

# CANADIAN UNIVERSITIES

# IN CLIMATE ACTION

Research Report by Tasha Stansbury Published 2021

# **CANADIAN UNIVERSITIES IN CLIMATE ACTION**

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## INTRODUCTION

In September 2019, over 7.6 million people participated in a series of Global Climate Strikes, many of them high school and university students. More than 6,100 events were held in 185 countries around the world. The strikers' demands included a complete phase-out of fossil fuels, the end of burning and deforestation of Amazonian and Indonesion rainforests, and immediate transition towards just, equitably, and fully renewable energy. Largely inspired by Swedish high school student Greta Thunberg's weekly climate strikes from school starting in August 2018,<sup>2</sup> and the subsequent School Strikes for Justice movement, these climate strikes were designed to draw attention to the immediacy and urgency of climate issues around the world and demand climate justice.

Advocacy for climate justice has gained traction in recent years, but it is far from being new. The environmental justice movement was born in the United States in the 1980s, when a study entitled "Toxic Waste and Race" exposed the way minority and low-income communities are disproportionately exposed to the effects of environmental damage and degradation, in particular through the placement of toxic landfills in low-income and/or racialized communities.<sup>3</sup> Although the study focused on sites of environmental racism in the United States, these problems exist globally, and in multitudes in Canada as well.

For example, in Aamjiwnaang First Nation, community members have suffered from high levels of cancer, developmental and reproductive disorders, and other health issues due to heavily polluted air and water sources.<sup>4</sup> In Grassy Narrows First Nation, high levels of mercury contamination in the English-Wabigon River has led to 90% of the population showing signs of poisoning, and residents are at least three times more likely to have neuropsychological, intestinal, and vision problems.<sup>5</sup> Africville, Nova Scotia, is one of the most well-known examples of environmental racism in Canada; a historically black community, it was chosen as the site for several dumps as well as an infectious disease hospital due to its being an "expendable nuisance", and then was subsequently destroyed in the 1960s after the City of Halifax determined that it had become an eyesore and brought shame to the city.6

<sup>&</sup>lt;sup>1</sup> "7.6 million people demand action after week of climate strikes", 350 (28 September 2019), online: <www.350.org>.

<sup>&</sup>lt;sup>2</sup> Suyin Hayes, "Students From 1,600 Cities Just Walked Out of School to Protest Climate Change. It Could Be Greta Thunberg's Biggest Strike Yet", Time Magazine (24 May 2019), online: <www.time.com>.

<sup>&</sup>lt;sup>3</sup> "History of Environmental Justice", Sierra Club (2021), online: <www.sierraclub.org>.

<sup>&</sup>lt;sup>4</sup> Level Justice, "2018-2019 Chapter Theme Report: Environmental Justice in Canada" (October 2018) at 19, online (pdf): <a href="https://leveljustice.org/sites/default/files/ej">https://leveljustice.org/sites/default/files/ej</a> theme report final - october 2018.pdf>. <sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> *Ibid* at 20.

In the decades since the beginning of the environmental justice movement, the effects of climate change have worsened, countries around the world have struggled to lower their greenhouse gas emissions, and the world's most vulnerable continue to bear the brunt of the burden. As such, the climate justice movement has continued to grow, acknowledge ways that climate change disproportionately affects marginalized groups and exacerbates inequitable social conditions, and push for real action to achieve justice for those groups.<sup>7</sup>

More information about the climate justice movement, and its history in Canada, can be found in Level Justice's 2018-2019 Chapter Theme Report on Environmental Justice in Canada.8

# WHY THIS REPORT?

As an organization that conducts research and advocacy within universities, Level Justice is in a good position to encourage Canadian universities to take more of a leading role in climate action, to partner with climate action groups to expand the scope of their work, and to connect interested students with climate action initiatives. This report can be used within both Level's law school chapters and other university groups, as a comprehensive guide to understanding their respective campus' involvement in climate action. The core purpose of this report is to encourage university students in particular to take action on climate change, whether by getting involved with student groups or encouraging university administration to take bolder action, and offer specific steps and examples of models they could follow in order to do so. This report will address:

- Previous impacts that universities and their students have had on societal development, and the implications for climate action;
- Current climate action that Canadian universities are taking, including action being taken by:
  - University administration;
  - Individual faculties;
  - Faculty-led independent projects; and
  - Student-led groups;
- Multi-university efforts being participated in by Canadian universities;
- Potential further climate action leadership work to be done by each of the abovementioned groups and actors within universities; and

<sup>&</sup>lt;sup>7</sup> Daisy Simmons, "What is 'climate justice'?", Yale Climate Connections (29 July 2020), online: <www.yaleclimateconnections.org>.

<sup>&</sup>lt;sup>8</sup> See note 4.

Potential roles for Level Justice and its campus chapters to play in that work.

The research in this document will be delivered in two parts:

- 1. A main report featuring an analysis of universities' role in climate action in Canada, and
- 2. A secondary portion featuring climate action profiles of each university in Canada with a Level Justice chapter.

# WHY UNIVERSITIES?

Universities around the world are currently in an important transition period. As more emphasis is placed on accessibility of higher education to non-traditional students, as well as knowledge transfer and social engagement, the typical "Ivory Tower" image of the university is being dispelled. Universities are taking more of a central role in societies; fulfilling not only their traditional roles as sources of education and research, but also as hubs of advocacy and important leaders in societal progress. Additionally, as owners and operators of buildings on campus, universities are in a position to make a significant impact, as buildings account for up to 19% of all greenhouse gas emissions and 32% of global final energy use. 10

There are several ways of understanding the impact of universities on societies, and subsequently on climate action. The work of universities is generally divided into three areas or missions: Education, research, and more recently, engagement. This third mission of engagement is fairly new and there is no agreed upon common understanding for what precisely it means.<sup>11</sup> However, it can loosely be defined as activities or projects that link universities to their respective societies' social and cultural needs. This includes knowledge transfer, which is focused largely on the needs of local industry, and social or community engagement, which encompasses types of knowledge transfer activities that are socially oriented and partner with non-profit organizations or community service groups. 12

Tristan McCowan offers a framework for understanding the impact of universities on climate change specifically. McCowan's research divides universities' work into five main areas

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<sup>&</sup>lt;sup>9</sup> Peter Maassen, Zacharias Andreadakis, Magnus Gulbrandsen, and Bjørn Stensaker, "The Place of Universities in Society" (2019) Körber-Stiftung at 13.

<sup>&</sup>lt;sup>10</sup> Oswaldo Lucon et al, "Buildings", in O. Edenhofer et al, eds, Climate Change 2014: Mitigation of Climate Change [Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Changel, (Cambridge, UK: Cambridge University Press, 2014) 671-738 at 678.

<sup>&</sup>lt;sup>11</sup> Supra note 9 at 8.

<sup>&</sup>lt;sup>12</sup> *Ibid* at 11.

of impact, or modalities: education, knowledge production, service delivery, public debate, and campus operations. 13 Service delivery and public debate are understood to fall under universities' third mission of engagement, while campus operations are defined separately because while they are not central to the core purpose or missions of universities, they are relevant to universities' impact on climate change. 14

In McCowan's framework, these modalities are observed in two main ways. First, the framework examines each modality's external impact on "bridging actors" (graduates, organizations, and communities) and "society" (economic, political, and cultural spheres), and the subsequent impacts on climate change itself. Second, each modality's potential impacts are observed in terms of both mitigation and adaptation pathways; in other words, whether the pathway will serve to help prevent climate change, or to help people learn how to live with the effects of climate change that cannot otherwise be avoided. To illustrate each of these relationships, or pathways, McCowan graphs each of the Mitigation and Adaptation Pathways (Figure 1), accompanied by a Pathways Key (Figure 2) to provide examples of each type of potential impact.

However, McCowan also stresses that these impacts can be positive or negative; for example, the student in example "M1" could become an engineer applying principles of sustainability into her building designs, <sup>15</sup> or conversely she could develop professional competencies which allow her to increase fossil fuel extraction. <sup>16</sup> Universities have the potential for creating immense positive impact on climate change, but they also have the potential for worsening it. While many universities and institutions advocate for the advancement of climate action, it is important to observe to what extent those institutions practice what they preach. McCowan refers to this as institutional embodiment, or the degree of consonance between the aims and actions of an institution.<sup>17</sup>

McCowans' framework will be used in part to shape the methodology of this report; however, this framework is mainly useful for considering future impacts of each aspect of a university's work, while this report mainly considers current actions being taken by each university.

<sup>&</sup>lt;sup>13</sup> Tristan McCowan, "The impact of universities on climate change: a theoretical framework" (2020) Transforming Universities for a Changing Climate Working Paper No.1 at 7.

<sup>&</sup>lt;sup>14</sup> *Ibid* at 9.

<sup>&</sup>lt;sup>15</sup> *Ibid* at 12.

<sup>&</sup>lt;sup>16</sup> *Ibid* at 13.

<sup>&</sup>lt;sup>17</sup> *Ibid* at 7.

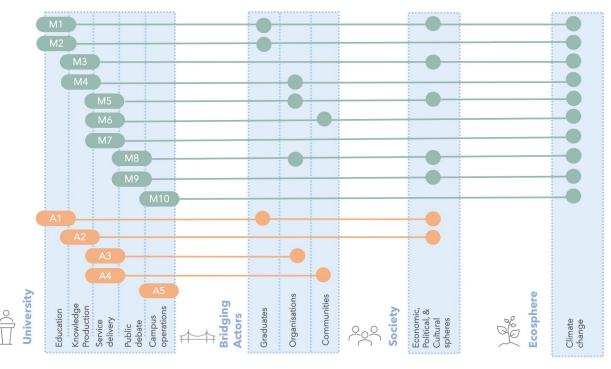


Figure 1: Mitigation and Adaptation Pathways<sup>18</sup>

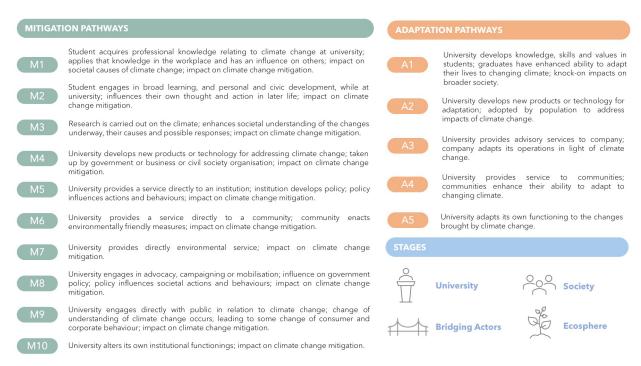


Figure 2: Pathways Key<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> *Ibid* at 10.

<sup>&</sup>lt;sup>19</sup> *Ibid* at 11.

# THE CANADIAN CONTEXT

According to a study by Körber-Stiftung on the role of universities in society around the world, universities play a uniquely important role in Canadian society. While research and development initiatives at universities in other countries are generally done in partnership with industry actors, Canada has relatively low levels of industry-based research. This is because many major companies in Canada are branches of US-based companies, and most research and development activities take place at home offices in the US. As a result, the share of Canadian research conducted solely by universities is fairly high compared to other countries.<sup>20</sup>

Canadian universities also have an exceptionally high level of knowledge transfer and community engagement initiatives, and the importance of mutually beneficial engagement with not-for-profit community partners is prioritized more highly than in other parts of the world.<sup>21</sup> The importance of this work is widely recognized by Canadians; according to a 2017 Universities Canada survey, upwards of 90% of Canadians believe that university research is valuable to society and support increases to university research funding.<sup>22</sup> As we can observe from the university highlights featured later in this report, many Canadian universities are already taking leading roles in both climate change research and climate action initiatives within and across their communities.

# **THE IMPACT OF STUDENT ACTIVISM**

One factor that McCowan's report does not address in detail is the impact of student activism, which is most often conducted separately from or, indeed, directly in opposition to university operations. While student activism is usually conducted by an extreme minority of the student populations, including during times of considerable politicization and activism, student groups have had an immense impact on both university operations and broader government policy.<sup>23</sup> In the 19th century, student groups emerged as key forces for independence in colonized countries; for example, student groups from the Dutch East Indies studying in the

<sup>&</sup>lt;sup>20</sup> Supra note 9 at 31.

<sup>&</sup>lt;sup>22</sup> Universities Canada News Release, "New polling data shows Canadians value research for Canada's future" (18 September 2017), online: <www.univcan.ca>.

<sup>&</sup>lt;sup>23</sup> Philip G. Altbach, "Student Politics: Activism and Culture" in James J.F. Forest and Philip G. Altbach, eds., International Handbook of Higher Education, vol 18 (Netherlands: Springer, 2006) 329-345 at 330.

Netherlands created the concept of, and then led the movement for, an independent Indonesian nation.<sup>24</sup> In Latin America, student groups led a movement in the early 20th century which established student influence on virtually all elements of academic and campus decision making.<sup>25</sup>

One of the most well-known examples of student activism occurred in the United States in the 1960s, when college students inspired by the Civil Rights Movement conducted mass demonstrations on campus in response to the government's escalation of the Vietnam War.<sup>26</sup> These student activists were an immense political force in the US, as they influenced public opinion, and then eventually the government, towards ending the Vietnam War.<sup>27</sup> While there was a general lull in student activism since the 1960s, it began to increase again since the turn of the 21st century. 28 Several of these protests have been carried out in response to specific university policies such as tuition increases, but many also addressed wider societal problems like government oppression, racism and white supremacy, sexual assault awareness, and climate change.<sup>29 30</sup>

# Student climate activism

In the last decade, climate activism on campus has pushed universities to make commitments to reducing their carbon footprint, and the pressure from students keeps growing.<sup>31</sup> A particular point of recent climate activism on university campuses has been divestment in fossil fuels. The University of Ottawa became the first Canadian university to commit to full divestment from fossil fuels in April 2016, followed by the University of British Columbia, Concordia University, the University of Victoria, and Université Laval.<sup>32</sup> Students have found creative ways to influence university policies; for example, UBC's commitment to divestment was made in response to a hunger strike launched in January 2020 by a group of students at the university. The strike, organized by UBC's brand of Extinction Rebellion, ended

<sup>&</sup>lt;sup>24</sup> *Ibid* at 335.

<sup>&</sup>lt;sup>25</sup> *Ibid* at 336.

<sup>&</sup>lt;sup>26</sup> *Ibid* at 337.

<sup>&</sup>lt;sup>27</sup> *Ibid* at 342.

<sup>&</sup>lt;sup>28</sup> Rachel Brooks, "Politics and protest – Students ride up worldwide", *University World News* (13 May 2016), online: <www.universityworldnews.com>.

<sup>&</sup>lt;sup>29</sup> Ibid.

<sup>&</sup>lt;sup>30</sup> "20 of the Most Important College Protests and Social Movements", Best Degree Programs (May 2017), online: <www.bestdegreeprograms.org>.

<sup>&</sup>lt;sup>31</sup> Michael Melia, "Students push universities to stop investing in fossil fuels", ABC News (19 February 2020), online: <www.abcnews.go.com>.

<sup>&</sup>lt;sup>32</sup> Emma Jackson, "Divestment movements take hold at universities", *The Charlatan* (11 February 2020), online: <www.charlatan.ca>.

after 100 hours, when the UBC board committed to fully divest from fossil fuel companies.<sup>33</sup> Since then, UBC has been ranked the #1 university in the world for climate action by Times Higher Education World University Rankings.<sup>34</sup>

#### Want to take action?

- Keep track of Climate Marches and Climate Strikes that are occurring in your province or city – or organize one – and encourage your student groups to participate.
- Find gaps in your university's commitment to reducing their carbon footprint and ask that they be filled via petitions and/or open letters.
- Run an awareness campaign on your university's campus about carbon emissions and their impact on local and global communities. Find creative ways to raise awareness!

#### LOBBYING FOR CLIMATE ACTION

# What is lobbying?

Another way that universities and their students can make an impact on climate change policy is by lobbying. Lobbying is "the process through which individuals and groups articulate their interests to federal, provincial or municipal governments to influence public policy or government decision-making."35 Lobbyists can be individuals hired to represent a client's interest, or representatives of a coalition of interest groups working towards the same type of broad policy change; for example, pushing for increased climate action at the government level.

At the federal level, lobbying activities are governed by the Lobbying Act, which came into force in 1989 as the Lobbyists Registration Act. At that time, it was criticized for requiring only a small amount of information. The Act went through four amendments before it reached its current form, coming into force in July 2008 as the Lobbying Act. Major changes included more requirements for information on the lobbying being done and more severe penalties for infractions, and a ban on former public office holders from lobbying for five years after the end of their public office position.<sup>36</sup>

<sup>&</sup>lt;sup>34</sup> "Impact Rankings 2020: climate action", *Times Higher Education* (2020), online: <www.timeshighereducation.com>.

<sup>&</sup>lt;sup>35</sup> A. Paul Pross, "Lobbying in Canada", *The Canadian Encyclopedia* (13 January 2021), online: <www/thecanadianencyclopedia.ca>. <sup>36</sup> Ibid.

The Lobbying Act divides lobbyists into two categories: Consultant lobbyists, who are people hired by clients to communicate with a public officer, and in-house lobbyists, who are employees of organizations seeking to lobby a public officer.<sup>37</sup>

The lobbying system has been criticized for creating potential for conflict of interest, and many scandals have arisen from the abuse of the lobbying process. However, lobbying is also a major tool of political advocacy and driver for policy change. In Canada, the lobbying system is regulated through conflict of interest legislation, like the Lobbying Act. Additionally, both consultant and in-house lobbyists must be registered as such at each of the relevant levels of government, and report on meetings with public officers to their respective lobbying regulators.

# Lobbying for and by students in Canada

Lobbying is conducted by several coalitions that either represent students and/or universities as a whole or include university student or faculty groups as coalition members. For example, the Canadian Federation of Students, Universities Canada, and Climate Action Network Canada have all recently lobbied for climate action at the federal level. Coalition members generally have to pay fees for membership.

# **Canadian Federation of Students**

The Canadian Federation of Students represents student unions and associations across Canada, bringing students' issues and concerns to the federal government. Their 2020 lobbying report includes a section encouraging the Canadian government to take bold action on climate change, recommending a fully funded decarbonization strategy which prioritizes justice for Indigenous people, workers, and the poor in the transition to a green economy.<sup>38</sup>

#### Want to take action?

- Join your university's students' association or student union to help identify key issues to be brought to the federal government's attention.
- Check here to see if your university's student association is a member of CFS: https://cfsfcee.ca/about/member-locals/
- If not, encourage them to join!

<sup>&</sup>lt;sup>37</sup> Ibid.

<sup>&</sup>lt;sup>38</sup> Canadian Federation of Students, "Be Bold: Education & Climate Justice for All: Canadian Federation of Students Lobby Document 2020" (2020) at 15, online (pdf): <a href="https://cfs-fcee.ca/wp-">https://cfs-fcee.ca/wp-</a> content/uploads/2020/02/CFS-Lobby-Document-2020.pdf>.

# **Universities Canada**

Universities Canada is a membership organization of university presidents advocating for Canadian universities at the federal level. Their 2020 pre-budget lobbying submission identified expanding investments in international research, namely to address climate change and other pressing global issues and investing in "state-of-the-art, green post-secondary infrastructure" as two of its five main priorities. 39 Universities Canada is extremely active at the federal lobbying circuit.40

#### **Climate Action Network Canada**

Climate Action Network Canada is a coalition of over 100 member groups, including some university groups. It aims to help Canadian organizations understand and respond to policies surrounding climate change, as well as helping coordinate these responses and efforts for greatest impact. 41 University-based groups involved in the Climate Action Network include the University of Toronto Environmental Action, the York University Faculty Association, and the Canadian Association of University Teachers. 42

## Want to take action?

- Talk to your environmental student group and encourage them to join the Climate Action Network. Unincorporated non-profits with at least five members can join as associate members for as little as \$40 per year.
- Visit this website to learn more about how to get involved: https://climateactionnetwork.ca/get involved/

# **MULTI-UNIVERSITY EFFORTS**

<sup>&</sup>lt;sup>39</sup> Universities Canada, "Investing in people, research and innovation for a greener Canada: Universities Canada's Budget 2020 submission to the House of Commons Standing Committee on Finance" (2020). online (pdf): <a href="https://www.univcan.ca/wp-content/uploads/2019/08/Investing-in-people-research-and-decomposition-people-research-and-de innovation-for-a-greener-Canada-pre-budget-2020-submission-to-finance-committee-august-2019accessible.pdf>.

<sup>&</sup>lt;sup>40</sup> Marco Vigliotti, "University of Saskatchewan, Universities Canada most active on federal lobbying circuit in September". iPolitics (29 October 2019), online: <www.ipolitics.ca>.

<sup>&</sup>lt;sup>41</sup> Climate Action Network, "About CAN-Rac" (2020), online: <www.climateactionnetwork.ca>.

<sup>&</sup>lt;sup>42</sup> Climate Action Network, "Our Members" (2020), online: <www.climateactionnetwork.ca>.

In addition to lobbying coalitions like Universities Canada, there are several other multiuniversity efforts across the country specifically targeting the issue of climate change. The list below is not exhaustive, but covers some of the high-profile agreements and initiatives between Canadian universities and others attempting to work together towards a carbon-neutral future.

# Investing to Address Climate Change: a Charter for Canadian Universities

Investing to Address Climate Change: a Charter for Canadian Universities was signed in June 2020 by 15 universities across Canada. It acknowledges the social, economic, and environmental changes caused by climate change across Canada, and universities' responsibility to act to address these challenges. It considers the duty of universities to design comprehensive strategies, including through management of campus operations and long-term investments, in a way which will accelerate the transition to a low-carbon economy. It outlines a set of principles and practices that the signatories agree to follow and encourage other Canadian universities to do the same, including:

- 1. Adopting a responsible investing framework to guide investment decision-making that align with the UN Principles of Responsible Investment;
- 2. Regularly measuring the carbon intensity of their investment portfolios and setting reduction targets;
- Evaluating progress towards their carbon reduction targets regularly and share those evaluations publicly; and
- 4. Ensuring that the performance evaluation of investment managers takes into account their work towards achieving those same objectives.<sup>43</sup>

Signatories: McGill University, University of Toronto, University of British Columbia, Dalhousie University, University of Guelph, Université Laval, University of Manitoba, McMaster University, Université de Montréal, University of Ottawa, Queen's University, Simon Fraser University, University of Waterloo, and Western University.

# **Sustainability and Education Policy Network (SEPN)**

<sup>43</sup> University of Toronto, "Investing to Address Climate Change: A Charter for Canadian Universities (2020), online (pdf): <a href="https://sustainability.utoronto.ca/wp-content/uploads/Investing-to-Address-Climate-Change">https://sustainability.utoronto.ca/wp-content/uploads/Investing-to-Address-Climate-Change</a> 18-June-2020.pdf>.

Originally founded at the University of Saskatchewan as SEPN-Canada in 2012, the Sustainability and Education Policy Network "began the world's first large-scale, national-level research collaboration by collecting and analyzing comparable data across Canada's formal education system."<sup>44</sup> Original Canadian university participants included the University of Saskatchewan and its partners at Dalhousie University, Royal Roads University, University of British Columbia, with additional researchers from universities around the world. The original Canadian program involved examining and comparing sustainability policies and practices being developed across all levels of education in Canada.

SEPN's research has now been expanded to an international scale, with research partners participating from around the globe. As of 2020, SEPN is launching a new research project called the Monitoring and Evaluation of Climate Change Education (MECCE) Project, whose goal is to "advance global climate literacy and action through improving the quality and quantity of climate change education, training, and public awareness."

Canadian university partners: University of Saskatchewan, Université du Québec à Montréal. Additional researchers and collaborators from McMaster University, The King's University, Dalhousie University, Royal Roads University, and University of British Columbia.

# **University Climate Change Coalition (UC3)**

Organized by Second Nature, an organization working to accelerate climate action in and through higher education, the University Climate Change Coalition is a collaborative coalition of North American research universities that "leverages relationships and expertise to accelerate local climate solutions and build community resilience." Coalition members commit to reducing their institutional carbon footprints and hosting cross-sector climate forums in their communities. Through its five-year (2020-2025) action plan, it has set specific goals targeted to the three "spheres of influence": campus, community, and global. These goals are primarily aimed at utilizing university resources to grow climate action strategies both individually and collaboratively.<sup>47</sup>

<sup>&</sup>lt;sup>44</sup> Sustainability and Education Policy Network, "Sustainability in Education" (2021), online: <www.sepn.ca>.

<sup>&</sup>lt;sup>45</sup> Sustainability and Education Policy Network, "The Monitoring and Evaluation of Climate Change Education (MECCE) Project" (2021), online: <www.sepn.ca>.

<sup>&</sup>lt;sup>46</sup> Second Nature, "University Climate Change Coalition (UC3)" (2021), online: <www.secondnature.org>.

<sup>&</sup>lt;sup>47</sup> University Climate Change Coalition, "2020-2025 Strategic Plan" (2020), online (pdf): <a href="https://secondnature.org/wp-content/uploads/UC3-Strategic-Plan-2020-2025.pdf">https://secondnature.org/wp-content/uploads/UC3-Strategic-Plan-2020-2025.pdf</a>.

# Want to take action?

Start a petition asking your university to join one of the above mentioned coalitions or networks. These groups are excellent opportunities for universities to learn from one another and hold each other accountable to higher standards of climate change mitigation and adaptation efforts.

# **UN Sustainable Development Goals (SDGs)**





Figure 3: Sustainable Development Goals<sup>48</sup>

Some universities have also framed their goals for sustainability around the United Nations' Sustainable Development Goals. Developed in 2015 as part of the 2030 Agenda for Sustainable Development, the SDGs are a set of 17 integrated goals related to the three dimensions of sustainable development: social, economic, and environmental. The goals are

<sup>&</sup>lt;sup>48</sup> United Nations, "What are the Sustainable Development Goals?" (2015), online: <www.undp.org>.

understood to affect one another and to all be interrelated, in that action in one area will affect outcomes in others.

The SDGs provide a unified interdisciplinary and intersectional framework for understanding sustainability. They encourage thinking about sustainability not solely in terms of meeting emissions reductions targets or reducing energy usage, but also in terms of eradicating social inequalities and building strong communities. Canada has committed to advancing the 2030 Agenda, and many universities have followed suit in individual commitments.

#### Want to take action?

- Check to see if your university has formulated a sustainability plan that explicitly considers the 17 SDGs, or has other plans related to them.
- If not, see how many of its commitments and plans relate to the SDGs, and propose that your administration create a unified, multifaceted plan that acknowledges and considers
- You can also create or join a Sustainability Development Goals-oriented student group or club to promote the SDGs on campus!

# ASSESSING INDIVIDUAL UNIVERSITIES' IMPACT

Below you will find climate action profiles of individual Canadian universities, in particular those with Level Justice chapters. These highlights will contain a brief summary of current actions being taken by each university to fight climate change, sorted loosely into categories of "campus operations", "research and education", and "student groups". These categories reflect a simplified blend of the three pillars of the university's work (research, education, engagement) with the categories of bodies that might carry out that work (administration, faculty, students), as a full analysis of the interaction between these categories for each individual university is outside the scope of this project. Where applicable, climate-related work being conducted in Faculties of Law will be particularly highlighted as it is most pertinent to Level Justice's work. These profiles are not comprehensive, as many of the universities listed have an enormous amount of climate-related initiatives.

In addition to individually searching each university's website for evidence of climate action, such as Climate Action Plans, initiatives conducted by individual faculties, and environmentally-focused student groups, two key tools will be used to assess each university's contributions to mitigating climate change. These will be the Times Higher Education Impact Rankings and Sustainability Tracking, Assessment & Rating System (STARS) Reports.

There are currently 10 universities across Canada with Level Justice chapters. However, there are 96 universities in Canada. Only universities with Level Justice chapters are featured in this report. Not all universities have Times Higher Education Impact Rankings or STARS reports.

# **Times Higher Education Impact Rankings**

The Times Higher Education Impact Rankings assess universities across the world based on the United Nations' Sustainable Development Goals (SDGs). In order to assess universities' action on climate change, the rankings measure universities' research on climate change, their use of energy, and their preparations for dealing with the consequences of climate change. The data is collected largely via student surveys. The list includes 376 universities from 70 countries, but only Canadian universities will be considered for the sake of this report.<sup>49</sup>

# Sustainability Tracking, Assessment & Rating System (STARS) Reports

Hosted by the Association for the Advancement of Sustainability in Higher Education (AASHE), STARS is a "transparent, self-reporting framework for colleges and universities to measure their sustainability performance." <sup>50</sup> It is designed to provide a framework for understanding sustainability in different sectors of higher education. It also provides a benchmarking tool for institutions to compare their sustainability performance against peer institutions, aggregated averages, or their own past performance. Its assessment categories include academics, campus engagement, public engagement, operations, planning & administration, and innovation & leadership, each with several sub-categories. Through participation in STARS, institutions can earn ratings of STARS Reporter, Bronze, Silver, Gold, or Platinum based on their sustainability leadership.<sup>51</sup>

# Want to take action?

Check if your university is currently ranked by the Times Higher Education Impact or STARS Rankings systems. Many universities have also previously submitted data but have since allowed their membership to expire.

<sup>&</sup>lt;sup>49</sup> Supra note 33.

<sup>&</sup>lt;sup>50</sup> The Sustainability Tracking, Assessment & Rating System, "About STARS" (2020), online: <www.stars.aashe.org>.

<sup>&</sup>lt;sup>51</sup> *Ibid*.

Encourage your universities to establish or renew their membership in these performance measuring initiatives. These are also excellent accountability tools, as universities can measure their progress against both their own past work and against other institutions' efforts.

# **UNIVERSITY CLIMATE ACTION PROFILES**

**Universities with Level Justice chapters** 

# **University of British Columbia** (Vancouver, BC)

Student population: 66,747

Times Higher Education Impact Rating: #1 globally

STARS Rating: Gold (expired August 2018)

UBC's Sustainability Initiative keeps track of sustainability reports, climate action, climaterelated innovation and research, featured courses and programs, fellowships and grants, campus partnerships, and more.

UBC is a signatory to Investing to Address Climate Change: A Charter for Canadian Universities, a research collaborator in the Sustainability and Education Policy Network (SEPN), and a member of the University Climate Change Coalition.

#### **Campus Operations**

UBC was the first Canadian university to develop a sustainable development policy in 1997. UBC also has a Climate Action Plan, approved by the UBC Board of Governors, which includes a 100% reduction in GHG emissions on the Vancouver campus by 2050. The Vancouver campus already emits 38% less GHGs than it did in 2007. UBC committed to divestment from fossil fuels in 2019.

### Research

UBC is home to the UBC Climate Hub, a student-driven initiative funded by the UBC Administration and supported by a wide array of offices and initiatives at UBC. Climate Hub projects include:

- Youth Climate Ambassadors Project a project connecting trained university student facilitators with high school classes and community groups;
- Climate Teaching Connector a pilot project to introduce more climate content into courses across departments, connecting profs with climate experts within the UBC network;

- <u>Student Academic Climate Advocacy Toolkit</u> a resource for students interested in advocating for more climate change and climate justice content throughout their academic experiences at UBC;
- <u>UBC Climate Emergency</u> an exploration of what actions UBC can take to address the declared climate emergency; and others.

## **Education**

UBC offers a <u>BA program in Environment & Sustainability</u> and a <u>BSc in Environmental Sciences</u>. They also offer a graduate program through the <u>Institute for Resources</u>, <u>Environment and Sustainability</u>, and over 60 undergraduate, graduate, and professional programs that allow students to specialize in a sustainability-related subject.

# Faculty of Law

The Allard School of Law Centre for Law and the Environment offers a specialization in environmental and natural resources law, and is putting together an educational platform, including an upper-year JD seminar, entitled Green Rights and Warrior Lawyers. It also offers an experiential learning opportunity in collaboration with the Pacific Centre for Environmental Law and Litigation and an environmental law moot court competition.

The Centre additionally participates in <u>action and outreach</u> by organizing, hosting, and participating in public-facing events, including direct action events like Climate Strike marches and marches to protest human rights abuses by Canadian mining companies, and participates in public debate and policy change via open letters, law reform submissions, op-eds, and other pieces of writing.

#### Student Groups

UBC hosts several student groups related to sustainability, including but not limited to:

- AMS Sustainability
- Common Energy UBC
- Commerce Undergraduate Society Sustainability
- Engineers for a Sustainable World
- UBC350
- Zero-Waste Squad

#### **University of Victoria** (Victoria, BC)

Student population: 21,593

Times Higher Education Impact Rating: #4 globally

STARS Rating: Gold (valid through July 2023)

UVic's sustainability practices are managed through its Office of Campus Planning & Sustainability.

The University of Victoria was a top 10 performer in STARS' 2019 Sustainable Campus Index in the category of Air and Climate and is a signatory to Investing to Address Climate Change: A Charter for Canadian Universities.

# **Campus Operations**

UVic's 2020-2021 Sustainability Action Plan is a precursor to a five-year plan set to be created in 2021. Its goals include increasing the number of its buildings that meet the Leadership in Energy & Environmental Design (LEED) Gold standard for sustainability, including any new building projects; reducing its total greenhouse gas emissions by 30% compared to 2010's emissions, as well as reducing campus electrical intensity and natural gas consumption; and increasing the rate of waste diversion on campus to 82%, all by the end of 2021.

In January 2020, UVic committed to divestment from certain carbon-intensive enterprises, with the goal of 45% reduction in carbon footprint of investments by 2030.

## Research

Environment, Climate, and Energy is listed as one of UVic's areas of research strengths. UVic conducts research on climate modelling, climate change mitigation and adaptation, the development of sustainable energy systems, and the human dimensions of climate change. Researchers work in partnerships with community groups, governments, and industry to work towards sustainable solutions and low carbon economic development.

The University of Victoria is home to several climate-focused research centres and initiatives, including:

- Institute for Integrated Energy Systems a multidisciplinary research community whose mission is to chart feasible pathways to sustainable energy systems through the development of new technologies, processes, and systems. The Institute provides leadership across a variety of fields in the study of sustainable energy development and works with industry, non-profit, and government partners.
- Pacific Institute for Climate Solutions led by the University of Victoria and operating in collaboration with the University of British Columbia, Simon Fraser University, and the University of Northern British Columbia. Its goal is to develop innovative, evidence-based climate solutions knowledge that is used by decision-makers within BC, nationally and internationally.
- Pacific Climate Impacts Consortium a regional climate service centre at the University of Victoria that provides practical information on the physical impacts of climate change in the Pacific and Yukon Region of Canada based on quantitative studies. The Consortium plays an important role in bridging climate research and the practical application of that knowledge by decision makers.
- Climate Solutions Navigator a tool aimed at connecting the university community on climate solutions opportunities and facilitate new research partnerships across faculties and with industry, public and civil society.

The University of Victoria also hosts two major federal research labs:

- The Canadian Centre for Climate Modeling and Analysis develops and applies computer models of the climate system to simulate global and Canadian climate, and then predict changes on short- to long-term timescales. This information is then used to provide science-based information to inform climate change adaptation and mitigation in Canada and internationally.
- The Water and Climate Impacts Research Centre is a co-location agreement between the University of Victoria and the National Water Research Institute of Environment Canada. It runs the Water Quantity/Hydrology/Sediment program that forms part of Environment Canada's Oil Sands monitoring program, and conducts additional research on the hydrologic and ecological impacts of atmospheric change and variability, particularly in the Canadian Arctic.

# Education

UVic has an Environmental Studies program which offers undergraduate and graduate programs, as well as experiential learning opportunities. The School of Environmental Studies offers BA, BSc, MA, and MSc programs with streams dedicated to Ecological Restoration.

# Faculty of Law

The UVic Faculty of Law lists Environmental Governance and Sustainability as one of its faculty research strengths. Law faculty expertise includes international law of the sea, green legal theory, citizen engagement on environmental issues, the nexus between Indigenous rights and environmental protection, water law, forest certification, and land-use law.

The law school also hosts the Environmental Law Centre (ELC) Clinic, Canada's first environmental law clinical program. The ELC works with community groups, conservation organizations, and First Nations across British Columbia on climate-related legal issues. It advocates for law reform, provides representation to clients before courts and tribunals, and engages in public legal education and outreach on environmental issues.

#### Student Groups

Climate-related student groups at UVic include, but are not limited to:

- Ancient Forest Committee
- Ecological Restoration Club
- Students for the Salish Sea
- The Wildlife Society UVic Student Chapter
- UVic Community Cabbage

# **University of Calgary** (Calgary, AB)

Student population: 30,201

Times Higher Education Impact Rating: #101-200 range

# STARS Rating: Gold (valid through December 2021)

The University Calgary Office of Sustainability webpage includes information on strategy, research, education, sustainable campus, ways to get involved, the campus as a learning lab, and news and upcoming events related to sustainability.

The University offers <u>Sustainability Awards</u> for outstanding sustainability contributions of UCalgary students, faculty, and staff. It also supports the <u>Sustainable Development Goals Alliance</u>, a student-run organization dedicated to advancing the 17 SDGs.

UCalgary was a top 10 performer in <u>STARS' 2019 Sustainable Campus Index</u> in the categories of Campus Engagement, Coordination and Planning, Purchasing, and Research.

# **Campus Operations**

UCalgary's <u>2019 Climate Action Plan</u> aims to achieve a carbon-neutral campus by 2050. The Office of Sustainability runs a <u>Campus Energy and Emissions Dashboard</u>, an interactive tool which tracks energy use and greenhouse gas emissions on campus.

UCalgary is committed to a <u>sustainable campus</u>. It has a high concentration of <u>green buildings</u> on campus, including several Leadership in Energy & Environmental Design (LEED) buildings, one Zero Carbon building project, and more of each in progress. It follows sustainable standards in the design, construction, and operation of its buildings to reduce <u>energy consumption</u>; maintains indoor and outdoor gardens to localize its <u>food system</u>; and considers sustainability in its <u>transportation</u> and <u>purchasing</u> programs.

#### Research

Sustainability is a core component of the <u>2018-23 Academic and Research Plans</u>. Approximately <u>20% of researchers and 80% of academic departments</u> at the University are conducting sustainability-research.

UCalgary hosts the <u>Arctic Institute of North America</u>, Canada's first and longest-lived Arctic research institute. The Institute conducts research to acquire, preserve, and share information on physical, environmental, and social conditions in the North.

University of Calgary is also a partner of <u>ArticNet</u>, a network of over 175 researchers from various disciplines in 33 Canadian universities working together with partners from Inuit organizations, northern communities, government agencies, and the private sector to study the impacts of climate change in the Canadian North. The researchers also collaborate with research teams from around the globe.

The University, along with the ArcticNet program, also participates in the <u>Canadian</u> <u>Consortium for Arctic Data Interoperability (CCADI)</u>, an initiative to develop an integrated Canadian arctic data management system that facilitates communication and utility between a

variety of research groups.

<u>Campus as a Learning Lab</u> is an additional initiative that focuses on experiential learning and fostering a campus rooted in sustainability. CLL uses the University of Calgary campus as a lab to test and model innovative sustainability practices. Students can participate in CLL research projects for course credit.

# **Education**

UCalgary offers a program called <u>FutureU</u>, a co-curricular experiential learning program aimed at helping students work towards sustainable and healthy futures for themselves and their communities. The program is open to all students on campus.

It also offers a <u>Certificate in Sustainability Studies</u> program, which can be embedded into most undergraduate degrees at no additional cost. It offers learning opportunities with a variety of external organizations working on sustainability.

The Schulich School of Engineering hosts the <u>Centre for Environmental Engineering</u>

<u>Research and Education (CEERE)</u>. CEERE offers a specialization for both undergraduate and graduate students in Energy and Environment, and undertakes environmental engineering research to build expertise and create solutions for clean air, soil, and water.

# Faculty of Law

The Faculty of Law lists Natural Resources, Energy and Environment Law as one of its main research areas.

#### **Student Groups**

The <u>Sustainable Development Goals Alliance</u> is a community of student groups working to raise awareness and actions for the 17 Sustainable Development goals. They conduct student engagement, community training, and regional advocacy programs, including an annual training conference and a mentorship program.

UCalgary also hosts several independent <u>student groups</u> with sustainability goals, including but not limited to:

- Community Garden Club
- Eco Club
- Ecosystem and Public Health Club
- Emerging Leaders for Clean Energy: University of Calgary
- Emulating Nature in Innovations
- Energy and Environment Engineering Students' Association
- Environmental Law Society
- Environmental Science Students' Association
- Students for Direct Action

# University of Saskatchewan (Saskatoon, SK)

Student population: 20,957

Times Higher Education Impact Rating: #101-200 range

STARS Rating: Silver (valid through March 2023)

# **Campus Operations**

USask's Office of Sustainability webpage monitors including a monitoring of daily power production from solar panels, and includes information on programs & events, work and volunteer opportunities, and tips on being a sustainable student or employee.

The University recently put together a 2021-2030 Draft Sustainability Strategy, which is framed in light of the UN SDGs and includes the goals of "leverage our place", "model the way", "empower action", "capitalize on strengths", and "catalyze social change". Other plans include a Campus Sustainability Plan, which includes specific goals for each of its areas of operation and work (research, education, community engagement, operations, governance), including targets to increase their STARS rating; a Climate Action Plan, which includes a goal of 20% reduction of 2006/07 emissions by 2020 and an inventory of GHG emissions; an Energy and Water Conservation Policy; and an Energy Action Plan.

USask coordinates Work Green, a network of campus workplaces dedicated to improving the sustainability of their day-to-day operations, and offers a Sustainability Revolving Fund, which finances sustainability initiatives that result in utility savings through behaviour changes on campus. It also runs a Living Lab program, combining study, research, and innovation by using the campus and the surrounding community as a laboratory for teaching and research on all aspects of sustainability.

The Government of Canada has invested \$1.5 million from its Low Carbon Economy Fund to help the University of Saskatchewan help reduce greenhouse gas emissions.

#### Research

All of the University of Saskatchewan's signature research areas impact sustainability.

USask hosts the Global Institute for Water Security, a leader water resources research institute dedicated to helping protect freshwater resources, and the Toxicology Centre, which conducts research on the harmful effects of chemical and physical agents on the environment.

USask is also the founding member of the Sustainability and Education Policy Network (SEPN), a collaboration between universities and researchers across the globe examining sustainability policies and practices being developed at all levels of education and increasing global climate literacy and action. SEPN is a project of the Sustainability Education Research Institute, a collaborative institute that houses various forms of research on environment and sustainability related to education. The Institute also offers opportunities for academic and community collaboration and graduate and post-doctoral training.

The Office of Sustainability maintains an inventory of sustainability-focused research being conducted at the University on its website.

#### Education

The School of Environment and Sustainability offers an undergraduate certificate program and several graduate degree programs. USask also offers a Bachelor of Science in Agriculture through the Environmental Science program and several other programs of study in sustainability available through different colleges at the University. Undergraduate and graduate programs are additionally available through the Toxicology Centre.

The Office of Sustainability maintains an inventory of sustainability-inclusive courses available at the University, including courses featuring Indigenization and Internationalization related content.

# Student groups

Sustainability-focused student groups at USask include, but are not limited to:

- Environmental Studies Student Association
- School of Environment and Sustainability Students' Association
- Green Legal
- USask IEEE PES Student Branch Chapter
- Wildlife Disease Association

# **University of Manitoba** (Winnipeg, MB)

Student population: ~27,000

Times Higher Education Impact Rating: N/A **STARS Rating:** Gold (valid through August 2021)

The University of Manitoba's Office of Sustainability website offers a summary of sustainability initiatives across campus, including campus initiatives, education and research, ways to get involved, and reports on policies and strategies.

UM has a Sustainability Committee, which acts in an advisory capacity to the Academic and Administrative Vice-Presidents. The Committee is made up of 13 members representing the interests of students, faculty, and administration across all UM campuses. Its Sustainability Awards recognize sustainability leadership in students, staff and faculty. It also released a Sustainable Development Goals Report in 2020 outlining its commitments to the UN's 17 SDGs.

UM was a top 10 performer in <u>STARS' 2019 Sustainable Campus Index</u> in the categories of Research and Coordination and Planning and is a signatory to *Investing to Address Climate Change: A Charter for Canadian Universities*.

# **Campus Operations**

UM's 2019-2023 <u>Sustainability Strategy</u> is framed in light of the UN's 17 SDGs. It sets out specific goals and commitments in the realms of research and academics, campus life, and infrastructure and operations to be completed by the end of each year to the end of 2023. Commitments include exploring the creation of a degree designation in Sustainability Studies for students in any program, establishing a sustainability award, developing a comprehensive energy master plan, and several others. It has also committed to integrating Indigenous knowledge into aspects of its planning and education initiatives.

UM has conducted a <u>greenhouse gas emissions inventory</u>, and plans to use it as a guideline to reduce future emissions.

UM has committed to <u>waste reduction on campus</u> by promoting reusable water bottles and bags, introducing a reusable container program at one of their dining halls, and hosts a Waste Reduction Week. It also offers a composting program and several types of recycling.

UM is dedicated to <u>increasing the sustainability of its food</u>, including sustainable food options at dining halls, Fair Trade certified food products, and three community gardens on campus. UM's Sustainability website also promotes <u>sustainable transportation options</u> to and throughout its campuses.

# Research

<u>77%</u> of UM's research-producing departments and 1,150 of its faculty members are engaged in sustainability research. It was named a <u>United Nations Academic Impact Hub</u> in 2018 for its work and research related to SDG #6, clean water and sanitation.

It has several <u>key research themes</u> related to sustainability, including Arctic system science and technology; safe, health, just and sustainable food systems; sustainable water management systems; Indigenous research; and sustainable systems for resilient communities.

Its Arctic system science and technology research is conducted largely through the Centre for Observation Science's <u>Arctic Geomicrobiology and Climate Change</u> project, which tracks geomicrobial changes in Arctic sea ice and sediments. This data is used in part to inform public policy development in addressing key issues facing the Canadian Arctic.

UM hosts the <u>Sustainable Food Systems Research Group</u>, an umbrella group of researchers collectively working to advance UM's signature research theme of Safe Health, Just and Sustainable Food Systems. It also hosts a <u>Living Lab</u> program, which connects UM faculty

and staff and students conducting research projects to solve sustainability challenges on campus.

#### Education

<u>20%</u> of UM's courses are sustainability-related, and it offers over 900 courses across 18 faculties and 62 departments that relate to sustainability.

It offers Bachelor's degrees in <u>Environmental Science</u> and <u>Environmental Studies</u> through the Department of Environment and Geography.

# **Student Groups**

Student groups at UManitoba related to sustainability include, but are not limited to:

- University of Manitoba Efficient and Renewable Technology Hub
- Society of Earth Sciences and Environmental Students
- Manitoba Environmental Industries Chapter
- University of Manitoba Indigenous Concerns on the Environment Club
- Engineers Without Borders
- SDG Working Group

UM students also have the opportunity to take part in the <u>Sustainability Ambassador Program</u>, a volunteer leadership program for students interested in promoting sustainability at UM.

# Queen's University (Kingston, ON)

Student population: 24,143

Times Higher Education Impact Rating: N/A

**STARS Rating:** N/A

The Queen's <u>Sustainability Office</u> website contains information on various sustainability initiatives being conducted across the Queen's community.

Queen's is a signatory to the University Climate Change Coalition, and in 2019 hosted a <a href="UC3">UC3</a> forum with the objective of developing a shared understanding of climate action in the Kingston community, and to create connections and opportunities between groups. It is also a signatory to *Investing to Address Climate Change: a Charter for Canadian Universities*.

## **Campus Operations**

The 2016 <u>Queen's Climate Action Plan</u> is focused on a main goal of a carbon neutral campus by 2040. It includes GHG inventories and reduction targets; actions to date in operations, teaching, research, and student engagement; and a strategy for implementation of the Plan. A 22-member <u>Climate Action Plan Advisory Committee</u> is working on evaluating, planning, developing, and implementing the Climate Action Plan. Queen's <u>Campus Master Plan</u>, which

guides how the university will physically change in the future, is shaped by six guiding principles, one of which is "foster a most sustainable campus".

Queen's has <u>previously reduced</u> its GHG emissions and energy usage by installing a new boiler, and increasing lighting efficiency. Other accomplishments include achieving <u>green building certifications</u> on four buildings and installing <u>green roofs</u> on several buildings. Its <u>Integrated Learning Centre</u>, which is home to the Faculty of Engineering and Applied Science, is certified as one of the most environmentally advanced buildings in Canada.

Queen's has also conducted several energy-reducing initiatives, including replacing their combustion heating units with <u>cogeneration units</u>, using an <u>enthalpy wheel</u> to salvage used air for new energy and fresh air, air conditioning shutdowns coordinated through a <u>demand management program</u>, and <u>others</u>.

The university has also increased sustainability through food, hosting a <u>community garden</u>, publishing a <u>local food guide</u>, and a <u>Soul Food</u> program which redirects unused food from university cafeterias to local Kingston shelters every night.

Further commitments to sustainability include <u>sustainable purchasing choices</u>, an extensive <u>recycling program</u>, and promotion of <u>sustainable transportation</u>.

# Research

There are nearly <u>60 researchers</u> at Queen's that are involved with environmental research. Queen's is home to several environmentally-focused research groups and centres, including:

- <u>Paleoecological Environment Assessment and Research Laboratory (PEARL)</u> a group of about 30 researchers providing historical perspective to environmental change, informing the understanding and study of current global environmental change;
- <u>Centre for Energy and Power Electronics Research (ePOWER)</u> a research centre working to develop new energy efficient, cost effective, and environmentally friendly power electronic technologies;
- Queen's-RMC Fuel Cell Research Centre (FCRC) Canada's leading university-based research and development organization, run by the Faculty of Engineering and Applied Science, which is dedicated to developing technology for fuel cell applications; and
- Queen's Institute for Energy and Environment Policy (QIEEP) a research centre working to facilitate research into policy issues regarding energy and the environment.

#### Education

The <u>Integrated Learning Centre</u>, in addition to housing the Faculty of Engineering and Applied Science, also serves as a learning space, providing hands-on opportunities for students to learn about engineering with a focus on sustainability.

Queen's offers a <u>Masters in Applied Sustainability</u> through the Faculty of Engineering and Applied Science, as well as undergraduate and graduate degrees through the <u>School of Environmental Studies</u>. It also offers sustainability-focused courses through other programs,

including the <u>School of Business</u>, which offers a course on practices to become more sustainable and access career opportunities in the green economy.

Students can also learn about sustainability through the <u>Technology</u>, <u>Engineering and Management (TEAM)</u> multidisciplinary project course offered by the Department of Chemical Engineering. Students have worked on projects to determine viability of renewable and sustainable energy courses, and conducted studies on campus cooling, energy consumption, and green roofs.

# **Student Groups**

Student leadership in sustainability is acknowledged in the Queen's Climate Action Plan. Students groups conducting sustainability work at Queen's include, but are not limited to:

- The AMS Commission of the Environment and Sustainability
- Arts and Science Undergraduate Society (ASUS) Committee for the Environment
- Conservation Queen's
- Queen's Greens
- The Queen's Solar Design Team
- The Earth Centre
- Queen's Backing Action on Climate Change
- Queen's Soul Food
- Students for Sustainability

# **University of Ottawa** (Ottawa, ON)

Student population: 42,587

Times Higher Education Impact Rating: N/A

STARS Rating: Silver (valid through September 2021)

UOttawa's Office of Campus Sustainability website contains information on its sustainability related commitments and accomplishments.

UOttawa was a top 10 performer in <u>STARS' 2019 Sustainable Campus Index</u> in the category of Transportation and is a signatory to *Investing to Address Climate Change: A Charter for Canadian Universities.* 

#### **Campus Operations**

In its 2015 <u>Addressing Global Warming: The uOttawa Response</u> report, uOttawa committed to reducing the carbon footprint of its investments by at least 30% by 2030, creating a Clean Innovations Fund, investing \$10 million in clean technologies, and creating a Clean Innovation Research Fund (CIRF).

UOttawa's <u>Sustainability Plan</u> includes a goal to become a carbon neutral campus by 2040 and eliminate remaining emissions by 2050. It has implemented an <u>Environmental</u>

Management and Sustainability Policy, as well as additional policies surrounding ethical and environmentally-friendly procurement of goods. UOttawa also builds all of its major buildings to a LEED Silver Certification standard or higher and to have green roofs where possible, hosts over 50 community garden plots on campus, and has committed to further greening the campus in its Campus Master Plan. It has also reduced energy usage on campus and aims to continue reducing energy consumption by 2% annually despite the growth of campus.

The Faculty of Social Sciences also hosts <u>Canada's tallest living wall</u>, or vertical garden, which is six floors high and provides humidity and air purification to the whole building.

# Research

The <u>Clean Innovation Research Fund</u> was established in 2016 and by 2020 had provided \$1.5 million to research on climate change.

# **Education**

UOttawa's Sustainability website offers a comprehensive list of <u>undergraduate</u> and <u>graduate</u> courses, <u>academic programs</u>, and <u>scholarships</u> related to sustainability. It also offers a <u>Living Laboratory</u> program which combines academic work and community volunteering to improve sustainability on campus.

## Faculty of Law

Environmental Law is listed as one of the Faculty of Law's main areas of research. Research, teaching, discussion, and advocacy related to environmental law is done largely through the Centre for Environmental Law and Global Sustainability.

#### Student Groups

UOttawa has a <u>Green Reps</u> program for students in residence looking to get involved with making residence living more sustainable.

UOttawa's sustainability-related student groups and clubs include:

- UO Climate Crisis Coalition
- University of Ottawa Society of Environmental Awareness
- Plant a Plant
- Environmental Science Association of uOttawa
- uOttawa Environmental Law Students' Association
- Environmental and Aboriginal Law Association

# **University of Western Ontario** (London, ON)

Student population: 28,386

Times Higher Education Impact Rating: #101-200 range

STARS Rating: Gold (valid through July 2021)

UWO's <u>Sustainability at Western</u> website contains information on current initiatives, academics, campus operations, and other information related to sustainability. It maintains an <u>Energy Dashboard</u>, which tracks electric, water, and steam energy usage across campus, as well as green factsheets on UWO's buildings. It also maintains an ongoing <u>GHG inventory</u>. The university also <u>tracks initiatives and research</u> being conducted across campus that align with the UN's 17 Sustainable Development Goals.

UWO offers several <u>awards</u> for community contribution to sustainability, including <u>Western's</u> <u>Ideas for Sustainability and the Environment (WISE) Competition</u>, <u>Western Green Awards</u>, and many others.

UWO is a signatory to *Investing to Address Climate Change: A Charter for Canadian Universities.* 

# **Campus Operations**

UWO's 2012 "Creating a Sustainable Western Experience" sustainability plan contains 5- and 10-year goals. Previous accomplishments include a commitment to all new buildings achieving a minimum LEED silver certification and upwards of 60% waste diversion rates. Specific goals include reducing 80% GHG reduction targets by 2050 compared to 2009 levels, becoming a Zero Waste campus, purchasing products and services that meet sustainability criteria, supporting the development of green infrastructure on campus, increasing the availability of sustainable food on campus, and an increase in focus on sustainability in academia, research, and campus lifestyle.

UWO's Hospitality Services has its own <u>Sustainable Action Plan</u>, and hosts its own oncampus <u>farmer's market</u>.

#### Research

The <u>Centre for Building Sustainable Value</u> at the Richard Ivey School of Business also conducts teaching and research on sustainable development. It founded the <u>Network for Business Sustainability</u>, a growing network of over 8,000 researchers and managers committed to advancing sustainable business.

### **Education**

UWO's <u>Centre for Environment and Sustainability</u> offers several <u>undergraduate</u> programs and courses, a <u>Masters of Environment and Sustainability</u>, and a summer co-op program. The Centre's goal is to implement interdisciplinary teaching and learning that advances the understanding of interactions between society and the environment.

Other sustainability-related courses are available within each faculty. Students are advised to seek academic counselling to find these courses.

# Student Groups

Sustainability-related student groups at UWO include:

- Student Energy at Western University
- EnviroWestern
- WaterAid Western
- Wildlife Conservation Society

# **University of Windsor** (Windsor, ON)

Student population: 16,491

Times Higher Education Impact Rating: N/A

**STARS Rating:** N/A

UWindsor's <u>Environmental Sustainability</u> <u>@ UWindsor</u> web page contains information on its sustainability initiatives. UWindsor has an <u>Environmental Sustainability Advocate</u> position, whose main responsibility is to manage and enhance UWindsor's sustainability initiatives.

# **Campus Operations**

UWindsor has made improvements in <u>waste management</u>, and has proposed an <u>Energy Plan</u> to mitigate energy usage, which is currently under review. The Energy Plan includes goals to reduce energy usage and greenhouse gas emissions by 5% each over by 2022 following the implementation of the Plan, as well as installing electric vehicle charging stations and switching fleet vehicles to electric. UWindsor also has two <u>LEED certified buildings</u>, and has committed to sustainable practices in its <u>food services</u>.

UWindsor also hosts a campus community garden and farmers market.

#### Research

The Environment is one of the areas of research strength at UWindsor. It currently has <u>over</u> 70 faculty members conducting research in environmental sustainability.

The Great Lakes Institute for Environmental Research hosts two major research projects:

- <u>GEN-Fish</u> a team of researchers tracking the location and abundance of freshwater fish species and their performance in the face of environmental stressors; and
- Real-Time Aquatic Ecosystem Observation Network (RAEON) a project focused on providing infrastructure, staff, and data management for Canadian researchers carrying out research on the Great Lakes in order to manage, rehabilitate, and enhance ecosystems.

#### **Education**

UWindsor offers graduate and undergraduate academic programs that emphasize environmental studies through the <u>Department of Civil Environmental Engineering</u>, the <u>Department of Earth and Environmental Sciences</u>, the <u>Great Lakes Institute for Environmental</u>

Research, and the Faculty of Science. The Sustainability @ UWindsor web page also maintains a list of environmental sustainability-related courses.

#### Faculty of Law

The UWindsor Faculty of Law hosts the <u>Cities & Climate Action Forum</u> via the <u>Windsor Law Centre for Cities</u>. The Forum conducts research and provides public education and engagement on climate change and the need for municipalities to take action. The Faculty of Law also runs the <u>Transnational Environmental Law and Policy Clinic</u>, an experiential opportunity for students to engage in environmental policy research in a transnational context.

# **Student Groups**

UWindsor students have the opportunity to get involved in the <u>Environmental Sustainability</u> <u>Advocacy Committee</u>, which manages the campus community garden and runs sustainability awareness initiatives on campus.

UWindsor also hosts student groups focused on sustainability and climate, including:

- Environmental Law Society
- Jull Environment Club
- UWindsor Climate action

# **CONCLUSION**

Although Canadian universities are some of the world's best leaders in climate action, there is still a significant amount of work to be done even on its leading campuses. Universities have the potential for making an immense impact on climate action initiatives within their campuses, in their local communities, and at several levels of government. While there is significant debate as to how best to embody their commitments to climate action, Canadian universities seem overall receptive to increasing sustainability on campus, reducing their carbon footprint, and taking positive steps towards a healthier climate.

The data collected on the 10 universities in this report alone demonstrates inconsistencies in the ways that universities approach climate action and commitments to sustainability. For example, there is a huge variety in the goals of energy usage and greenhouse gas emissions reductions across universities; this may be related to availability or allocation of funding and resources, which varies depending on the university and its area of focus. While some universities have committed to divesting from fossil fuels, others choose to reduce their investments or influence investee companies to adopt more sustainable practices. Finally, while some universities make a direct commitment to interdisciplinary and intersectional sustainability action through engagement with the United Nations Sustainable Development

Goals, others focus more directly on certain SDGs and still others do not mention them at all. Interestingly, there were very few mentions of climate justice found throughout the course of this research.

There are many ways that students can get directly involved in various forms of climate action on campus, including taking courses, participating in experiential learning opportunities, joining clubs and societies, and participating in direct action like demonstrations, marches, and student strikes. Universities pay attention to their students' interests and demands; this means that there is potential for students to make an impact at every level of engagement with their university, including the highest levels of administration. Even universities with lower levels of funding or research focused specifically on environmental sustainability can be influenced to increase their actions in those areas if students demonstrate interest and demand. Students looking to get involved on campus can consult this report for a summary of opportunities and initiatives. For more information, students can contact their respective university's sustainability office or speak to other students already involved in these initiatives.

#### Recommendations for further Level Justice involvement:\*

- Have Level student chapters request to have Level Justice listed with other student groups that are involved in sustainability work on their university's website. If the university does not have such a list, have the Level student chapter compile a list and offer it to the university for publication. This would assert Level Justice's role as an organization that cares about climate justice, and would likely also increase student involvement in Level campus chapters.
- If possible, register Level Justice in a climate lobbying coalition such as Climate Action Network Canada. This would elevate the voices and perspectives of both Level Justice as an organization and its student chapters.
- Conduct further research with student chapters regarding their own universities' potential
  for further involvement. Have student chapters create and submit a proposal and/or
  petition to their university, either as an alternative to either a fundraising or awareness
  event or in addition to both (depending on group size, student availability and
  commitment, etc.).
- Consider implementing a climate lens to all future Level Justice theme reports, including
  at least one section on how the issue in question is affected by or affects climate
  change. Implement elements of climate justice into this analysis, including a
  consideration of disproportionate effects on poor, racialized and/or Indigenous
  communities, women, disabled people, immigrants, etc. and possible steps forward. This
  can also be done through engagement with the UN Sustainable Development Goals.

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