointments and the remainder for general support of the University.

The IC's Recommendations

As stated at the outset and argued in this report, the Investment Committee is of the opinion that Dalhousie's divestment of fossil fuel holdings would not constitute an effective response to climate change. Again, the IC recommends that the Board reject the proposal that Dalhousie divest holdings in the 200 companies identified by Divest Dal. The committee also recommends two new initiatives as a result of its collaboration with its review of

divestment in fossil fuel holdings. It recommends that the university investigate ways to allow donors to direct their endowments to environmentally sustainable investments, and it commits to greater openness and transparency with regard to Dalhousie's investments. In addition, we will continue to press fund managers to respect ESG investment principles.

At the same time, the IC hopes this report conveys our agreement with Divest Dal on many aspects of its position. In closing, the Investment Committee of the Board would also like to thank Divest Dal for its patience, its commitment and its interest in Dalhousie University. The University shares a common goal with Divest Dal, that being the reduction in GHG emissions in order to mitigate the threat imposed by ongoing climate change.

Investment Committee Fossil Fuel Review Activities

- A. Investment Committee reviews and approves work plan for the requested review.
- B. Annual posting of University's holdings (direct & indirect) in publicly traded securities:
 - i. Direct & indirect publicly traded securities account for 79% of fund;
 - ii. 64% of publicly traded securities held in comingled pooled funds;
 - iii. In total, \$8.2 million, or 1.3%, held in CU200 companies.
- C. Review of fossil fuel investment discussions at 15 other Canadian universities:
 - i. One committed to divestment, path uncertain;
 - ii. Seven PRI signatories;
 - iii. Seven following Dalhousie's lead in formally implementing the integration of ESG factors;
 - iv. Four are setting up separate funds for low carbon/clean tech/fossil fuel free investments, as Dalhousie did in 2015.
- D. Senate ad-hoc committee on fossil fuel investments and student BoG member attend Investment Committee meetings for discussions:
 - i. Review of current portfolio construction, policies and holdings;
 - ii. Review of ESG integration philosophy and approach as well as presentation of ESG portion of the fund's risk dashboard,;
 - iii. After a number of meetings with staff, Senate ad-hoc committee had concluded that indiscriminate divestment of fossil fuel holdings is neither practical nor productive in addressing climate change "social injury" concept;
 - iv. Senate ad-hoc committee suggests that Dalhousie's communication of ESG integration could be stronger public communication and promotion of Dalhousie's leadership in this area was lacking where it should be taking more credit;
 - v. Senate ad-hoc committee suggests that more explicit language of climate change risks pertaining to investments;
 - vi. Staff one-on-one follow-up meetings with student board member to discuss investment approaches;
 - vii. Student member provides investment approaches to climate change taken by other institutional investors, with a number addressing thermal coal. Statements by some state no investments in companies where revenues from thermal coal exceed a certain hurdle of company's total revenues. Stanford for example stated that their fund will have no direct holdings in any company whose majority of revenues comes from the extraction or burning of thermal coal. With a Stanford litmus test, Dalhousie's fund has passed ever since Stanford's proclamation.
- E. Survey of BoG opinion thirteen responses
 - i. Questions posed in survey:
 - a) How should Dalhousie consider fossil fuel divestment in the context of its mission? Does the mission require amendment?
 - b) Is the IC's mandate appropriate? If not, how have these responsibilities changed?

- c) In light of the current level of investment in fossil fuel companies, should Dalhousie pursue divestment, and if so, to what degree?
- d) Are fossil fuel companies the sole source behind climate change risk, or are other industries also a source of harmful carbon emissions?
- ii. major points drawn from the responses:
 - a) Dalhousie's mission is appropriate, and promotes open discussion and debate;
 - b) Dalhousie sustainability initiatives are much more than investment holdings campus operations have a larger impact;
 - c) Broad-based and indiscriminate divestment of entire industries is not seen as consistent with the University's mission, nor is it an effective tool;
 - d) Climate change risks arise from numerous activities/business enterprises not confined to fossil fuel industry;
 - e) Diversification and sustainability assessments as part of the investment process will address investment risk;
 - f) Dalhousie's efforts in incorporating ESG is not widely known nor understood well, thus a need for enhanced communication although an early adopter and leader, Dalhousie has not promoted as subsequent adopters have done.
- F. Initial contact with external investment consultant to identify institutional global equity funds that are fossil fuel free initial observations:
 - i. Short list of options
 - ii. Short track records no significant down market experience
- G. Advancement Office Input
 - i. Philanthropic investors (donors) are seeking maximum return on their investments;
 - ii. Donor's social objectives are met by what they want the earnings of their endowments to be spent on;
 - iii. Low Carbon Investment Option no donors have elected this option since it was introduced in 2015.

ESG Integration

ESG Integration is:

- Integrating the ESG factors into fundamental investment analysis to the extent that they are material to improving risk-adjusted investment performance.

ESG Integration Is NOT:

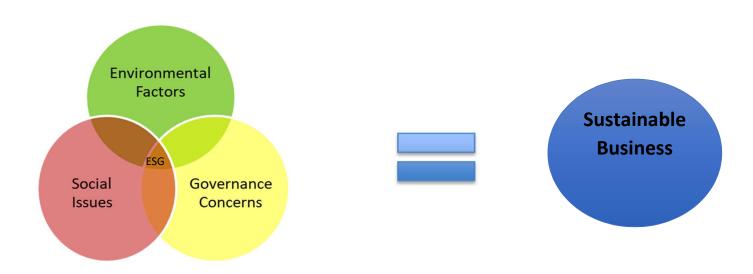
Socially-responsible investment (SRI):

a portfolio construction process that attempts to avoid investments in certain stocks or industries through negative screening to defined ethical guidelines.

NOR

Impact investing:

investing in projects or companies with the express goal of effecting mission-related social or environmental change.



ESG Factors

Area of focus	Activity	Potential impact on financial performance					
Environment	Resource management and pollution prevention Reduced emissions and climate impact Environmental reporting/disclosure	Avoid or minimize environmental liabilities Lower costs/increase profitability through energy and other efficiencies Reduce regulatory, litigation and reputational risk Indicator of well-governed company					
Social	Diversity Health and safety Labor-Management relations Human rights Product Integrity Safety Product quality Emerging technology issues Community Impact Community relations Responsible lending Corporate philanthropy	Improved productivity and morale Reduce turnover and absenteeism Openness to new ideas and innovation Reduce potential for litigation and reputational risk Product Integrity Create brand loyalty Increase sales based on products safety and excellence Reduce potential for litigation Reduce reputational risk Community Impact Improve brand loyalty Protect license to operate					
Corporate Governance	 Executive compensation Board accountability Shareholder rights Reporting and disclosure 	Align interests of shareowners and management Avoid negative financial surprises or "blow-ups" Reduce reputational risk					

		Omversity i	aascape	дреник т					
University	Announcement	Divestment	PRI Signatory	Actions					
Dalhousie University	November 2014	No	No	Continue with ESG integration that was implemented in 2013					
Mount Allison	May 2018	No	Yes	Will incorporate ESG factors					
University of Toronto (UTAM)	Dec 2017	No	Yes	-Adopted ESG factors and report annually on them -Signed Montreal Carbon Pledge -Signed Carbon Disclosure project					
Laval	Feb 2017	Yes	No	-Will divest the Endowment Funds from fossil fuels -Form a RI advisory committee tasked with recommending methods, practices and actions. Plan to release an annual progress report.					
University of British Columbia	Feb 2017	No	No	Set up a second portfolio that is fossil free. Donors can contribute and University will increase the fund if it "performs well".					
University of Winnipeg	June 2016	No	No	-Will incorporate ESG factors					
University of Ottawa	Apr 2016	No	Yes	-Plan to reduce carbon footprint by 30% by 2030 -Create \$3M Clean Innovation Research Fund -Commit \$10M to seed capital for green tech.					
Thompson Rivers University	Apr 2016	No	Yes	-Will incorporate ESG factors					
McGill University	Mar 2016	No	No	-Plan to set up Socially Responsible Investment Fund					
Queens University	Oct 2015	No	No	-Concluded divestment not an effective tool to address issues of climate change -Encouraged more shareholder engagement					
University of Guelph	July 2015	No	No	-Create a policy that addresses Responsible investing which will include ESG considerations					
Trent University	May 2015	No	No	-Create an SRI Fund that will comprise up to 10% of Endowment assets					
University of Calgary	Feb 2015	No	No	-Will not alter its investment policy should they get a request to divest					
Concordia	Nov 2014	No	Yes	-Create a \$5M Sustainable Investment fund, that will incorporate ESG factors					
			Other PRI Sig	gnatories					
University of Victoria	PRI Jan 2015		Yes	PRI report says they incorporate ESG in manager selection, appointment and monitoring processes.					
Simon Fraser University	PRI July 2014		Yes	Incorporates ESG factors					

Dalhousie – ESG Integration

Investment Policy:

General Investment Principles and Philosophies

The Endowment Funds shall be invested in a manner to maximize risk adjusted returns. Dalhousie University believes that over the long term, companies that exhibit responsible corporate behavior with respect to environmental, social and governance (ESG) factors will have a positive impact on long-term financial performance. The assessment of ESG factors along with the assessment of the business, management and financial metrics will enhance the identification of good investment opportunities and to help mitigate risk to the Endowment Funds

The Endowment Funds will encourage its external investment managers to develop and enhance their ESG assessment capabilities. The Administration will include ESG assessment progress and capabilities in each investment manager's annual review.

The Endowment Funds will include ESG assessment capabilities when evaluating investment managers for new mandates.

The ESG profile of the Endowment Funds and the related opportunity and risk characteristics will be reviewed and assessed semi-annually by the Investment Committee. These reviews and assessments will be made at the investment manager, asset class, and total fund levels.

Proxy Voting

The Investment Committee or Administration will require the Investment Managers to provide a summary of how proxies have been voted. This report shall also disclose any ESG issues that may have arisen and how this ESG issue has impacted positively or negatively the exercise of any proxy vote.

• Regular Investment Manager Reporting

Report on any environmental, social and governance (ESG) risks they have discovered in their portfolio. The report shall also include information on any ESG issues that have been identified and discussed with the management of any of the companies that are in the portfolio or information on ESG issues that are made available through industry publications or events.

Dalhousie is a member of the Responsible Investment Association

Dalhousie can leverage this relationship to participate collectively with other investors in engagement activities. In the past, Dalhousie has joined activities such as calls for greater climate change risk disclosures, human rights - -labor policy development, design and use of key performance indicators, food production safety.

Dalhousie's risk dashboard includes ESG results and carbon footprint metrics and trends

UN PRI & Dalhousie's Past Reluctance to Sign

Following are listed the six Principles for Responsible Investing ("PRI") that were developed in conjunction with the United Nations. These PRI formed the basis of the ESG integration that Dalhousie adopted in 2013.

Dalhousie University does not have an internal investment team to evaluate and select securities to invest in – all investment activities are mandated to external third party investment management firms. However, the majority of Dalhousie's investment managers formally incorporate ESG factors in their assessments and evaluations of securities. As Dalhousie does not have its own internal security selection and management team, it has been reluctant to sign on to the PRI as it was not directly engaged with security issuers, particularly as in relates to principle #3. However recent discussions with the PRI have indicated that reliance on external managers is a regular practice, and that Dalhousie is much further than many signatories.

Principles for Responsible Investing:

1. We will incorporate ESG issues into investment analysis and decision-making processes.

Dalhousie University has and continues to encourage its investment managers to include ESG factors in their evaluations. Dalhousie does not advocate negative screening or exclusion of businesses that are engaged in legitimate activities that meet and satisfy a consumer demand.

Dalhousie is dependent on external professionals for these assessments – it does not have the expertise or resources to identify, research and properly assess ESG factors on its own.

2. We will be active owners and incorporate ESG issues into our ownership policies and practices.

To obtain portfolio diversification on a cost effective basis, the majority of Dalhousie's investments are made through pooled funds and other co-mingled vehicles where Dalhousie does not directly own or hold securities. As a result, Dalhousie is not entitled to vote the proxies of these securities. Even if Dalhousie held the securities directly, it does not have the resources to review every AGM meeting agenda of a 1,000+ companies, prepare its own resolutions, write letters to management, or have the size to be granted meetings with management.

Dalhousie's managers have internal resources to review these matters and most also use external services such as ISS to comment on the resolutions. Dalhousie does receive and review the voting filed by the managers.

3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.

It was thought that this required direct engagement with the companies, which requires resources and expertise. Dalhousie's approach has been to include this in the annual review with its investment managers and to encourage further progress in this area. Dalhousie equity managers have been requested to document how ESG factors are considered in their evaluation process of potential investments.

4. We will promote acceptance and implementation of the Principles within the investment industry.

Dalhousie frequently discusses ESG developments with its investment managers and other investment industry participants, and has frequently made conference presentations to promote ESG. However, Dalhousie does not have the resources to thoroughly draft its own regulatory submissions, nor to provide appropriate review and commentary on submissions of others.

5. We will work together to enhance our effectiveness in implementing the Principles.

Dalhousie does belong to a few industry associations, and does occasionally become evolved in discussions on ESG practices.

6. We will each report on our activities and progress towards implementing the Principles.

Due a number of limitations that Dalhousie had noted in the first five principles, it believed that it was not in a position to sign the PRI nor to have a formal PRI progress reporting process.

Interim report to Senate Outcome of the Engagement with the Board of Governors on the Ad Hoc Committee of Senate Report on Fossil Fuel Divestment

February 26, 2018

Membership:

Kevin Hewitt, Chair of Senate
Iraj J. Fooladi, Douglas C. Mackay Chair in Finance, Faculty of Management
Mike Smit, Faculty of Management
Meinhard Doelle, Schulich School of Law

DSU Representative:
Jeremy Banks, Faculty of Architecture and Planning (until December 2017)
Alex Ayton, Faculty of Engineering (from January 2018)

Background

The Ad hoc Committee of Senate on Fossil Fuel Divestment prepared a report exploring the issue of divestment. This working group was asked to identify ways to translate their recommendations into action. In brief, the report acknowledges that we are still dependent on fossil fuels, and the companies that provide them. Yet not all companies are equal. The report concludes it is fiscally and ethically responsible to not invest in companies which:

- Deny the reality and threat of climate change
- Oppose action to mitigate climate change
- Rely on fossil fuel reserves to bolster their valuation

Companies more deserving of investment will:

- Publicly acknowledge the reality and threat of climate change
- Invest in reducing reliance on fossil fuels, including alternative energy, and climate change mitigation
- Demonstrate willingness to leave fossil fuel assets undeveloped
- Show responsible environmental stewardship and transparency
- Actively and honestly support education on climate change and its mitigation

This is a nuanced approach to divestment. It is most similar to the "best in sector" approach, and is more complex than other divestment strategies (which range from "No coal" [e.g. Stanford] to "No direct or indirect relationship to fossil fuel extraction").

Thanks to in-group expertise and productive meetings with Dalhousie's Treasury & Investments team, we summarize the challenge of implementing any form of targeted investment / divestment as follows:

- Dalhousie relies on a variety of strategies to manage the risk of its Endowment Funds.
- Diversification is a key element of risk management: multiple asset classes, multiple strategies, multiple investment managers in each major asset class.
- To achieve this level of diversification with limited funds, Dalhousie makes extensive use of pooled funds. A pooled fund uses funds from multiple investors to purchase a variety of assets. The fund manager makes day-to-day investment decisions to achieve a desired level of risk and in pursuit of a desired level of return.
- With a pooled fund, Dalhousie cannot mandate specific companies that it does or does not wish to invest in.
- The alternative, a segregated fund, has higher management fees. These fees reduce the rate of return, which decreases the funds from endowments for bursaries, scholarships, academic units, etc.
- There are pooled funds that offer certain features (for example, a "green" pooled fund that focuses on environmental considerations when making investment decisions). There is not yet sufficient history to accurately determine the risk of these smaller funds, and there is not sufficient investment interest for these funds to achieve the size required to meet Dalhousie's risk and diversification needs.
- The short version: there is currently no mechanism to achieve divestment without (likely) reducing rates of return and increasing risk. While there is growing demand for such a mechanism from various organizations, there is not yet a supply to meet that demand.

Our Solution

Given these constraints, our proposed solution is about increasing the demand for pooled funds that take a company's impact or stance on climate change into account when making investments, and advocating for supply to meet that demand.

Dalhousie was one of the first universities to include environmental, social and governance (ESG) factors in investment decisions, and adopted this requirement with negligible impact to investment risk. We propose a similar response to the urgent issue of climate change. We have adopted the ESG philosophy of engagement with fund managers, seeking to acquire data and include climate change-related factors in assessing investment opportunities.

We are suggesting that the Board of Governors make edits to the Investment Policy, and have drafted amendments (in bold) for their consideration. Dalhousie's Treasury & Investments team, the Board of Governors Investment Committee, the board itself, and other experts will undoubtedly be able to improve on these suggestions while retaining their spirit.

The complete set of revisions is below, alongside the relevant ESG-related language.

Section 5.10 is comparable to Section 5.7 on ESG factors: it is a statement of principles. Climate change is real, climate change poses a risk, and companies that respond to this risk are a better long-term investment.

5.11 and 5.12 are comparable to 5.8 on ESG factors: the inclusion of climate-change related information when considering investment opportunities, and a reporting requirement.

5.13 is about Dalhousie advocating for an increased supply of pooled fund options that consider climate change as an important factor yet do not increase risk, increase costs, or decrease diversification.

Changes to 13.6 and 15.2 are about enacting these principles, including reporting on climate change related issues alongside ESG factors.

We recognize Dalhousie's advocacy alone will not be sufficient to create a supply of pooled funds that consider climate change factors, but our hope and expectation is that Dalhousie will not be alone. As more organizations seek to divest, we hope and expect others will advocate along similar lines, and that market pressure will result in investment options consistent with our University's position on climate change. I should also note that if successful, this will be a change that impacts not only our investments, but also some much larger pooled funds. This approach explicitly preserves the goal of maximizing risk-adjusted returns, yet also lays the groundwork for greater impact than any single institution divesting.

Draft Proposed Amendments [Revisions in Bold]

5.7 The Endowment Funds shall be invested in a manner to maximize risk adjusted returns. Dalhousie University believes that over the long term, companies that exhibit responsible corporate behavior with respect to

environmental, social and governance (ESG) factors will have a positive impact on long-term financial performance. The assessment of ESG factors along with the assessment of the business, management and financial metrics will enhance the identification of good investment opportunities and to help mitigate risk to the Endowment Funds.

- 5.8 The Endowment Funds will encourage its external investment managers to develop and enhance their ESG assessment capabilities. The Administration will include ESG assessment progress and capabilities in each investment manager's annual review.
- 5.9 The Endowment Funds will include ESG assessment capabilities when evaluating investment managers for new mandates.
- 5.10 Dalhousie University believes that anthropogenic climate change poses substantial risk to human and natural systems, and that local and international efforts to reduce dependence on fossil fuels are critical to addressing this risk. Dalhousie University believes how companies respond to this risk, and to these efforts, is an important consideration when assessing long-term value. Companies which deny the reality of climate change, oppose actions to mitigate climate change, or rely on fossil fuel reserves to bolster their valuation are poor investment opportunities and pose a risk to the Endowment Funds. Companies which publicly acknowledge the threat of climate change and take concrete actions to mitigate it, demonstrate responsible environmental stewardship and transparency, and/or invest in alternative energy and other technology to mitigate the impacts of fossil fuels have the potential to be good investment opportunities, subject to assessment of business, management and financial metrics.
- 5.11 The Endowment Funds will encourage its external investment managers to develop and enhance their ability to characterize the climate-change related (CCR) factors of investment opportunities. The Administration will include assessment progress and capabilities in each investment manager's annual review.
- 5.12 The Endowment Funds will include CCR assessment capabilities when evaluating investment managers for new mandates.
- 5.13 The Endowment Funds will advocate that external investment managers consider creating, identifying, or advocating for investment opportunities (at current risk, diversification, and cost levels) which mitigate the risk posed by companies which deny the reality of climate change, oppose actions to mitigate climate change, or rely on fossil fuel reserves to bolster their valuation are poor investment opportunities.
- 5.13 The Endowment Funds will advocate that external investment managers consider creating, identifying, or advocating for investment opportunities (at current risk, diversification, and cost levels) which mitigate the risk posed by companies which deny the reality of climate change, oppose actions to mitigate climate change, or rely on fossil fuel reserves to bolster their valuation are poor investment opportunities.

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13.6 The Investment Committee or Administration will require the Investment Managers to provide a summary of how proxies have been voted. This report shall also disclose any ESG issues that may have arisen (**including any issues relevant to climate change**) and how these issues impacted positively or negatively the exercise of any proxy vote.

15.2 Quarterly. In addition to the monthly report and within 30 days: [part a omitted here for brevity]

- i. Investments
 - i. Confirm adherence to policy guidelines (compliance report)
 - ii. Provide any comments or suggestions regarding constraints, guidelines, etc.
 - iii. Discuss any changes to investment strategy or process
 - iv. Report on any environmental, social and governance (ESG) risks **or climate change-related risks** they have discovered in their portfolio. The report shall also include information on any ESG issues **and on any climate change-related issues** that have been identified and discussed with the management of any of the companies that are in the portfolio, or information on ESG **or climate change** issues that are made available through industry publications or events.

(6 pages)

DALHOUSIE UNIVERSITY ENDOWMENT INVESTMENTS Fossil Fuel Review – Part 2 Carbon-Focused Investment Options As submitted K.Olds, Board of Governors

September 12, 2018

The following options and precedents were gathered and submitted by Kathleen Olds, student member on the Board of Governors. The "Comments/Questions" have been added by the Investment Committee.

Introduction:

The purpose of this document is to present a broad range of decarbonized investment options. Given that, according to Genus Fossil Free, over 880 institutions have divested, each with their own unique approach, the task of compiling all their strategies in one short document is impossible. It is not an exhaustive list and should not be treated as such; rather the hope is that it will serve to inform the Investment Committee on the divestment landscape. It is up to the committee's discretion to determine which of the following strategies is appropriate to explore in the context of a funds search. For each of the below, I have tried to find a precedent in pursuing this strategy by an endowment or pension fund or, if none are available, I have worked with an investment expert to find ETFs to serve as an example. Should none of the below options prove satisfactory, I request that the Committee provide guidance for further development of decarbonized investment options.

Under almost all of the below-mentioned investment scenarios, additional thought is required for determining which companies should and shouldn't be eligible for investment. These decisions should be dynamic and involve the university community; while the investment decisions at Dalhousie are the responsibility of the investment managers, the investment committee and the Board as a whole, the impact affects the whole institution. I thank the Committee for all their work and thought on how to implement decarbonization of Dalhousie's investment.

Decarbonized Investment Options with Precedents:

1. Divestment from all Fossil Fuel Companies

Justification: This strategy is simple and clear; Dalhousie's exit from the fossil fuel industry as a whole would make a strong statement and demonstrate our commitment to a fossil-free future. It would be a clear ask of our investment managers, with little to no room for ambiguity.

Precedent: University of Edinburgh's £1 billion endowment fund was committed in February 2018 to full fossil fuel divestment by 2021; their exposure to fossil fuels was previously valued at £5 million (Hill, 2018)

Question/Comment: Approximately 70% of Dalhousie's publicly traded securities are held indirectly in co-mingled funds.

2. Divestment from Coal Companies

Justification: Coal is widely considered the dirtiest fossil fuel and is responsible for a quarter of global annual emissions. Countries, including China, are making commitments to move away from coal as an energy source. With this option, Dal could demonstrate its commitment to investing where our energy mix will be in the future as opposed to where it is today. Important

to note here is that coal divestment is widely considered to be partial divestment and, while it will be an action supported by both Divest Dal and the DSU, many students will keep pushing for more.

Precedent: Stanford University in 2014 committed to divesting its \$18.7 billion endowment fund from directly-held publicly traded companies whose main business is the extraction of thermal coal for use in energy generation (Wines, 2014). Columbia University's Board of Trustees voted in March 2017 to divest its \$9.2 billion endowment fund from companies deriving more than 35% of their revenue from thermal coal production (Bollinger, 2017).

Question/Comment: Under the Stanford litmus test, Dalhousie's holdings have been void of such companies.

3. Divestment from the Top 200 Fossil Fuel Companies by Carbon Asset

Justification: This was the original ask of Divest Dal. There is an externally managed list of companies that are subject to divestment and strong precedent for this strategy. Companies could also get off of this list by reducing their carbon assets and investing in renewable energy; thus this strategy provides a strong incentive for corporate responsibility. In addition, several divestment campaigns are promoting strategies for allowing continued investment in these companies provided they commit to burning under 20% of their carbon assets. Dalhousie had \$8,906,472.00 invested in these companies as of March 2017.

Precedent: California State University's Foundation voted in December 2014 to divest its endowment fund from the Top 200 list within four years; in May of the same year, Dayton University Board of Trustees voted to divest its \$670 million endowment pool from the same list within 18 months (Cozine, 2017; Robinson, 2014). Washington DC also announced in 2016 that it had completed the divestment of its pension fund from the Top 200 (Hirji, 2016).

Question/Comment: Directly -held vs indirectly-held? Entire industry or selective (Good actors" vs "bad actors")?

4. Divestment from Top 100 Fossil Fuel Companies by Carbon Asset

Justification: Similar to the above option, this shorter list would have the advantage of fewer companies for the investment managers to focus on. This strategy is less effective in limiting exposure to the carbon bubble and does less to address climate change.

Precedent: New York City has committed this year to divest its pension fund from the top 100 fossil fuel companies by 2022 (Holder, 2018).

Question/Comment: Directly –held vs indirectly-held? Chances/situations of indiscriminate exclusion, even those that invest in alternative R&D?

5. Divestment from the Top 100 Coal Companies

Justification: This combines the benefits of divesting from coal with the benefits of having a concrete and narrower list of companies. Given that many countries are committing to moving away from coal, this strategy could be framed as future-focused investing. In addition, as energy companies themselves shift towards other energy sources they could fall off this list. Thus, this strategy would avoid blacklisting an entire industry by signalling that Dalhousie is simply promoting a movement in energy mixes via its investments. Further, it is important here to specify the difference between thermal and metallurgical coal; given that the former is used for energy generation and the latter for steel and iron-making, the Investment Committee would need to make a decision whether to follow the lead of many divested institutions and divest from thermal coal companies, or to focus on all coal. We had \$970,202.00 invested in the top 100 coal companies in March 2017, down to \$847,000 in March 2018 (all of which was held in two companies, Teck and First Energy).

Precedent: University of Washington began the process of divesting its endowment fund from any of the top thermal coal companies in 2015 (Balta, 2015).

Question/Comment: Thermal vs metallurgical coal is an important distinction. First Energy is a U.S. company that generates, transmits and distributes electricity. 34% of their revenues come from generation, and coal-fired generation accounts for 55% of total generation – a number coal-fired plants have been deactivated with conversion to other types of generation, Teck resources is a mining company, mining copper, zinc, and metallurgical coal. Metallurgical coal accounted for 51% of Teck's 2017 revenues.

6. 'Worst-of-the-worst' approach

Justification: This strategy would involve the development of metrics to determine which fossil fuel and energy companies are the most environmentally damaging; it allows companies the flexibility to develop comprehensive sustainable development plans and thus to remove themselves from the list. Dalhousie subscribes to *MSCI ESG Research Data* which contains metrics that could be used to exclude the 'worst-of-the-worst' including carbon intensity and other environmental metrics.

Precedent: In January 2018, the San Francisco Employees' Retirement System committed to divesting from key fossil fuel companies; they tasked their CIO (Chief Investment Officer) with the development of a list of metrics by which to determine the 'worst-of-the-worst' (Diamond, 2018). Following these metrics, investment managers would develop their own watchlists of fossil fuel companies to remove from the portfolio (Diamond, 2018). This strategy was recommended and approved following the CIO's argument that fossil fuel companies are often used as a hedge in inflationary periods (Diamond, 2018). The full list of companies will be finished by July 30, 2018 following which the investment managers are asked to immediately begin the divestment process (Diamond, 2018).

Question/Comment: Customized mandates of directly-held securities. Selection, definition and evolution of metrics.

7. Divestment from companies whose energy mix would undermine international climate goals

Justification: This divestment strategy is deliberately phrased vaguely because it can be approached in a number of ways. The two principal strategies are to set floors for renewable use, or alternatively to specify ceilings for fossil fuel or coal use. These benchmarks may shift over time to reflect changes in technology or environment, and as companies commit to decarbonization and follow through on these commitments, our investments in them may be renewed. The most difficult and important step, should the Investment Committee prefer this approach, is to define the reference points and benchmarks to pass on to our investment managers. Financially, it is logical to invest in companies with solid business plans, and one aspect of these plans is necessarily adapting to work in a fossil-free future; further, this strategy would signal that Dalhousie is not aligned for or against any industry, but is simply committed to investing in a manner that reflects its values.

Precedent: One of the earliest and most monumental divestment commitments was Norway's \$890 billion pension fund in 2015 which committed to divesting from companies whose thermal coal reliance exceeds 30% of their energy mix (Schwartz, 2018).

Question/Comment: No company in Fund whose thermal coal revenues exceed 30% of total company revenues.

8. Risk-based approach: looking holistically at environmental impacts of companies from a variety of sectors, using pre-determined metrics including greenhouse gas emissions and carbon assets

Justification: This would allow us to avoid banning certain companies, sectors, or industries and signal that Dal will not endorse unsustainable business strategies. Further, this strategy does not infringe upon portfolio diversification or any industry investments and relationships.

Precedent: The managers of Norway's \$1 trillion Pension Fund, which has \$37 billion invested in the oil and gas sector, or 6% of the fund's benchmark equity index, committed to moving away from fossil fuels in 2018 (Fouche, 2018). Their reasoning was financial; they feared the impact of a possible permanent drop in oil prices (Fouche, 2018). The plan, which will be voted on by Parliament in fall 2019 and is widely expected to pass, proposes that investors be in charge of how to transition towards decarbonization; "Investors will look even more carefully at which companies are aligning their business strategies to the transition to a low-carbon energy system and which ones are not. Investors then have a range of options for managing the risks they perceive," said Stephanie Pfeifer, portfolio manager and head of Institutional Investors Group of Climate Change (Fouche, 2018).

Question/Comment: Regular reporting from and communications with investment managers cover stock selection, investment premise, and investment risk, including ESG factors. Investment Committee must approve each security selection of each investment manager?

Other Decarbonization Investment Options

1. Divestment from companies that derive all or virtually all of their profit from the extraction of carbon-based fuels, beginning with coal and oil.

Justification: Following a tactical divestment approach, this strategy would focus on companies that specialize in oil drilling (such as those held in exchange traded indexes like the XOP, IEO, and PXE), rather than the larger integrated oil companies which often own the assets in the ground - such as Shell, Exxon, and BP. This strategy would allow us to avoid divesting from companies who may be critical for an energy transition, and instead focus on companies that primarily profit from extraction. It acknowledges that many energy companies are committing to addressing the climate crisis via investment in renewables, a switch from carbon-based fuels, and increased research and development budgets. It takes into consideration that, although the larger integrated oil companies control the carbon assets, if they move away from extraction (where the smaller outside drilling companies profit) and toward renewables, those assets can be left in the ground. It takes a strong stance in removing the social license from companies who do not adequately address the crisis in their business plans.

Question/Comment: Terms of reference, update frequency, number of reviewed companies.

2. Divestment from companies that deny the reality of climate change and/or support climate change disinformation campaigns.

Justification: This recommendation was originally made by Senate - it's a narrow list of companies and makes a strong statement regarding Dalhousie's commitment to climate justice.

Question/Comment: Objective vs subjective assessment; concurrence of assessments.

3. Divestment from companies who lack a comprehensive decarbonization plan for 2050

Justification: Dalhousie has committed to net-zero carbon emissions by 2050 - to divest from companies whose plans do not align with ours would demonstrate that we take this plan seriously. This process would be long term; the Investment Committee would allow the companies within our portfolio to transition away from carbon-based energy sources. Example: The PZD ETF invests only in companies who reduce/mitigate environmental impact from carbon emissions and climate change (Crigger, 2018).

Question/Comment: Inclusive of all industries – large global list of publicly traded companies.

4. Divestment from companies whose planned 2030 energy mixes are not in line with Canadian national targets

Justification: Similar to the above strategy, this would remove the social license from companies who could undermine Canada's commitment to a green future without blacklisting specific industries. *Example: The NUMG is an ESG ETF which caps the maximum allowable carbon emissions in calculating ESG scores for constituents; while this approach focuses on current carbon emissions, we could possibly alter it to include planned carbon emissions (Crigger, 2018).*

Question/Comment: Canadian or Global applicability/

5. Divestment from companies whose actions contravene national environmental regulations

Justification: This strategy would demonstrate Dal's commitment to not only climate justice, but also to the validity of rule of law. Some companies notoriously and flagrantly ignore environmental laws, bylaws, or regulations; by refusing to invest in such constituents we erode the social license to act in such a harmful manner.

Question/Comment: Jurisdictional application. Investment managers currently look at this under ESG. VW, SNC Lavalin. Rehabilitation eligibility?

6. Divestment from companies whose business plans do not align with international climate change goals

Justification: As a more holistic approach, this action would affirm the University's stance on a low-carbon future for its community. Furthermore, as companies begin to develop sustainable development plans that would allow them to comply with these international goals, the list of companies in which we do not invest will shrink, so there will be marginal long-term impacts on Dal's portfolio diversity. This strategy, if pursued, would require fulsome discussion by the Committee to specify the reference points for sustainable investing. One possibility is to look at the funds provided by companies for R&D into renewable energy and sustainable development. Example: The MPCT ETF tracks an index of companies whose revenues are driven by products and services that address at least one of the UN sustainable development goals; it has a distribution yield of 2.73% (Crigger, 2018). On July 9, 2018 the Church of England announced its commitment to divest its £12 billion endowment and investment fund from all fossil fuel companies that have not aligned their business plans with the Paris Agreement target to limit global warming to 2 degrees Celsius by 2023 (Murray, 2018).

Question/Comment: Broad or specific industry application?

7. Goals-based approach: eliminating companies whose business plans are inconsistent with Dal's stated goals of net-zero carbon emissions by 2050

Justification: Similar to the above, this strategy highlight's Dal's commitment to its own sustainability goals. Again, the implementation of this strategy would necessarily have a longer time frame, as we would give our constituents time to react and adapt.

Question/Comment: Applicable to all industries?

8. Divestment from companies whose actions are inconsistent with article 32.2 of UNDRIP which states that Indigenous people must give free, prior, and informed consent prior to the approval of any projects affecting their lands territories or resources.

Justification: As Dalhousie discusses the Indigenization and decolonization of the university, this strategy could demonstrate that Dalhousie is committed to working against companies that infringe upon Indigenous and treaty rights.

Question/Comment: National reviews?

Potential Strategies

Potential strategies for ethical investing abound. Any responsible strategy will likely combine multiple tactics, but to be acceptable to students and provide the reputational benefits of ethical investing it is important that money is actively moved.

- Providing our investment managers with a list of companies to avoid
- Providing our investment managers with a list of acceptable and unacceptable qualificationsfor investment or divestment
- Reducing our exposure to fossil fuels companies by a certain percentage year-by-year
- Focusing on directly held equities
- Gradually pooling our funds with other divested institutions
- Publishing our endowment fund carbon footprint year-by-year and making commitments to reduce it, leaving the mechanisms of such to our investment managers

Timeframes

Time frame is important insofar as climate change is an urgent matter. However, there are many option that address climate change in a responsible manner while also allowing for responsible financial decisions.

- Immediately stop increasing investments in fossil fuels (or any of the above options)
 Precedent: University of Oxford
- 3-year timeframe

Precedent: University of Edinburgh

5-year timeframe

Precedent: New York City

Ongoing adjustment of the portfolio

Precedent: Norway

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Sustainability Progress Report

Office of Sustainability November 2018

In the last ten years, Dalhousie and partners invested over \$93.6 million in 55 sustainability related projects ranging from energy to biodiversity. The annual saving/cost avoided from these projects is \$3,317,152. In June 2018, the biomass co-generation project started its commissioning process. The annual revenue projection is \$1.36 million. This is used to pay for additional utilities and payment on the project.

Of the \$93.6 million-dollars, Dalhousie has invested \$64.87 million with the remaining being provided by external partners. Facilities Renewal contributions and non-utility projects equal \$42.36 million. An average simple pay-back for utility projects (water and energy) without including the facilities renewal contributions and non-utility projects is 4.8 years.

Examples of Utility projects include:

- District Energy, Full Building Retrofits (examples: Life Science Centre and Tupper Building Energy Performance projects)
- Better Envelope (examples: D Building, IDEA and Design building envelope additions)
- Recommissioning (examples: McCain and Mona Campbell)
- Efficient Systems, Equipment, and Products (examples: campus wide-lighting upgrades, reducing once through potable water used for cooling equipment and spaces, and Halifax-wide water fixture upgrades).
- Energy Product Changing (examples: solar thermal, air and photovoltaic installations and other less carbon intensive fuel product)
- SMART Metering

Dalhousie University is a Chartered participant of the International Sustainability Assessment Rating Systems (STARS). Every three years, the Office of Sustainability submits information on over 65 criteria related to sustainability operations, research, curriculum and student engagement. The latest ranking awarded Dalhousie a Gold STAR. The assessment highlights areas of strengths and future opportunities.

Dalhousie passed a University operational Sustainability Policy (2009) and Plan (2010). Goals, objectives, actions and three sets of targets were set for a 10-year period. Eleven indicators are tracked, and every fourth year the Office of Sustainability releases a public Sustainability Progress Report. The first report was released in 2014 and the second report in <u>April 2018</u>.

Notable highlights include:

- On average over 100 students and several faculty work with the Office of Sustainability on research and action projects annually.
- Climate adaptation strategies such as green roofs, rain water cisterns, vegetative swales, rain gardens and tree planting have been successfully deployed.
- Approximately 100 tonnes of garbage has been diverted from the landfill against the baseline year through campus-wide programs.
- Water consumption was reduced from the 2009-2010 baseline by 47%.
- The phase two target for 2016 of 20% reduction of GHGs from the baseline year was achieved.

Future Action

The final 2020 set of Phase 3 targets for the Sustainability Plan are significant. To achieve these targets, strategies such as renewable energy agreements and green building certification for existing buildings will need to be deployed in combination with other current programs and innovations. By 2021, an updated Sustainability Plan for the next decade will chart the course for future actions.

Introduction:

As part of the Investment Committee's ("IC") follow-up review on fossil fuel investments, staff engaged a third party consultant to provide a list of "Fossil Fuel Free" or "Carbon Neutral" Funds and were provided with a list of 10 potential products that were considered either Fossil Fuel Free or a Sustainable Strategy.

Fossil Fuel Free Strategies

There is no regulated or universally accepted definition of fossil fuel free, however upon review of the strategies that were provided it became evident that some of the products on the list did not fit into this category and were not a fossil fuel free fund. These included:

Blackrock Global Dividend Funds Morgan Stanley Global Franchise Morgan Stanley Global Opportunity, OFI Global Asset Management Global Focus.

These four funds were often void of the energy and utilities sectors but this was not a result of consciously choosing to not hold fossil companies, rather it was a result of their bottom up stock selection process. There was no mention of fossil fuel free within their respective investment objectives.

One fund the Essex Global Environmental Opportunities Strategy appears to be an environmentally conscious fund but upon reviewing the factsheet they clearly indicate they are not an ESG fund. This led staff to believe they don't believe in ESG integration the same as Dalhousie.

The remaining funds in this list had strategies that did seek to avoid fossil fuel funds or to be carbon neutral, however upon review of their metrics they had lower annualized performance than the Global equity returns of the Endowment Fund often with higher standard deviation.

The one exception is the Genus Capital Fossil Free CanGlobe Equity Fund, which outperformed the Endowment in one period (5 year annualized), however it did have a higher standard deviation.

Sustainable Strategies

The Sustainable strategies all appear to be environmentally conscious, seek to invest in companies that believe in sustainable business practices, and that will help solve environmental challenges. These beliefs are similar to integrating ESG into the strategy that Dalhousie currently pushes all managers to do.

All of the sustainable strategies provided lower returns in the 1, 3 and 5 year periods with higher standard deviation relative to the global equity returns of the Endowment Fund.

Summary of Strategies

Fossil Fuel Free Strategies

AB Sustainable Growth - This fund was not included in the analysis as it only has a 1 year track record, Dalhousie's preference is for a fund to have at least 5 years of data.

Blackrock Global Dividend Fund

Investment Objective

The fund "Seeks high-quality, dividend-paying companies that the team believes can generate strong, consistent returns with lower volatility over the long term"

Currently no holdings in Energy or Utilities, however no mention that it is because of it being "carbon neutral" or "Fossil Fuel Free", it just says that "the fund is a global portfolio of well-established, multinational companies carefully selected for quality, income and dividend growth potential"

Essex Global Environmental Opportunities Strategy (GEOS)

Investment Objective

The fund invests globally in listed equity securities of companies they believe will solve the world's greatest environmental challenges and enable sustainability while providing positive returns. They have nine environmental themes, including

Agricultural product and clean fuels
Low Carbon Commerce
Power Technology
Clean Tech and Efficiency
Environmental Finance
Renewable Energy
Efficient Transport
Power Merchants and Generation
Clean Water

The fact sheet says that the strategy is **not** an ESG strategy, however the Sr PM is the head of the ESG investment team. It doesn't appear they believe in ESG integration the same as Dalhousie.

Genus Fossil Free CanGlobe Equity Fund

Investment Objective

This fund is 35% CAD/65% Global and invests in large cap stocks, and integrates broad ESG criteria, and excludes all companies directly involved in the extraction, processing and transportation of fossil fuels.

Genus Fossil Free Dividend Equity Fund

Investment Objective

The fund seeks to reduce risk and provide higher dividend yield. Similar to the Fossil Free CanGlobe Equity Fund it is 35% CAD/65% Global and invests in large cap stocks, and integrates broad ESG criteria, and excludes all companies directly involved in the extraction, processing and transportation of fossil fuels.

Morgan Stanley Global Franchise

Investment Objective

The Morgan Stanley Global Franchise Strategy is a concentrated global equity strategy that offers a differentiated approach to investing. The strategy seeks to generate attractive returns by investing in high-quality businesses, characterized by dominant intangible assets, high returns on operating capital employed (ROOCE) and strong free cash flow (FCF) generation. To help achieve this objective, the strategy employs a "buy-and-hold" approach to construct a concentrated portfolio, with stock selection informed by rigorous fundamental analysis.

The team typically seeks companies with strong intangible assets, such as familiar brands, licenses and networks – household names that are part of people's everyday lives. These often have recurring sales that underpin sustainability and resilience, as well as strong management teams that allocate capital efficiently. Examples of top ten holdings includes Microsoft, VISA, British American Tobacco, Philip Morris.

There is no mention of this being fossil fuel free or carbon neutral.

Morgan Stanley Global Opportunity

Investment Objective

The philosophy is "Warren Buffett investment principles applied to growing companies." They believe that by applying a price discipline to investments in high-quality companies, strictly defined as those with competitive advantages and long-term growth that creates value, they can best capture opportunities and manage risk for clients.

They integrate ESG into this process, but there is no mention of it being fossil fuel free or carbon neutral.

Concentrated portfolio – 30-45 stocks, 95% Active share, 20-50% annual turnover.

OFI Global Asset Management Global Focus

Investment Objective

The strategy focuses on absolute value by purchasing companies with a large gap between the value of the business and market price that also have durable advantages and effective management.

AUM \$1.2B

24.9% of portfolio is currently in 5 technology stocks, Facebook, Alibaba, Paypal, Alphabet, Amazon.

Pax Global Environmental Markets Strategy -

Investment Objective

A global thematic strategy investing in companies that are developing innovative solutions to resource challenges in four key areas: energy efficiency and renewable energy, water infrastructure, waste management, and sustainable food and agriculture.

0% from Canada (55% US/45% Foreign).

Schroder's Global Climate Change

Investment Objective

The Fund seeks to provide capital growth primarily through investment in equity securities of worldwide issuers which will benefit from efforts to adapt to, or mitigate climate change.

Five main themes

- i. Energy efficiency
- ii. Low carbon fossil fuels
- iii. Clean energy
- iv. Sustainable transport
- v. Environmental resources.

They will not invest in the following:

- Companies where the investment case is not significantly affected by climate change
- Companies whose products decrease in demand due to climate change
- Companies that do not recognize and embrace the importance and impact of climate change

Companies reporting significant ownership of fossil fuel reserves (e.g. oil, coal, gas, tar-sands, shale gas) are excluded from the universe

40-60 holdings

Offered as a segregated account

Dalhousie University vs "Fossil Fuel Free" and Carbon Neutral Funds Annualized Returns Data As At June 30, 2018

Dalhousie Endowment Global Equities - ex Canada				
	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u>7 Yr</u>
Gross	19.71%	12.70%	16.21%	14.77%
Inv Mgmt Fees	0.42%	0.42%	0.42%	0.42%
Dalhousie Endowment Pool Return (Net of Inv Mgmt Fees)	19.29%	12.28%	15.79%	14.35%
Standard Deviation			9.16%	

	1 Yr	3 Yr	5 Yr	7 Yr
Blackrock Fundamental Global Dividend - Gross	0.49%	8.70%	12.32%	12.80%
Fees	0.75%	0.75%	0.75%	0.75%
Blackrock Fundamental Global Dividend - net of Fees	-0.26%	7.95%	11.57%	12.05%
Difference	19.55%	4.33%	4.22%	2.30%
Standard Deviation			9.46%	

Essex Global Environmental Opportunities Strategy (GEOS)	<u>1 Yr</u> 4.77%	<u>3 Yr</u> 3.96%	<u>5 Yr</u> 10.02%	<u>7 Yr</u> 10.05%
Fees	1.00%	1.00%	1.00%	1.00%
Essex Global Environmental Opportunities Strategy (GEOS)	3.77%	2.96%	9.02%	9.05%
Difference	15.52%	9.32%	6.77%	5.30%
Standard Deviation			12.01%	

OFI Global Asset Management Global Focus	<u>1 Yr</u> 16.27%	<u>3 Yr</u> 11.87%	<u>5 Yr</u> 15.20%	<u>7 Yr</u> 15.37%
Fees	0.80%	0.80%	0.80%	0.80%
OFI Global Asset Management Global Focus	15.47%	11.07%	14.40%	14.57%
Difference	3.82%	1.21%	1.39%	-0.22%
Standard Deviation			12.48%	

Fees 10% 093% 093% 093% 093% 093% 093% 093% 093% 093% 093% 093% 093% 093% 093% 093% 093% 10	PAX Global Environmental Markets Strategy	<u>1 Yr</u> 6.79%	<u>3 Yr</u> 10.64%	<u>5 Yr</u> 15.40%	<u>7 Yr</u> 14.42%
Name	Fees	1.00%	1.00%	1.00%	1.00%
Standard Deviation 10.19% Schroder Global Climate Change 15.25% 11.92% 5Yr 7Yr Schroder Global Climate Change 15.05% 1.50% 1.50% 1.50% 1.50% Schroder Global Climate Change 13.75% 10.42% 14.01% 11.74% Difference 5.54% 1.86% 1.78% 2.61% Standard Deviation 11.25% 15.55% 17.19% 16.95% Fees 0.98% 0.	PAX Global Environmental Markets Strategy	5.79%	9.64%	14.40%	13.42%
LYr 3Yr 5Yr 7Yr Schroder Global Climate Change 15.25% 11.92% 15.51% 13.24% Fees 1.50% 1.60% 1.74% 2.61% 1.74% 2.61% 1.25% 1.25% 1.26% 1.26% 1.25% 1.26% 1.26% 1.25% 1.26% 1.26% 1.25% 1.26% 1.25% 1.26%	Difference	13.50%	2.64%	1.39%	0.93%
Schroder Global Climate Change 15.25% 11.92% 15.51% 13.24% Fees 1.50% 1.50% 1.50% 1.50% Schroder Global Climate Change 13.75% 10.42% 14.01% 11.74% Difference 5.54% 1.86% 1.78% 2.61% Standard Deviation 11.25% 11.25% 7.7r Morgan Stanley Global Franchise 14.31% 15.15% 17.19% 16.95% Fees 0.98%	Standard Deviation			10.19%	
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Difference 5.54% 1.86% 1.78% 2.61% Standard Deviation 11.25%	Fees	1.50%	1.50%	1.50%	1.50%
Standard Deviation	Schroder Global Climate Change	13.75%	10.42%	14.01%	11.74%
1 Yr 3 Yr 5 Yr 7 Yr 14.31% 15.15% 17.19% 16.95% 16.21%	Difference	5.54%	1.86%	1.78%	2.61%
Morgan Stanley Global Franchise 14.31% 15.15% 17.19% 16.95% Fees 0.98% 0.98% 0.98% 0.98% Morgan Stanley Global Franchise 13.33% 14.17% 16.21% 15.97% Difference 5.96% -1.89% -0.42% -1.62% Standard Deviation 11.04% -1.62% Morgan Stanley Global Opportunity Fund 35.69% 24.09% 31.10% 23.48% Fees 0.98% 0.98% 0.98% 0.98% Morgan Stanley Global Franchise 34.71% 23.11% 30.12% 22.50% Difference -15.42% -10.83% -14.33% -8.15% Standard Deviation 13.55% -14.33% -8.15% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97%	Standard Deviation			11.25%	
13.33% 14.17% 16.21% 15.97%	Morgan Stanley Global Franchise				
Difference 5.96% -1.89% -0.42% -1.62% Standard Deviation 11.04% 11.04% Morgan Stanley Global Opportunity Fund 35.69% 24.09% 31.10% 23.48% Fees 0.98% 0.98% 0.98% 0.98% 0.98% Morgan Stanley Global Franchise 34.71% 23.11% 30.12% 22.50% Difference -15.42% -10.83% -14.33% -8.15% Standard Deviation 13.55% 13.55% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97%	Fees	0.98%	0.98%	0.98%	0.98%
Standard Deviation 11.04% Morgan Stanley Global Opportunity Fund 1 Yr 3 Yr 3 Yr 24.09% 5 Yr 7 Yr 31.00% 7 Yr 23.48% Fees 0.98% 0.98% 0.98% 0.98% 0.98% Morgan Stanley Global Franchise 34.71% 23.11% 30.12% 22.50% Difference -15.42% -10.83% -14.33% -8.15% Standard Deviation 13.55%	Morgan Stanley Global Franchise	13.33%	14.17%	16.21%	15.97%
1 Yr 3 Yr 5 Yr 7 Yr	Difference	5.96%	-1.89%	-0.42%	-1.62%
Morgan Stanley Global Opportunity Fund 35.69% 24.09% 31.10% 23.48% Fees 0.98% 0.98% 0.98% 0.98% Morgan Stanley Global Franchise 34.71% 23.11% 30.12% 22.50% Difference -15.42% -10.83% -14.33% -8.15% Standard Deviation 13.55% -14.33% -8.15% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97% Fees 0.00% 0.00% 0.00% 0.00% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97%	Standard Deviation			11.04%	
Morgan Stanley Global Franchise 34.71% 23.11% 30.12% 22.50% Difference -15.42% -10.83% -14.33% -8.15% Standard Deviation 13.55% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97% Fees 0.00% 0.00% 0.00% 0.00% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97%	Morgan Stanley Global Opportunity Fund				
Difference -15.42% -10.83% -14.33% -8.15% Standard Deviation 13.55% Wellington Climate Change Strategy 3.10% 3 Yr 3 Yr 5 Yr 7	Fees	0.98%	0.98%	0.98%	0.98%
Standard Deviation 13.55% LYr 3 Yr 5 Yr 7 Yr Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97% Fees 0.00% 0.00% 0.00% 0.00% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97%	Morgan Stanley Global Franchise	34.71%	23.11%	30.12%	22.50%
Lyr 3 Yr 5 Yr 7 Yr Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97% Fees 0.00% 0.00% 0.00% 0.00% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97%	Difference	-15.42%	-10.83%	-14.33%	-8.15%
Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97% Fees 0.00% 0.00% 0.00% 0.00% Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97%	Standard Deviation			13.55%	
Wellington Climate Change Strategy 3.10% 8.22% 14.05% 12.97%			3 Yr	5 Yr	<u>7 Yr</u>
Difference 16.19% 4.06% 1.74% 1.38%			8.22%	14.05%	
	Fees	3.10%	0.00%	14.05% 0.00%	0.00%

Dalhousie Endowment Global Equities (including Canada)				
	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u>7 Yr</u>
Gross	13.24%	14.96%	13.05%	11.67%
Inv Mgmt Fees	0.42%	0.42%	0.42%	0.42%
Dalhousie Endowment Pool Return (Net of Inv Mgmt Fees)	12.82%	14.54%	12.63%	11.25%
Standard Deviation			7.16%	
	1 Yr	3 Yr	5 Yr	7 Yr
Genus Capital Fossil Free Can Globe Equity Fund	12.29%	10.30%	15.19%	n/a
Fees	0.65%	0.65%	0.65%	
Genus Capital Fossil Free Can Globe Equity Fund	11.64%	9.65%	14.54%	
Difference	1.18%	4.89%	-1.91%	
Standard Deviation			8.54%	
	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u>7 Yr</u>
Genus Capital Fossil Free Dividend Equity Fund	9.22%	8.87%	12.03%	n/a
Fees	0.65%	0.65%	0.65%	
Genus Capital Fossil Free Dividend Equity Fund	8.57%	8.22%	11.38%	
Difference	4.25%	6.32%	1.25%	
Standard Deviation			6.86%	

Sustainable strategies

Acadian Global Sustainability

Investment Objective

The Acadian Sustainable Global Equity strategy seeks to provide institutional clients with the opportunity to capture long-term capital appreciation by investing primarily in a portfolio of global equity securities. The portfolio holds the securities of companies that exhibit socially responsible characteristics and sustainable business practices and restricts ownership of those that do not.

200-400 holdings 4%-6% active risk

AllianzGI Global Equity Sustainability

The fund concentrates on companies on global stock markets with sustainable business practices. Its investment objective is to attain capital growth over the long term.

They believe that by integrating environmental, social and governance factors into the investment process they are able to avoid activities that may bring significant reputational risk. Integrating ESG factors in the investment process produces:

- Reputational protection
- An improved risk/return profile
- Ability to fulfil fiduciary responsibility
- A positive impact on society

Approximately 50 stocks

This fund shares a similar view with Dalhousie, however has not achieved the same risk adjusted performance. Significantly higher fees.

Boston Common Global Equity Strategy

The strategy seeks to preserve and build capital over the long-term through investing in a diversified portfolio of companies it believes are high quality from an environmental, social and governance ('ESG') perspective and undervalued. The strategy invests in companies that, in the opinion of the advisor, have sound governance and a history of responsible financial management which have the potential to be consistently profitable over a long time horizon.

Hermes Global Equity ESG Strategy

The investment objective of the Strategy is to achieve long-term capital appreciation by investing in equity securities globally with favourable ESG characteristics.

93 holdings

Northern Trust Global Sustainability Fund Strategy

Investment Objective

Seeks to replicate the investment composition and overall performance of the stocks included in the MSCI World ESG Leaders Index.

The Index is a diversified, sector neutral global benchmark constructed using environmental, social and governance (ESG) factors. Sector and regional neutrality is designed to help the Index outperform other social responsibility and sustainability indices.

Schroder Global Sustainable Growth

The Fund aims to provide capital growth by investing in equity securities of companies worldwide which meet their sustainability criteria.

Sustainability beliefs:

Companies that are run for the longterm, taking account of their impact on ALL stakeholders will be able to sustain supernormal growth and returns

Companies with strong sustainability characteristics achieve better operational performance can maintain long-term structural growth

Markets are typically poor at valuing long-term growth and non-financial factors

30-50 holdings

Stewart Investors Worldwide Sustainability Strategy

Investment objective

The Fund aims to achieve long-term capital growth, and will seek to invest in a diverse portfolio of equity securities which are listed, traded or dealt in on any of the Regulated Markets worldwide. The Fund is not managed to a benchmark and may have exposure to developed or emerging markets whilst maintaining its geographical diversity. The Fund invests in companies which are positioned to benefit from, and contribute to, the sustainable development of the countries in which they operate.

Dalhousie Endowment Global Equities - ex Canada				
	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u>7 Yr</u>
Gross	19.71%	12.70%	16.21%	14.77%
Inv Mgmt Fees	0.42%	0.42%	0.42%	0.42%
Dalhousie Endowment Pool Return (Net of Inv Mgmt Fees)	19.29%	12.28%	15.79%	14.35%
Standard Deviation			9.16%	
Acadian Global Sustainability	<u>1 Yr</u> 14.49%	<u>3 Yr</u> 10.17%	<u>5 Yr</u> 14.99%	<u>7 Yr</u> n/a
Fees	0.75%	0.75%	0.75%	0.75%
Acadian Global Sustainability	13.74%	9.42%	14.24%	
Difference	5.55%	2.86%	1.55%	
Standard Deviation			9.36%	
Allianz GI Global Equity Sustainability	<u>1 Yr</u> 12.71%	<u>3 Yr</u> 11.66%	<u>5 Yr</u> 15.53%	<u>7 Yr</u> 14.13%
Fees	1.38%	1.38%	1.38%	1.38%
Allianz GI Global Equity Sustainability	11.33%	10.28%	14.15%	12.75%
Difference	7.96%	2.00%	1.64%	1.60%
Standard Deviation			9.95%	
	1 Yr	3 Yr	5 Yr	7 Yr
Boston Common Global Equity	12.19%	10.36%	14.92%	13.70%
Fees (approximately)	0.80%	0.80%	0.80%	0.80%
Boston Common Global Equity	11.39%	9.56%	14.12%	12.90%
Difference	7.90%	2.72%	1.67%	1.45%
Standard Deviation			9.67%	
	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u>7 Yr</u>
Hermes Global Equity ESG Strategy	13.64%	10.39%	16.37%	n/a
Fees	0.60%	0.60%	0.60%	
Hermes Global Equity ESG Strategy	13.04%	9.79%	15.77%	
Difference	6.25%	2.49%	0.02%	
Standard Deviation			10.10%	

Northern Trust Global Sustainability Fund Strategy	<u>1 Yr</u> 11.89%	<u>3 Yr</u> 10.33%	<u>5 Yr</u> 14.65%	<u>7 Yr</u> 13.85%
Fees	0.30%	0.30%	0.30%	0.30%
Northern Trust Global Sustainability Fund Strategy	11.59%	10.03%	14.35%	13.55%
Difference	7.70%	2.25%	1.44%	0.80%
Standard Deviation			9.12%	
Schroder Global Sustainable Growth	<u>1 Yr</u> 15.03%	<u>3 Yr</u> 12.20%	<u>5 Yr</u> 15.79%	<u>7 Yr</u> 15.29%
Fees	0.30%	0.30%	0.30%	0.30%
Schroder Global Sustainable Growth	14.73%	11.90%	15.49%	14.99%
Difference	4.56%	0.38%	0.30%	-0.64%
Standard Deviation			10.81%	
	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u>7 Yr</u>
Stewart Investors Worldwide Sustainability Strategy	10.82%	13.49%	15.66%	15.29%
Fees	1.50%	1.50%	1.50%	1.50%
Stewart Investors Worldwide Sustainability Strategy	9.32%	11.99%	14.16%	13.79%
Difference	9.97%	0.29%	1.63%	0.56%
Standard Deviation			10.51%	