Okanagan Senate

THE SECOND MEETING OF THE OKANAGAN SENATE
FOR THE 2021/2022 ACADEMIC YEAR

THURSDAY, 28 OCTOBER 2021
3:30 P.M. to 5:30 P.M.

1. **Call to Order – Dr Santa J. Ono** (information)

2. **Membership – Dr Kate Ross**

   Nominating Committee:

   *Two senators have been nominated for the vacancy on the Senate Nominating Committee: Stephen O’Leary and Rob Johnson. An election will be held under this item to select a member until 31 August 2023 and thereafter until replaced.*

3. **Minutes of the Meetings of 30 August and 23 September 2021 – Dr Santa J. Ono** (approval) (docket pages 3-24)

4. **Business Arising from the Minutes - Dr Santa J. Ono** (information)

5. **Remarks from the Chair and Related Questions – Dr Santa J. Ono** (information)

6. **Remarks from the Deputy Vice-Chancellor and Related Questions – Dr Lesley Cormack** (information)

7. **Remarks from the Provost and Related Questions – Dr Ananya Mukherjee-Reed** (information)

8. **Academic Policy Committee – Dr Jan Cioe**

   Graduate Student Parental Accommodation Policy (approval) (docket pages 25-35)

9. **Admissions & Awards Committee – Ms Tamara Ebl**
   a) New and Revised Awards (approval) (docket pages 36-46)
      Grade 12 Literacy Assessment Requirement – Admission Change (approval) (docket pages 36, 43-48)
10. **Curriculum Committee – Dr Yves Lucet**
   Curriculum Proposals from the Faculties of Education and Health & Social Development (approval) (docket pages 47-60)

11. **Learning & Research Committee – Dr Sally Stewart**
   Referral on Honorary Degrees for 2021-2011 (approval) (docket pages 61-67)

12. **Nominating Committee – Dr Jannik Eikenaar**
   Appointment to a President’s Advisory Committee for the Extension of the Vice-President Research and Innovation (approval) (docket page 68)

13. **Report from the Deputy Vice-Chancellor – Dr Lesley Cormack**
   Climate Action Plan 2030 – with Rob Einerson, John Madden, Benjamin Johnson, Leanne Bilodeau, Abigail Riley and Krista Falkner. (information) (docket pages 69-190)

14. **Other Business**
OKANAGAN SENATE
MINUTES OF 30 AUGUST 2021
DRAFT

Attendance


Regrets: S. Point, P. Barker, J. Holzman, R. Campbell, R. Johnson, J. Jakobi, J. Udoch, D. Rogers, R. Somal,

Clerk: C. Eaton

Guest: R. Sadiq

Call to Order

President Santa J. Ono, Chair of Senate, called the Senate to order at 10:02 am

Chairs Remarks

The President noted that he called this meeting as soon as he learned of the request circulating from Senator Lalonde. 10 days’ notice was needed for such a meeting and the circumstances have changed in the past 10 days. Before turning to the substantive matter, the President reminded the Senate of where UBC and the Okanagan campus stood with regards to public health measures.

The President noted that COVID case counts have been rising this summer, both generally, but in particular in the Kelowna area. On 20 August, additional public health orders were brought in place for the region and the previous Tuesday, the Province announced that proof of vaccination will be required to access some events, services, and businesses. A first dose is needed by 13 September, and people need to be fully vaccinated by 24 October. The Province also announced that masks must be worn in all public indoor areas including classrooms and laboratories. In addition to the province-wide guidelines and those for Interior Health, starting on 7 September, students living in on-campus housing must provide proof of vaccination, and students in health science programs must be fully immunized to participate in student practica or clinical placements in long-term care or extended care facilities.
Dr Ono further advised that the Province has announced that the Return-to-Campus guidelines are being updated and new guidelines will be available soon, and that he Ministry of Advanced Education has noted that under the guidance of WorkSafeBC, all public post-secondary institutions have developed communicable disease prevention plans and as part of these plans, post-secondary institutions can implement their own proof of vaccination policies beyond what is provincially required for faculty and staff.

The President noted that the above did not fully address the largest demographic on our campuses: our students. He advised that for most of last week, he and his fellow research university presidents, and the Research University Council of BC have been working to achieve clarity on this matter of what ability the University had to take action here. There have been a lot of questions and concerns regarding the autonomy of UBC and other universities to make decisions regarding our community’s health and safety, and how that intersects with the authority of Government and health officers. Dr Ono said that he knew that those questions will continue and need to be addressed. To the specific matter of keeping our people safe in this pandemic, Dr Ono said that he was pleased to say that UBC will require COVID-19 testing for all students, faculty and staff, with exemptions provided for those who are vaccinated against COVID-19, and we will implement a process for confidential self-disclosure of vaccination status for all those who access our campuses, including students, faculty, staff and visitors.

Dr Ono noted that this was a developing situation and this only became an option at the end of the previous week.

Dr Cormack said that it was clear that the situation in the Okanagan has been important to helping move this matter forward. We all wishes that this conversation was happening in early July and not the end of August as there was little logistical time to set up a vaccine and testing mandate. Dr Cormack advised that a rapid testing program had been approved for the Okanagan and a vaccine clinic was occurring today.

Dr Mukherjee-Read said that we were planning to implement a twice-weekly testing program with the help of Nursing and Medicine. We estimate needing to test around 10% of our population.

Dr Ono noted that UBC was in a better position than the rest of the BC post-secondary system and due to a clinical trial over the summer we have useful data on tests and testing protocols. 83-92% test efficacy could be expected using rapid antigen testing. The question is how could we scale this up as we don’t yet have data on UBC vaccination rates in the Interior, while we do have this for Vancouver.

Senator Cioe asked how exemptions from testing would work for those vaccinated: would this require one dose or two.

Dr Ono said that from a public health point of view, full vaccination would be a much stronger case, but we needed to determine this over the next week or so.
Senator Ebl asked if even vaccinated people could avail themselves of rapid testing given breakthrough cases and new variants.

The President said that testing should be available to anyone, not just required for those who weren’t vaccinated.

In response to a question from Senator Ebl, the President said that he couldn’t yet speak to enforcement. We need to show empathy and recognize that people need time to comply with rules learned very recently.

Senator Morgan said the students appreciated the work done by the University to protect the people of UBC, but said that it did not go far enough and said they would propose an amendment.

Senator Picault said that some faculty members in his department were immunocompromised and asked what could we do to support them.

The President said that we would provide medical accommodations for faculty, staff, and students. Conversations would need to occur with heads and deans as necessary.

The President reminded the Senate that the Public Health Orders were legally binding and we did not have autonomy to go against a legal order.

Senator McNeil asked if it would be illegal for UBC to impose a stronger vaccine mandate.

The President said that we were not allowed to have our own stronger vaccine mandate; the President said that he personally supported a stronger mandate.

Senator Reeves noted that the Ministry of Advanced Education said on 24 August said that we could issue stronger mandates, so there seemed to be some dispute between ministries on what was allowed if the Ministry of Health said otherwise. She also noted that currently the mask mandate expired at the end of September and that it would be concerning if UBC was not free to extend these. The Senator went on to note that BC seemed to be controlling what its universities should do more than other provinces and this was concerning in a city with only 19 ICU beds and where UBC couldn’t provide 2-meter physical distancing based on class capacity and hallway dimensions. In light of this, UBC needed to explore what ability UBC had to implement our own health measures.

Senator Lalonde said that other universities in Canada have gone against provincial guidelines and the law faculty at the University of Victoria has issued an opinion saying that universities could make their own decisions here. He said that it was important for the Senate to articulate strong support for action by UBC.
The President said that despite their law faculty’s opinion, the University of Victoria has not acted contrary to Provincial direction.

**Motions Regarding COVID-19**

Robert Lalonde
Margaret Reeves

That the Okanagan Senate urges the President and Board of Governors to require students who will be living in residence, and students, faculty and staff that will be attending, supporting or delivering in-person classes, tutorials, or laboratories to be fully vaccinated against the Covid 19 virus prior to doing so.

**AMENDMENT**

Kristen Morgan
Rhys Herzberg

That the Okanagan Senate direct the faculties to require Instructors to offer their courses of instruction for the 2021 Winter Session either online or in hybrid format.

Senator Cioe spoke against the amendment noting that some students wanted in-person instruction and signed up for their courses on that basis.

Senator Mukherjee-Reed noted that we knew some students couldn’t attend in person but since the spring we have been planning for options for them. She noted the collective agreement complications and the need to respect local collegial decision making.

Senator Traister spoke against the amendment noting that he agreed with the previous speakers and additionally arguing that it was too broad in its scope.

Senator Low asked if students would be required to self-isolate for two-weeks during the term if they tested positive for COVID.

The President said that we couldn’t yet say.

The Provost said that we would have to follow Interior Health protocols but we have equipped every lecture room with lecture capture technology and students would be accommodated as needed.

*By general consent, the time to adjourn was extended by 30 minutes.*

**GERMANENESS OF AMENDMENT**
Senator O’Leary raised a point of order arguing that the amendment wasn’t germane to the call of the meeting.

Senator Cioe said he would argue that the amendment was germane to the call of the meeting as it related to COVID-19 health and safety.

Senator Cormack said that the relationship was tangential in logic.

The Senate resolved that the amendment to the motion was germane.

Senator Hilton said that the amendment would assist international students and that there weren’t that many concessions available to them other than academic leave for a term or two, and this was a penalty rather than a concession.

The Provost said that we started from a position with 20% of courses online and when further issues were raised by international students, we removed capacity controls and equipped classrooms with lecture capture. We have given advice to faculty members and deans on more specific faculty-level accommodations available including course substitutions.

Senator Herzberg spoke in favour of the motion, saying that we could not force students to attend an unsafe environment.

Senator Picault spoke against the amendment and said that we should allow rather than require such options.

Senator Tomaskova said that the Faculty of Arts and Social Sciences built in a lot of flexibility into its scheduling for this year in the interests of equity and access.

Senator Cioe noted that Senate had a formal policy on academic concession that should be used to address concerns.

Senator Sugden spoke in favour of the amendment noting that Management courses are already online or hybrid. He said that the motion allowed for online or hybrid approaches and that we should be creative and flexible.

Senator Hare noted that accreditation and regulatory matters required some programs to have face-to-face instruction.

By general consent, the amendment was amended to add “Except where in-person instruction is required by external regulatory requirements.”

Senator Picault asked who decides what mode of instruction is used for courses.
Senator Mukherjee-Reed said that we have respected our usual ways of determining how a mode of instruction was set within departments.

**MOTION TO CALL THE PREVIOUS QUESTION**

Bryce Traister
Margaret Reeves

} That the previous question be so put.

**AMENDMENT**

Kristen Morgan
Rhys Herzberg

} That the Okanagan Senate direct the faculties to require Instructors to offer their courses of instruction for the 2021 Winter Session either online or in hybrid format except where in-person instruction is required by external regulatory requirements "

**EXTEND TIME TO ADJOURN**

Karen Hodges
Margaret Reeves

} That the time to adjourn be extended by a further 30 minutes.

Senator Hodges clarified that the motion before Senate was to give the President and the Board of Governors the Senate’s endorsement of a vaccine mandate for the Okanagan campus, what they did with that was between UBC and the Province. She noted that everyone has suffered in this pandemic and the stakes were high. There was an effective vaccine for this disease and this was the cleanest, fastest and strongest way to protect our community. She encouraged UBC to strike a moral claim and to say to the Province that we want to protect the health and safety of everyone.

Senator Lalonde said that this was a legally-grey area and UBC should force the issue by acting unilaterally.
Motions Regarding COVID-19

Robert Lalonde / Margaret Reeves

That the Okanagan Senate urges the President and Board of Governors to require students who will be living in residence, and students, faculty and staff that will be attending, supporting or delivering in-person classes, tutorials, or laboratories to be fully vaccinated against the Covid 19 virus prior to doing so.

Adjournment

Seeing no other business, the meeting was adjourned at 11:30 a.m.
Attendance


Clerk: C. Eaton

Call to Order

The Chair of Senate, Dr Santa J. Ono, called the meeting to order at 3:33 pm

Agenda

The President noted that he had approved a request to consider candidates for degrees under Other Business towards the end of the agenda.

Senate Membership

VICE-CHAIR OF SENATE

The Registrar, Dr Kathleen Ross, announced that as no further nominations were received, Dr Lesley Cormack was acclaimed as elected Vice-Chair of Senate.

NEW MEMBERS

The registrar welcomed the following new members of Senate:

Dr Jan Hare, Dean Pro Tem. of the Faculty of Education, until replaced; and
Dr Ilya Parkins, Joint Faculties Senator, until 31 August 2023 and thereafter until replaced.

SENATE NOMINATING COMMITTEE
The Registrar announced that with the resignation of Senator Ragoonaden, there was a vacancy on the Senate Nominating Committee. Nominations were set to be due on 15 October 2021.

Minutes of the Previous Meeting

Jan Cioe
Tamara Ebl

\[That \text{ the Minutes of the Meeting of 10 May 2021 as corrected.}\]

\[Correction: \text{ Senator Ebl and Herzberg’s comments regarding gender criteria for awards on page 8 were to read “In response to a question from Senator Eikenaar, Senators Herzberg and Ebl confirmed that the Admissions & Awards Committee was reviewing the matter of gendered terminology and criteria in awards and was committed to promoting improvements.”}\]

Chairs Remarks

The President opened his remarks by noting that the return to campus was going as well as could be hoped for: as of yesterday, 82% of faculty staff and students have completed the vaccination status declaration with 98% reporting that they were vaccinated and 95% with two doses. The President thanks everyone for their commitment to a healthy and safe campus, especially recognizing the importance of the mask mandate.

Dr Ono set out his priorities and goals for the 2021-22 year. These were in the following categories: equity, diversity and inclusion; indigenous engagement and reconciliation; climate change; COVID-19 response; operational efficiency and the President’s Academic Excellence Initiative.

In the area of Equity, Diversity and Inclusion:
- Work with the UBC community to complete the Taskforce Report of Anti-Racism and Inclusive Excellence;
- Identify priorities for implementation from the Taskforce Report;
- Support the implementation of top annual priorities from the Inclusion Action Plan;
- Release the Report from the National Forum on Anti-Asian Racism; and
- Ensure that the “Beyond Tomorrow Scholars Program” is successfully launched.

In the area of Indigenous Engagement and Reconciliation:
• Work with the entire UBC community and indigenous partners to implement the Indigenous Strategic Plan;
• Continue to foster strong relationships with Musqueam;
• Work with the Executive, Provosts, Deans and ISP Coordinating Committee to plan Indigenous faculty, staff and student recruitment; and
• Work with Professor Sheryl Lightfoot and the Deans to develop a synergistic partnership between the Faculties of Applied Science and Science with 3 First Nations.

For Climate Change:
• Continue to lead climate action in my second year as the President of the University Climate Change Coalition (UC3);
• Continue to lead as Chair of the Committee of Presidents of the U7+ Alliance of 45 universities to address pressing global challenges such as climate change; and
• Prepare to host the global Climate Change Summit at UBC in summer 2022.

For the COVID-19 response:
• Continue to lead UBC’s strategy to support a healthy and safe community during this year of Return to Campus, working with provincial leaders and health authorities;
• Support the implementation of a remote work program that fosters employee engagement, attraction and retention, and considerations around environmental impacts;
• Work with the Executive and others to enhance programming for students as they return to campus after 18 months away; and
• Evaluate and apply lessons learned from the pandemic into future planning to mitigate risk and leverage opportunities.

In the area of Operational Efficiency:
• Work with Executive and experts in institutional finance to establish a UBCV/O operating model that optimizes the distribution of resources across UBCV and UBCO;
• Focus on UBCV and UBCO budgets with a clear delineation of administrative structures and an alignment of budget frameworks between both campuses;
• Support the implementation of a Thrive-based platform for monitoring testing of unvaccinated individuals at UBC; and
• Provide clear and visible leadership in the refinement of Workday HR and Finance and the implementation of Student within the Integrated Renewal Program.

Finally, for the President’s Academic Excellence Initiative- the academic renewal project:
• Oversee the accelerate phase of the PAEI and support the development of the campaign-phase for both campuses;
• Engage with the Deputy Vice-Chancellor, Provosts and Deans to leverage PAEI to support the EDI priorities of the university; and
• Work with the Provosts, VP Research and Deans to support infrastructure investments to support new faculty members recruited by PAEI.
Dr Ono reminded Senators that the first National Day for Truth and Reconciliation was in seven days; UBC would be observing this day as a holiday on both campuses and classes would not be held. He noted that in a recent broadcast email he encouraged the UBC community to honour the National Day for Truth and Reconciliation, whether through personal reflection, education and awareness activities, or by participating in Orange Shirt Day or other events. Dr Ono said that he was pleased to note that many UBC faculties, schools and departments are commemorating the National Day for Truth and Reconciliation and Orange Shirt Day through various activities. Dr Ono further commented that UBC’s overall response to residential schools and colonialism is guided by the Indigenous Strategic Plan, which we launched just over a year ago. Dr Ono suggested that the challenge was now looking forward: We need to keep ourselves accountable and ensure this plan is enacted and embedded into the structures, processes, and daily life of the university.

The President noted the importance of the United Way campaign, which he co-chaired. This initiative supported needy initiatives across the province as well as the University. Dr Ono noted that we were a very privileged community in a society challenged in many ways by the pandemic. UBC was one of the largest supporters of the United Way.

Finally, the President spoke of the recent federal election. He thanked everyone who was highly engaged in the election. He noted the difficulty with the Vote on Campus program being discontinued and said that they would continue to encourage Elections Canada to make it as easy as possible for students to vote.

Senator Cioe noted concerns with Workday Student moving ahead and its structure not being supportive of the nature of a Canadian higher education institution.

The President noted that Dr Cormack was the executive lead on the program and asked her to address this question.

Dr Cormack said that we were in early days of planning the Workday Student ecosystem and we still did not know what could or could not be done. We are seeking point solutions for some things such as Student Finance which are different from the American system workday was familiar with. We did not have an option to stay with the existing system. UBC was working hard with workday and this was a very complex ecosystem that will always have challenges. She noted that these issues would come back to Senate as required.

The Registrar added that this was an opportunity for us to look at how UBC did things, some of which were not common practices and we should look at changing for the better. She noted that the new system would give students and UBC more utility than the current SIS, but we would have to adapt as well.

Dr Ono said that UBC was an important and large partner for Workday and we can use our leverage to seek improvements. He noted that in discussions with other university
Presidents, many spoke highly of the program once the transition phase was passed. We will continue to do what we need to do to have it work in our Canadian context.

Remarks from the Deputy Vice-Chancellor

Dr Cormack noted that the Okanagan campus enrolment was slightly higher this year with around 12000 students. She noted that some courses were online as planned in the spring when students reported wanting online and hybred courses and in light of travel challenges. Our initial plan was for 17% of courses being online and in practice this term has 23% of courses entirely online, 4.4% optionally online and 1.4% hybrid. With students back in campus, “Create” has been expanded to include a “Recreate” for returning students who are having their first on-campus experience, and we are working to expand informal learning spaces to facilitate student online participation on days they are on campus. She thanked everyone for working to keep the campus safe. In closing, Dr Cormack noted the “health ambassadors” program was expanded to remind people of mask requirements on campus and self-attestations around vaccinations with education rather than coercion being the goal. Testing is available on campus as needed for asymptomatic people and two vaccination clinics have been established with further clinics to be set up as needed, especially with more students coming internationally.

Dr Arthur noted the 12000 students referenced, and asked where we were in terms of our government funded full-time enrolment count, noting that we were at 108% of our funded targets last year.

Dr Cormack said that we were at around 112% of our funded seats.

Dr Ross added that we wouldn’t finalize those numbers until 1 November so there may be a small adjustment. The Enrolment Report will come forward to Senate towards the start of Term 2, and it would be important to note the undergraduate vs graduate enrolments.

Remarks from the Provost

The Senate recognized Mr Brad Wuetherick, Associate Provost for Academic Programs, Teaching and Learning, on behalf of Vice-President Mukherjee-Reed.

Mr Wuetherick noted the following for Senate:

- Appreciation for the IT and audio-visual staff for their work over the summer to prepare the campus for new and different modes of learning
- Overall the faculties were reporting a very high rate of compliance with public health orders and safety rules on campus.
- The work of the Beyond-COVID task force, where over 100 people have worked over the summer on the key themes learned for teaching and learning and opportunities for improvements.
• With respect to Student Experience of Instruction, following the changes made over the past year, on 28 September an open forum would be held for both campuses and he suggested that those interested should attend.
• The upcoming National Day of Truth and Reconciliation and the various events being held that day and week. Orange banners have been raised on campus in collaboration with the Okanagan Nation Alliance and a website has been established to let people know opportunities
• A transformational review has been launched of health programming at the Okanagan campus; on 4 and 5 October, external visitors will be on campus to help think about the future.
• An indigenous knowledge and open education forum will be held on 22 October.
• A call of proposals has been issued for the ALT2040 fund. Three streams are available: open educational resources, program and learning experience enhancement, and a program development stream. Proposals were due 22 November.
• Finally, there will be a Ministry of Advanced Education, Skills and Training Quality Assurance Process Audit visit on 29 and 30 November.

Senator Ebl noted the self attestation for vaccination and how we would ensure that those who were not vaccinated or did not reply would undergo rapid testing. She also asked if we had security concerns at clinics given protests in Salmon Arm.

Dr Cormack replied that we had no issue with the clinic held so far. We do not anticipate problems but are working with Campus Security. With respect to rapid testing, this program was still under development.

From the Board of Governors

Dr Ono advised that set out on your agenda was confirmation from the Board of Governors of their concurrence to all of the matters forwarded to them from January to May.

In addition, Dr Ono noted that the Okanagan Senate passed a motion in August to make a recommendation to the Board to implement a vaccine mandate.

Dr Ono noted that a similar motion was passed by the Vancouver Senate. The Board met yesterday and Board Chair Nancy McKenzie has asked him to convey the following message to the Senates:

“First, the Board appreciates the care and energy that the Senates have invested in considering this matter and producing recommendations for the Board’s consideration. These are challenging times and the health and safety of the UBC community is of paramount concern to all of us. We face difficult issues and the input and views of the Senates are important and deeply valued.

Having received the recommendations from the Senates, a significant amount of time was set aside on the Board agenda to ensure that they could be carefully considered.
The Board also invited public health experts, including Dr. David Patrick from UBC’s School of Population and Public Health and Dr. Daniel Coombs from UBC’s Department of Mathematics and a member of the BC-COVID Modeling Group, to share their expert advice on the measures that UBC should be taking to address public health and safety concerns arising from the pandemic. These experts, as well as medical health officers from Vancouver Coastal Health and Interior Health provided up-to-date, detailed data-driven presentations, including information about current vaccination rates.

The Board also obtained legal advice to ensure that it understood the legal framework within which these public health measures are being implemented.

Informed by these presentations and after deep and careful questioning from Governors, the Board believes that the most appropriate path at the current time is to require that all faculty members, staff members, and students be fully vaccinated or undergo regular COVID-19 testing.

In addition, mandatory masking and the use of the BC vaccine passport, as required by public health authorities, is required. Where necessary, appropriate accommodations will be made for those with particular concerns, such as disability, immunocompromised status, family/caregiving status, or religious beliefs.

Circumstances continue to evolve, especially as new variants arise. The Board will continue to keep a close eye on the impact of the pandemic and UBC’s response will continue to be updated and modified as changing circumstances warrant.

Finally, [the Board Chair is] committed to keeping the community informed on the implementation of the rapid testing program; for example, information on the frequency of testing, verification, and approaches to ensuring compliance.

[The Board Chair] would like to emphasize the Board’s appreciation for the Senate's consideration of these matters and for reaching out to the Administration and the Board. The Board is interested in increased communication between the two Governance branches and the Executive to best serve the needs of UBC and has requested the Board Secretariat to work with the Senate Secretariat to explore how best to achieve that.”

Senator Lalonde said that at present we had a self-declaration mechanism that could be abused. He asked if we would have a data-driven process in the future.

Dr Ono replied yes and this would be announced in the near future.

Senator Reeves asked if we had information on the number of people who had attending the Okanagan campus and had testing positive for COVID-19.
The President replied that yes, UBC had this information internally but the health authorities had made clear that we not publicly share this information; the President assured the Senate that the overall numbers were very small.

AGENDA COMMITTEE

The Chair of the Senate Agenda Committee, Dr Jan Cioe, presented.

RECOGNITION OF UNIVERSITY-LEVEL SERVICE

Jan Cioe
Robert Lalonde

That the Senate affirm that service is an important aspect of a Faculty Member’s work, and that service to the general University and service to a department or faculty are of equal importance to the academic administration of the University.

Dr Cioe said that those who participate in University governance were doing a great service to our collegial model of governance. The Agenda Committee wishes to affirm that service is an important component of the responsibilities of a faculty member but that this is not always a matter of unilateral preference. As a matter of self-direction, some faculty chose to stand for election, and the Agenda Committee was concerned that faculty would be discouraged from elected University-level service in favour of departmental service.

Senator McNeil suggested that service could be beyond the campus and could be to the academic community at large.

Senator Cioe said that the Agenda Committee agreed with that sentiment as noted in its report. Community and disciplinary service tended to be part of the self-directed work noted.

Senator Stewart spoke in favour of the motion and said if approved this should be shared broadly.

Senator Traister asked to whom this was being affirmed.

Senator Cioe said it was to the provost, deans, heads and directors anyone else who made decisions or advised on merit, promotion, and related matters.

Senator Ebl noted that this matter also affected contract faculty member such as lecturers.

Senator Cioe agreed.

Senator Reeves expressed a concern with the current wording of the motion itself not addressing the broader notion of service in the background document.
AMENDMENT IN THE FORM OF A SUBSTITUTION

By general consent the motion was amended with the following substituted text: “That the Senate affirm that service in all forms is an important aspect of a Faculty Member’s work, and that service to a department, to a faculty, to the university, and to the broader academic community are of equal importance.”

CHANGES TO ACADEMIC YEAR APPROVED ON BEHALF OF SENATE

Senator Cioe advised Senate that that using its delegated authority of Senate under Rule 25 of the Rules and Procedures of Senate, the Agenda Committee approved the following resolution recommended by the Senate Academic Policy Committee on behalf of the Senate:

“That, Policy O-125 notwithstanding, Okanagan Senate amend the 2021-2022 Academic Year to close the University on 30 September 2021 in recognition of the National Day for Truth and Reconciliation, to extend the last day of teaching to Wednesday 8 December 2021 and to set the exam term from Saturday 11 December 2021 to Wednesday 22 December 2021 (inclusive and using all dates within).”

Senator Cioe said that the Registrar’s Office would work to have as few Sunday exams as possible.

Senator O’Leary asked if consultation had occurred with the faculties prior to this decision, noting the particular concern for Applied Science with a more compacted examination schedule.

Senator Cioe said no as time was of the essence to give people as much time as possible to make the necessary changes. Members from most faculties were present on one or both committees though. He noted that for Applied Science this would result in a more stressful examination schedule and that this was a recognized problem. He said that he hoped Enrolment Services would be able to do this with as little stress as possible for BASc students.

Senator Olson comments on student stress, reminding the Senate that most BASc students had six exams a term, with a few as many as eight. He noted that when we expanded the reading break his Faculty already cautioned the University that this would cause hardship for his students. He said that he was growing increasingly concerned by the impact of scheduling changes on Applied Science Students as the matter was driven largely by accreditation and not completely within their control.

Senator Cioe said that the BASc should really be a 5-year degree program.
Dean Olson agreed, the BASc should either be a 5-year degree or have fewer credits.

Nominating Report

The Chair of the Senate Nominating Committee, Dr Jannik Eikenaar, presented.

COMMITTEE ADJUSTMENTS

Jannik Eikenaar, Jan Cioe

That Dr Ilya Parkins be appointed to the Council Budget Committee (Okanagan Senate Academic Building & Resources Committee) until 31 August 2023 and thereafter until replaced, to fill a vacancy; and

That Dr Sandy Hilton be appointed to the Senate Learning & Research Committee until 31 August 2023 and thereafter until replaced, to fill a vacancy.

AMENDMENTS TO POLICY AP5 (DEANS APPOINTMENT POLICY)

Jannik Eikenaar, Robert Lalonde

That Senate approving the amendments to Policy AP5 (Deans Appointments Policy) as set out in the attached proposal.

Dr Eikenaar said that this proposal did not address the contentious issue of open or closed short lists of candidates; instead, at this time the Nominating Committee was bringing forward the non-controversial changes proposed last year while the more complicated issue was being reconsidered.

Senator Reeves noted that the hiring committee memberships set out in the policy referred to student and faculty members on committees but didn’t make reference to staff members; however, in her experience staff were sometimes members of these committees.

At the request of President Ono, the Clerk advised that there were a number of open seats on each committee to be filled at the discretion of the President and these were sometimes used to appoint senior staff members who reported to the position in question.
to the search committee. For faculty and students on the other hand, we tended to have them be elected rather than appointed.

AMENDMENTS TO POLICIES AP11/12 (REGISTRAR/LIBRARIANS APPOINTMENT POLICY AND ACADEMIC ADMINISTRATORS APPOINTMENT POLICY)

Jannik Eikenaar
Ilya Parkins

That Senate approve the amendments to Policies AP 11 and AP 12 as set out in the attached proposals.

By general consent, the time to adjourn was extended to 5:30 pm

Report from the Registrar

2021 OKANAGAN SENATE BY-ELECTION RESULTS

Dr Ross advised that Further to the call for nominations for faculty members of the Okanagan campus to fill two (2) vacancies on the Okanagan Senate for the remainder of the 2020-2023 triennium issued on 23 August 2021, one (1) valid nomination has been received. Therefore, pursuant to Section 15 of the University Act, the following faculty member is acclaimed as elected as representative of the Joint Faculties on the Okanagan Senate for a term ending 31 August 2023 and thereafter until a successor is elected:

• Dr Ilya Parkins, Associate Professor, Faculty of Arts and Social Sciences

A second call for nominations for the remaining position was issued on 13 September 2021.

Other Business

CANDIDATES FOR DEGREES

The Chair noted that this motion with required 2/3rds in favour to be approved.

Jan Cioe
Lesley Cormack

That the candidates for degrees as recommended by the faculties be granted the degrees for which they have been recommended effective September
2021 and that a committee comprised of the Registrar, the relevant deans, and the Chair of the Senate be empowered to make any necessary adjustments.

HONORARY DEGREES

Sally Willis-Stewart  }  That the Senate not approve honorary degrees for
Jan Hare        the 2021-2022 academic year.

Dr Willis-Stewart said that this felt like a time-sensitive matter. As senators were aware, there have been a lot of comments over the past few months with the issue of one being granted to a former Indian residential school principal. This same motion was approved almost unanimously by the Vancouver Senate the previous evening. She said that it was important for the two senates to stand together on this matter and that there needed to be careful action and consideration of the processes around honorary degrees.

Senator Hare said that Chancellor Point spoke poignantly on this at the Vancouver Senate and asked the University to proceed carefully and thoughtfully. She suggested that the conversations around this prompt us to consider the questions raised both by the O’Grady situation specifically but also honours in general, both in their granting and their rescinding. Dr Hare said that we needed to develop a process to make decisions under.

Dr Ono advised that at the Vancouver Senate there were those who noted the importance of having information to make properly informed decisions, and those who noted the importance of acting quickly on this matter.

Senator Cioe asked how the motion proposed lined up with developing a process to reconsider degrees.

Senator Willis-Stewart said that yes, the intent was to both give us time to undertake the process considerations noted.

Senator Cioe said that the motion in question did not have that nuance in it. He suggested some informative whereas clauses may be helpful.

At the President’s request, the Clerk set out the basis for the recommendation, which was to give time and space to undertake a process consideration. He suggested that if the Senate wanted more through documentation, they could refer it to the Committee and have them prepare more detailed documentation.
Senator Lalonde said that he did not feel that he had enough notice to have more than an initial reaction on this matter. He said that he did not have a problem with choosing to rescind a degree, but he did have a problem with deciding to close down the honorary degree recommendation process for a year. He said that he would need time to consider the proposal.

Dr Willis-Stewart said that last fall, a number of committee members raised questions regarding process. Over the summer, the residential school situation was brought to the University’s attention but as the Senate meeting was moved forward they did not have time to prepare a proposal for Senate.

Senator Hodges said that she was troubled by this proposal as it was asking for the Committee to be given time but the Senate itself was not given time to consider the matter. She further suggested that two issues were being conflated: how we identify and screened candidates prior to a degree being recommended, and how to we address situations we discover after the fact. We should not limit our ability to honour people now because of bad cases from the past.

Senator Schatzko said that there was a timeline issue that made this perhaps a timely consideration: Vancouver was moving forward and normally the Okanagan would recommend honorary degree candidates this term. She suggested that there were times when we should be one University and do things together. The public will want to know that we are taking steps to ensure that degrees are not issued now to people with concerns in their pasts.

Senator Willis-Stewart said that she did not intend any disrespect to the Senate by bringing this forward; she stated that her intent was to give the University time to consider this properly. With respect to the timelines, the Committee could adjust those as needed.

By general consent, the time to adjourn was extended to 5:45 pm

Senator Reeves said that with more information she expected the Senate would support his matter but also sympathized with those who wanted time to consider it.

The Clerk advised that the deadline for honorary degree nominations for 30 September, and then following that a series of committee meetings followed in order to make recommendations to Senate in November or December. There was nothing to prevent the Learning & Research Committee from making a late recommendation or not making a recommendation.

Karen Hodges
Stephen O’Leary

That the proposal be referred to the Senate Learning & Research Committee for consideration and that they be directed to report back to Senate at the October meeting with further information on this matter.
Senator Hodges said that she respected the important work of the committee but was concerned by how this matter was brought forward to Senate.

**Adjournment**

Seeing no other business, the meeting was adjourned at 5:33 p.m.
28 October 2021

To: Okanagan Senate

From: Academic Policy Committee

Re: Graduate Council Parental Accommodation Policy

The Academic Policy Committee reviewed and enclosed the attached policy it deems ready for approval.

Therefore, the following is recommended to Senate:

Motion: That Senate approve the Graduate Council Parental Accommodation Policy.

Respectfully submitted,
Jan Cioe
Chair, Academic Policy Committee
Proposal Form
Okanagan Campus

<table>
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<th>Date: June 18, 2021</th>
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<tbody>
<tr>
<td>Faculty/School Approval Date: May 19, 2021</td>
<td>Contact Person: Dr. Paul Shipley</td>
</tr>
<tr>
<td>Effective Session: 2021W</td>
<td>Email: <a href="mailto:paul.shipley@ubc.ca">paul.shipley@ubc.ca</a></td>
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</tbody>
</table>

**Type of Action:**
New policy

**Rationale:**
This policy aims to promote the success of graduate students who become new parents by recognizing the challenges of balancing the demands of bearing and/or parenting a new child and working towards academic goals. The policy makes it possible for a student to maintain full-time student status during an eight-week period surrounding the arrival of a new child, with all the benefits of such status, by standardizing a minimum level of academic accommodation during that period. It also entitles eligible students to extended deadlines for meeting standard academic progress targets.

**Proposed Academic Calendar Entry:**

**Graduate Student Parental Accommodation Policy**

This policy applies to students currently registered in full-time graduate programs at the University of British Columbia's Okanagan campus who are in good standing and making satisfactory progress toward the completion of their degree. Students must have completed at least one term of full-time study in their program. (See also On-Leave Status).

The policy makes it possible for a student to maintain full-time student status during an eight-week period surrounding the arrival of a new child, with all the benefits of such status, by

[Draft Academic Calendar URL: http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,285,984,0]

Present Academic Calendar Entry: N/A
standardizing a minimum level of academic accommodation during that period.

A graduate student with substantial parenting responsibilities for a newborn or newly adopted child during their course of study may apply for parental accommodation. The parental accommodation period must start within eight weeks of the (expected or actual) date of childbirth or adoption.

Parental accommodation periods must be approved by the Dean of the College of Graduate Studies.

An application for a parental accommodation shall be made as far in advance of the requested parental accommodation period as possible, with 30 days being the minimum notice allowed.

Students who are approved for parental accommodation will be granted a parental accommodation period.

During the parental accommodation period, the student will continue to be registered as a full-time student, and tuition and student fees must be paid as usual.

Academic deadlines and expectations are to be flexible and modified to accommodate the student's new parental responsibilities, as follows:

- The parental accommodation period will be tailored to fit the student's individual
circumstances and timing considerations.

- Students will be allowed to postpone completion of course assignments, examinations, and other academic requirements.
  Such modifications of academic expectations should be mutually agreed upon by the student and their supervisor or program coordinator, and course instructor(s) as applicable, in advance of the parental accommodation period.

- It is the responsibility of the student to ensure that this consultation takes place.

- It is the responsibility of the supervisor or program coordinator to be flexible in their expectations.

In the event that a student and their supervisor or program coordinator cannot come to an agreement regarding the modification of an academic expectation as per above, the Dean of the College of Graduate Studies shall make a determination.

Graduate programs that are structured with regard to the sequencing and scheduling of courses and other academic requirements, such as those that are cohort based, may have particular constraints on modifications to academic scheduling, but are still expected to
exercising flexibility in supporting a student during a parental accommodation period.

For graduate students enrolled in undergraduate courses, normal concession policies for those courses still apply.

Modification of Time Limits

Students who are approved for parental accommodation will automatically have four months added to their maximum allowable time in program, and, for doctoral students, to their maximum allowable time to advance to candidacy.

Individual graduate programs are expected to extend any internal deadlines for the completion of academic requirements (such as comprehensive exams or coursework) by a minimum of four months.

Further extensions beyond these minimums are possible, subject to the approval of both the graduate program and the College of Graduate Studies.

Graduate Awards and Fellowships

A graduate student granted a parental accommodation period retains the full value of any fellowship or other award for which the terms and conditions are established by the College of Graduate Studies and will experience no change in this funding during the parental accommodation period. Payments will continue on the usual schedule. There will be no change.
to the total amount granted or to the completion date of the scholarship.

Awards for which the terms and conditions are not established by the College of Graduate Studies will be paid according to the terms and conditions established by the donor or granting agency.

1. Exceptions to this policy may be approved by the Dean of the College as an academic concession following the applicable policy.
Number & Title

XXXX: Graduate Student Parental Accommodation Policy

Effective Date:

XXXX

Approval Date:

XXXX

Review Date:

This policy shall be reviewed two (2) years after approval and thereafter as deemed necessary by the responsible committee.

Responsible Committee:

Senate Academic Policy Committee

Authority:

University Act, S. 37(1)

“The academic governance of the university is vested in the senate and it has the following powers:

...(p) to deal with all matters reported by the faculties, affecting their respective departments or divisions; ...

and,

S. 40

...(g) to deal with and, subject to an appeal to the senate, to decide on all applications and memorials by students and others in connection with their respective faculties;
(h) generally, to deal with all matters assigned to it by the board or the senate...

**Purpose and Goals:**

This policy aims to promote the success of graduate students who become new parents by recognizing the challenges of balancing the demands of bearing and/or parenting a new child and working towards academic goals. The policy makes it possible for a student to maintain full-time student status during an eight-week period surrounding the arrival of a new child, with all the benefits of such status, by standardizing a minimum level of academic accommodation during that period. It also entitles eligible students to extended deadlines for meeting standard academic progress targets.

**Applicability:**

This policy applies to students currently registered in full-time graduate programs at the University of British Columbia’s Okanagan campus who are in good standing and making satisfactory progress toward the completion of their degree. Students must have completed at least one term of full-time study in their program. (See also On-Leave Status).

**Definitions:**

For the purposes of this policy:

- *Parental Accommodation* shall mean the modification of academic deadlines and expectations in order to be flexible and to accommodate the student’s new parental responsibilities, as mutually agreed upon by the student and her/his supervisor or program advisor in advance of the *parental accommodation period*.

- *Parental Accommodation Period* shall mean a period of up to eight (8) consecutive weeks, starting within eight (8) weeks of the (expected or actual) date of childbirth or adoption.

- *Course of Study* shall mean the academic program in which the student is registered.

**Policy:**

1) A graduate student with substantial parenting responsibilities for a newborn or newly adopted child under the age of six (6) during their *course of study* may apply for a *parental accommodation*. The parental accommodation period must start within eight weeks of the (expected or actual) date of childbirth or adoption.

2) *Parental accommodation periods* must be approved by the Dean of the College of Graduate Studies.
3) An application for a parental accommodation shall be made as far in advance of the requested parental accommodation period as possible, with 30 days being the minimum notice allowed.

4) Students who are approved for parental accommodation will be granted a parental accommodation period.

5) During the parental accommodation period, the student will continue to be registered as a full-time student, and tuition and student fees must be paid as usual.

6) Academic deadlines and expectations are to be flexible and modified to accommodate the student’s new parental responsibilities, as follows:

   a) The Parental Accommodation Period needs to be tailored to fit the student’s individual circumstances and timing considerations.
   b) Students will be allowed to postpone completion of course assignments, examinations, and other academic requirements. Such modifications of academic expectations should be mutually agreed upon by the student and their supervisor or program coordinator, and course instructor(s) as applicable, in advance of the Parental Accommodation Period.
   c) It is the responsibility of the student to ensure that this consultation takes place, and
   d) It is the responsibility of the supervisor or program coordinator to be flexible in their expectations.

7) In the event that a student and their supervisor or program coordinator cannot come to an agreement regarding the modification of an academic expectation as per above, the Dean of the College of Graduate Studies shall make a determination.

8) Graduate programs that are structured with regard to the sequencing and scheduling of courses and other academic requirements, such as those that are cohort based, may have particular constraints on modifications to academic scheduling, but are still expected to exercise flexibility in supporting a student during a parental accommodation period.

9) For graduate students enrolled in undergraduate courses, normal concession policies for those courses still apply.
Modification of Time Limits

10) Students who are approved for 
\textit{parental accommodation} will automatically have four months added to their maximum allowable time in program, and, for doctoral students, to their maximum allowable time to advance to candidacy.

11) Individual graduate programs are expected to extend any internal deadlines for the completion of academic requirements (such as comprehensive exams or coursework) by a minimum of four months.

12) Further extensions beyond these minimums are possible, subject to the approval of both the graduate program and the College of Graduate Studies.

Graduate Awards and Fellowships

13) A graduate student granted a 
\textit{parental accommodation period} retains the full value of any fellowship or other award for which the terms and conditions are established by the College of Graduate Studies and will experience no change in this funding during the 
\textit{parental accommodation period}. Payments will continue on the usual schedule. There will be no change to the total amount granted or to the completion date of the scholarship.

14) Awards for which the terms and conditions are not established by the College of Graduate Studies will be paid according to the terms and conditions established by the donor or granting agency.

History:

This is a new policy that has been proposed by the College of Graduate Studies and the Graduate Council after consultation with graduate students.

Related Policies:

On-Leave Status
http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,285,999,1207

Senate Appeals on Academic Standing
http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,285,984,1173

Appendix:

\footnote{Exceptions to this policy may be approved by the Dean of the College as an academic concession following the applicable policy.}
There is no appendix to this policy.
15 October 2021

To: Okanagan Senate

From: Okanagan Admissions and Awards Committee

Re: a) New and Revised Awards (approval)
b) Grade 12 Literacy Assessment Requirement – Admission Change (approval)

a. New and Revised Awards

The Admissions and Awards Committee has reviewed and recommends to Senate for approval the attached list of new and revised awards.

Motion: That the Senate accept the new awards as listed, that they be forwarded to the Board of Governors for approval, and that letters of thanks be sent to the donors.

b. Grade 12 Literacy Assessment Requirement – Admission Change

The Admissions and Awards Committee has reviewed and recommends to Senate for approval a proposal to remove reference to the requirement for BC/Yukon secondary school applicants to provide a completed Grade 12 Literacy Assessment before receiving an offer of admission. With the proposed change, satisfactory performance on the Grade 12 Literacy Assessment will be condition of the offer of admission, as outlined in the attached proposal.

Motion: That the Senate approve changes to the Grade 12 Literacy Assessment requirement for admission for applicants following the BC/Yukon secondary school curriculum, effective for entry to the 2022 Winter Session and thereafter.

Respectfully submitted,

Tamara Ebl, Chair
Senate Admissions and Awards Committee
NEW AWARDS

Proposed Title:    Andrew Arida Memorial Award

Awards totalling $5,000 have been made available through an endowment established by friends, family and colleagues in memory of Andrew Arida (1970-2021), along with matching funds from the University of British Columbia, for outstanding domestic students on the Vancouver and Okanagan campuses who identify as Black and are entering an undergraduate program directly from secondary school or transferring from another post-secondary institution. Recipients are academically qualified and would not be able to attend UBC without financial assistance. In addition to academic merit, consideration is given to qualities such as leadership skills, community service, and recognized extra-curricular achievement. Subject to continued academic standing, the awards will be renewed for a further three years of study or until the first undergraduate degree is obtained (whichever comes first). Ideally, recipient selection will alternate between the Vancouver and Okanagan campuses. Andrew (B.A., M.A. 2014) joined UBC in 1996, working in a variety of positions in recruitment and admissions before assuming the position of Deputy Registrar in 2018. He was devoted to attracting well-rounded students to campus, and was proud to see UBC become increasingly diverse and accessible under his leadership. Andrew received UBC’s President’s Service Award for Excellence in 2018 in recognition of his contributions and service. A musician, traveler, and soccer fan, Andrew regularly gave back to the community through volunteer work. The awards are adjudicated by Enrolment Services. (First award available for the 2021/2022 winter session)

Proposed Title:    Robin Durrant Aboriginal Access Studies Award

Awards totalling $4,000 have been made available through an endowment established by Robin Durrant along with matching funds from the University of British Columbia for students enrolled in the Aboriginal Access Studies Program, a university entrance program offered at the

From: Paul Greenhough, Development and Alumni Engagement, Okanagan Campus

To:    Okanagan Senate Admissions and Awards Committee

Re:    Awards recommended for approval by the Okanagan Senate Admissions and Awards Committee
University of British Columbia, Okanagan campus, which prepares Indigenous students for the transition to post-secondary studies. Awards are made on the recommendation of Indigenous Programs & Services. (First award available for the 2022/2023 Winter session)

Proposed Title: Lowe McKechnie Bursary in Graduate Studies

Bursaries totalling $5,000 have been made available annually through a gift from Graham Lowe and Joanne McKechnie, along with matching funds from The University of British Columbia, to graduate students at the University of British Columbia, Okanagan campus. The bursaries are adjudicated by Enrolment Services. (First award available for the 2021/2022 Winter session)

Proposed Title: First West Credit Union Launi Skinner Scholarship for Indigenous Students

A $3,000 scholarship has been made available annually through a gift from First West Credit Union in honor of Launi Skinner for an outstanding Indigenous student in the Bachelor of Management program at the University of British Columbia, Okanagan campus. As one of Canada’s largest cooperative financial service providers, First West offers members the financial strength, comprehensive product selection and extended branch network of a large financial institution, while maintaining local brand identities and a unique grassroots approach to service. We exist to simplify lives and help members and communities thrive. An important part of how we live this out is through a deep commitment to equity, inclusion and diversity within our organization and the regions we serve—a promise that is championed by First West CEO Launi Skinner. This includes building new connections and deepening existing relationships with Indigenous Peoples. One way we do this is by increasing educational opportunities for Indigenous students. This scholarship is adjudicated by Enrolment Services. (First award available for the 2021/2022 Winter session)

Proposed Title: Walley Lightbody Award in Law

Awards totalling $4,000 have been made available through an endowment established by alumnus Walley Lightbody for a student graduating with any degree from the Department of Economics, Philosophy and Political Science in the Irving K. Barber Faculty of Arts and Social Sciences at the University of British Columbia, Okanagan campus. The award is created in recognition of Walley Lightbody, Q.C., BA ’56, LLB ’59, and his decades-long career in law and many contributions to the profession. Preference will be given to students who have demonstrated their intention to pursue a career as a lawyer. The award is made on the recommendation of the Irving K. Barber Faculty of Arts and Social Sciences. (First award available for the 2021/2022 Winter session)

Proposed Title: Beyrouti and Meola Family Women’s Basketball Award

One or more awards, which may range from a minimum value of $500 each to the maximum allowable value under athletic association regulations, have been made available through an endowment established by Anthony Beyrouti along with matching funds from the University British Columbia. These awards are offered to outstanding members of the UBC Okanagan Heat Women’s Basketball teams in any year of study who are in good academic standing and...
have demonstrated excellent leadership skills. Awards are made on the recommendation of the Athletics Awards Committee. (First award available for the 2021/2022 Winter session)

Proposed Title: **Award title: Kotowick Bursary in Biochemistry and Molecular Biology**

A $2,000 bursary has been made available annually through a gift from Dr. Kyle Kotowick (B.Sc. 2011, M.A.Sc. 2013, Ph.D.) and his company Invicton Labs for undergraduate students in the microbiology program in the Irving K. Barber Faculty of Science at the University of British Columbia, Okanagan campus. Preference given to a student in the medical and molecular biology option. The bursary will be adjudicated by Enrolment Services. (First award available for the 2021/2022 Winter session)

Proposed Title: **The Colin & Lois Pritchard Foundation Award in Nursing**

Five $4,000 awards have been made available through an endowment established by The Colin & Lois Pritchard Foundation, along with matching funds from The University of British Columbia, for undergraduate nursing students in the School of Nursing in the Faculty of Health and Social Development at the University of British Columbia, Okanagan campus. These awards are established in recognition of Lois Pritchard and her training as a registered nurse. Preference will be given to students entering the program in first-year or, third-year students directly transferring into the Bachelor of Science in Nursing program from Okanagan College and who have graduated from a British Columbia secondary school in School Districts 5, 8, 20, 22, 23, 51, 53, 58, 67, 73 or 83. The awards are made on the recommendation of the School of Nursing. (First awards available for the 2022/2023 Winter session)

Proposed Title: **Smith + Andersen Scholarship in Engineering – Okanagan**

Scholarships totalling $2,000 have been made available annually through a gift from Smith + Andersen for third or fourth-year female Bachelor of Applied Science students majoring in Mechanical or Electrical Engineering in the School of Engineering at the University of British Columbia, Okanagan campus. The scholarships will be adjudicated by Enrolment Services. (First award available for the 2021/2022 Winter session)

Proposed Title: **Beyond Tomorrow Scholar Travel Award - Okanagan**

Travel awards of up to $1,000 each have been made available annually by the University of British Columbia for outstanding domestic UBC Okanagan students who self-identify as Black and currently hold a Beyond Tomorrow Scholars Award. Recipients are academically qualified and participating in initiatives such as experiential learning components that are approved by the Beyond Tomorrow Scholars Program. Award funding can also be used towards relocation costs to UBC Okanagan. The awards are adjudicated by Enrolment Services. (First awards available for the 2022/2023 Winter session)

Proposed Title: **John H. V. Gilbert Interprofessional Scholarship**

A $500 scholarship has been endowed by friends and colleagues in honour of Dr. John H.V. Gilbert for an outstanding student at the University of British Columbia, Vancouver or the
University of British Columbia, Okanagan who, having completed the penultimate year of any health or human services degree program, combines academic excellence and demonstrated student leadership in interprofessional education for collaborative patient centered practice. Activities related to interprofessional education in all undergraduate years are considered. The scholarship is made on the recommendation of the Office of the Vice-President, Health. (First award available for the 2022/2023 Winter session)

Proposed Title: Students' Union Okanagan of UBC Emergency Assistance Endowment Fund

Emergency aid totalling $2,000 has been made available through an endowment established by the Students' Union Okanagan of UBC to assist students in any program at The University of British Columbia, Okanagan campus, who may require short-term funding due to an unforeseen and unexpected event. The fund is administered by Enrolment Services. (First awards available for the 2021/2022 Winter session).

Proposed Title: ImpactBC Scholarship in Health Care Research and Development

Scholarships totalling $6,700 have been made available through an endowment established by ImpactBC for outstanding student(s) enrolled in a UBC health program at the University of British Columbia, Vancouver or the University of British Columbia, Okanagan who have completed a research or development project focusing on patient/client involvement in health care decision making or in health professional education. ImpactBC was instrumental in advancing health care improvement and patient engagement in B.C. from 2000-2015. The awards are made on the recommendation of the Office of the Vice-President Health, and in the case of graduate students, in consultation with the Faculty of Graduate and Postdoctoral Studies (Vancouver) or the College of Graduate Studies (Okanagan).

REVISED AWARDS: PREVIOUSLY APPROVED, WITH CHANGES TO TERMS OR FUNDING SOURCE:

Existing description (2020):
Award Title: Rick and Yasmin Thorpe and Friends Transfer Scholarship

A $1,250 scholarship has been made available annually through a gift from Rick and Yasmin Thorpe and friends for undergraduate students at The University of British Columbia, Okanagan campus. Preference will be given to a transfer continuing student who graduated from Summerland Secondary School, Princess Margaret School, Penticton Secondary School, or Penticton Christian Community School. The scholarship will be adjudicated by Enrolment Services.

Amended Description: Rick and Yasmin Thorpe and Friends Scholarship

A $1,250 scholarship has been made available annually through a gift from Rick and Yasmin Thorpe and friends for undergraduate students at The University of British Columbia, Okanagan campus. Preference will be given to a continuing student who graduated from
Summerland Secondary School, Princess Margaret School, Penticton Secondary School, or Penticton Christian Community School. The scholarship will be adjudicated by Enrolment Services.

Rationale: The intended recipient is meant to be a continuing UBC student who graduated from one of the local high schools listed, not a new transfer student. Limited high school information for transfer students would make it difficult to identify eligible incoming transfer students.

Existing description (2017):
Award Title: **Dorothy Anna Proudfoot Memorial Scholarship in Nursing**

A $9,600 scholarship has been endowed by the estate of Dorothy Anna Proudfoot for a graduate student enrolled in the Master of Science or Doctor of Philosophy Nursing program in the School of Nursing at the University of British Columbia, Okanagan campus. Preference will be given to the student with the highest admission GPA. Dorothy Proudfoot (1929-2015) had an intriguing nursing career which spanned many decades, starting in Humboldt, Saskatchewan, and ending in long-term care in Kelowna, BC. She flew with the Saskatchewan Air Ambulance and served as a nurse in Japan during the Korean War. Dorothy worked in community health for many years in Kelowna and she was also involved in home nursing, long-term care assessment, and administration. The award is made on the recommendation of the College of Graduate Studies in consultation with the School of Nursing.

Amended Description: **Dorothy Anna Proudfoot Memorial Scholarship in Nursing**

A $9,600 scholarship has been endowed by the estate of Dorothy Anna Proudfoot for a graduate student enrolled in the Master of Science or Doctor of Philosophy Nursing program in the School of Nursing at the University of British Columbia, Okanagan campus. Preference will be given to the student with the highest admission GPA. Dorothy Proudfoot (1929-2015) had an intriguing nursing career which spanned many decades, starting in Humboldt, Saskatchewan, and ending in long-term care in Kelowna, BC. She flew with the Saskatchewan Air Ambulance and served as a nurse in Japan during the Korean War. Dorothy worked in community health for many years in Kelowna and she was also involved in home nursing, long-term care assessment, and administration. The award is made on the recommendation of the College of Graduate Studies in consultation with the School of Nursing.

Rationale: expanding eligibility to PhD graduate students

Existing description (2021): **Bachelor of Nsyilxcn Language Fluency Degree Undergraduate Entrance Award**

Awards totalling $35,000 have been made available annually, along with matching funds from The University of British Columbia, to third-year students enrolled in the bachelor of Nsyilxcn language fluency degree program in the Irving K. Barber Faculty of Arts and Social Sciences at The University of British Columbia, Okanagan campus. Preference is given to students with financial need. These awards are renewable for a second-year subject to the students maintaining academic standing. The awards will be adjudicated by Enrolment Services.
Amended Description: Bachelor of Nsyilxen Language Fluency Degree
Undergraduate Entrance Award

Awards totalling $35,000 have been made available annually, along with matching funds from The University of British Columbia, to third-year students enrolled in the bachelor of Nsyilxen language fluency degree program in the Irving K. Barber Faculty of Arts and Social Sciences at The University of British Columbia, Okanagan campus. Preference is given to students with financial need. These awards are renewable for a second-year subject to the students maintaining academic standing. The awards will be adjudicated by Enrolment Services.

Rationale: The awards can be distributed more equitably within the cohort to those with the greatest financial need.
## Admission Change Proposal Form

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<tr>
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### Type of Action:
strike reference to the requirement for BC/Yukon applicants to provide a completed Grade 12 Literacy Assessment before UBC can make an offer of admission.

### Rationale:

Presently, UBC maintains an admission requirement that specifies that students graduating from BC curriculum schools must complete their mandatory Grade 12 Literacy Assessment before receiving an offer of admission to an undergraduate program. This modern assessment replaces the previous English 12 provincial exam which was last offered in the summer of 2019. Details about the literacy assessment can be found here: https://curriculum.gov.bc.ca/provincial/grade-12-literacy-assessment

When the UBC first adopted this requirement, it was originally understood that students would be eligible to complete the assessment before the commencement of the grade 12 school year. However, after implementation delays and various changes, the assessment is now described as an item that students are expected to complete while enrolled in grade 12. Results for the assessment are expected to be available approximately 6-7 weeks after each sitting. Current scheduled sittings do not align with UBC’s admission cycle.

The Literacy Assessment should still be considered in the admission assessment in some capacity. Undergraduate Admissions Office recommends that, instead of requiring the results of the assessment before issuing an offer of admission, we make suitable performance on the Grade 12 Literacy Assessment a condition of the offer of admission.

Additional details outlined in the attached proposal.

### URL:
http://www.calendar.ubc.ca/okanagan/index.cfm?tree=2,22,63,0

[Homepage] ➔ [Admissions] ➔ [Applicants Following the BC/Yukon Secondary School Curriculum] ➔ [Minimum Academic Qualifications]

### Proposed Calendar Entry

#### Minimum Academic Qualifications

The minimum academic qualification for admission is secondary school graduation, including the following Grade 12 courses:
Grade | Required Courses
---|---
Grade 12 | English Studies 12 or English First Peoples 2

1 Or equivalent International Baccalaureate, Advanced Placement, or post-secondary courses. See Program Requirements for Canadian Secondary School Applicants; Advanced Placement and International Baccalaureate Courses Approved to Satisfy Prerequisites; and Post-Secondary Courses that Count Toward BC/Yukon Secondary School Graduation.

A minimum average of 67% is required for admission to all programs. However, due to limited enrolment, a higher average is required in most programs.

Equivalent courses offered in French will also be accepted. (Français Langue 12 is not accepted in place of English Studies 12 or English First Peoples 12.)

For BC/YT high school graduates of 2019 or earlier: Applicants are required to have written the final examinations offered by the BC Ministry of Education (BC Provincial Examinations) that were required for graduation. For admission decisions, BC Provincial Examination results will be used if the examination result advantages the academic assessment. However, in cases where a significant discrepancy exists between the course grade and the examination grade, UBC reserves the right to use the examination grade only.

Canadian Aboriginal Language Post-Secondary Courses

UBC recognizes Canadian Aboriginal language post-secondary courses from a recognized institution for admission in place of one Grade 12 course. Please contact Undergraduate Admissions for more information.

URL: [http://www.calendar.ubc.ca/okanagan/index.cfm?tree=2,22,63,0](http://www.calendar.ubc.ca/okanagan/index.cfm?tree=2,22,63,0)

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### Minimum Academic Qualifications

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<thead>
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1 Or equivalent International Baccalaureate, Advanced Placement, or post-secondary courses. See Program Requirements for Canadian Secondary School Applicants; Advanced Placement and International Baccalaureate Courses Approved to Satisfy Prerequisites; and Post-Secondary Courses that Count Toward BC/Yukon Secondary School Graduation.
Baccalaureate Courses Approved to Satisfy Prerequisites; and Post-Secondary Courses that Count Toward BC/Yukon Secondary School Graduation.

A minimum average of 67% is required for admission to all programs. However, due to limited enrolment, a higher average is required in most programs.

Equivalent courses offered in French will also be accepted. (Français Langue 12 is not accepted in place of English Studies 12 or English First Peoples 12.)

For BC/YT high school graduates of 2019 or earlier: Applicants are required to have written the final examinations offered by the BC Ministry of Education (BC Provincial Examinations) that were required for graduation. For admission decisions, BC Provincial Examination results will be used if the examination result advantages the academic assessment. However, in cases where a significant discrepancy exists between the course grade and the examination grade, UBC reserves the right to use the examination grade only.

BC/YT applicants will be required to provide a completed Grade 12 Literacy Assessment when it is required for graduation before UBC can make an offer of admission.

Canadian Aboriginal Language Post-Secondary Courses

UBC recognizes Canadian Aboriginal language post-secondary courses from a recognized institution for admission in place of one Grade 12 course. Please contact Undergraduate Admissions for more information.
Revision to Grade 12 Literacy Assessment Requirement

Prepared by UBC Undergraduate Admissions
September 2021

Overview

Presently, UBC maintains an admission requirement that specifies that students graduating from BC curriculum schools must complete their mandatory Grade 12 Literacy Assessment before receiving an offer of admission to an undergraduate program. This modern assessment replaces the previous English 12 provincial exam which was last offered in the summer of 2019. Details about the literacy assessment can be found here: https://curriculum.gov.bc.ca/provincial/grade-12-literacy-assessment

When the UBC first adopted this requirement, it was originally understood that students would be eligible to complete the assessment before the commencement of the grade 12 school year. However, after implementation delays and various changes, the assessment is now described as an item that students are expected to complete while enrolled in grade 12. The assessment will be offered according to the following scheduled sittings:

1. November 1-5, 2021
2. January 24-28, 2022
3. April 25-29, 2022
4. June 13-17, 2022

Results for the assessment are expected to be available approximately 6-7 weeks after each sitting.

The challenge that these developments pose is that the prescribed schedule changes do not align well with the timing of UBC’s admissions cycle. If we insist on reviewing the assessment results before making an offer of admission, we would need a significant portion of the applicant pool to write this assessment in November to qualify for first-round offers (issued in late January through February). For those who do not complete the assessment in November, a January sitting would be required to make our spring offers of admission. And, students attempting to write in April would be prohibited from gaining offers of admission until the summer which would significantly hinder UBC’s ability to achieve its enrolment goals (we would be making offers of admission to BC students later than all of our competitors).

Additionally, we are receiving feedback from our school counsellor community that schools have already scheduled students into assessment times based on the needs of their students and their school. For the most part, schools are scheduling students depending on when they are completing
their English Studies 12 course. This means that students taking this course in Term 2 of the senior year of high school would likely be completing the assessment in April or June. Moreover, students will not have the opportunity to select an alternate schedule since schools will not be providing invigilation resources for every sitting at the request of students.

**Recommendation:**

After the elimination of the English 12 provincial exam, UBC lost a valuable tool that assisted us in adjudicating the abilities of our applicant pool in a critical subject area. For this reason, the Undergraduate Admissions Office maintains that the Grade 12 Literacy Assessment should still be considered in the admission assessment in some capacity. However, the changes described above do make it difficult to insist that the literacy assessment must be completed before gaining an offer of admission, and supporting our applicants to best prepare for these assessments would be in line with the approach we have taken throughout the COVID-19 pandemic and our stated principles of admission.

Moving forward, the Undergraduate Admissions Office recommends that, instead of requiring the results of the assessment before issuing an offer of admission, we make suitable performance on the Grade 12 Literacy Assessment a condition of the offer of admission. This approach has the benefit of resolving the scheduling challenges noted above but still permits us to promote a suitable standard of achievement that facilitates our goals.

For clarity, the suitable standard of achievement we require should be provided to students when they receive their offer. We are aware that the results for the assessment will be provided on a Proficiency Scale using the following descriptive categories.

**Grade 12 Literacy Assessment Proficiency Scale**

- **Emerging** - *The student demonstrates an initial understanding of the concepts and competencies relevant to the expected learning.*

- **Developing** - *The student demonstrates a partial understanding of the concepts and competencies relevant to the expected learning.*

- **Proficient** - *The student demonstrates a complete understanding of the concepts and competencies relevant to the expected learning.*

- **Extending** - *The student demonstrates a sophisticated understanding of the concepts and competencies relevant to the expected learning.*

This information is somewhat brief, but we recommend that our offer condition specify that students achieve a rating of ‘Proficient’ to maintain their offer of admission. While it is difficult to tell whether
the selection of this rating will be optimal, we do know that the Grade 10 Literacy Assessment, which was first offered in 2019/2020, resulted in ~75% of all assessment-takers achieving a ‘Proficient’ rating or higher. Considering that our applicant pool is generally an academically higher-performing subset of all students who write the assessment, this initial suggestion of a ‘Proficient’ rating is an appropriate baseline standard.

An additional benefit of using this offer condition approach is that we can communicate additional opportunities should a student not meet our prescribed condition. For example, a student who gains an offer of admission but does not achieve the required rating could be advised to rewrite the assessment again at a later scheduled sitting in the same year; or, we could steward students who do not meet the requirement towards the English Foundation program. The latter opportunity could be helpful for international students who are enrolled in BC schools and who are otherwise admissible but are still developing their English skills. Revocation of an offer can be pursued after other avenues have been fully explored to ensure that students are equitably treated while we introduce this new offer condition.

Summary

Academic ability in English is critical for success at UBC and we now have a new assessment provided by the BC Ministry of Education to assist us in making this judgement. While the upfront presentation of the Grade 12 Literacy Assessment for admission would permit the provision of a firmer offer of admission, the drawbacks suggested to us by secondary school counsellors are leading us to reconsider our process. As described above, the shift from requiring assessment results upfront before admission evaluation, to a condition that students must maintain to retain their offer of admission should still provide us with the insight this additional assessment provides. Along with the additional options that any student not meeting an offer condition can be given, this revised approach should allow us opportunities to better promote enrolment of qualified applicants and optimize enrolments as needed for the 22W admission cycle and beyond.
28 October 2021

To: Okanagan Senate

From: Curriculum Committee

Re: Curriculum Proposals (approval)

The Curriculum Committee has reviewed the material forwarded to it by the Faculties and encloses those proposals it deems ready for approval.

Therefore, the following is recommended to Senate:

**Motion:** That the revised certificate and program, and new and revised courses, brought forward by the Faculties of Education and Health and Social Development be approved.

- a. From the Faculty of Education
  - i. Teaching English and Additional Languages (TEAL) Certificate
  - ii. Master of Education > Program Requirements
  - iii. LLED 497 – New course

- b. From the Faculty of Health and Social Development
  - iv. NRSG 581 – Revised course

For the Committee,

Dr. Yves Lucet
Chair, Curriculum Committee
Curriculum Proposal Form
Change to Program – Okanagan campus

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<td>Dr. Scott Douglas</td>
</tr>
<tr>
<td>Phone:</td>
<td>250.807.9277</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:scott.douglas@ubc.ca">scott.douglas@ubc.ca</a></td>
</tr>
</tbody>
</table>

Type of Action: Other: Revisions to Current Program

Rationale:

Current TEAL Certificate is unpopular due to the following reasons:

1) ineligible for certification to teach English as an Additional Language (EAL) to adults in Canada because of a lack of a practicum component,
2) more hours / courses than required for certification (180 hours versus 120 required for the equivalent of a TESL Canada Standard One Certificate), and
3) more expensive due to the extra credits not required in similar programs at other institutions.

The Okanagan School of Education (OSE) would like to reduce the current TEAL Certificate from 15 credits (5 courses) to 12 credits (4 courses). The proposed changes to the certificate maintain the current 9 credits of core courses (LLED 494, LLED 495, and LLED 496), and add a 3 credit practicum component (LLED 497).

- The revised certificate comprises 144 instructional hours, bringing the revised certificate closer in line with the minimum 120 hours of instruction (100 hours of course work and 20 hours of practicum) required for the equivalent of a TESL Canada Standard One certificate, with the additional 24 hours providing a value-added component specifically focused on additional language teaching and learning.
- A 12-credit certificate is in line with the cost of similar certificates across Canada and fulfills the minimum required hours of instruction and practicum.
- A 12-credit certificate is also closer in line with the time commitments required by similar certificates across Canada.
- The proposed changes remove the previous 6 credits of electives from the OSE’s Early Learning, Inclusive Education, and Language and Literacy Post-Baccalaureate Programs, which are extraneous to initial certification requirements to teach EAL to adults in Canada.
- The electives were also removed to reduce the certificate to 12 credits from 15 credits because other Post-Baccalaureate courses offered in the OSE are typically not connected to additional language teaching and learning, making it challenging for students to complete a 15 credit certificate with courses relevant to their future teaching contexts.
Proposed Academic Calendar Entry:

Homepage (draft) Faculties, Schools, and Colleges Okanagan School of Education
Post-Baccalaureate Education Programs

[14685] Admission Requirements

[14686] Admission to the Post-Baccalaureate Certificate/Diploma programs requires a bachelor's degree, teacher's certification, or permission of the Okanagan School of Education. Students wishing to enrol in individual courses but who are not in a Post-Baccalaureate Certificate or Diploma program require third-year standing as well as permission from the Okanagan School of Education.

[...]

[17597] Teaching English and Additional Languages (TEAL) Certificate

[17598] The Teaching English and Additional Languages (TEAL) Certificate is designed to prepare students who are new to teaching as well as offer professional development for current teachers and people with previous teaching experience to work with additional language learners in Canada or abroad. The certificate develops the skills to work as English as an additional language (EAL) teachers in adult contexts, heritage language teachers.

Draft Academic Calendar URL:
http://www.calendar.ubc.ca/okanagan/pr oof/edit/index.cfm?tree=18,284,1018,0

Present Academic Calendar Entry:

Homepage (draft) Faculties, Schools, and Colleges Okanagan School of Education
Post-Baccalaureate Education Programs

[14685] Admission Requirements

[14686] Admission to the Post-Baccalaureate Certificate/Diploma programs requires a bachelor's degree, teacher's certification, or permission of the Dean of Education. Students wishing to enrol in individual courses but who are not in a Post-Baccalaureate Certificate or Diploma program require third-year standing as well as permission of the Dean of Education.

[...]

[17597] Teaching English and Additional Languages (TEAL) Post-Baccalaureate Certificate

[17598] The Teaching English and Additional Languages (TEAL) Post-Baccalaureate Certificate is designed to prepare and offer professional development for English Language Learning specialists, Learning Assistance Teachers, and other district-level consultants, school-based teachers, and educational practitioners in additional language teaching and learning.
English Language Learning specialists, Learning Assistance Teachers, and other district-level consultants, school-based teachers, and educational practitioners in additional language teaching and learning settings.

**Certificate Requirements**

**12 credits of:**

- LLED 494 (3) Introduction to Additional Language Teaching and Learning
- LLED 495 (3) Curriculum and Materials Design in Additional Language Teaching and Learning
- LLED 496 (3) Theory and Practice

**9 credits of core courses:**

- LLED 494 (3) Introduction to Additional Language Teaching and Learning
- LLED 495 (3) Curriculum and Materials Design in Additional Language Teaching and Learning
- LLED 496 (3) Theory and Practice

[17599] The Teaching English and Additional Languages (TEAL) Post-Baccalaureate program consists of 15 credits of courses drawn primarily from the Language and Literacy Education (LLED) offerings. Students must complete 9 credits of core courses: LLED 494 (3), LLED 495 (3), and LLED 496 (3) and an additional 6 credits of electives which can be selected from within the Okanagan School of Education’s Post-Baccalaureate Programs. Additional courses may be approved as electives by the Okanagan School of Education Post-Baccalaureate Program Coordinator and the Director of the Okanagan School of Education.
<table>
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<tr>
<th>in Additional Language Teaching and Learning</th>
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<tbody>
<tr>
<td><strong>LLED 497(3) Practicum in Additional Language Teaching and Learning</strong></td>
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**Note:** Not all courses are offered every year. Students should contact the Okanagan School of Education for current Post-Baccalaureate courses.

- 6 credits of electives from within the Okanagan School of Education’s Early Learning Post-Baccalaureate Program, Inclusive Education Post-Baccalaureate Program or Language and Literacy Education Post-Baccalaureate Program (as listed above).
## Curriculum Proposal Form
### New/Change to Course/Program – Okanagan campus

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<td>Contact Person:</td>
<td>Dr. Sabre Cherkowski</td>
</tr>
<tr>
<td>Phone:</td>
<td>250.807.9306</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:sabre.cherkowski@ubc.ca">sabre.cherkowski@ubc.ca</a></td>
</tr>
</tbody>
</table>

### Type of Action:
Other: New program option

### Rationale:

The requested change will provide options for M.Ed. students to complete the same degree in two ways, with or without a Capstone Project. For naming purposes, we are calling this a M.Ed. degree with coursework only to distinguish it from the current program requirements that do require the Capstone Project. The M.Ed. is not changing, just the paths to completion. The capstone project is no longer a requirement for TQS. See TQS Policy 5.00 at [https://www.tqs.bc.ca/regulations/tqs-policy.pdf](https://www.tqs.bc.ca/regulations/tqs-policy.pdf).

This change to provide the option to complete the degree through either a Capstone Project or through coursework only means that those students who wish to delve deeply into one particular topic at the end of their program and write a lengthy academic paper as the exit assignment in the final EDUC 598 seminar course may continue to do so. Those students who prefer to complete their program without a Capstone Project, through completing further courses, will be able to do so. In both cases, students will be meeting the learning outcomes across all their courses and will have a rich, robust, and rigorous program of studies. This change provides more options to students in terms of their path to completion within the M.Ed. degree.

With the addition of a M.Ed. coursework only option, M.Ed. students will have the option of:

1. completing 27 credits of course work and a three credit Capstone Project (EDUC 598)
   or
2. completing all 30 credits through course work.

Currently, the M.Ed. requires a Capstone Project as the exit assignment for program completion, offered through EDUC 598 (3 credits). To complete, students typically carry out an extended literature review inquiry into a topic that is relevant and meaningful to them in their professional contexts. The project can take many forms; however, it typically results in a formal written paper that is read and approved by the student’s graduate supervisor.
The M.Ed. degree, regardless of which path to completion a student takes, provides a rich learning environment for studying educational theories, methodologies, and problems which can then be transferred to work in schools, the workplace, the non-profit sector, and community leadership. Learning outcomes will vary depending on course selection.

The School of Education expects that enrollment will increase only marginally with this new option, and that we capacity for enrollments beyond current numbers. The requested change is part of an ongoing strategy to enrich and improve our program offerings and to increase M.Ed. graduate numbers. This proposed option will be of interest to students studying at a distance who may be able to complete their program mostly online, and/or who would rather complete regular in-person/online coursework with various assignments than dive into an extended paper as the final project for their program. This will also provide the School with a secondary option for M.Ed. with Capstone Project students who, for various reasons, may end up lagging behind in their completion requirements and could be guided into the coursework only option to complete the degree in a timely manner.

**Proposed Academic Calendar Entry:**

[15071] M.Ed. Program Requirements

[16135] The M.Ed. is typically completed as a part-time program. Students are encouraged to complete the coursework over two academic years, including summer sessions. Continuing fees will be assessed after three years. M.Ed. students are required to complete the degree within four years.

**Present Academic Calendar Entry:**

[15071] M.Ed. Program Requirements

[16135] The M.Ed. is typically completed as a part-time program. Students are encouraged to complete the coursework over two academic years, including summer sessions. Continuing fees will be assessed after three years. M.Ed. students are required to complete the degree within four years.

**Draft Academic Calendar URL:**

http://www.calendar.ubc.ca/okanagan/proof/edit/index.cfm?tree=18,285,897,1054
M.Ed. Degree with Capstone Project

Capstone project option offers opportunities for students with an interest in exploring a particular topic in greater depth. Students will develop a substantial academic paper on their particular inquiry area of interest.

[16136] To be recommended for an M.Ed. degree with capstone project, students must complete the following:

[12142]
- 9 credits of core courses: CUST 562, EDUC 500, and EDUC 521;
- 18 credits from the Okanagan School of Education’s course offerings (3 credits can be taken from a Faculty/Department other than the Okanagan School of Education with approval from the Director of Graduate Programs. See Course Offerings);
- EDUC 598 (3 credits)

M.Ed. Degree with Coursework Only

M.Ed. degree with coursework only offers students rich opportunities for learning and professional development through the variety of course offerings.

[16136] To be recommended for an M.Ed. degree, students must complete the following:

[12142]
- 9 credits of core courses: CUST 562, EDUC 500, and EDUC 521;
- 18 credits from the Okanagan School of Education’s course offerings (3 credits can be taken from a Faculty/Department other than the Okanagan School of Education with approval from the Director of Graduate Programs. See Course Offerings);
- EDUC 598 (3 credits)
gaining broad knowledge at an advanced level to inform their professional and/or applied practice.

To be recommended for the M.Ed. degree with coursework only, students must complete the following:

- 6 credits of core courses: CUST 562 and EDUC 521;
- 24 credits from the Okanagan School of Education’s course offerings (3 credits can be taken from a Faculty/Department other than the Okanagan School of Education with approval from the Director of Graduate Programs. See Course Offerings)

Note: A maximum of 6 credits can be taken at the 400-level with approval from the Director of Graduate Programs in Education.

Proposed Academic Calendar Entry:

<table>
<thead>
<tr>
<th>CORE COURSES</th>
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Core courses are required for all M.Ed. and M.A. students.¹

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<th>Core Courses</th>
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<tr>
<td>CUST 562 Curriculum Issues and Theories</td>
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<tr>
<td>EDUC 500 Research Methodology in Educa</td>
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Present Academic Calendar Entry:

[12147] CORE COURSES

Core courses are required for all M.Ed. and M.A. students.

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<tr>
<td>EDUC 500 Research Methodology in Educa</td>
</tr>
</tbody>
</table>
EDUC 521 Readings and Discourse in Education

1 EDUC 500 not required for M.Ed. with coursework only.

[12148] To be recommended for the M.Ed./M.A. degrees, students must complete 15 credits (M.A.), 18 credits (M.Ed. with capstone), or 24 credits (M.Ed. coursework only) from the Okanagan School of Education’s course offerings (3 credits can be taken from a Faculty/Department other than the Okanagan School of Education with approval from the Director of Graduate Programs (see below). Course selection is done in consultation with a student’s supervisor.
Curriculum Proposal Form
New Course – Okanagan campus

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<td>Dr. Scott Douglas</td>
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<td>Phone:</td>
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<td>Email:</td>
<td><a href="mailto:scott.douglas@ubc.ca">scott.douglas@ubc.ca</a></td>
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<tr>
<td>Type of Action:</td>
<td>New Course</td>
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**Rationale:**

The addition of a practicum course within our current TEAL certificate would align the certificate with the equivalent requirements for a TESL Canada Standard One certificate. These requirements include 10 hours of observation and 10 hours of supervised practicum, which we do not have in the current TEAL Certificate program.

**Proposed Academic Calendar Entry:**

LLED 497 (3) Practicum in Additional Language Teaching and Learning

Professional development as an additional language educator through a supervised 20-hour practicum including guided lesson observations (10 hours) and focused teaching practice (10 hours). Concurrent seminars develop skills in lesson planning, instructional strategies, reflective practice, classroom leadership, interculturality, and community building. Pass/Fail.

**Draft Academic Calendar URL:**
N/A

**Present Academic Calendar Entry:**
None.
# Curriculum Proposal Form

**New/Change to Course/Program – Okanagan campus**

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<tr>
<td>Contact Person:</td>
<td>Dr. Kathy Rush</td>
</tr>
<tr>
<td>Phone:</td>
<td>250.807. 9561</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:Kathy.rush@ubc.ca">Kathy.rush@ubc.ca</a></td>
</tr>
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</table>

**Type of Action:** [delete other choices]

| Revision to Calendar Description |

**Rationale:** [explain why type of action is needed (e.g. is the new course filling a gap? Is a new faculty member bringing expertise? Is the course content being updated?); please provide context and rationale as intended audience is from various Faculties]

NRSG 581 is tailored to students in the PhD in Nursing program; Masters-level students and students in other programs must obtain permission from the graduate program coordinator to register. This change was recently approved by Senate for the other three PhD in Nursing courses.

**Proposed Academic Calendar Entry:**
NRSG 581 (3) Leadership in Knowledge Application and Translation
Philosophies, theories and praxis in the application of nursing. **This course is restricted to students in the PhD in Nursing program unless permission is given by the Nursing program coordinator.**
Prerequisite: NRSG 504. Or equivalent graduate level course in knowledge and evidence-based practice.

**Present Academic Calendar Entry:**
NRSG 581 (3) Leadership in Knowledge Application and Translation
Philosophies, theories and praxis in the application of nursing. **Prerequisite:** NRSG 504. Or equivalent graduate level course in knowledge and evidence-based practice.

**Draft Academic Calendar URL:**
Note: URL not required for individual courses.
28 October 2021

To: Okanagan Senate

From: Senate Learning and Research Committee

Re: UBC Honorary Degrees

At the September 23rd meeting of the Okanagan Senate, the following motion from the floor introduced by Dr. Sally Willis-Stewart, Chair of the Okanagan Learning and Research Committee, was referred back to the Committee:

“That the Senate not approve honorary degrees for the 2021-2022 Academic Year.”

This motion was identical to one passed the previous day by the Vancouver Senate on the recommendation of its Tributes Committee, and was precipitated by the discovery in May 2021 of 215 unmarked graves at the site of the former Kamloops Indian Residential School.

Almost immediately upon news of the graves being made public, UBC began to receive requests for the revocation of the honorary degree granted in 1986 to the late John Fergus O’Grady, a Catholic Bishop and former principal of the school.

The Tributes Committee held an extraordinarily meeting in June which resulted in the Committee issuing a statement (attached for your reference) which was broadcast internally and posted on the Honorary Degrees webpage.

Ultimately, UBC received hundreds of communications, along with a petition containing over a thousand names. The communications called for, variously, the revocation of the Bishop O’Grady honorary degree, a review of all honorary degrees granted to anyone with any connection to the residential school system and, finally, for a review of all 800+ honorary degrees granted by UBC.

The Tributes Committee held further extraordinary meetings over the summer and introduced the above motion at the September 22nd Vancouver Senate meeting. The Committee’s memo to Senate (attached), has seven questions that the Committee was specifically asking the Senate to discuss in terms of revocation along with the motion that Senate not approve honorary degrees for this year, in order to give the Committee time to address the calls for review and revocation and to consider by what process revocation may occur. The motion was carried by the Vancouver Senate on September 22nd.
The Okanagan Learning and Research Committee voted unanimously to align with the Tributes Committee in proposing the same motion to the Okanagan Senate. The Committee feels very strongly that the importance of this alignment can't be overestimated in the context of discovery of the unmarked graves, including the Okanagan campus’ geographic proximity to the site of the graves.

In addition to considering the processes for revocation of an honorary degree, the Committee will also be undertaking a review of the processes and criteria for awarding honorary degrees. The Committee notes that as of the September 30th deadline, no honorary degree nominations were submitted to the Okanagan campus for 2022.

The Committee, therefore, requests that Senate consider the following motion:

Motion: That the Senate not approve honorary degrees for the 2021-2022 Academic Year.

Respectfully submitted,

Dr. Sally Willis-Stewart, Chair
Senate Learning and Research Committee
Statement of the Vancouver Senate Tributes Committee Regarding Kamloops Indian Residential School and the Honorary Doctor of Laws Granted to the Late John Fergus O’Grady

The Vancouver Senate Tributes Committee expresses its deep sympathies to the Tk’emlúps te Secwépemc and other Indigenous Peoples of Canada. The tragedies of the Canadian Indian residential school system – including the death and disappearance of Indigenous children – have been known for many years; the discovery of specific places with the remains of 215 children at the site of the Kamloops Indian Residential School has drawn this system to the forefronts of many in this province, country and around the world. We hope that such thoughts encourage all Canadians to work harder towards acknowledgment of the past and present in this country, and to affirm their support of and respect for the equal human rights of all, including Indigenous peoples.

Last week, many people reminded the University that in 1986 we granted an honorary Doctor of Laws to John Fergus O’Grady, who at the time was the Catholic Bishop of Prince George. Prior to his being appointed a bishop, the then Father O’Grady was a member of the Missionary Oblates of Mary Immaculate. In that capacity he was a principal at various Indian Residential Schools, including Kamloops Indian Residential School in the 1940s. Bishop O’Grady died in 1998. There have been many calls from both within the University and from the broader community for the honour granted to Bishop O’Grady to be revoked. There have also been calls for any honours granted to anyone associated with the residential school system be reconsidered.

The Tributes Committee is gathering what information it can on Bishop O’Grady from both institutional and other sources. We join with many others in calling on the Missionary Oblates of Mary Immaculate to release, as soon as possible, whatever information is in its archives on the residential school system in general and Kamloops Indian Residential School in particular. We do not intend to delay our consideration of this matter should that information not be forthcoming.

The Tributes Committee thanks those who have sent comments over the past week. We would also express our sincere appreciation to Chancellor Steven Point who, as a member of the Tributes Committee, has provided wise counsel. We know that to properly adjudicate this matter we will require the knowledge and advice of others, both within the University and beyond. The Tributes Committee is committed to reviewing this matter and making a recommendation to the Vancouver Senate as quickly as possible.

The Tributes Committee understands the Senate must have transparent processes and criteria for reconsidering honorary degrees so that those who were honoured by the University in the past are accorded fairness. The Tributes Committee is committed to working to support the Vancouver Senate in these decisions, collaborating with the Okanagan Senate should it wish to take similar action, and consulting with the University and wider communities – especially First Nations communities – on this important work.

Respectfully,

John H.V. Gilbert, C.M., Ph.D., LL.D., FCAHS
Chair, Vancouver Senate Tributes Committee
Professor Emeritus
The University of British Columbia

NB: Correspondence on this matter may be sent to vancouver.senate@ubc.ca
To: Senate
From: Senate Tributes Committee
Re: Procedures for Revoking Honorary Degrees
Date: 15 September 2021

Background

The tragedies of the Canadian Indian residential school system – including the death and disappearance of Indigenous children – have been known for many years; the confirmations this summer of specific places with the remains of children has drawn this system to the forefront of many in this province, country and around the world over this summer. The University in particular was reminded by many people that in 1986 we granted an honorary Doctor of Laws to John Fergus O’Grady, who at the time was the Catholic Bishop of Prince George. Prior to his being appointed a bishop, the then Father O’Grady was a member of the Missionary Oblates of Mary Immaculate, and in that capacity he was a principal at various Indian Residential Schools, including Kamloops Indian Residential School in the 1940s. There have been many calls from both within the University and from the broader community for the honour granted to Bishop O’Grady to be revoked. There have also been calls for any honours granted to anyone associated with the residential school system to be reconsidered.

The Senate Tributes Committee has issued a statement expressing its sympathies to the Tk’emlúps te Secwépemc and other Indigenous Peoples of Canada and committed to recommending transparent processes and criteria for reconsidering honorary degrees.

Questions for Discussion

We would suggest that there are seven questions that Senate should consider:

1) Does the Senate agree with the Tributes Committee that, in principle, honorary degrees may be revoked?
2) Under what criteria would the UBC revoke an honorary degree?
3) What information would be needed to consider revoking a degree and who, either within or beyond the University, should be involved in making such a decision?
4) What burden of proof, either for outside processes, or for processes within the University, should be required for UBC to revoke an honorary degree?
5) What procedural fairness considerations should be applied when considering revoking an honorary degree?
6) Would the procedural fairness considerations above necessitate someone being able to respond to allegations made against them?
7) What other actions, either in addition to, or instead of revoking an honorary degree should UBC consider when concerns are raised or substantiated regarding a past honoree?
Scope of Review

This matter has been precipitated by a particular concern with one honorary degree granted in May 1986 to the late John Fergus O’Grady. Mr O’Grady died in 1998. While most of the community comments have been directed towards Mr O’Grady, a few have called for a larger review or “audit” of all ~800 honorary degrees granted by UBC on the basis of either involvement in Indian residential schools or other activities (such as involvement in the internment of Japanese-Canadians or other actions or opinions now thought improper or harmful).

The Tributes Committee recognizes that consideration of individual situations may need to be conducted confidentially given the personal and sensitive information needing to be discussed. However, the Committee believes that the broader policy and procedural considerations should happen in as transparent a manner as possible.

Comparable Situations

Canadian Honours

We have reviewed the legislation and criteria for the Orders of Canada and British Columbia. Both have provisions for terminating membership in the order. Further, the Order of Canada is explicit in being terminated on the death of the honoree. The Order of British Columbia is silent on this but we have confirmed with the Secretary to the Advisory Council to the Order that in practice they also view membership to cease on death. As a result of this, neither order has to contend with revoking an honour posthumously.

With respect to the Order of Canada, five persons have had their memberships revoked, four for criminal convictions (one overturned on appeal however the membership was not reissued), and one for professional misconduct as a lawyer.

With respect to the Order of British Columbia, There is only one record of membership in the Order being terminated, that of David Sidoo.

The following are the criteria under which the appointment to the Order of Canada or the Order of BC may be terminated (except for formatting, both are identical):

a) the person has been convicted of a criminal offence; or
b) the conduct of the person
   (i) constitutes a significant departure from generally-recognized standards of public behaviour which is seen to undermine the credibility, integrity or relevance of the Order, or detracts from the original grounds upon which the appointment was based; or
   (ii) has been subject to official sanction, such as a fine or a reprimand, by an adjudicating body, professional association or other organization.

The Order of Canada’s termination policy may be found at https://www.gg.ca/en/honours/canadian-honours/order-canada/termination-policy
The Order of BC’s termination policy may be found at

**UBC Emeritus Status**

UBC grants emeritus status to retiring faculty members with sufficient service to the University. The Senate has revoked emeritus status once (and three people have voluntarily surrendered when we informed them that their status was under review). In that instance, the University waited until criminal convictions were found and the period to appeal lapsed. It then contacted the honoree and asked if he wished to respond to a proposal to revoke his emeritus professorship. He did not reply. The University Senate then met in closed session and after debate, voted to revoke the emeritus status.

**Canadian Examples**

Revocations are very rare in Canadian academia. In recent years, a few institutions have revoked honorary degrees, and a number have developed criteria for doing so. Those with criteria (some very brief) include Dalhousie, St Mary’s, Laurier, McGill, Regina, and Carleton. Several schools have also revoked degrees recently without a policy for guidance, including Queens. Most of the policies in question have been developed over the past 3 years, showing an increase in interest in this area.

We have been able to find the following Canadian university policies which make reference to revoking or rescinding honorary degrees:

- **Carleton University**

- **Dalhousie University:**

- **McGill University**

- **Regina, University of**

- **St Mary’s University**
  https://www.smu.ca/webfiles/GuidelinesforHonDocsNovember.pdf

- **Wilfred Laurier University**
  https://www.wlu.ca/about/governance/senate/honorary-degrees.html
International Examples

There have been a few popular press articles on revocations. In addition to the Canadian perspective (https://www.universityaffairs.ca/features/feature-article/a-fine-balance-deciding-who-deserves-an-honorary-degree/), an American perspective (https://www.insidehighered.com/views/2016/01/14/when-should-colleges-revoke-honorary-degree-essay) and British (https://wonkhe.com/blogs/grads-behaving-badly-yet-more-honorary-degree-revocations/) are available.

Recommendation

Further recommendations from the Tributes Committee will be forthcoming following today’s discussion. We are aware that such work will require much thought, consultation, and deliberation, and it has been suggested that the Vancouver Senate should not approve additional honorary degrees this year while we focus our attention on this important work. The Senate Tributes Committee would ask Senate to consider the following motion:

“That the Senate not approve honorary degrees for the 2021-2022 Academic Year.”
To: Senate  
From: Nominating Committee  
Re: Appointment to a President’s Advisory Committee for the Extension of Appointment of the Vice-President Research and Innovation  
Date: 18 October 2021  

The Senate Nominating Committee has received a request from the President to appoint a senator who must be a faculty member to serve on a President’s Advisory Committee for the Extension of Appointment of the Vice-President Research and Innovation. The Committee has considered possible nominees and is pleased to recommend that Senate resolve as follows:

That Senate appoint Greg Garrard to a President’s Advisory Committee for the Extension of Appointment of the Vice-President Research and Innovation.
The latest Report from the Intergovernmental Panel on Climate Change (IPCC) concluded that climate change is widespread, rapid, and intensifying and the UN Secretary-General has declared a ‘Code Red’ for humanity. It is imperative that we address and adapt to climate change, to avoid the worst impacts of the climate crisis. There is a renewed urgency given the severe impacts that we experienced this summer in BC, with the climate change induced heat wave and associated wildfires, causing significant harm to the people and unique biodiversity within our region.

UBC’s 2019 Climate Emergency Declaration recognized the severity, complexity, disproportionate impacts of, and responsibilities for, the climate crisis. It committed UBC to develop a collective response that embeds climate justice throughout its activities and priorities. With endorsement in principle of the Climate Emergency Task Force Report and Recommendations, the UBC Board of Governors emphasized that climate action continues to be a top strategic priority for the University, providing direction for UBC staff to update plans to address the climate crisis with the urgency it requires.

The Climate Emergency Declaration and subsequent Climate Emergency Community Engagement process reaffirmed UBC’s commitment to accelerate emissions reductions in alignment with the Paris Agreement of limiting global warming to 1.5°C. Reaching the 1.5°C Paris Target requires a global GHG reduction of 45% from 2010 to 2030 and reaching net zero around 2050. Three objectives for CAP 2030 are reflected in UBC’s Climate Emergency Declaration mandate:

1. Setting new targets that accelerate UBC’s path toward achieving the net zero emissions target prior to 2050;
2. Applying a climate justice lens to the policies and actions developed in CAP 2030;
3. Expanding CAP scope to include areas of influence extending beyond UBC’s operations, such as commuting, air travel, food systems, materials and waste.

**CAP 2030**

CAP 2030 addresses and accelerates GHG reductions in operational emissions (buildings, energy supply and fleet), and extended emissions (commuting, food, business air travel, embodied carbon, waste and materials) that are considerably larger and are now being included to align with the intent of UBC’s Climate Emergency Declaration.

This Plan outlines an ambitious path of deep GHG emission reductions for each campus, with bold actions including district energy decarbonization and building retrofits, while also providing opportunities for teaching, learning and research through Campus as a Living Lab initiatives that address the climate imperative.

CAP 2030 will decarbonize the institution while considering the inequitable impacts of climate change and subsequent responses on marginalized communities, including an understanding that the ability to partake in sustainable actions can be constrained by a lack of privilege and inequality.

**UBC VANCOUVER CAP 2030 TARGETS**

Building on two previous Climate Action Plans, (CAP 2010 and CAP 2020) and the significant GHG reductions already achieved (a peak operational GHG reduction of 38% in 2018 versus the 2007 baseline), UBC Vancouver’s CAP 2030 sets a bold vision and accelerated pathway for a broader scope of emission reductions in response to UBC’s Climate Emergency Declaration – the key targets and emissions categories are summarized below:

![Figure 1 – UBC Vancouver CAP 2030 Targets & Emissions Categories](image)

**UBC OKANAGAN CAP 2030 TARGETS**

CAP 2030 is UBC Okanagan’s first Climate Action Plan and sets a bold vision and decarbonization pathway for a broad scope of emission reductions in response to UBC’s Climate Emergency Declaration. This Plan
builds upon the significant success at operational GHG reduction despite a rapidly expanding campus – the key targets and emissions categories are summarized below:

**Figure 2 – UBC Okanagan CAP 2030 Targets & Emissions Categories**

**RISK MITIGATION**
Achieving the CAP 2030 targets will mitigate a number of key institutional risks:

- **Financial risk**: Investments in decarbonizing UBC’s energy supply and buildings will mitigate risks from increasing external carbon pricing legislation.
- **Reputational risk**: UBC’s sustainability leadership attracts top students, faculty, staff and research – without setting and achieving CAP 2030 targets, UBC risks losing this leadership position and the many associated benefits.
- **Operational risk**: Investments in future-proofing buildings will enable UBC to maintain increased operational resiliency during climate event’s, such as heat waves and wildfires.

**CARBON PRICING**
UBC currently pays overall carbon liabilities of around $3m per year from the application of carbon taxes on fossil fuel purchases (primarily natural gas) and the carbon offset associated with BC’s Climate Change Accountability Act. This carbon liability will increase in the future if UBC does not continue to decrease carbon emissions. UBC’s expected future carbon liability is estimated to accumulate to over $100m in the next 20 years if no further actions are taken to reduce carbon emissions. Without UBC’s past GHG reduction successes across both campuses, this liability would have been more than double this amount.

**RESOURCING & BUDGETING**
CAP 2030 represents a significant UBC-wide effort across both the Vancouver and Okanagan campuses. The CAP 2030 team engaged UBC’s Strategic Decision Support to advise on the development of a

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1 Estimate based on multiplying UBC’s remaining emissions by the Federal Governments proposal of an escalating carbon price, increasing by $15/year from 2023 and reaching $170/tonne in 2030.
resourcing strategy. The implementation horizon is 10 years and will require sustained leadership, increased resourcing, and cross-campus engagement with the academy and collaboration from many units across both campuses. Partnership opportunities will be pursued with utilities, industry and government to leverage funding and investments in low carbon solutions. Financial mechanisms and price signals will continue to be identified that support behavioral change while helping to fund emission reductions.

NEXT STEPS

- Staff will advance CAP 2030 for Board of Governors endorsement for the upcoming session scheduled in November, 2021.
- Pending Board endorsement of CAP 2030, staff will continue to advance detailed capital project and operating program requirements for reducing GHGs in operational and extended emission areas.
The University of British Columbia  Vancouver Campus

Climate Action Plan 2030
Acknowledgements

We begin by acknowledging that UBC’s Vancouver-Point Grey campus is located on the traditional, ancestral and unceded territories of the xʷməθkʷəy̓əm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.
Executive Summary

Building on two previous Climate Action Plans and significant GHG reductions already achieved, UBC Vancouver’s CAP 2030 sets a bold vision and accelerated pathway for a broader scope of emission reductions in response to UBC’s 2019 Declaration on the Climate Emergency:

CAP 2030 will position UBC as a model of how universities can mobilize to address the climate emergency and Paris targets through bold, impactful actions to accelerate and deepen GHG reductions across operations, and expanded action to reduce extended emissions.

UBC’s Climate Emergency Declaration recognizes the severity, complexity, disproportionate impacts of, and responsibilities for, the climate crisis. It commits UBC to develop a collective response that embeds climate justice throughout its activities and priorities. With this endorsement, the UBC Board of Governor’s emphasized that climate action continues to be a top strategic priority for the University. Specifically, the Declaration gives impetus for UBC to update plans to address the climate crisis with the urgency it requires.

The Climate Emergency Declaration and Climate Emergency Community Engagement process reaffirmed UBC’s commitment to accelerate emissions reductions in alignment with the Paris Agreement of limiting global warming to 1.5°C. Meeting the 1.5°C Paris Target (IPCC pathway) requires a global net anthropogenic GHG reduction of 45% from 2010 to 2030 and reaching net zero around 2050.

This Plan sets targets that will accelerate and broaden UBC’s climate action with a 2030 GHG reduction target of 85% on operational emissions (2007 baseline year) and 45% on extended emissions (2010 baseline year), in addition to advancing UBC’s target for net-zero operational emissions to 2035—15 years ahead of the original 2050 target. This Plan helps to advance many facets of UBC’s strategic plan goals by creating platforms for climate informed teaching, learning and research, and leverages multiple Campus as a Living Laboratory opportunities to maintain UBC’s reputation and leadership position in climate action and sustainability.

CAP 2030 addresses operational emissions (buildings, energy and fleet), which are within existing CAP reduction targets, and extended emissions (commuting, food, business air travel, embodied carbon, waste and materials, and paper), which are considerably larger and are now being included to align with the intent of UBC’s Declaration on the Climate Emergency.

Without further commitment to accelerate action across all areas, UBC’s GHG emissions will continue to increase substantially, risking UBC’s reputation and the many associated benefits, and exposing the institution to considerable energy and carbon liabilities in the future.
In 2022, UBC will pay a carbon price of $75 for each tonne of carbon dioxide (tCO₂e) emitted ($50/tCO₂e for BC Carbon Tax and $25/tCO₂e for public sector offset requirements). UBC Vancouver currently pays overall carbon costs of around $3 million per year. This will increase in the future if UBC does not continue to decrease scope 1 and 2 carbon emissions, and as carbon pricing escalates as part of government climate policy. Given that equipment and infrastructure exist for many years, UBC’s expected future carbon liability would accumulate to approximately $100 million over the next 20 years if no further actions are taken to reduce carbon emissions. Without UBC’s past action, this liability would have been more than double this amount.

Over 130 staff, faculty and students from across both campuses were engaged to develop CAP 2030 targets, actions and implementation pathways across all goal areas. Through an online survey and virtual public engagement events, we heard from 764 participants from the Vancouver Campus about the emerging CAP 2030, and the barriers and opportunities for climate action on campus. This Plan puts forward UBC Vancouver-led and system-wide actions that, if all actions, strategies and plans articulated in this Plan are implemented will achieve the 2030 GHG targets.

CAP 2030 is a UBC-wide effort across both the Vancouver and Okanagan campuses, and will require continued leadership, increased resourcing, and cross-campus engagement with the academy and collaboration from many units across both campuses. The CAP is accompanied by an accountability framework that outlines responsibilities for implementation, monitoring progress, and governance for decision making over time.
1 Introduction

1.1 A Call to Urgent Action

UBC has established a clear Vision Statement for climate action that guides accelerated action in the Climate Action Plan 2030 (CAP 2030) for both the Vancouver and Okanagan campus:

> CAP 2030 will position UBC as a model of how universities can mobilize to address the climate emergency and Paris targets through bold, impactful actions to accelerate and deepen GHG reductions across operations, and expanded action to reduce extended emissions.

Three objectives for the UBC Vancouver Climate Action Plan are reflected in UBC’s Climate Emergency Declaration mandate.

1. Setting new targets that accelerate UBC’s path toward achieving net zero emissions target prior to 2050;
2. Applying a climate justice lens to the policies and actions developed in CAP2030;
3. Expanding CAP scope to include areas of influence extending beyond UBC’s operations, such as commuting, air travel, food systems, materials and waste.

These objectives provide direction to help achieve the Vision while considering the inequitable impacts (i.e. human and nature’s justice) of climate change and subsequent responses on marginalized communities, including an understanding that the ability to partake in sustainable actions may be constrained by lack of privilege and inequality.

Infobox: UBC’s Climate Emergency Declaration

The UBC Climate Emergency Declaration was prompted by a student-mobilized open letter signed by over 1,600 students, staff, faculty and campus organizations and participation of over 5,000 UBC students, faculty and staff in the September 27th, 2019 Global Climate Strike.

UBC’s Board of Governors unanimously endorsed a Declaration on the Climate Emergency in December 2019, joining over 1,700 jurisdictions around the world making similar declarations around this time.

In February 2020, UBC launched a climate emergency community engagement process, overseen by a task force of students, staff and faculty, with support and input from the UBC Climate Hub. This process resulted in the UBC Climate Emergency Engagement Final Report and Recommendations identifying nine overarching strategic priorities to advance climate action, including “supporting the forthcoming
recommendations and new interim emissions targets emerging from the Climate Action Plan 2030 process”.

The Climate Emergency Declaration and Climate Emergency Community Engagement process reaffirm UBC’s commitment to accelerate emissions reductions in alignment with the Paris Agreement of limiting global warming to 1.5°C\(^1\). Meeting the 1.5°C Paris Target (IPCC pathway) requires a global net anthropogenic GHG reduction of 45% from 2010 to 2030 and reaching net zero around 2050.

UBC’s declaration recognizes the severity, complexity, disproportionate impacts of, and responsibilities for, the climate crisis. It commits UBC to develop a collective response that embeds climate justice throughout its activities and priorities. With endorsement in principle of the Report and Recommendations from UBC’s Climate Emergency Task Force, the UBC Board of Governors emphasized that climate action continues to be a top strategic priority for the University, providing direction for UBC staff to update plans to address the climate crisis with the urgency it requires.

CAP2030 represents a significant step as the third CAP for the Vancouver Campus, building on existing climate achievements guided by CAP 2010 and CAP 2020. Informed by the Vision Statement and Objectives, this Plan provides UBC Vancouver-specific greenhouse gas (GHG) emission reduction targets and actions, as well as cross-campus (Vancouver and Okanagan) actions that support UBC system-wide GHG emission reduction targets across all action areas.

### 1.2 Purpose of the UBC CAP 2030

This Plan provides the overarching campus climate policy direction to make informed and strategic policy decisions to reduce GHG emissions, to increase climate adaptation, which is the process of adjustment to actual or expected climate and its effects to live with and minimize destruction and suffering, and increase climate resiliency, which can generally be thought of as an ongoing process of diverse, interconnected relationships and processes that activate and build up resilience-enhancing capacities within and across a community.

Implementing the Plan will reduce medium to longer term operational costs associated with increased carbon pricing, increase the future resiliency of the campus to withstand the impacts of acute climate shocks and events resulting from climate change, and to

\(^1\) [https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement](https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement), accessed 13\(^\text{th}\) August 2021
continue to demonstrate UBC’s commitment and leadership to address climate change through a climate justice lens.

Some actions in this Plan are already underway, or set to begin, while others will require further study to advance. Through strategic investment decisions in high impact climate action areas over the next 10 years, UBC Vancouver is setting a course to leverage institutional, operational and intellectual capacities to chart a leadership path for other similar post-secondary institutions to emulate. These investments will help support research, attract and retain faculty, staff and students, and be a role model for other universities to follow.

Further, the anticipated advancement in campus de-carbonization and energy efficient technologies will provide a platform to enhance teaching, learning, and research, by partnering with faculty researchers devoted to help advance innovation in these areas and promote Campus as a Living Laboratory, positioning the University as a testbed of innovation.

1.3 Climate Action: A Long Running Priority for UBC

Climate action has been a priority for UBC for the past two decades, especially with regards to operational emissions (scope 1 and 2). UBC achieved its Kyoto Protocol targets for academic buildings five years ahead of schedule through major energy efficiency upgrades, including the ECOTrek project, which formed part of UBC’s first Sustainability Strategy.

UBC’s first Climate Action Plan in 2010 set a decarbonization pathway to a 100% GHG reduction by 2050 (net zero), with interim targets for a 33% GHG reductions for 2015 and 67% for 2020. These targets guided multiple new projects and initiatives including the introduction of bio-energy, energy conservation and advancing high performance green buildings. For example, the Bio-energy Research and Demonstration Facility (BRDF), represented one of the major projects that helped UBC achieve operational GHG savings of over 35% from 2007. The forthcoming completion of the BRDF expansion project in late 2021 will help achieve a total reduction in campus operational emissions of approximately 60% compared to 2007. This represents a major achievement and will move UBC significantly closer to its target of a 67% reduction in GHG emissions.

UBC has built a strong global reputation on climate action; in 2019, Times Higher Education ranked UBC as the top university globally in addressing the climate crisis. UBC has also played an important role in elevating this issue across the global university network, including through the University Climate Change Coalition (UC3), the University Alliance for Sustainability (UAS), the International Sustainable Campus Network (ISCN) and the U7+ Alliance that help ensure higher learning institutions across the globe are effective agents of change.
1.4 Key Drivers for this Plan

In 2018, the Intergovernmental Panel on Climate Change (IPCC) released a special report on the impacts of global warming. It determined the impacts of climate change would likely be worse than previously expected, and the previously assumed safe limit of a 2°C increase would result in irreparable damages, and an increased chance of runaway climate change. The Report found that limiting warming to 1.5°C would help protect against the worst changes. It is commonly understood that the 1.5°C limit should be seen as the maximum safe level. Limiting climate change to this level will require global net anthropogenic GHG reductions of 45% by 2030 (below a 2010 baseline), and to net zero by 2050. Global climate models are warning of an alarming 3-4°C increase in temperatures by the end of the century.

**Infobox: 2021 IPCC Report**

With the latest IPCC Report (Climate Change 2021: The Physical Science Basis\(^2\)) comes a renewed urgency to act to limit severe climate change. Based on this report, “only rapid and drastic reductions in greenhouse gases in this decade can prevent such climate breakdown, with every fraction of a degree of further heating likely to compound the accelerating effects.”

Key highlights from the IPCC Report include:

- **A3**—Increased extremes in heatwaves, heavy precipitation, droughts, tropical cyclones, and their connection to human influence, has strengthened.
- **B1**—Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions CO\(_2\) and other greenhouse gas emissions occur in the coming decades.
- **D1**—Limiting human-induced global warming to a specific level requires limiting cumulative CO\(_2\) emissions and rapid and sustained reductions in CH\(_4\) emissions to limit the warming effect and improve air quality.

In September 2019, millions of people around the world participated in peaceful marches in the lead up to the United Nations Climate Summit. The marches, initiated by the youth-led climate movement Fridays For Future, built on the environmental activism of Indigenous Peoples, who have historically and continue to be on the front lines of both the impacts of climate change and the activism required to progress towards a more sustainable and just future for generations to come.

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A purpose of these student led marches and strikes was to raise awareness of the disproportionate impact climate change is having and will continue to have on the future of today’s youth. Expanded through student activism to include allies of all ages, the September 2019 climate marches became some of the largest protest movements in the world, and were a catalyst for a series of Climate Emergency Declarations to be made globally, including by UBC.

Infobox: Summer 2021 Heat Wave

The heat wave and subsequent wild fires experienced in Summer 2021 provided a renewed focus on the urgency of climate action, through mitigation, adaptation and resiliency lenses. Climate scientists\(^4\) noted that the

“extreme heat was virtually impossible without human-caused climate change”.

Similarly, wildfires driven by the hotter climate are becoming more and more common in our province, releasing huge quantities of GHG emissions and smoke pollution, impacting our unique biodiversity, displacing communities and magnifying mental health and wellbeing risks across BC and beyond.

This has presented significant challenges to human health and the biodiverse ecosystems that sustain us. Critical impacts include the unprecedented displacement of people and wildlife, and hazardous air-quality and heat waves across BC and beyond, leading to health complications and deaths, and affecting the ability for thousands of people to work and live comfortably across the province. Severe and increasingly common events such as these represent an opportunity to leverage nature-based solutions for heat stress, through the

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\(^3\) Photo credit: Joachim Zens

shading provided by the urban tree canopy and rainwater management provided by vegetation and green spaces.

1.4.1 Internal Policy Drivers

CAP 2030 is informed by and supports the implementation of several important UBC Plans, including UBC’s Strategic Plan: Shaping UBC’s Next Century, which asserts UBC’s climate leadership as a key priority. It states,

“The challenges around climate change are high. We need to intensify our academic and operational efforts on our campuses, in affiliated communities around the world. We must go beyond minimizing harm to becoming net contributors to human and ecological health.”

The UBC CAP 2030 will help define how sustainability and climate change will support UBC’s efforts to shape the next century. CAP 2030 also helps to advance two of the nine strategic priority areas identified by UBC’s Climate Emergency Task Force Report that was endorsed in principle by the UBC Board of Governors. These include accelerating UBC’s emissions reductions in response to the Climate Emergency and supporting community wellbeing in the face of the climate crisis.

CAP 2030 additionally aligns with the values and visions set forth in many of UBC’s existing plans and initiatives, including the Inclusion Action Plan, the Indigenous Strategic Plan the Wellbeing Strategic Framework; wellbeing also represents a guiding priority with multiple co-benefits across many of the emissions themes contained within CAP 2030, particularly those related to extended emissions.
1.4.2 External Policy Drivers

Many rapidly-changing external policy drivers have influenced the direction of CAP 2030, and will continue to inform this Plan’s direction as it is implemented.

| Transportation & land use | 1. BC Government’s Zero-Emission Vehicle Act: 100% of new vehicle sales to be zero-emission vehicles by 2040, including 10% by 2025 and 30% by 2030
| Buildings | 2. BC Government’s Renewable & Low Carbon Fuel Requirements Regulation: reduce lifecycle carbon intensity of fuel by 20% by 2030
| Buildings | 3. BC Building Step Code: 20% more energy efficient by 2022 and 80% more efficient by 2032 (net zero energy ready standard)
| Buildings | 4. Federal Government’s escalation of carbon price on fuels to $170 tCO2e by 2030. Public sector offset requirements add an additional $25.00 / tCO2e to this cost5
| Buildings | 5. BC Government’s amendment for increased supply of clean fuel sources to support transition to renewable fuel economy
| Buildings | 6. BC Government’s updated GHG emission intensity factors for electricity use in BC integrated grid-connected entities
| Buildings | 7. BC Government’s requirement for post-secondary capital project submissions to reduce GHG emissions by 50% (relative to LEED Gold)
| Waste | 8. BC Government organic waste: 95% of organic waste diverted from landfills and turned into other products by 2030

As the provincial and federal governments continue to increase the carbon tax associated with fossil fuel purchases, and with the continued mandate to purchase carbon offsets to maintain a carbon neutral public sector in BC, UBC’s carbon liability will continue to grow over time without further climate action.

In 2022, UBC will pay a carbon price of $75/tCO2e emitted ($50/tCO2e for BC Carbon Tax and $25/tCO2e for public sector offset requirements). UBC Vancouver currently pays overall carbon costs of around $3 million per year. This will increase in the future if UBC does not continue to decrease scope 1 and 2 carbon emissions, and as carbon pricing escalates as part of government climate policy. Given that equipment and infrastructure exist for many years, UBC’s expected future carbon liability would accumulate to approximately $100 million over the next 20 years if no further actions

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5 To support these reductions by discouraging pollution-intensive investments and increasing affordability of cleaner options, the federal government is also proposing to increase the carbon price by $15/ tCO2e per year, starting in 2023, rising to $170 per tonne of carbon pollution in 2030. Existing carbon offsets as part of BC’s Climate Change Accountability Act add another $25/ tCO2e to this price. The CleanBC Renewable Gas Mandate is estimated to add an additional $45/ tCO2e to this price by 2030.
are taken to reduce carbon emissions. Without UBC’s past action, this liability would have been more than double this amount.

2 CAP 2030 Approach

2.1 Beyond Mitigation: Increasing Adaptation and Resiliency

While this Plan focuses on the development of mitigation strategies to reduce fossil fuel impacts, responding to climate change will also require the development of just, equitable and accessible adaptation strategies to reduce the impacts associated with the increasing frequency and severity of climate change events. Foundational climate adaptation and resiliency strategies have already been integrated into a number of campus plans and guidelines. Specific examples include the Integrated Stormwater Management Plan (ISMP), Water Action Plan (WAP), and the Green Building Action Plan (GBAP); these adaptation and resiliency strategies will also be integrated into future planning, including the upcoming Campus Vision 2050 Plan. A future Climate Adaptation Resiliency and Biodiversity Strategy will act as a hub for this work and link to other existing and future plans, policies, and initiatives across UBC.

Given the severity and increased frequency of climate change events, UBC is integrating a number of adaptive responses as part of our mitigation efforts now - e.g. assessing cooling capacities, nature based solutions, and access to address increased heat wave events, the GBAP is updating the Climate Ready Building Requirements that advance implementation of adaptive responses immediately, and introducing new criteria for building retrofits that also consider passive and active cooling measures such as those used in the UBC Macleod Building.

2.2 An Integrated University Initiative

Realizing the vision and ambition of CAP 2030 will require UBC to activate all institutional, intellectual, operational and community capacities. Some of the most innovative research into demonstratable climate solutions is happening right here at UBC. The CAP 2030 process is an opportunity for the University’s operations and research communities to work together through applied research to solve our climate challenges (i.e. projects such as UBC’s new $23m Renewable Energy Hub will be a testbed for low carbon innovation). UBC’s Campus as a Living Laboratory programs are driven by the University’s operational and sustainability commitments, and have a well-established track record of success to develop, pilot and scale innovative processes and solutions. Key examples focusing on innovative low carbon solutions, include the BRDF and its current expansion.

The SEEDS Sustainability Program creates applied student-led research and interdisciplinary collaborations that utilize the Campus as Living Laboratory. Examples
include creating robust interdisciplinary partnerships and research clusters between UBC’s students, staff and faculty. These Campus as a Living Laboratory programs were key to informing the development and implementation of the original CAP 2010 and the CAP 2020, and will continue to be leveraged for the CAP 2030. Collaboration is ongoing to determine the next breakthrough clean energy and climate solutions at UBC. Continuing to leverage this strength in the future will be key to meeting UBC’s aggressive climate targets and to accelerate the uptake of UBC-created solutions beyond our campus.

In addition to institution-level change, successful delivery of UBC’s climate action will require the full breadth of the UBC community to be engaged and participate to achieve collective impact. This is especially true for addressing UBC’s extended impact emissions sources, such as commuting, air travel, food and waste. Supported by UBC’s existing and emerging policies, programs, infrastructure, tools and resources, UBC students, faculty and staff, through choices and as a community, have an opportunity to take relevant actions and contribute to these emissions reduction areas.

Figure 2: UBC operations and research collaboration at the Bioenergy Research Demonstration Facility (BRDF)

Note: The BRDF is a collaboration between UBC Energy and Water Services and UBC Applied Science.
2.3 Lessons from the COVID-19 Pandemic

The Plan was initiated during the COVID-19 pandemic and racial justice protests of 2020. The impacts of COVID-19 heightened public awareness of the historical and ongoing systemic, structural and institutional inequities and racism against Indigenous, Black, and People of Colour communities. These events deeply shaped what was heard from the community, and have been articulated in the recommendations. This work recognizes that climate justice must be advanced in conjunction with institutional responses to today’s multiple intersecting crises - the pandemic, an opioid crisis, intense racial injustice and an economic recession/affordability crisis - which compound inequalities faced by marginalized populations. Some reflections triggering further policy development include leveraging learning from remote working and online class delivery, ensuring flexibility and accommodations remain in place to support student, staff, and faculty well-being, and optimizing the use of space to reduce energy, GHG emissions, and associated costs. Specific lessons and actions emerging from the COVID-19 pandemic are referenced in the relevant sections below.

With classes moved online and a significant reduction in on-campus activities during 2020 and 2021, the pandemic also had an impact on UBC’s operational and extended emissions. Despite this, the pandemic has had little impact on the analysis presented in this plan as most findings are based on the data collected in pre-pandemic periods. Moving forward, the impacts of the COVID-19 pandemic on campus travel patterns, air travel, and the other issues and opportunities it presents for the near future will be monitored through the CAP 2030 implementation process.

2.4 A Climate Justice Lens

The application of a climate justice lens will ensure equity, inclusion, diversity, and accountability are upheld and advanced while accelerating climate action as marginalized and vulnerable populations are often disproportionally impacted by climate change.

Infobox: Climate Justice

Climate change and environmental harms are known to disproportionately affect the marginalized and the underprivileged, and to compound and magnify those existing inequalities; ‘climate justice’ addresses this by tying social justice lenses into a climate action approach. Climate justice frameworks have evolved out of past and ongoing activism driven by Indigenous peoples, Black communities, people of colour, gender inequity, and grassroots movements mobilizing to resist persistent impacts of environmental racism and systemic oppression. Climate justice also addresses preventable health and wellbeing impacts, and protecting human rights. It does so through acting on distributive justice, procedural justice, and restorative justice, in order to form a more holistic approach to recognizing and addressing the ways in which underprivileged populations are differently affected by climate change and its consequences.
A climate justice lens recognizes responsibility and accountability for causes of climate change, the inequitable burdens of climate change impacts and an awareness of intersecting vulnerabilities, systemic and structural injustices. Climate justice might generally be thought of as advocating for what is right, fair, appropriate or deserved in relation to climate change drivers and impacts.

Throughout the development of the CAP 2030 actions, working groups have reflected on how to advance climate action in a way that considers the needs of those with fewer resources and those who use too many. Engaging principles of climate justice are particularly relevant when developing climate actions related to food systems, commuting and business air travel. This Plan’s actions are designed to align with embedding wellbeing, community resilience, equity and diversity across university systems and structures – foundational to the UBC Wellbeing Strategic Framework, Inclusion Action Plan and Indigenous Strategic Plan. This approach is ongoing and achieves significant co-benefits across many of this Plan’s emission themes, particularly those related to extended emissions.

2.5 Co-benefits to Climate Action and Risk Management

Taking strong action on climate change is critical to improving UBC’s contribution to reducing globally harmful GHG emissions, however, this is far from the only benefit. Advancing an ambitious CAP 2030 will further many other UBC interests, including:

- Protecting UBC against the increasing costs of carbon taxes and pricing at the provincial and federal level;
- Mitigating UBC’s exposure to future volatility in conventional energy costs and supply chains;
- Increasing resiliency, capacity, and diversification of UBC’s energy infrastructure and green infrastructure in the face of climate change;
- Future-proofing UBC’s buildings to the impacts of climate change, through the use of a passive measures first approach, while integrating whole systems infrastructure considerations regarding active cooling strategies;
- Leveraging student and faculty-led applied research to utilize the Campus as Living Laboratory;
- Sharing and amplifying UBC’s place-based climate research and solutions that help accelerate climate action at a local, regional and global scale;
- Leveraging technology innovation, research, and development at UBC with industry and utility partners;
- Leveraging external funding and partnerships to advance key research and innovation priorities by UBC;
- Pursuing external funding and investments into University infrastructure priorities;
- Supporting sustainability challenges within the institution and capitalizing on teaching, learning, and research opportunities;
- Bolstering UBC’s internationally recognized reputation and leadership in climate action and sustainability in operations and research;
• Strengthening the UBC community’s resilience and sense of individual and collective agency by equipping/supporting community members to take action on climate change; and
• Increasing UBC’s overall community resilience, mental health and wellbeing.

These co-benefits will be considered alongside technical and financial risks, and other criteria when assessing future investments in CAP 2030 priorities.

3 Plan Development

3.1 Planning Process

In April 2020, the Board of Governors endorsed climate action as a key sustainability focus area for UBC campuses. Following this leadership endorsement, the CAP 2030 process launched in May 2020. The process was led by Campus and Community Planning, with strategic oversight and direction provided by the Operational Sustainability Steering Committee with representation from faculty and administrative leadership.

The CAP 2030 planning process built upon the significant success that UBC has had to date for campus operations. It also leveraged recommendations from the climate emergency engagement process as well as expertise across UBC through topic-based working groups and technical committees.

UBC working groups were established to develop targets and actions for all CAP topic areas. Actions in areas that apply to both Vancouver and Okanagan campuses, such as business air travel, food systems, and embodied carbon, were identified. Targeted staff, faculty, students, and external subject matter experts were engaged to develop the CAP recommendations based on the following themes:

• Energy Supply and Buildings
• Fleet
• Commuting
• Business Air Travel
• Embodied Carbon
• Food Systems
• Engagement and Outreach Programs
• Waste, Materials and Paper
• Financial Tools

Emerging directions and draft targets for CAP 2030 – Vancouver and Okanagan Campuses - were presented to the Board of Governors in February 2021. The CAP
2030 process, Figure 3, illustrates the overall timeline and key stages in the planning process.

![Figure 3: CAP 2030 Process Overview](image)

CAP 2030 working group members were instructed to consider key elements from the Climate Emergency Declaration, with a specific focus on including a climate justice lens to help evaluate priority actions. Engagement and vetting of working group actions was conducted at the director’s level for many units across UBC to define ownership, alignment, support and responsibility for actions as part of an overall CAP Accountability Framework (Appendix B) through a distributed approach to CAP implementation.

As actions were developed and refined, targeted stakeholder meetings were held with key staff from the units responsible for leading or supporting specific campus actions. The intent of these meetings was to gather support for implementation, identify resources currently being mobilized, identify where additional resources are needed, and to confirm roles and responsibilities moving forward.
3.2 Public Engagement Process

From March 29 to April 16, 2021, the Campus and Community Planning team led an engagement process for the entire university community. This was an opportunity for staff, students and faculty to learn about the emerging CAP 2030 themes, ask questions, and share perspectives.

Through an online survey and virtual events, we heard from 764 participants from the Vancouver Campus about the emerging CAP 2030, and the barriers and opportunities for climate action on campus. Figure 4 presents a snapshot of the main themes that we heard from the UBC community during the public engagement period.

Figure 4: CAP 2030 Public Engagement - Key Messages Received

Further information on the main themes heard during the UBC CAP 2030 public engagement process can be found in the Engagement Summary Report (Appendix D).
4 Addressing Climate Change

4.1 UBC GHG Emission Sources

The GHG emissions for UBC’s Vancouver campus are generated from various sources, as illustrated in Figure 5 below.

Figure 5: UBC's Operational and Extended Emissions

Note: Extended emissions are estimated and less accurate than campus operations GHG values which are reported more rigorously as part of UBC’s annual carbon reporting under BC’s Climate Change Accountability Act. For the Waste and Materials category, emissions shown only include those from disposal and do not include life cycle emissions, which are much larger.

4.1.1 Campus Operations (Scope 1 and 2)

Campus operations emissions are those over which UBC has direct control and on which UBC pays carbon offset taxes through the provincial carbon neutral legislative requirements for public sector organizations in BC. Sources include emissions from buildings, campus energy facilities, and fleet vehicles. Reducing these emissions requires infrastructure change and capital investments. To date, these emissions have been successfully reduced by enhancing the energy performance of buildings and district energy supply.

Heating and operating buildings account for approximately 97% of UBC total campus operations emissions, and the vast majority of these come from burning natural gas...
(86%), as this fossil fuel (mostly composed of methane, CH₄) has significantly higher GHG emissions than BC’s clean electricity (primarily sourced from clean and renewable hydropower). Emissions generated through campus operations are defined as emissions from sources directly controlled and operated by UBC, including combustion of natural gas on campus (scope 1), and from upstream emissions from electricity consumed on campus (scope 2).

Figure 6 illustrates the dominant role of natural gas in UBC’s buildings and District Energy System (DES) emissions. Electricity emissions only accounted for 6% of total Campus Operations emissions in 2019. However, the relative importance of these emissions will increase in the future as electricity use increases to help displace fossil fuel use to meet climate targets.

![Figure 6: UBC Campus Operations Emissions by Energy Source (2019)](image)

GHG emissions from electricity are calculated using electricity emissions factors for BC have become somewhat volatile due to a change in emissions factor approach. Analysis for CAP 2030 targets and actions has been based on recent provider-based electricity emissions factors and this area will be monitored as these factors continue to evolve in the future.

The University is on track to reduce operational emissions by approximately 60% below 2007 levels, with the first full year of the bio-energy expansion project operating in 2022, outperforming the Paris Agreement 1.5°C target of 45% reduction. However, even more aggressive targets are required to maintain UBC’s sustainability and climate action
leadership position and meet the intent of UBC’s Climate Emergency Declaration. The CAP targets address emissions from institutional buildings including core infrastructure, academic, and student housing; excluded are off campus buildings and UBC’s neighborhood developments. Neighbourhood emissions will be addressed by a future update to the Community Energy and Emissions Plan (CEEP), the Residential Environmental Assessment Program (REAP) and the Neighbourhood Low Carbon Energy Strategy.

4.1.2 Extended Impact emissions (Scope 3)

Extended impact emissions occur from activities that are not always fully controlled by UBC, but that the institution impacts and influences through purchasing decisions, plans, policies, guidelines, behavioral change programs, and others. These emissions are generally referred to as scope 3 emissions and include sources such as commuting to and from campus, business air travel, food consumed on campus, waste, and the embodied carbon associated with the construction of new buildings and retrofits. While UBC has influence on these emissions the University is not currently responsible for carbon offset payments associated with them under the provincial carbon neutral legislation. These extended impact emissions are almost 2.5 times larger than campus operations emissions as illustrated in Figure 5. CAP 2030 is the first time UBC has made an explicit mandate to set reduction targets for extended impact emissions.

4.2 CAP 2030 Plan – Targets

The global climate crisis is accelerating, and strong collective action must be taken to avoid the worst impacts. With CAP 2030, UBC is committing to build upon past successes to achieve deep carbon reductions for campus operations and extended impacts emissions by 2030, with a future goal to go beyond net zero (see Figure 7). Through strategic investments in climate action, UBC will be leveraging its institutional, operational and intellectual capacities to chart a leadership path for other post-secondary institutions to follow.
Figure 7: UBC’s Climate Action – Past Successes and Future Milestones
4.2.1 Reduce Campus Operations Emissions by 85% by 2030

The existing CAP 2020 target for operations was for a 67% GHG reduction by 2020, and UBC will be close to achieving this reduction with the BRDF expansion. With CAP 2030, UBC is setting a target of 85% GHG emission reduction below 2007, significantly exceeding the 1.5°C Paris Agreement emissions targets. Reducing emissions by 85% translates to eliminating virtually all conventional fossil fuel\(^6\) use from campus operations.

4.2.2 Net Zero Campus Operations Emissions by 2035

The previous campus operations net zero target, or 100% GHG reduction, was set at 2050. CAP 2030 sets a new accelerated target of net zero by 2035, which will address the remaining emissions from low carbon energy that remain after most fossil fuels are eliminated. The technology solutions for this, such as carbon capture, are still emerging and have not been proven at a wide scale, which will provide an opportunity for partnering with faculty researchers who are advancing innovation in this area. Figure 8 shows the historical operations emissions, plus the impact of actions that can cumulatively reduce emissions by 100%, or net zero.

\(^6\) Some fossil fuels may still be required for specialized purposes or uses that don’t have viable alternatives.
UBC is well-positioned to achieve deep carbon reductions and accelerate decarbonization of its core operations to meet targets. A combination of factors including UBC’s history of successfully reducing emissions, accelerating technology innovation, and increasing community support for action will help to advance UBC’s climate ambition. Given the size of UBC’s Vancouver Campus, this can serve as an invaluable demonstration for how other campuses and neighbourhoods could achieve decarbonized energy use. A hierarchy of decarbonization principles has been developed to create a clear pathway for UBC to achieve net zero operational emissions, as shown in Figure 9 below.

Figure 9: Net Zero Decarbonization Principles
4.2.3 Reduce Extended Impact Emissions by 45% by 2030

For the first time, UBC is creating reduction targets for extended impacts emissions; CAP 2030 sets a target for a 45% reduction from 2010 levels, reaching the Paris Agreement 1.5°C target by 2030 as shown in Figure 10. This is in line with the mandate given by UBC’s Climate Emergency Declaration.

Achieving this target will require institutional leadership in addition to strong buy-in and support from UBC’s students, staff and faculty, who through their own choices and activities have a strong influence over these emissions.

Figure 10: UBC Extended Emissions and Target

*Note*: the waste emissions shown above only include those from disposal and do not include life cycle emissions, which are much larger.

5 CAP 2030 Plan Targets, Strategies and Actions

This section contains a high-level summary of key actions identified in the CAP 2030 working group process, broken down across all action areas. It is intended to provide an overview of areas of focus, specific targets, key actions, and the overall level of ambition of CAP 2030.
5.1 Campus Operations

5.1.1 Academic District Energy System

**Target:** By 2030, 100% of the energy used by the Academic District Energy System will come from low carbon sources.\(^7\)

**Rationale:** The Academic District Energy System (ADES) provides the major source of heat to campus buildings via a network of hot water pipes under campus. Heat for the ADES is provided by renewable biomass from the BRDF and fossil fuel based natural gas from the Campus Energy Centre (CEC). This district energy system has also been the single largest source of UBC’s GHG reductions, with district energy specific emissions declining from approximately 50,000 tCO\(_2\)e in 2007 to 24,400 tCO\(_2\)e in 2019, in large part due to the steam to hot water conversion and the use of biomass to reduce natural gas consumption.

![Figure 11: UBC Campus Energy Centre\(^8\)](image)

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\(^7\) Low carbon energy sources include renewable energy such as BC Hydro grid, locally generated electricity (e.g., solar, biomass, renewable natural gas (RNG), etc.)

\(^8\) Photo Source: [https://www.naturallywood.com/project/ubc-campus-energy-centre/](https://www.naturallywood.com/project/ubc-campus-energy-centre/), accessed 13th August 2021
The bio-energy expansion that is nearing completion and will be operating this fall will achieve a 75% reduction in ADES emissions, with 70% of the energy coming from low carbon biomass and Renewable Natural Gas (RNG), while also expanding heating services to new buildings. Figure 9 illustrates how low carbon biomass energy and RNG (significant use as Cogen fuel) will meet the majority of baseload requirements, with natural gas predominantly used for shoulder and peak times during fall and winter.

![Figure 12: ADES Fuel Sources (Summer 2021 - Summer 2022)](image)

**5.1.1.1 Actions - Immediate (Start F2021-22)**

- Undertake a comprehensive technical and financial feasibility analysis to identify the most promising low carbon energy supply option(s) for the UBCV ADES – this study is already underway and will be completed in 2022, a number of technologies are being investigated through a detailed evaluation process against a number of key criteria – see Resourcing Strategy in Appendix A.
- Continue to prioritize energy demand side management efforts to offset all energy increases due to campus growth.
- Develop a UBC Vancouver campus energy strategy, including developing key guiding principles, to inform UBC’s transition to clean energy and net zero emissions.
5.1.1.2 Short Term - By 2024

- Collaborate and explore strategic partnership opportunities with BC's major utilities to increase UBC's access to a diversity of low carbon energy supplies.

5.1.1.3 Medium Term - By 2030

- Implement low carbon ADES supply and demand solutions. Begin with initial projects by 2025, with a goal of achieving 100% low carbon energy by 2030.
- Explore and evaluate potential solutions to reach and accelerate UBC's net zero target, such as carbon capture, to address the remaining emissions from low carbon energy sources and hard to abate applications.

5.1.2 Buildings

**Target:** By 2030, new buildings and building renewals will target near zero operational emissions, and existing building emissions will be reduced to reach a target developed as part of the Existing Building Decarbonization Plan.

**Rationale:** Heating and operating UBC’s buildings represents 97% of total Campus Operations emissions, and this energy currently accounts for about $22 million in annual energy costs. Direct natural gas consumption by buildings (i.e., buildings that are not connected to the ADES) represent about 30% of the total. Ensuring new buildings are built to high performance, existing buildings are strategically retrofitted, and that energy supplied to buildings becomes increasingly low-carbon is imperative for UBC to achieve its bold GHG emission reduction ambitions, minimize energy consumption and reduce escalating carbon costs.

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9 Near zero operational emissions assumes that building level, future energy and GHG intensity targets are being met and all energy supply is from low carbon ADES, BC Hydro electricity, and/or renewable natural gas.

10 UBC’s buildings include a lot of energy intensive laboratory space. Due to equipment such as fume hoods and steam and humidification systems, energy consumption of these buildings is materially larger than for traditional buildings, which tend to be dominated by space and water heating.
5.1.2.1 Actions - Immediate (Start F2021-22)

- Eliminate fossil fuel equipment installation in new and existing buildings, unless sufficient amounts of RNG are secured for the lifetime of the equipment\(^\text{11}\).
- Develop an Existing Building Decarbonization Plan that integrates with maintenance and renewal programs, and a resourcing strategy to support incremental costs.
- Develop GHG targets and an action plan for the buildings in the UBC Properties Trust building portfolio that align with the CAP 2030 scope.

5.1.2.2 Short Term – By 2024 and Medium Term - By 2030

- All buildings on campus will connect to the ADES. If the project does not connect to the ADES it should apply for a variance. If projects cannot connect into the ADES they are required to achieve net zero carbon certification (design and operation).
- Develop and implement new building and renewal project GHG intensity targets by building type, incorporating more energy efficient designs and low carbon energy sources, and creating a life cycle costing process that deals with capital budgets to meet low carbon design requirements.

\(^{11}\) As a low-carbon non-fossil fuel, renewable natural gas (RNG) can replace natural gas in buildings that are not connected to the district energy system. However, historically the available supply of RNG has been limited.
- Implement building retrofits strategically as per the above plan (Existing Building Decarbonization Plan) and funding.
- Research and track building space utilization and changes due to remote activity, and explore opportunities for energy reductions through space utilization and mitigating growth of new floor space.
- Develop a process to reduce emissions from refrigerants used in buildings.

![Campus Operations Emissions: UBC Buildings](image)

*Figure 14: Campus Operations Emissions: UBC Campus Buildings*

*Note:* This graphic includes all emissions at the building level, and includes direct natural gas use by buildings as well as by the ADES described above.

**Infobox: Marine Drive Residence heat pump project study**

Electrification of building HVAC equipment is a key opportunity to reduce UBC’s GHG emissions. UBC Student Housing and Community Services (SHCS) commissioned a study to assess replacement of natural gas fired make up air units (MUA), which provide heating and ventilation, with air source heat pumps (ASHP) at the Marine Drive student residence.

Heat pumps work by using electricity to transfer heat from the outside environment to inside the building. As such, they can be extraordinarily efficient, with the units assessed for Marine Drive about four times more efficient than existing equipment. When considering available incentives and energy savings over the project lifespan, ASHP lifecycle costs are competitive and help to significantly reduce GHG emissions.
5.1.3 Fleet

**Target:** UBC will only procure new vehicles and equipment that are zero emissions where feasible solutions exist.

**Rationale:** While UBC’s fleet of vehicles and motorized equipment has a relatively small impact on overall GHG emissions, vehicles are a highly visible part of UBC’s operations.

Between 2007 and 2018, UBC Building Operations reduced UBC fleet GHG emissions by 52% and achieved the only E3 Fleet Platinum rating in Canada. Transitioning to Zero Emissions Vehicles (ZEV) and enabling vehicle sharing among departments can realize significant co-benefits in addition to improving community wellbeing through reduced community harming GHG emissions, including greater overall financial performance and improved quality of fleet services for end users.

![Figure 15: UBC Electric Vehicle and Charging Station](image)

5.1.3.1 Actions – immediate *(Start F2021-22)*

- Explore the expansion of fleet management programs across all UBC vehicles, including additional funding, in order to continue to pursue fleet optimization and increased efficiency.
- Develop a comprehensive ZEV Charging, Fueling, and Maintenance Strategy to guide ZEV transitions on campus.

5.1.3.2 Short – by 2023

- Incorporate a Zero Emissions Vehicle and Equipment First (ZEV First) requirement into existing fleet policy for all new vehicles and equipment, where feasible operational solutions exist.

![Campus Operations Emissions: Fleet](image)

*Figure 16: Campus Operations Emissions - Fleet*

5.1.4 Financial Mechanisms: Internal Carbon Pricing

**Target:** Implement an internal carbon price to better align financial decision-making criteria with UBC’s climate goals.

**Rationale:** Carbon pricing is seen as a key policy tool and a financial mechanism to address climate change. It works by incorporating the true costs of carbon pollution into the decision-making process. So far, external climate policy has lagged behind providing an actual representation of the costs of damages associated with climate change. To address these challenges, CAP 2030 proposes the introduction of an Internal Carbon Price (ICP) to better align financial decision-making criteria with UBC’s climate goals and provide certainty, predictability, consistency and rigor for decision making. Unlike a carbon charge, the internal carbon price does not result in the exchange of money; it is simply used to inform decisions. The application of an internal carbon price can result in more money being invested initially in climate-friendly
systems that reduce carbon dioxide emissions; however, it often saves money when factoring in the life cycle cost-benefits of the solution.

UBC’s internal carbon price represents an overall price ceiling, inclusive of all external pricing instruments, such as carbon offsets and fuel taxes. With the introduction of an internal carbon price, UBC will join the City of Vancouver and Metro Vancouver to create a local cluster of global leadership on carbon pricing. Refer to Appendix C for UBC’s Internal Carbon Pricing Policy Guideline.

5.1.4.1 Actions - Immediate (Start F2021-22)

- An internal carbon price level of $250/tCO\textsubscript{2}e has been selected based upon carbon price escalation seen at the provincial and federal levels, which will reduce risks by ensuring that carbon costs are fully accounted for during decision making.
- Pilot the internal carbon price approach in lifecycle cost analysis for several energy supply, equipment renewal and energy conservation projects.

5.1.4.2 Short Term - By 2024

- Implement the internal carbon price and use life cycle cost analysis to inform decision-making for energy projects (energy supply, energy equipment, energy conservation projects), as well as to fleet purchases and programs.
- Pilot and implement the internal carbon price and use life cycle cost analysis to inform decision-making on capital and infrastructure planning.

5.2 Extended Impacts Emissions

5.2.1 Commuting

**Target:** By 2030, achieve a 45% reduction in commuting emissions from 2010 levels.

**Rationale:** Accounting for approximately 36,000 tCO\textsubscript{2}e emissions per year, commuting by students, faculty and staff to the Vancouver campus is the highest extended impact emissions category accounting for nearly the same GHG emissions of buildings and energy supply combined. UBC has been very successful at increasing the transit mode share from 18% in 1997 to 54% in 2019 as a result of the introduction of the U-Pass program for students in 2003. However, substantial growth in the transit mode share is constrained until there is a rapid transit connection to UBC, which isn’t anticipated until around 2030. This risks an increase to the single occupant vehicle mode share above the current 32% and therefore an increase in commuting emissions and public health impacts. There are opportunities for significant emissions reductions by decreasing commuting trips, shifting choices of transportation modes and vehicle types, and increasing transit capacity in the longer term. Climate justice factors into the
development of transportation policies and programs to ensure that equity across the UBC community is considered.

5.2.1.1 Actions – Immediate (Start F2021-22)

- Develop policies, targets and tools that enable and support departments in incorporating remote work / teleworking, flex days and online learning on an ongoing basis.
- Explore funding via a “Sustainable Transportation Levy” as part of parking permit fees (e.g., $0.25 / trip) to fund sustainable transportation initiatives, including a Sustainable Transportation Program, that will support increased use of sustainable modes of transportation and reductions in commuting emissions.
- Establish an ongoing Sustainable Transportation Program to deliver infrastructure, programs and initiatives that enable sustainable transportation choices and drive behavioural change to reduce commuting emissions.
- Continue to pursue a SkyTrain connection to campus by 2032 (existing action).
- Identify a suite of improvements including infrastructure, procedural, and policy changes to improve the Electric Vehicle (EV) charging user experience and increase capacity to support transition towards electrical vehicle ownership in the UBC community.

5.2.1.2 Short Term - By 2024

- Transition parking permit fee structure to daily permits only (eliminating monthly, term, and annual permits), and offer a discount/subsidy for monthly transit passes for all staff and faculty.
- Improve cycling experience to support increased cycling trips to and from campus, such as improved secure bike storage, working with government partners to provide dedicated bike lanes to/from campus and an integrated e-bike and bike share program with the City of Vancouver.
5.2.2 Business Air Travel

**Target:** By 2030, reduce business air travel emissions by 50% from 2019 pre-COVID-19 levels.

**Rationale:** Business air travel is a significant source of extended impact emissions, accounting for approximately 17,500 tCO₂e/yr. This is equivalent to about 50% of total campus operations emissions. Much of this travel is undertaken by UBC faculty and staff to attend academic and professional conferences. By leveraging the availability of better communication technology solutions, greater social awareness, and recent learnings from the COVID-19 pandemic, air travel and associated emissions can be reduced while providing an opportunity to maintain or improve UBC’s education and research objectives, and is a key opportunity to increase access to educational opportunities for students and departments lacking means for engaging in extensive travel. This acknowledges the dependence upon air travel for researchers to carry out certain types of research and scholarly projects. Generally speaking the UBC Okanagan Campus often bears a somewhat disproportionate amount of “UBC system” travel. Identification and removal of barriers to choosing travel alternatives will be integral to shifting cultural norms, while ensuring an equitable approach.

**5.2.2.1 Actions – Immediate (Start F2021-22)**

- Initiate a Sustainable Travel Program to develop behavioural change programming and awareness campaigns that shift behavior and create awareness around travel impacts and the increasing number of virtual alternatives available.
- Implement a study across both campuses to understand inter-campus air travel patterns, barriers and opportunities to reduce inter-air travel emissions. This action will enable UBC to better understand travel between the two campuses and how our travel behaviours should ideally shift as we start to emerge from Covid-19 travel restrictions.

**5.2.2.2 Short Term - By 2024**

- Track and report GHG emissions and other key parameters for all UBC business air travel.
- Lead a coordinated approach to reduce air travel across the University ecosystem by leveraging UBC’s leadership role across peer networks (e.g., UC3, U7+).
5.2.3 Food Systems

**Target:** By 2030, achieve a 50% GHG emission reduction of food systems.

**Rationale:** UBC campus food systems account for over 29,000 tCO₂e per year and is the second highest category in extended impact emissions after commuting. From a global perspective, food systems are an enormous driver of climate change and contribute between 21 - 50% of global GHG emissions. After commuting, food is the second highest emissions category in the extended impact emissions area.

Over 60% of food produced, equivalent to 35 million tonnes of food are wasted in Canada each year, generating about 56.5 million tonnes of CO₂-equivalent emissions. Approximately 32% – equaling 11.2 million metric tonnes of lost food – is avoidable and is edible food that could be redirected to support people in our communities¹².

UBC is well positioned to lead an integrated approach in creating a just and resilient campus-wide food system – access to sustainable, safe, affordable, healthy foods increases mental health, physical health, and sense of wellbeing benefits. Through partnerships with communities both on and off campus, a Climate-Friendly Food System at UBC will use science-based targets to reduce food system-related GHG emissions. The creation of a campus-wide food system strategy will address all components of UBC’s food system, including food production, procurement, provision, consumption to waste and recovery.

5.2.3.1 Actions – Short Term – by 2024

- Develop campus-wide Climate-Friendly Food System (CFFS) definition, mandatory CFFS labelling, and a toolkit to increase sustainable dietary choices and habits.
- Develop and implement mandatory campus-wide Climate-Friendly Food System Procurement Guidelines applicable to all food providers. Develop a Food Waste Reduction and Recovery Strategy (including food-related waste).
- Amend the UBC Supplier Code of Conduct to reflect UBC’s climate commitments.
- Develop a Food System Resilience and Climate Action Strategy that holistically advances climate-friendly foods at UBC including climate mitigation and adaptation.
- Leverage and expand established interdisciplinary research initiatives, student and faculty-led research to advance climate-friendly food systems, spanning climate mitigation and adaptation.
5.2.3.2 5.2.3.2 Actions - Medium Term — 2024-2030

- Enhance the measurement and reporting of the campus food system’s environmental footprint, and coordinate with other food sustainability tracking priorities.

Figure 20: Extended Emissions - Food
5.2.4 Waste and Materials

**Target:** By 2030, UBC will apply a circular economy lens\textsuperscript{13} to enable a 50% reduction in waste, progressing toward a zero-waste community.

**Rationale:** While UBC’s reported GHG emissions from waste disposal are a very small fraction of overall emissions, waste-related emissions are much higher when considering life cycle emissions that include production of goods and materials – analogous to what is included in embodied carbon calculations for construction. In 2019, the Ellen MacArthur Foundation reported that 45% of 2050 global emissions reductions will need to address production of goods and materials, and circular economy strategies could eliminate almost half of these emissions.

A Zero Waste Action Plan update planned for 2022 will more strongly prioritize emissions reductions opportunities such as reuse, apply a circular economy lens, and address barriers that have limited progress toward UBC’s zero waste goals to date.

5.2.4.1 Actions – Immediate (Start F2021-22)

- Initiate a process for updating the Zero Waste Action Plan, which will include refining and integrating the actions below.
- Complete the planning and resourcing for launch of a scalable reuse program that includes furniture, residence items, and scientific equipment.

5.2.4.2 Short Term – by 2024

- Fund, develop, and implement the Waste Operations Strategy (implemented through Building Operations), which will provide critical waste management infrastructure and business process updates needed to reach our zero waste goals.
- Scope and develop a central sustainable procurement program that could include vendor and product sustainability criteria, packaging requirements, updated procurement guidelines and processes, and integration with the Integrated Renewal Plan (UBC’s enterprise level IT systems upgrade).

\textsuperscript{13} In contrast to a conventional linear economy (“take, make and dispose”), a circular economy lens increases the focus on reuse and recycling of goods and materials back into the economy to avoid and eliminate waste and generate economic value.
5.2.5 Engagement and Outreach Programs

**Target:** By 2030, three quarters (75%) of UBC faculty, staff and students will be aware of UBC’s climate action goals and participating in UBC’s evolving and expanding culture of sustainability.

**Rationale:** UBC’s climate-related engagement and outreach programs have demonstrated successes in reducing energy and emissions from UBC operations through energy conservation initiatives and campaigns delivered by programs including Green Labs, Sustainability Coordinators and Sustainability in Residence. With the inclusion of extended emissions targets in CAP 2030, new and expanded communications and engagement capacity will be critical to underpin the community climate action and behaviour and social changes needed to reach the Paris Agreement target-aligned goals for business air travel, commuting, food, and waste.

**5.2.5.1 Actions – Immediate (Start F2021-22)**

- Create a comprehensive plan to track, support, and (where needed) coordinate the implementation of CAP-related engagement and outreach communications, campaigns, and programming, in alignment with institutional action on the Climate Emergency Task Force priorities, Sustainability & Climate Action Integrated Communications & Engagement (ICE) Plan, and CAP 2030 scope 1, 2 and 3 emissions reduction actions.
5.2.5.2 Short Term – by 2024

- Establish a climate action communications, engagement and outreach model (supporting awareness-building and education as well as social and behavioural change) for both targeted and campus-wide audiences.
- Develop new and expanded sustainability engagement and outreach programs, tools and resources, ensuring adequate and ongoing resourcing to amplify engagement on climate action.
- Standardize a university-wide process for portfolios, faculties and/or departments to track, measure and report out on UBC CAP participation and progress.

5.2.6 Embodied Carbon

**Target:** By 2030, establish an embodied carbon baseline and align new building and renewal designs with a 50% reduction target.

**Rationale:** As UBC continues to drive down operational emissions from buildings, it is becoming more important to take a life cycle approach and address embodied emissions that arise from materials used to construct these buildings, in addition to the energy emissions from operating the building. Even when averaged over the life of the building, these emissions represent a significant share of all UBC’s extended impact emissions, hence limiting new construction as far as possible represents the first step in limiting GHG emissions. The embodied energy of new buildings can be reduced by using materials which use less energy to produce and are made from natural materials and recycled materials.

*Figure 22: UBC’s Tallwood Building*
There has been significant progress made in initial research and scoping of this area; UBC is already a recognized innovator and leader in building projects that use low carbon materials and innovative construction techniques, as demonstrated by UBC’s Brock Commons Tallwood Project (Figure 22), which was world’s tallest contemporary wood building at the time of completion. Research will need to continue into developing more accurate and streamlined assessment methods for embodied carbon, reliable regional supply chains for low carbon materials, as well as design and construction strategies to further reduce embodied carbon across the campus.

5.2.6.1 Actions – Immediate (Start F2021-22)

- Develop clear guidance for embodied carbon Life Cycle Assessment (LCA) studies for new buildings and renewals, and introduce a pilot target of 20% reduction over a baseline building.
- Develop guidance for reducing embodied carbon in buildings to discourage, reduce or potentially eliminate materials with the highest embodied carbon impacts.
- Update the method for campus level reporting on embodied carbon emissions in UBC's GHG inventory and carbon reporting.

5.2.6.2 Short Term – by 2024

- Create an operational and academic research collaboration or hub for UBC building performance/embodied carbon.
- Develop embodied carbon reduction targets for UBC buildings by type and for campus as a whole, for application on projects in 2025-2030.

5.2.6.3 Medium/Long Term – by 2031+

- In addition to embodied carbon, consider healthy and equitably-sourced materials as part of a holistic approach to building material choices.

Figure 23: Extended Emissions – Embodied Carbon
5.3 Complementary Action Areas

The following actions are tied to other planning initiatives that are not specifically part of CAP 2030, but contribute to important CAP 2030 objectives.

5.3.1 Adaptation, Resilience and Biodiversity

CAP 2030 is focused on the mitigation of greenhouse gas emissions to meet UBC’s and Paris Agreement targets. However, adaptation and resiliency in the face of a changing climate, notably that our biodiversity and ecosystems are a key issue as evidence of a changing climate.

British Columbia is already experiencing the impacts of climate change on our population and unique biodiversity. Average temperatures are increasing, sea levels are rising, and more variable and extreme weather is becoming more frequent, including increased rainfall and extreme rainfall events. It is also important to note, that though all of BC faces challenging climate change impacts, Indigenous communities continue to experience a disproportionate share of historical and magnifying climate impacts. These impacts directly affect the province and require government and public sector organizations to re-think how they will deal with their own infrastructure and operational needs, and their ability to provide services to the public. Failing to adequately consider and manage risks from climate change will cost significantly more than implementing proactive management of these risks. In response, the Province of BC is drafting a Climate Readiness and Adaptation Strategy that UBC has helped inform. The Province is also developing Minimum Climate Resilient Design standards and guidelines that will influence our future actions.

In recent years, the Province has required public sector organizations including UBC to complete an Annual Climate Risk Survey to understand current public sector capacity to report on climate risk management. In the near future UBC will be required to report and track progress against key climate risk categories, in the same way we report on and offset carbon emissions and mitigation actions. Increasingly UBC will need to incorporate climate resiliency and adaptation considerations into campus planning and operations. For example, designing stormwater management systems that can accommodate more intense rainfall events, modelled for future climate conditions.

Addressing climate and ecological crises simultaneously is critical in developing a resilient campus. In addition, natural assets are also part of a holistic suite of solutions that can contribute to mitigating GHG emissions - e.g., urban forests and shading buildings to reduce cooling energy loads, using green space to mitigate heat island effects, and carbon sequestration via trees and vegetation.
Given the devastating local impacts of climate change, there will be a continued immediate campus response to recent heat wave and climate fires with a focus on building retrofits, addressing indoor air quality measures for wildfire smoke, and exploring ways to enhance the UBC Vancouver Climate Ready Building Requirements for new construction. The campus will be developing an Adaptation, Resiliency and Biodiversity Strategy as a subsequent CAP 2030 planning phase.

5.3.1.1 Actions – Immediate (Start F2021-22)

- Increase understanding of the biodiverse ecosystems on campus and the climate adaptation benefits they provide by developing foundational research around biodiversity and climate resilience on the UBC campus. This will include:
  - A community-driven process to develop a set of campus biodiversity and climate principles to advance climate change mitigation and adaptation, ecological health, and human health and wellbeing.
  - A campus natural asset baseline that quantifies the contributions of UBC’s natural assets to the range of ecological and socio-cultural services.
- Continue UBC’s immediate response to recent heat wave and climate fires with a focus on building retrofits, addressing indoor air quality measures for wildfire smoke, and updating and expanding the UBC Vancouver Climate Ready Building Requirements for new construction.
- Provide technical and advisory contributions to the drafting Provincial Climate Preparedness and Adaptation Strategy.
- Develop procedures and protocols for building occupants and facility managers – i.e. UBC to take proactive steps to introduce new maintenance and operation protocols to improve air quality through ventilation systems by implementing MERV 13 filters.

5.3.1.2 Short Term – by 2024

- Develop a Climate Adaptation, Resiliency and Biodiversity Strategy that is an "umbrella" strategy that incorporates other UBC plans, policies and initiatives, with specific actions to maintain and enhance urban biodiversity as a tool for climate action through nature-based solutions.
- Adopt biodiversity metrics as a key indicator of climate resilience on campus.
- Leverage and expand established interdisciplinary research initiatives, student and faculty-led research to advance climate mitigation, adaptation and biodiversity solutions, in service of community health and wellbeing (e.g. reducing climate anxiety, addressing health impacts from forest fire smoke, etc.).
5.3.1.3 Medium Term – by 2030

- Incorporate and codify UBC biodiversity enhancements as a strategy to advance towards the target of 85% GHG emission reductions by 2050.

5.3.2 Housing at UBC

A strategy supporting affordable housing at or near UBC for students, faculty and staff to reduce commuting emissions was identified as an important issue, while it is important to simultaneously recognize that significant embodied carbon emissions arise before and during new construction that have major climate impacts and will take many decades to balance with reduced commuting emissions.

5.3.2.1 Actions - (Immediate to Medium Term):

- Continue to implement UBC’s Housing Action Plan to address housing affordability challenges for UBC faculty, staff, and students by increasing housing opportunities on campus.
- Explore additional opportunities for affordable on-campus housing through the upcoming Campus Vision 2050 land use process.
- Conduct a study to model the impacts on commuting emissions and embodied carbon emissions for various on-campus housing scenarios to help inform future land use planning and Campus Vision 2050.

6 Plan Implementation

6.1 Distributed Leadership Approach

The CAP 2030 is a UBC wide effort across both the Vancouver and the Okanagan campuses, and will require leadership and resourcing from many units across both campuses. The breadth and scope of the Plan necessitates that it reaches every corner of the institution, requiring a distributed approach to implementation. A CAP Accountability framework has been developed that outlines responsibilities for implementation of actions, monitoring progress, governance over decisions and processes – See Appendix B.

The distributed leadership model integrates concurrent work into this Plan, enhances mobilized resources across campuses, and embeds ownership and accountability for delivering on this Plan across the organization. This approach builds the cross-organizational capacity required for systems change. UBC Campus and Community
Planning will serve as a support and/or lead for several discrete actions, and support the monitoring and reporting on progress led by units over time, ensuring all units are held accountable and recognized for advancing their respective actions. The distributed leadership approach will continue through implementation to ensure successful execution of this Plan.

6.2 Resourcing CAP 2030

6.2.1 Approach and Resourcing – Campus Operations

CAP 2030 has identified bold targets and key actions that can accelerate UBC towards its net zero target for Campus Operations. Technically there are solutions that can support deep emission reductions through more aggressive performance requirements at building and site scales, as well as low carbon energy at the campus scale. However, the final decarbonization approach for UBC’s current context requires further development. Therefore, a top priority is to continue key studies to identify the best approach to decarbonize UBC’s core operations, progressively refine the costing, and ensure that limited resources are spent in the most effective manner to reduce GHG emissions.

As UBC advances towards deeper GHG reductions, increasing levels of capital investment will be required in the short term, to help reduce UBC’s carbon liability in the medium and longer term. While it is too early to provide a detailed estimate of investment needed for achieving the overall GHG reductions identified by CAP 2030, a sense of the scale of investment can be given when considering future carbon liabilities. Translating the recent update of the federal carbon price to UBC’s remaining carbon emissions gives carbon liabilities of approximately $100 million over a 20 year project period (provincial offset requirements and implicit carbon costs from regulations will further add to this)\(^\text{14}\). Investments in clean solutions will be needed to avoid having to pay this liability.

The timing of investments will vary widely. Generally, building scale decarbonization projects will be ongoing throughout the decade to 2030. Investments in district energy decarbonization projects are forecasted to commence earlier following detailed studies and analysis.

6.2.2 Approach and Resourcing – Extended Impacts

In contrast to campus operations emissions which are generally addressed through capital investments, reductions in extended impact areas will be driven by policy, procedures, processes, and programs aimed at achieving behaviour change across the

\(^{14}\text{Estimate based on multiplying UBC’s remaining emissions by the announced federal carbon price ($170/t CO}_2\text{e) and by an assumed average project life of 20 years.}\)
UBC community. This, in combination with the fact that many emission reduction opportunities of ‘low-hanging fruit’ are still available in the extended impact categories, means that relative to campus operations emissions, its resourcing needs are lower and will be in the form of human resources, administrative, or program funding. Addressing extended impact emissions is something the University can commence quickly, to drive action and to show leadership and commitment to the Climate Emergency Declaration.

6.2.3 Short-term Resourcing Priorities

There are several short-term priorities that will require immediate resourcing to ensure that the CAP 2030 process continues to advance.

- **Academic District Energy System and building decarbonization plans:** these technical and financial studies currently underway will continue into 2022 and lead to the recommended technical solutions and projects that will provide the “heavy lift” emissions reductions for campus operations.

- **Low carbon equipment replacements:** There are several hundred pieces of fossil fuel (natural gas) equipment in buildings, responsible for about half of Campus Operations emissions. This equipment periodically needs to be replaced, with new equipment often staying in operation for 15-20 years. Avoiding locking in of new fossil fuel equipment is critical to achieve the CAP 2030 targets. It will require extra funds to cover the higher upfront capital costs of low carbon alternatives (many of which will have lifecycle savings when including the cost of energy and carbon). Importantly, this will protect against the risk of having to replace gas-using equipment well before its end of life at a later date, which would come at considerable extra cost.

- **Low carbon design for new and renewal green buildings:** Similar to equipment replacements, it is critical to avoid locking in new fossil fuel equipment going forward wherever possible. As new and renewal buildings are designed, low carbon features may necessitate incremental capital costs. UBC must find ways to address these costs in budgeting and funding.

- **Extended impacts program development and implementation:** Quick-start actions have been initiated to reduce emissions from food systems and business air travel. These programs and others will need to continue and expand to support achievement of our aggressive 2030 targets.

This short-term resourcing will help build the foundations for success of CAP 2030, ensure that the long-term costs of climate action are minimized, and demonstrate early leadership on priorities identified in the Climate Emergency Declaration.
### 6.2.4 Resourcing Strategy

Resourcing and funding of the CAP 2030 will help achieve multiple objectives across the institution, including avoiding future costs and reducing UBC’s carbon liability. CAP 2030 will help position UBC at the vanguard of climate action leadership and will help to advance a core pillar of UBC’s Strategic Plan. CAP 2030 will continue to elevate UBC’s brand and reputation on sustainability. UBC’s investment in CAP 2030 is not just an investment in improving operational excellence through higher performance buildings, low carbon infrastructure and behavioral change programs and community climate action. Resourcing CAP 2030 will also provide innovative platforms for Campus as a Living Laboratory projects whereby the operational and academic communities of students and faculty partner together to foster innovation, ingenuity and position UBC as a progressive change-agent that advances applied research to demonstrate climate action(s), practices and policies.

The CAP 2030 project management team collaborated with UBC’s Strategy and Decision Support (SDS) to develop an overall Resourcing Strategy for CAP 2030 (Appendix A), which identifies opportunities, efficiencies and innovative resourcing approaches for the many actions and the resulting future projects and programs identified in the Plan. It also defines the selection process for major projects, with project implementation considerations, financial planning considerations, and a preliminary overview of the types of funding needs and opportunities to support CAP 2030 actions.

Realizing the bold vision and aggressive GHG reduction targets in CAP 2030 will require significant effort from across the university, and significant investments in innovative low carbon projects, student and faculty-led research and programs. These necessary investments will challenge UBC’s current resourcing abilities. Innovative solutions will be needed not only in technology, but also in processes for planning and resourcing projects and programs.

Achieving our emissions targets will not only help protect the climate, our biodiversity, and public health and wellbeing, but will also mitigate UBC’s carbon liability, while maintaining UBC’s sustainability leadership role at this critical time for our planet.
Figure 24: UBC Climate Strike in front of Musqueam Welcome Post, Sept 2019

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15 Photo credit: Joachim Zens
7 Glossary

**Academic District Energy System (ADES):** UBC's district energy systems that produces hot water and distributes it to buildings to provide space and water heating. UBC's ADES is the main source of heating to campus buildings.

**Air Source Heat Pump (ASHP):** An air source heat pump is a system that transfers heat from outside the building to inside the building for heating (or vice versa for cooling). As it transfers heat and doesn’t create heat, ASHPs can be extraordinarily energy efficient, with heat generated up to 400% of the initial electrical energy input.

**Alliance of World Universities (U7+):** An international alliance of university presidents to engage in discussions and concrete action and commitments to address the most pressing global challenges in a multilateral context.

**Biodiversity:** A characteristic of an ecosystem that describes the diversity of life it contains, and directly correlates to the function and resilience of that ecosystem. Biodiversity is manifested at all levels of the organization and functioning of biological life, from the micro to the macro level, including genetic diversity, diversity of species, ecosystems and biomes, and cultural diversity.

**Bioenergy Research and Demonstration Facility (BRDF):** UBC’s plant that produces heat and electricity from biomass fuel, renewable natural gas, and conventional natural gas. The biomass fuel is gasified to create syngas that is burned to produce steam. The heat produced by the BRDF is distributed by the ADES to buildings in the form of hot water.

**Business As Usual (BAU):** Refers to a situational context or scenario that does not undergo any change; a scenario where no climate action is taken.

**Campus Operations Emissions:** Emissions generated through campus operations are defined as emissions from sources directly controlled and operated by UBC, including combustion of natural gas on campus (scope 1), and from upstream emissions from electricity consumed on campus (scope 2).

**Carbon Dioxide (CO₂):** A naturally occurring gas that is also a by-product of the combustion of fossil fuels and biomass, land-use changes, and other industrial processes. It is the principal anthropogenic greenhouse gas. It is the reference gas against which other greenhouse gases are measured and therefore has a Global Warming Potential (GWP) of 1.

**CleanBC:** A plan developed by the British Columbia provincial government that sets 2030 climate goals through energy and industry emission reduction innovations and initiatives.
Climate Action Plan (CAP): A framework that provides a pathway to net zero emissions for the Vancouver campus. This was first initiated in 2010, and has been subsequently updated for 2020, and now 2030.

Climate Adaptation: An approach aimed to mitigate the suffering and destruction of climate change through adapting ecological, social, economic and physical environments to withstand threats such as rising sea levels, severe storms, higher temperatures and changes in rainfall patterns.

Climate Justice: A holistic approach to climate action that acknowledges the ways in which climate change and its consequences differently affect underprivileged and marginalized populations, compounding and exacerbating the existing inequalities they experience.

Climate Justice Lens: Recognizes responsibility and accountability for causes of climate change, the inequitable burdens of climate change impacts and an awareness of intersecting vulnerabilities, systemic and structural injustices. Climate justice might generally be thought of as advocating for what is right, fair, appropriate or deserved in relation to climate change drivers and impacts, including thinking about climate justice as forms and processes of distributive justice, procedural justice and restorative justice.

Climate Mitigation: A human intervention to reduce the sources or enhance the sinks of greenhouse gases (GHGs).

Climate Resilience: The degree to which a socio-ecological system can withstand and adapt to the adverse effects of a changing climate.

E3 Fleet Rating (E3): A unique made-in-Canada rating program that evaluates and recognizes excellence in the green performance of vehicle fleets.

Extended Impact Emissions: Emissions occurring from activities that are not always fully controlled by UBC, but that the institution impacts and influences through purchasing decisions, plans, policies, guidelines, behavioral change programs, and others. These emissions are generally referred to as scope 3 emissions and include sources such as commuting to and from campus, business air travel, food consumed on campus, waste, and the embodied carbon associated with the construction of new buildings and retrofits.

Global Warming Potential (GWP): GWPs are particularly important within the context of emissions reporting since international protocols require the reporting of both individual GHGs and their carbon dioxide equivalents (CO$_2$e). For this reason, the calculation of GHG emissions generally involves multiplying the emission factor for a GHG by an appropriate measure of consumption (activity) to produce the corresponding emissions for that GHG and then multiplying those emissions by its GWP to produce the corresponding CO$_2$e emissions.
Greenhouse Gas (GHG) Emissions: Gases emitted from fuel combustion and other sources, that contribute to the greenhouse effect and global warming. This includes carbon dioxide, methane, nitrous oxide, ozone, and chlorofluorocarbons.

Heating, Ventilation and Air Conditioning (HVAC): The system and technology of heating and cooling of buildings through heating, ventilation and air conditioning.

International Sustainable Campus Network (ISCN): An International forum that support higher education institutions in the exchange of information, ideas, and best practices for achieving sustainable campus operations and integrating sustainability into research and teaching.

Renewable Natural Gas (RNG): A biogas (or biomethane) that results from bacteria breaking down organic waste from sources such as landfills, agriculture and wastewater treatment facilities, and is upgraded to a quality similar to fossil natural gas. Because of its biological source, it is considered a carbon neutral energy source.

Resilience: An ongoing process of diverse, interconnected relationships and processes that activate and build up resilience-enhancing capacities within and across a community for short, medium and long term sustainability and wellbeing.

Tonnes of Carbon Dioxide Equivalent (tCO2e): The universal unit of measurement to indicate the global warming potential (GWP) of each of the six greenhouse gases, expressed in terms of the GWP of one unit of carbon dioxide. Expressing all GHGs in terms of tonnes of CO2e allows the different gases to be aggregated. The GWP of CO2 equals one. Methane or CH4 has a GWP of 25, indicating that its radiative forcing is 25 times that of CO2. In other words, releasing one tonne of CH4 will have the same warming impact as releasing 25 tonnes of CO2. This impact is often expressed using the concept of carbon dioxide equivalent, or CO2e: that is, one tonne of CH4 can also be expressed as 25 tonnes of CO2e.

University Alliance for Sustainability (UAS): An alliance between Freie Universität Berlin, the Hebrew University of Jerusalem (Israel), the Peking University (China), St. Petersburg State University (Russia), and UBC to focus on sustainability as a comprehensive topic for collaborating in research, teaching, and campus management.

University Climate Change Coalition (UC3): A coalition of North American research universities committed to climate action and cross-sector collaboration to accelerate local climate solutions and build community resilience.

Zero Emissions Vehicle (ZEV): A vehicle that has the potential to produce no tailpipe emissions. These can still have conventional internal combustion engines but must be able to operate without it. Some types of ZEVs are battery-electric, plug-in hybrid electric, and hydrogen fuel cell.
Appendix
Appendix A – CAP 2030 Resourcing Strategy

Purpose and Objectives

The Resourcing Strategy will help enable implementation of CAP 2030, by providing an overall strategy and approach for resourcing the many actions and the resulting future projects and programs identified in the Plan.

It also defines the selection process for major projects, with project implementation considerations, financial planning considerations, and a preliminary overview of the types of funding needs and opportunities to support implementation of CAP 2030 actions.

Implementation planning and implementation of “quick start” actions is already underway, therefore this Resourcing Strategy can be utilized immediately. However, it is not static – CAP 2030 actions and projects will be developed, refined, and implemented over time; and the resourcing needs and opportunities will also evolve over time.

Resourcing CAP 2030 is Critical

Realizing the bold vision and aggressive GHG reduction targets in CAP 2030 will require significant effort from across the university, and significant investments in innovative low carbon projects and programs. These necessary investments will challenge UBC’s current resourcing abilities. Innovative solutions will be needed not only in technology, but also in processes for planning and resourcing projects and programs.

Recently announced federal and provincial climate policy dramatically increases the cost of carbon pollution, exposing UBC to future carbon liabilities from its current operations to well over $100 million\(^1\). Achieving our emission reduction targets will not only help protect the climate, but will also mitigate this carbon liability. Conversely, without continued aggressive action and investment, UBC will lose its leadership role on climate action, and forego the research and reputational benefits this brings.

Guiding Principles and Approach

Moving forward, the guiding principles and approach outlined below should be utilized by UBC CAP 2030 stakeholders involved in planning and resourcing actions, projects and programs.

Planning & Developing CAP 2030 Projects & Programs

- **Strategic priorities:** Alignment of CAP 2030 to advance UBC’s Strategic Priorities including: Strategic Plan: Shaping UBC’s Next Century (Operational Excellence), 20 Year Sustainability Strategy, Climate Emergency Declaration and Climate Emergency Task Force Report, Wellbeing Strategic Framework, Campus Plan, Green Building Action Plan, Zero Waste Action Plan, Transportation Plan, etc.

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\(^1\) Estimate based on multiplying UBC’s remaining emissions by the Federal Governments proposal of an escalating carbon price, increasing by $15/year from 2023 and reaching $170/tonne in 2030.
- **Achieve multiple objectives**: CAP 2030 projects should seek to strategically advance multiple objectives at the same time wherever possible, such as research into clean technology solutions, coordination with existing infrastructure updates, and enhancing campus climate adaptation, resiliency, health and wellbeing and the biodiversity of campus ecosystems.

- **Prioritize and phase projects strategically**: Recognizing that UBC has many competing priorities for resourcing, focus primarily on projects that achieve significant GHG reductions and other co-benefits relative to level of effort and resourcing, applying a rigorous review process. Resourcing can be distributed over time by strategically phasing projects and initiatives, building on incremental successes.

- **Leverage capacity across UBC**: To minimize incremental costs and new funding needs, plan projects and programs to leverage existing human and financial resources wherever possible, building capacity and integrating CAP 2030 priorities into mainstream activities. Use a decentralized approach to allow units that are best positioned to take the lead and implement specific CAP projects and programs, and play a leading role to identify resourcing needs and seek funding opportunities. Pursue opportunities that leverage UBC’s intellectual resource assets in ways that integrate applied research opportunities for students and faculty to advance CAP priorities (e.g. SEEDS).

- **Position UBC and CAP 2030 projects for funding and partnership opportunities**: Identify and scope a pipeline of high impact projects to set UBC up in a strong position for funding and grant opportunities as they emerge. Additionally, projects will consider how UBC can help achieve the objectives of governments and other funding entities, e.g., help demonstrate new decarbonization solutions to help advance objectives of CleanBC and federal climate priorities.

- **Prioritize funding needs**: Prioritize identification and sequencing of CAP 2030 funding needs that are high visibility/demonstratable, low administration, high impact/GHG reduction, and high engagement (students & community).

**Major Project Review & Selection Process**

Before selecting projects and pursuing resourcing, major CAP 2030 projects (i.e. major decarbonization projects above $5 million) will be reviewed against a set of assessment criteria to ensure projects align with CAP 2030/climate emergency declaration goals, maintain institutional reputation and mitigate financial/operational risks.

- **Screening criteria include**:
  - GHG emissions reduction
  - Reputation, brand and identity (helps to elevate UBC’s leadership and innovation, amplifies our role as agent of change, attracts academic and professional expertise to the university, etc.)
  - Social license: climate justice and public perception, input from stakeholder groups including the Climate Hub
  - Financial performance: Life Cycle Costing (capital and operational expenditures), with application of UBC’s Internal Carbon Pricing on operational expenditures (see next section)
  - Maturity of technology (Technology Readiness Level: TRL)
  - Site footprint (space required for implementation)
Environmental impact (exclusive of GHG emissions, e.g., public health, and biodiversity impacts (ecological connectivity / ecosystem structure)

Policy and legislative risk, e.g., future potential for provincial recognition of carbon capture under B.C.’s Climate Change Accountability Act

The CAP 2030 Major Project Review & Selection process will consist of a number of phases as illustrated in Figure 1 below:

**Figure 1 – CAP 2030 Major Project Review & Selection Process**

Financial models and analysis

- **Identify cost savings and financial benefits**: Decarbonization projects often come with higher upfront costs, but can potentially enable operational savings from lower energy consumption or fuel costs. For example, UBC achieved over $22 million in energy savings since 2014 as a result of energy conservation projects completed by Energy and Water Services (EWS); investments in the Academic District Energy System will save the university an estimated $13 million per year in energy and carbon costs by 2030.²

- **Integrate internal carbon pricing**: In some cases, projects to reduce GHG emissions may not have acceptable financial paybacks using existing financial analysis models. But going forward, investment decisions will apply Life Cycle Costing (LCC) to operating expenditures over the lifespan of the project and fully factors in accelerating government and other carbon costs to the energy supply component of operational expenditures. Utilizing the proposed Internal Carbon Pricing (ICP) in conjunction with LCC (as outlined in UBC’s Internal Carbon Pricing Policy Guideline) will help identify the best projects to achieve UBC’s GHG reduction targets – both major projects and smaller projects.

- **Address decentralized savings**: Many CAP 2030 actions can lead to university wide cost savings, such as reducing air travel with virtual alternatives, programs for reusing furniture and equipment assets, and optimizing space use in buildings to avoid new building projects. However, a key challenge to realizing these savings is that currently no unit can make a business case for advancing such projects, as the costs are concentrated in the unit running the program, while the savings are often distributed

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² This considers today’s energy rates net of carbon prices ($6.50/ GJ natural gas, $85/ dry tonne of biomass) and already announced implicit and explicit carbon pricing policies for 2030 ($170/tCO₂e federal carbon price, $25/tCO₂e public sector offset requirements, and an estimated $45/tCO₂e for the CleanBC Renewable Gas Mandate).
across other units. UBC should develop new and innovative financial and accounting models/mechanisms to overcome this barrier.

Funding and partnerships
- **Lower the costs of borrowing:** The cost of borrowing is often a major barrier for capital intensive projects, including clean energy projects. While the cost of capital has never been cheaper, UBC often can’t access money at market rates. To address this, UBC should engage its partners in the BC Government to test possible solutions to this issue, and explore other opportunities for low cost financing.
- **Engage with external partners:** UBC should continue to develop and nurture partnerships with the federal, provincial, and local governments, as well as with BC’s major utilities, emphasizing opportunities for UBC to help support and inform the priorities of these partners, such as low carbon district energy solutions and decarbonizing buildings.
- **Focus on efficient funding sources:** Given the effort required and complexity of many external funding processes and reporting requirements, UBC should assess the effort vs. potential benefits and focus on opportunities that have a larger chance of success.
- **Get creative:** There are likely many other opportunities that will arise as CAP 2030 is implemented from an initial plan into concrete projects and programs over the next nine years. New and innovative approaches to resource and operationalize CAP 2030 will be critical, and sometimes this will require UBC staff and stakeholders to work outside traditional comfort zones. Leveraging interdisciplinary research partnerships internally will also expand funding opportunities.

Potential financing opportunities
Potential opportunities to explore include but are not limited to:

- **UBC fundraising programs:** Explore potential fundraising projects or campaigns, e.g., to UBC’s alumni and donor network, to help set up UBC as a leading low-carbon community.
- **UBC Sustainability Revolving Fund:** explore expansion of fund criteria to enhance decarbonization opportunities.
- **Canada Infrastructure Bank:** Continue discussions to assess the feasibility of debt financing for buildings and infrastructure projects.
- **Government Funding Opportunities:** Continue to monitor and investigate other existing and emerging federal and provincial government funding opportunities, aligning with resourcing needs.

**CAP 2030 implementation & resourcing outline**

While investments are required to implement the CAP 2030 actions, some actions will have a positive return in investment, similar to past CAP projects such as the BRDF that had strong financial performance. The approach for operationalizing the CAP actions is summarized below:
- **Overall**: the investments in CAP2030 will help create teaching, learning and research (TLR) opportunities, attract research and innovation interest and funding, and positively impact campus wellbeing, UBC reputation and leadership and other co-benefits.

- **Capital projects** (new buildings) to be designed to new low carbon standards
  - Use updated Life Cycle Costing (LCC) approach that incorporates ICP as a tool and guideline for decision making
  - Research indicates this should have a positive long-term business case and co-benefits – however will entail higher capital costs
  - The higher capital costs will impact project budgets, which will entail tough decisions. It will be critical to develop innovative solutions to support funding and avoid potential cutting of the high performance and low carbon components.

- **Building decarbonization retrofits**
  - Similar to above, projects to use LCC with ICP to guide decision making on a case by case basis
  - Depending on the project, low carbon retrofits may increase capital costs, and business cases will not always be positive
  - Projects can be prioritized to leverage equipment end of life, address other building issues, and achieve co-benefits
  - External/government funding will be sought to support these projects wherever possible

- **District energy low carbon solutions**
  - Detailed feasibility study will recommend option(s)
  - Costing studies will follow, and lead into the CAP 2030 Major Project Selection & Review process
  - External/government funding will be sought to support these projects wherever possible

- **Extended impact emissions**
  - Initial funding for first 2 years will focus on program scoping, development, capacity building across units and initial deployment
  - Leverage existing UBC resources wherever possible, and leverage external funding whenever available
  - Work toward clear outcomes
  - Explore alternative funding models for future years

The following Table provides additional information, including general funding needs by type, opportunities to mitigate costs and improve the business case, and some potential funding sources that will inform CAP 2030 funding asks and resourcing going forward. The funding opportunities will evolve over the coming months and years as CAP implementation advances.

<table>
<thead>
<tr>
<th>Project type &amp; funding needs</th>
<th>Cost mitigation &amp; business case considerations</th>
<th>Potential funding sources</th>
</tr>
</thead>
</table>
| **1. Operations: Infrastructure & Buildings** | • Reduce carbon liabilities created by escalating external carbon costs  
• Each project evaluated on a case by case basis  
• Apply LCC with ICP for decision making |  |
<p>| <strong>A. District Energy low carbon energy supply (e.g., large)</strong> | • Diversify energy supply to reduce supply risk | • BC Hydro contributions to decarbonization studies |</p>
<table>
<thead>
<tr>
<th><strong>scale heat pumps, thermal storage</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>One or several major projects 2025 - 2030</td>
</tr>
</tbody>
</table>

- CAP 2030 Major Project Review & Selection Process
- Government grants – e.g. federal
- Research funding and Campus as a Living Lab opportunities

<table>
<thead>
<tr>
<th><strong>B. Existing Building Decarbonization Retrofits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10 retrofit projects, 2022 – 2030+</td>
</tr>
</tbody>
</table>

- Leverage and align with other retrofit needs: deferred maintenance, seismic upgrades, heating equipment end of life
- Avoid installing new fossil fuel-based equipment: more cost effective than retrofitting equipment prior to end of life (i.e. a new natural gas boiler is likely to need retrofitting before end of life to meet our GHG goals
- Clean BC
- Utility incentives/partnership
- Sustainability Revolving Fund &/or future Green Fund
- Future Provincial funding related to Step Code

<table>
<thead>
<tr>
<th><strong>C. New Building Incremental Capital Costs (to meet GHG targets)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2022+</td>
</tr>
</tbody>
</table>

- Avoid installing new fossil fuel equipment
- Explore funding models – e.g., develop an internal low carbon/green building fund

<table>
<thead>
<tr>
<th><strong>D. Funding for Community Energy &amp; Emissions Plan (CEEP) update</strong></th>
</tr>
</thead>
</table>

- To provide planning and focus for GHG reduction and adaptation in UBC’s Residential Neighbourhoods
- GPO/central funding for 1 Project Manager and consulting budget for a period of 2 years
- Utility incentives & funding

<table>
<thead>
<tr>
<th><strong>E. Permanent funding for existing term positions: Climate Action Planner and Green Labs Lead</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2022+</td>
</tr>
</tbody>
</table>

- Climate Action Planner oversees Climate Change Accountability Reporting (regulatory), manages CAP and facilitates implementation
- Green Labs includes operational energy conservation and extended impacts emission reduction initiatives, leading to operational cost savings
- GPO/central funding

<table>
<thead>
<tr>
<th><strong>2. Extended Impacts Programs</strong></th>
</tr>
</thead>
</table>

A. **Scope and establish new programs**

- Program development & coordination, communications planning, capacity building, engagement and communications support
- Opportunities for cost savings/avoided costs – e.g., business air travel
- Leverage and integrate within existing staff resources wherever possible

- GPO/central funding needed for core program development and capacity building
- Potential opportunities for alternate funding models – e.g., user fees for furniture/equipment reuse program

B. **Business air travel**

- Engagement and behavioural change campaigning - Sustainable Travel Program with a goal to reduce UBC’s Staff & Faculty business related GHG emissions
- Emissions tracking and annual reporting:

- Reduced travel costs across departments i.e. a 45% reduction in annual travel would result in approximately $10m in annual travel savings
- IT A/V upgrades to enable more virtual and hybrid activities have already started and may be funded already - TBD

- GPO/central funding
- Future potential for offsets fund
### C. Climate Friendly Food Systems (CFFS)

1. Continuation of critical core project management to advance research to practice/policy:
   - CFFS initiative development and implementation:
   - Continuation and launch of new applied student research and development costs that produce demonstrable outcomes
2. Operational Costs to support CFFS menu offerings
3. Communications and Engagement - campaigning
   - Emissions tracking and annual reporting: Integration with existing business processes

- Helps maintain UBC’s leadership position and global sustainability reputation
- Significant co-benefits on other intersectional campus sustainability and wellbeing commitments, including human and ecological health and wellbeing.
- Opportunities to leverage and highlight student-led research and interdisciplinary partnership opportunities that use CLL, contribute to key UBC Strategic Plan strategies including: interdisciplinary education, practical learning, student research, thriving communities, public relevance and knowledge exchange (e.g. SEEDS/Food Systems Project/Food Security Initiative)
- Financial savings from capturing/recovering value of rescuable lost and wasted food

### D. Commuting

Sustainable transportation program staff & operating budget

Program costs: to be offset by proposed parking levy

- Commuting emissions are the largest extended emissions area, with campus energy decarbonization these will become the largest source of emissions under a BAU scenario.
- Significant impact on campus wellness for active transportation modes.
- Efficient land use, as over time less space will need to be reserved for parking

- Proposed Sustainable Transportation parking levy to generate funding

### E. Waste & materials

Reuse program administration costs; build and expand program incrementally based on KPIs

Other waste-related costs TBD pending update to Zero Waste Action Plan

- Reuse generates savings to departments; could generate net savings to UBC
- Potential revenue generation for some components

- GPO, and/or user pay to distribute some costs to departments (but must avoid dis-incentivizing departments from participating)

### 3. Complimentary Opportunities

#### A. Climate Resilience & Nature-Based Adaptation Solutions

- Nature-based solutions to climate mitigation and adaptation (through biodiverse ecosystems and ecosystem services like shading, carbon sequestration) present a low-

- Campus Vision 2050
- Internal/External research grants
- Campus as a Living Lab funding and resources
<table>
<thead>
<tr>
<th>Cost alternative for climate action</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Climate resilient ecosystems require less maintenance and irrigation, thus lowering operational costs to maintain campus landscapes.</td>
</tr>
<tr>
<td>• Student-led research and interdisciplinary partnerships (e.g. SEEDS/CBIRD/CCUB) to highlight and leverage opportunities to maintain and enhance urban biodiversity</td>
</tr>
</tbody>
</table>

**Governance and Process**

The CAP 2030 will require incremental funding over the 10-15 year horizon of the plan. The plan identifies strategic priorities and projects that are phased and calibrated to achieve demonstrable impacts and leverage external funding opportunities as they arise.

1. **Implementation planning:** Informed by the guiding principles and approach outlined earlier, continue to develop, prioritize and refine a range of cost estimates and investment needs for CAP 2030 priority actions and projects.

2. **Engage OSSC:** The Operational Sustainability Steering Committee holds significant institutional knowledge and connections. The CAP 2030 project team will continue to engage the OSSC in vetting and guiding the implementation and resourcing of major CAP actions and projects.

3. **Start conversations with UBC Development and Alumni Engagement Office & the President’s Office:** The UBC Development and Alumni Engagement Office provides an opportunity to explore innovative approaches to support CAP 2030 resourcing.

4. **Continue and refine conversations with potential utility, government and other partners:** In addition to the CAP 2030 team, work with units involved in implementation to leverage the distributed approach to resourcing described earlier.
Appendix B – CAP 2030 Unit Accountability Framework

Context and purpose

Sustainability is a core value of UBC’s Strategic Plan. Climate action grounded in climate justice is strategic priority of the university, and defining metrics and targets are critical tools for advancing climate action.

CAP 2030 requires a ‘whole of university’ distributed approach whereby every unit has a role and responsibility in ensuring it is integrating climate action into its day to day decision making, work programming and business processes.

The Framework provides a mechanism and process for UBC units to report on their progress and achievements toward UBC’s Climate Action Plan 2030 Board-approved targets. It can be a process, an action, an activity, a physical space or piece of infrastructure, or even a program that is measured over time and can help evaluate progress from an existing condition or baseline).

The Framework is similar in concept to BC’s Public Sector Climate Change Accountability Reports, which PSOs including UBC submit to the Province annually to report on progress toward carbon neutrality, but for UBC internally (the largest PSO emitter in BC).

Who would submit the reports?

Departments or business units that are leading or playing significant roles in actions identified in the CAP 2030. These units have already been involved in development of the CAP actions.

How would the process work?

- The CAP 2030 team/Campus & Community Planning would provide guidance and tools to units for confirming CAP 2030 actions, creating simple unit action plans, and reporting
- The unit confirms their committed actions, ideally by completing a unit action plan
- The unit director/manager agrees to integrate the assigned actions into work plans /programs with allocation of staff time and resources to ensure actions are advanced
- The unit manages and advances implementation of the actions internally
- The unit completes and submits a Climate & Sustainability report annually, likely in the months following fiscal year end.

What would be in the report?

- Definition and scope of responsibility of that unit
- Progress and status of actions committed by the unit
- Identification of success factors, barriers or limitations, and recommendations or requests to enable increased progress.
• Key performance metrics, where applicable (identified in the unit action plan). These may be quantitative or qualitative, as appropriate and based on what can be reported easily and efficiently; qualitative elements could also include stories or case studies.
• Updated priority action plan for the following year.

** Governance: who are units accountable to?**

• Units would be accountable to the Operational Sustainability Steering Committee (proposed), to whom the annual reports would be submitted
• Refer to the Governance Chart in Figure 1 for more information.

** Co-benefits and opportunities**

• Recognition and celebration of achievements by units or people demonstrating leadership and exemplary performance
• Supporting external sustainability reporting such as the Annual Sustainability Report and the emerging online sustainability metrics dashboard.

** Related Policies and Programs**

Campus & Community Planning are also developing a complementary program to enable campus-wide, ground-level engagement on climate action and sustainability, with an anticipated launch in 2022. The program will serve as a clear roadmap for collective climate action, offering a customizable but standardized pathway for different groups within the UBC community (e.g. workplace units, laboratories, clubs) to prioritize and implement discrete, achievable actions to support UBC’s sustainability and climate goals as well as concurrent institutional climate action.
Figure 1 - Governance Chart – Unit Accountability Framework
Appendix C – UBC Internal Carbon Pricing Policy Guidelines

Purpose

This document serves to guide low carbon decision making on capital investments and renewals to align with UBC Climate Action goals related to greenhouse gas (GHG) reduction, in addition to the provincial government’s CleanBC Plan and Carbon Neutrality Act. In addition to GHG savings, implementation of Internal Carbon Pricing (ICP) will reduce UBC’s exposure to future escalation of external carbon pricing, both federal and provincial, related to infrastructure decision making (primarily the external carbon pricing component within operating costs from energy consumption). The major users of this document would include project managers and consultants engaged in capital projects and renewals on both the Point Grey and Okanagan campuses.

Types of Applicable Business Decisions

The value of applicable GHG emissions – through an internal shadow price – will be incorporated into lifecycle cost analyses for the following UBC projects or initiatives (Scope 1 and 2). Projects and initiatives have been calibrated to the UBC Green Building Action Plan (GBAP) Institutional Tier System where applicable:

<table>
<thead>
<tr>
<th>UBC Project / Initiative</th>
<th>GBAP Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy supply decisions for buildings (e.g., utilities) including, but not limited to, natural gas, liquid petroleum products, propane, biomass, and electricity; applicable to both new and existing buildings and the district energy system (DES), e.g., the value of GHG emissions would be incorporated into decision-making related to switching to a different energy source</td>
<td>NA</td>
</tr>
<tr>
<td>Mechanical equipment renewal decisions, e.g., replacing a boiler or connecting to the DES</td>
<td>5</td>
</tr>
<tr>
<td>Energy conservation projects, e.g., building energy retrofits, programming and controls changes</td>
<td>4/5</td>
</tr>
<tr>
<td>New capital project planning, i.e., new, large projects with significant costs, such as new academic building</td>
<td>1/2</td>
</tr>
<tr>
<td>Building renewal projects, i.e., system renewal and large-scale building retrofits</td>
<td>3</td>
</tr>
<tr>
<td>Fleet purchases</td>
<td>NA</td>
</tr>
</tbody>
</table>

Methodology

The ICP calculation is to be added as an additional criterion in capital and renewal decisions. All applicable analyses using lifecycle costing must include the carbon cost component – presented separately – associated with forecasted emissions stemming from a project, and must be embedded as a cost component in the schedule of cash flows. This can be accomplished in one of two ways:

1. As current lifecycle costing analyses account for existing provincial carbon taxes and offset mechanisms, the itemized breakdown would be replaced with a single carbon cost line which would equal the ICP price level. In this scenario, all existing and future external pricing instruments would be consolidated into this single line, and would therefore not be listed again as separate line items in the schedule of cash flows (see Example 1 below).
2. The status quo breakdown of carbon cost items would remain in place, with an additional line item added – representing the notional portion of the internal carbon price – which would equal the delta between the sum of all external carbon pricing instruments and the UBC internal carbon price level (see Example 2 below).

Irrespective of the scenario, the sum of all carbon costs must equate to the internal carbon price level. Individual users can exercise discretion with respect to the level of granularity of the carbon cost breakdown. It should also be noted that users must ensure that all relevant utility rates (including RNG) being used for forecasting do not have carbon costs included in them (i.e., commodity, delivery, and applicable taxes only). The UBC ICP should be applied to the same scope of GHG emissions as the BC Provincial Offsets, rather than the BC Carbon Tax (which applies to combustion sources only).

Example 1: Consolidating all carbon costs into one cost line, 2022

<table>
<thead>
<tr>
<th>UBC Internal Carbon Price in 2022 (Only Cost Line)</th>
<th>$250 per tonne of CO₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusive of:</td>
<td></td>
</tr>
<tr>
<td>UBC Shadow Price</td>
<td>$175 per tonne of CO₂</td>
</tr>
<tr>
<td>BC Provincial Carbon Tax</td>
<td>$50 per tonne of CO₂</td>
</tr>
<tr>
<td>BC Provincial Offset</td>
<td>$25 per tonne of CO₂</td>
</tr>
</tbody>
</table>
Example 2: Itemized breakdown of all carbon costs, 2022

<table>
<thead>
<tr>
<th>Carbon Cost Description</th>
<th>2022 Price ($) per tonne of CO₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC Provincial Carbon Tax</td>
<td>$50</td>
</tr>
<tr>
<td>UBC Shadow Price ($250 - $50 - $25)</td>
<td>$175</td>
</tr>
<tr>
<td><strong>Total Carbon Cost in 2022</strong></td>
<td><strong>$250</strong></td>
</tr>
</tbody>
</table>

As Example 1 illustrates, an internal carbon price of $250 per tonne of CO₂ is inclusive of all current and UBC-relevant carbon pricing policies. In this example, as a lifecycle cost model is developed, the only cost component to be reflected in the schedule of cash flows for 2022 would be $250 per tonne of CO₂; as such, a separate cost line for the BC Provincial Carbon Tax or the BC Provincial Offset would not be included, otherwise the figures would be double-counted and therefore erroneously inflate the financial projections. On the other hand, as Example 2 shows, in this scenario all the carbon cost items are itemized, with an internal notional price of $175 added in order to bring the total up to $250 per tonne of CO₂. Again, irrespective of the scenario, the total carbon cost remains the same.

The interface between new federal carbon taxes and existing provincial carbon taxes is unclear at this point; whether the federal carbon tax is superimposed on the existing BC carbon tax or if the BC carbon tax is raised to meet the federal standard remains to be determined. Irrespective of the outcome, the UBC internal carbon price will be inclusive of all federal and provincial instruments – i.e. it represents a total carbon price ceiling. With respect to the implicit costs associated with carbon regulations under the CleanBC strategy (e.g., the Renewable Gas Standard), the UBC internal carbon price will be inclusive of carbon costs associated with said regulations until they are adequately reflected in the respective utility rates.

**Price Level**

The UBC internal carbon price level is set at $250 per tonne of CO₂. The ICP price of $250 / tonne was set to help UBC mitigate future financial risk in future carbon regulations (forecasted to escalate to around $250 by 2030) and to provide a solid business case to shift capital investments to low-carbon options. The ICP price has been informed by leading practice by local, regional and federal governments.

The pricing level will continue to be in place unless all federal and provincial policies and regulations exceed the UBC ICP price level in a given year, at which point, the carbon price will simply equal the sum of all applicable external pricing instruments (see Example 3 below). For cash flows corresponding to years beyond 2030, the UBC internal carbon price will be held flat at $250, i.e., $250 per tonne of CO₂ in 2031, $250 per tonne of CO₂ in 2032, etc., assuming the sum of all government policies do not exceed this amount, otherwise the latter amount will supersede the $250 value. A mid-point check-in for reassessing the pricing level is proposed for the 2023-2025 period. This check-in will seek to determine potential price escalation beyond 2030, if still required.

All associated cash flows will be discounted at a rate of 5.75%, consistent with UBC cost of capital and general principles underscoring UBC financial projections.

**Example 3: External pricing instrument escalation and implications on UBC internal carbon price**

<table>
<thead>
<tr>
<th>Year</th>
<th>Scenario A: lower external price escalation</th>
<th>Scenario B: higher external price escalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBC Internal Carbon Price ($ per tonne of CO₂)</td>
<td>$250</td>
<td>$250</td>
</tr>
<tr>
<td>All External Pricing Policies, Sum Of ($ per tonne of CO₂):</td>
<td>$160</td>
<td>$260</td>
</tr>
<tr>
<td>BC Provincial Carbon Tax</td>
<td>$50</td>
<td>$130</td>
</tr>
<tr>
<td>Incremental Federal Carbon Tax</td>
<td>$60</td>
<td>$80</td>
</tr>
<tr>
<td>BC Provincial Offset</td>
<td>$25</td>
<td>$25</td>
</tr>
<tr>
<td>Renewable Gas Mandate</td>
<td>$25</td>
<td>$25</td>
</tr>
<tr>
<td><strong>Applicable Carbon Price ($ per tonne of CO₂)</strong></td>
<td><strong>$250</strong></td>
<td><strong>$260</strong></td>
</tr>
</tbody>
</table>

As Example 3 illustrates, the applicable carbon price incorporated into lifecycle costing analyses will be the greater of the price as per the UBC internal carbon pricing level above or the sum of all federal and provincial pricing policies and regulations for that given year. In Scenario A of this example, since the sum of all external instruments only equals $160, the carbon price of $250 is applied – as per the UBC internal pricing level – to achieve federal and provincial climate targets for 2030. In Scenario B, all external instruments render a value ($260) that exceeds the corresponding UBC internal pricing
level ($250), and would therefore supersede it. In such an escalation scenario, UBC would re-assess the internal carbon pricing policy to determine if it would be necessary to increase to achieve its Climate Action Goals. If the external pricing instruments help achieve UBC’s goals, then the ICP would no longer apply.

**Decision-Making Process**

The results of lifecycle costing analyses with an internal carbon price must be interpreted in concert with broad-based institutional factors (e.g., available project funding); in other words, the decision is rarely clear cut, and would be considered among a broader set of decision-making criteria. When developing project budgets, it is critical to factor the impact of carbon pricing on proposals, as well as the alignment to institutional strategic goals and climate action targets.

To assist with decision-making, several scenarios have been presented for consideration. It should be that the ‘proxy component’ of the total internal carbon price refers to the portion of the carbon price that raises the sum of all external pricing instruments to the $250 UBC shadow price on carbon:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Impact of Internal Carbon Pricing</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>The results of a lifecycle costing analysis point to the low carbon solution as being the lowest cost, with or without the proxy component of the total carbon price.</td>
<td>UBC should pursue the low carbon solution, for both environmental and financial reasons.</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>The results of a lifecycle costing analysis point to the low carbon solution as being the lowest cost with the proxy component of the total carbon price, but not the lowest cost without the proxy component.</td>
<td>UBC should pursue the low carbon solution, for both environmental and long-term financial reasons.</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>The results of a lifecycle costing analysis point to the low carbon solution as not being the lowest cost, with or without the proxy component of the total carbon price.</td>
<td>Generally, given the financial implications of such a result, UBC does not necessarily have to pursue the low carbon solution. Again, UBC can exercise discretion and choose the low carbon solution if it was needed to achieve emission reduction targets or if other associated benefits could be realized.</td>
</tr>
</tbody>
</table>
Business Case Example for Illustrative Purposes

Analysis of the following case study, illustrates the impact of an internal carbon price on the decision to replace a natural gas boiler (like-for-like) in the Robert F. Osborne Centre (OSBO), or to connect to the Academic District Energy System (DES) altogether. A decision was made to replace the boiler, like-for-like. However, when accounting for the impacts of climate change using ICP, the decision would favour connecting to the DES, instead.

As Table 1 demonstrates, ICP is added to the energy price\(^1\) which increases the total energy costs depending on the fuel sources and consumption. The present value of this energy cost in concert with the present value of capital expenditures and maintenance cost renders a lifecycle cost that is more indicative of the true cost of the decision over a 15-year time span. Figure 1 shows that without an internal carbon price, the decision would favour a like-for-like replacement; with an internal carbon price applied, however, the decision favours switching to the DES. In this case, with an internal carbon price applied, the present value of all costs to switch to the DES is approximately $136K, i.e. incorporating ICP provides a positive business case (Net Present Value = $136K) for switching to the DES compared to a like-for-like natural gas boiler replacement.

It should be noted that ICP, as a proxy price, does not directly entail money changing hands, it provides clarity as to which option may be chosen. In this case, the option to switch to the DES incurs higher initial capital expenditures compared to like-for-like replacement ($323K vs. $582K); however, considering all costs (capital, energy and maintenance costs), switching to the DES is more favorable.

<table>
<thead>
<tr>
<th>FY2021 Energy Rate ($/GJ)</th>
<th>Option 1: Natural Gas Boiler Like-for-Like Replacement</th>
<th>Option 2: Switch to DES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural Gas Rate 25</td>
<td>Natural Gas Rate 22</td>
</tr>
<tr>
<td>Energy Price ($/GJ)</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Provincial Carbon Tax ($/GJ)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Carbon Offset ($/GJ)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ICP Net of Provincial Carbon Tax(^2) ($/GJ)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Total Energy Rate without ICP ($/GJ)</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Total Energy Rate with ICP ($/GJ)</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Energy Consumption (GJ/Year)</td>
<td>3,220</td>
<td>1,038</td>
</tr>
</tbody>
</table>

\(^1\) Inclusive of carbon offset.
\(^2\) Equals to the lifecycle carbon intensity of each fuel multiplied by carbon price. For illustrative purposes, this business case is based on the following assumptions: carbon price is $250/t-CO\(_{2}\)e in FY20 inclusive of provincial carbon tax, escalated by $5/year; provincial carbon tax is $40/t-CO\(_{2}\)e in FY20, $45/t-CO\(_{2}\)e in FY21, and $50/t-CO\(_{2}\)e afterwards; both options include existing provincial carbon tax; commodity prices inclusive of delivery and taxes.
Figure 1: Present Value of Total Cost Comparison of Options for the Robert F. Osborne Centre (OSBO)

Note: PV of operating costs = PV of energy cost + PV maintenance costs
EXECUTIVE SUMMARY

CLIMATE ACTION PLANNING AT UBC

CAP 2030 PUBLIC ENGAGEMENT

ENGAGEMENT ACTIVITIES

WHAT WE HEARD

SUPPORT FOR UBC CONTINUING TO BE A CLIMATE LEADER

FIRST AND FOREMOST, WE HEARD BROAD SUPPORT, INTEREST AND PASSION ABOUT UBC’S CLIMATE AND SUSTAINABILITY AGENDA. IT WAS CLEAR FROM THE SUBMITTED FEEDBACK THAT THE UBC COMMUNITY IS ALREADY VERY ENGAGED IN A DIVERSITY OF CLIMATE-FRIENDLY INITIATIVES AND HAS MANY CREATIVE AND INNOVATIVE IDEAS FOR HOW THEY AND THE UNIVERSITY CAN CONTINUE TO SUPPORT THE REGION IN CLIMATE LEADERSHIP.

SUPPORT FOR A HYBRID APPROACH TO WORKING AND LEARNING

PROMOTE CLIMATE JUSTICE, FAIRNESS AND AFFORDABILITY

ENCOURAGE A CLIMATE-FRIENDLY CULTURE SHIFT

DESIGN FOR LONG-TERM CLIMATE IMPACT

NEXT STEPS

ENGAGEMENT PROCESS

ONLINE SURVEY

VIRTUAL OPEN HOUSE

SPEAKER EVENT
Executive Summary

Climate Action Planning at UBC

In December 2019, UBC declared a climate emergency, which included a commitment to accelerate the reduction of emissions at UBC Vancouver and UBC Okanagan. A key step is UBC’s development of a Climate Action Plan 2030 (CAP 2030) for both campuses.

CAP 2030 at UBC Vancouver is building on earlier climate action plans and successes in climate change mitigation and action, which have resulted in significant emissions reductions from core operations. However, CAP 2030 is enabling UBC to accelerate the pathway to becoming net zero through clean energy solutions and energy-efficient technologies, as well as identifying new ways to reduce emissions in areas that every university community member has influence over including commuting, food, waste, and business air travel.

Emerging directions and draft targets for CAP 2030 were presented to the Board of Governors in February 2021. The final CAP 2030 will be presented to the Board of Governors in November 2021 and will incorporate direction from the Board of Governors, refinement of targets and actions through ongoing studies, as well as input received through public engagement.

CAP 2030 Public Engagement

From March 29 – April 16, 2021, UBC’s Campus and Community Planning held a university-wide engagement process on CAP 2030. This engagement process was an opportunity for UBC community members to learn about the emerging CAP 2030, ask questions, and share perspectives. Engagement took place on both UBC campuses; however, this report focuses on the Vancouver campus. Please visit here for more information about the UBC Okanagan CAP 2030 engagement.

Engagement Activities

We heard from a total of 764 participants through three virtual engagement activities:

- **Online Survey (627 participants):** The online survey was a chance for the UBC Vancouver campus community to submit feedback about the CAP 2030 emerging directions and targets as well as provide insights about the barriers and opportunities for climate action on campus.

- **Virtual Open Houses (92 participants):** Two virtual open houses were held for the Vancouver campus community to connect with the CAP 2030 team over Zoom, watch a presentation and have a Q&A with UBC staff and the planning project team.

- **Speaker Event (45 participants):** A cross-campus staff event was held over Zoom and included small breakout sessions for staff to have detailed discussions on the CAP 2030 emerging directions and targets.
What We Heard
Through our online survey and virtual events, we heard feedback from participants about the emerging CAP 2030, and the barriers and opportunities for climate action on campus. Feedback was focused specifically around five areas focused on indirect emissions (called “extended impacts”): (1) engagement, (2) commuting, (3) UBC business-related air travel, (4) climate-friendly food systems, and (5) waste. The main themes that we heard during the CAP 2030 public engagement are summarized in the infographic and paragraphs below, with more detailed information in the Appendices at the end of this report.

**Support for UBC Continuing to be a Climate Leader**
First and foremost, we heard broad support, interest and passion about UBC’s climate and sustainability agenda. It was clear from the submitted feedback that the UBC community is already very engaged in a diversity of climate-friendly initiatives and has many creative and innovative ideas for how they and the university can continue to support the region in climate leadership.
Support for a Hybrid Approach to Working and Learning
The top comment we received overall was strong support from UBC students, faculty, and staff for a hybrid approach to working and learning following the COVID-19 pandemic. Participants felt strongly that a mixture of remote and in-person activities was the best way to reduce greenhouse gas emissions from commuting, while contributing positively to individual health and wellbeing.

Promote Climate Justice, Fairness and Affordability
Another theme we heard was about ensuring aspects of equity, fairness, and justice are integrated across all CAP 2030 focus areas. This theme was related to a number of topics, such as sustainable divestment, Indigenous partnerships, and acknowledging the intersectionality of climate change impacts. Additionally, students emphasized the need for climate actions that are affordable.

Encourage a Climate-Friendly Culture Shift
There was significant interest amongst participants to use CAP 2030 to incite a culture shift towards more climate-friendly actions and behavior. Feedback included the desire for UBC leadership to lead by example (especially around air travel), holding UBC partners and vendors to a high environmental standard, and strong support for systemic UBC change, in addition to individual behavior change.

Design for Long-Term Climate Impact
A final theme heard from participants was about designing our campus buildings and green spaces to be adaptive to climate changes over the long-term. Notably, feedback surrounded landscape stewardship, green space protection, and thermal comfort considerations for buildings.

Next Steps
The ideas and feedback collected from this public engagement process about the emerging CAP 2030 directions and targets, in combination with further technical work to refine the targets and actions, will inform the final CAP 2030 to be presented to the Board of Governors in November 2021.
Appendix I – Engagement Process Summary

Engagement Process
The UBC Vancouver Climate Action Plan 2030 public engagement was held March 29 – April 16, 2021. Community members participated through an online survey, virtual open houses and a virtual Hot Lunch cross-campus staff event.

This engagement process was guided by Campus and Community Planning’s Engagement Principles laid out in the Engagement Charter. These ten principles define how we engage the public and campus community in the planning and development of our campus, as well as collaborating and partnering on community programs and services.

In total, 764 people participated in this engagement, either attending the virtual events and/or completing the online survey. Our engagement summary is as follows:

- 92 people attended a virtual public open house via Zoom.
- 627 people completed the online survey.
- 45 people participated in the Hot Lunch staff event.

The online survey questions and detailed feedback analysis are included in Appendix II and verbatim survey responses are included in Appendix III.

Online Survey
The online survey was a chance for the Vancouver campus community to submit feedback about CAP 2030 emerging directions and targets, as well as provide insights about the barriers and opportunities for climate action on campus. The majority of survey respondents were UBC staff (52%) and UBC students (23%).

Virtual Open House
The virtual public open houses were held on March 30 and April 7, 2020 over Zoom. These events started with a 20-minute CAP 2030 presentation, but then were drop-in style events where participants met for a Q&A with UBC staff and the planning project team.

Speaker Event
The public engagement process was also supplemented with a Hot Lunch speaker event, where John Madden, Director of Sustainability & Engineering at Campus + Community Planning, presented an overview of CAP 2030. This event was held over Zoom on March 31, 2021 and included small breakout sessions for staff to have detailed discussions on the CAP 2030 emerging directions and targets.
Appendix II – Detailed Survey Results

This section outlines what we heard from the Vancouver Climate Action Plan 2030 online survey that was conducted between March 29 – April 16, 2021.

Both qualitative and quantitative feedback were collected through the online survey. The quantitative feedback is summarized below in a number of different charts and visualizations. This data was collected through multiple choice and Likert scale questions, with options to add text entries under “Other” for most questions. It is important to note that most questions had the option to “select all that apply,” so percentages of responses will not sum up to 100%.

The qualitative verbatim responses collected were reviewed and themed according to the sentiment of each comment. Top themes for open-ended survey questions are highlighted in the tables at the end of this Appendix. These include themes with an occurrence rate of 5% or more of the total number of comments for each question.

The top themes heard in the following charts and tables were collected and analyzed to develop the key takeaways for what we heard in the Executive Summary of this report. Responses to multiple choice, ranking and “other” text entry questions were combined with open-ended question responses to identify the top opportunities and barriers to specific climate actions for the Vancouver campus.

Section 1: Demographics

1. What is your primary connection to UBC?

Other: Alumni, multiple affiliations and emeritus professors.
2. When not based remotely due to COVID, where do you spend the majority of your time on campus? (Select all that apply)

- Office: 390
- Classroom: 135
- Lab: 89
- Other: 87
- Student Residence: 69
- Retail, Dining & Catering: 62

Others: Library, retired/home, recreation facilities, hospital.
3. UBC is interested in knowing whether the voices of groups who have been historically, persistently, or systemically marginalized are represented in this engagement process. Do you self-identify as (select all that apply):

Others: Mental and physical health issues, mothers and carers.
Section 2: Engagement

1. We recognize that many efforts to address the climate crisis are already ongoing across UBC's campus. How have you been taking climate action and/or supporting others to take climate action at UBC? (Select all that apply)

Other: Shop at UBC Farmers Market, participate in campus campaigns and rallies, supporting others to make climate friendly choices, working from home,
2. To help us understand the barriers (all/if any) to taking general climate action at UBC that you have experienced, how much would you agree or disagree with the following statements (0=Strongly disagree, 4=Strongly agree):

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would like more support in understanding how to be most effective with my time/resources/funds.</td>
<td></td>
<td>2.53</td>
</tr>
<tr>
<td>I believe the university should focus on institutional climate action rather than individual climate action.</td>
<td></td>
<td>2.34</td>
</tr>
<tr>
<td>I am aware of how to take or support climate action at UBC.</td>
<td></td>
<td>2.18</td>
</tr>
<tr>
<td>I believe my individual efforts would make much of a difference.</td>
<td></td>
<td>2.03</td>
</tr>
<tr>
<td>I have enough time/capacity in my studies or work to take climate action.</td>
<td></td>
<td>1.97</td>
</tr>
<tr>
<td>I have the funds or resources to take climate action.</td>
<td></td>
<td>1.91</td>
</tr>
<tr>
<td>I am comfortable with my current lifestyle and am not interested in changing my behaviour to support additional climate action at this time.</td>
<td>1.11</td>
<td></td>
</tr>
</tbody>
</table>

Other: Change needs to include levels of government, divestment, green jobs training, university needs to implement institutional actions in addition to actions by individuals, UBC leadership should lead by example.
3. Which of the following options would be helpful in supporting you to take climate action at UBC? (Select all that apply)

Other: Encourage working from home, more plant-based food options, funding for climate research and carbon neutral infrastructure, clearer information about how to get involved.
Section 3: Commuting

1. Pre-COVID, which modes of transportation did you use to commute to and from campus? (Select all that apply)
2. To help us understand the barriers to sustainable commuting pre-COVID, how much would you agree or disagree with the following statements:

**Barriers to Sustainable Commuting**

- I know what other sustainable transportation choices are available to me. 1.79
- I live too far away to bike to campus. 1.73
- Public transportation routes are inconvenient to support me getting to and from UBC campus. 1.6
- The costs of using public transportation are too high. 1.53
- There are no good bike routes or bike infrastructure connecting my home to UBC. 1.48
- I don’t want to bike to campus because I am worried my bike will be stolen. 1.44
- I prefer the convenience, comfort, and flexibility of driving alone to and from campus. 1.4
- I prefer driving to and from campus for family member drop-off/pick-up, or I am part of a carpool. 1.17
- I need a car or personal transport to meet my accessibility requirements. 0.69

Other: Need a car for accessibility or pick-up/drop-off, public transit is inconvenient, drive an electric vehicle, lack of end-of-trip facilities.
3. Which of the following options would support you in selecting more sustainable commuting alternatives to and from UBC’s campus? (Select all that apply)

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility to work or learn from home</td>
<td>346</td>
</tr>
<tr>
<td>Better transit service to/from campus (enabling faster, more comfortable</td>
<td>335</td>
</tr>
<tr>
<td>commute by transit)</td>
<td></td>
</tr>
<tr>
<td>Financial savings (i.e. discounted transit pass for staff and faculty)</td>
<td>333</td>
</tr>
<tr>
<td>A UBC Employee Transit Pass Program (i.e. Discounted transit pass for staff</td>
<td>311</td>
</tr>
<tr>
<td>and faculty)</td>
<td></td>
</tr>
<tr>
<td>Better cycling facilities to/from campus (enabling faster, more comfortable</td>
<td>244</td>
</tr>
<tr>
<td>commute by bike)</td>
<td></td>
</tr>
<tr>
<td>Provide more secure and convenient secure bike parking options on campus</td>
<td>191</td>
</tr>
<tr>
<td>Availability of only daily parking permits, rather than long-term parking</td>
<td>123</td>
</tr>
<tr>
<td>permits</td>
<td></td>
</tr>
<tr>
<td>More information/awareness of the environmental benefits of sustainable</td>
<td>102</td>
</tr>
<tr>
<td>alternatives</td>
<td></td>
</tr>
<tr>
<td>More information/awareness of the health benefits of sustainable alternatives</td>
<td>83</td>
</tr>
<tr>
<td>Other</td>
<td>68</td>
</tr>
</tbody>
</table>

Other: Provide better end-of-trip facilities, encourage remote work, financial incentives to take public transit or use electric vehicles/bikes, increase safety of bike lanes, accelerate the SkyTrain extension to campus.
Section 4: Climate-Friendly Food

1. As a UBC community member, how often do you eat climate-friendly foods (i.e. plant-based, organic, local)?

Respondents said that on average they ate climate-friendly foods some of the time.

2. To help us understand the barriers to making climate-friendly food choices at UBC pre-COVID, how much would you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Barriers to Climate-Friendly Food Choices</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know which foods are climate friendly.</td>
<td>1.77</td>
<td></td>
</tr>
<tr>
<td>I feel confident I am getting appropriate nutrition and can eat healthily if I shift to a climate-friendly diet.</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>I know why climate-friendly food systems are important (i.e. reducing greenhouse gas emissions) or where to go to learn more about climate-friendly food systems at UBC.</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>I enjoy the taste of climate-friendly food.</td>
<td>1.72</td>
<td></td>
</tr>
<tr>
<td>There are limited climate-friendly menu options on campus (i.e. plant-based, organic).</td>
<td>1.66</td>
<td></td>
</tr>
<tr>
<td>I find climate-friendly menu options to be unaffordable for me.</td>
<td>1.48</td>
<td></td>
</tr>
<tr>
<td>I’m worried that climate-friendly food will be inconsistent with my cultural practices and diet.</td>
<td>0.24</td>
<td></td>
</tr>
</tbody>
</table>
Other: Dietary restrictions, climate-friendly food is more expensive, need more sustainable food packaging, difficult to determine which foods are climate-friendly.

3. **Thinking about climate-friendly food purchasing, eating habits and dietary restrictions, which of the following options would support you in making more climate-friendly food choices on UBC campus? (Select all that apply)**

<table>
<thead>
<tr>
<th>Opportunities for Climate-Friendly Food Purchasing</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food labels that indicate which food options are more climate-friendly (i.e. at food retail outlets or from catering providers)</td>
<td>376</td>
</tr>
<tr>
<td>More climate-friendly food options on campus.</td>
<td>363</td>
</tr>
<tr>
<td>Greater diversity of tasty climate-friendly and culturally relevant menu offerings.</td>
<td>333</td>
</tr>
<tr>
<td>Financial incentives to purchase “climate-friendly” menu offerings (e.g. rewards for purchasing “climate-friendly” menu e.g. buy 9 items get 10th free).</td>
<td>328</td>
</tr>
<tr>
<td>Promotional materials and campaigns that communicate the impact of climate-friendly food behaviours (i.e. waste averted, GHG emission reductions).</td>
<td>189</td>
</tr>
<tr>
<td>Accessible resources to support climate-friendly food choices (e.g. online guide, promotional materials).</td>
<td>171</td>
</tr>
<tr>
<td>Enhanced educational opportunities to learn and take action on the intersectional climate and food crises (i.e. UBC courses, research, workshops/webinars, professional development).</td>
<td>170</td>
</tr>
<tr>
<td>More opportunities to grow your own food on campus.</td>
<td>161</td>
</tr>
<tr>
<td>Enhanced volunteer/paid opportunities to learn and take action on the intersectional climate and food crises (i.e. extracurricular activities, workshops).</td>
<td>140</td>
</tr>
<tr>
<td>Other</td>
<td>43</td>
</tr>
</tbody>
</table>

Other: More options for those with dietary restrictions and food sensitivities, increase sustainable food options on campus broadly (i.e. plant-based), make climate-friendly food affordable, education around cooking and gardening.
4. Thinking about reducing food waste and packaging, and promoting food recovery, which of the following options would support you in making more climate-friendly food choices on UBC campus?

- Greater availability of MugShare mugs or other reusable drink container exchanged programs on campus.
- More options to access surplus recoverable food (e.g. community meals, dignified donations to Food Bank, community fridges).
- Enhanced Reusable Food Container Exchange program (i.e. Green2Go program).
- Greater availability and access to seating at campus food outlets so you can order “for here” instead of take-out.
- Greater availability and access to refrigerators and microwaves on campus so you can bring your lunch from home.
- Financial incentives such as increased discounts at campus food outlets when you bring your own food or beverage container.

Other: Surcharge on all disposable containers, hold vendors accountable for their packaging, expand container sharing programs, more food options that do not use packaging (i.e. bakery items).
Section 5: UBC Business-Related Air Travel

1. As a UBC community member, how often do you travel by airplane for UBC-related business?

UBC students responded that they rarely travel by airplane for UBC business, UBC faculty travel often, UBC staff travel rarely, and non-UBC employees travel often.
2. The COVID-19 pandemic has provided us with a host of powerful new virtual platforms, allowing us to shift our meetings, events, learning opportunities and conferences online. In the future, compared to pre-pandemic behavior, would you be more or less likely to:

Respondents said that on average they are very likely to reduce air travel, conduct and host virtual meetings, and attend virtual conferences and virtual courses compared to pre-pandemic behaviour.
3. To help us understand the barriers to making sustainable UBC business-related air travel choices pre-COVID, how much would you agree or disagree with the following statements:

### Barriers to Sustainable Air Travel Choices

<table>
<thead>
<tr>
<th>Statement</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are a lack of more sustainable transportation alternatives to help me get where I need to go</td>
<td>2.37</td>
</tr>
<tr>
<td>I prefer to attend in-person conferences, events or meetings that require air travel</td>
<td>2.07</td>
</tr>
<tr>
<td>I need to attend conferences, events or meetings requiring air travel in person because it is part of my position’s professional development and performance criteria</td>
<td>2.0</td>
</tr>
<tr>
<td>I know what digital communication tools I have access to as a UBC community member</td>
<td>1.93</td>
</tr>
<tr>
<td>I have access to sufficient/effective technology, equipment or digital/IT support to virtually attend conferences, events or meetings that require air travel</td>
<td>1.92</td>
</tr>
<tr>
<td>At fiscal year end, I can feel pressured to spend down remaining funds and may be used to book UBC-related air travel.</td>
<td>0.97</td>
</tr>
</tbody>
</table>

Other: Prefer in-person conferences; In-person conferences offer many benefits including networking, socializing and professional development; travel is currently viewed as a “perk.”
4. Which of the following options would support you in making more sustainable UBC business-related air travel choices? (Select all that apply)

<table>
<thead>
<tr>
<th>Opportunities for Sustainable Air Travel</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free access to paid digital engagement tools through a UBC subscription.</td>
<td>280</td>
</tr>
<tr>
<td>Cultural shift amongst the UBC community to decouple UBC-related air travel from professional development/performance criteria and being viewed as a...</td>
<td>278</td>
</tr>
<tr>
<td>Implementing a UBC target to reduce 100% of non-essential UBC-related air travel (i.e. encourage virtual meetings and events).</td>
<td>251</td>
</tr>
<tr>
<td>Installation of tools and additional technology support to encourage widespread virtual teleconferencing (e.g., more classroom and meeting room monitors, speakers and...</td>
<td>236</td>
</tr>
<tr>
<td>Guidelines for best practice bundling of essential air travel (such as combining place-based research with meetings for a single longer trip vs. higher-frequency shorter trips).</td>
<td>213</td>
</tr>
<tr>
<td>More information about the virtual conferencing and collaboration tools available for UBC staff, students and faculty.</td>
<td>200</td>
</tr>
<tr>
<td>More information about the environmental impacts of air travel and benefits of sustainable transportation alternatives.</td>
<td>198</td>
</tr>
<tr>
<td>Reminders about the impacts of air travel during the UBC travel booking process, such as when getting quotes and at the point of purchase.</td>
<td>113</td>
</tr>
<tr>
<td>Other: Carbon offset travel program; conferences formats are outside UBC’s control; requires cultural shift; incentive programs such as unused travel funds available to departments; formal demerits for frequent flyers.</td>
<td>38</td>
</tr>
</tbody>
</table>

Number of Responses

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Section 6: Waste

1. As a UBC community member, how often do you partake in the following sustainable waste practices?

Respondents said that on average they reduce and reuse their waste often, and sort their waste almost all of the time.
2. To help us understand the barriers to making sustainable waste choices pre-COVID, how much would you agree or disagree with the following statements:

### Barriers to Sustainable Waste Choices

<table>
<thead>
<tr>
<th>Statement</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing sustainable or climate-friendly items (i.e. fair-trade, local, handcrafted, organic, etc.) often seems more expensive and can be cost-prohibitive</td>
<td>2.36</td>
</tr>
<tr>
<td>I have easy access to waste sorting stations or other waste management infrastructure on campus</td>
<td>1.99</td>
</tr>
<tr>
<td>I know where to learn more and what resources are available to me on the UBC campus to support waste reduction choices</td>
<td>1.88</td>
</tr>
<tr>
<td>I have enough information to confidently purchase sustainable or climate-friendly products (e.g. knowing reputable brands or vendors)</td>
<td>1.83</td>
</tr>
<tr>
<td>I know where to go to offer items for reuse, or inquire about items available for reuse</td>
<td>1.8</td>
</tr>
<tr>
<td>Many of the products and materials I purchase or use on campus are not recyclable</td>
<td>1.74</td>
</tr>
<tr>
<td>When I have limited time, sometimes I skip carefully sorting my waste at UBC sorting stations</td>
<td>0.91</td>
</tr>
<tr>
<td>Reducing my use of single-use plastics and sorting my waste is not convenient to my current lifestyle or circumstances</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Other: Need more information about where waste and recycling goes after leaving UBC; hold vendors accountable for their packaging and materials; recycling does not feel impactful or meaningful in the grand scheme of climate change; not enough plastic recycling options.
3. Which of the following options would support you in helping to reduce UBC waste sent to landfill and in building a circular economy? (Select all that apply)

- Financial savings (e.g. discounted coffee if you bring your own mug).
- Introducing a campus-wide Reuse Program for UBC furniture, residence items, and scientific equipment.
- More on-campus opportunities for sharing and reuse.
- More reusable food and beverage service ware (i.e. ceramic cups and plates) at UBC food outlets.
- Implementation of a Sustainable Procurement Program that could include: product sustainability criteria, packaging requirements and updated procurement processes.
- More information about how to create a circular economy at UBC, such as sourcing sustainable products and waste disposal practices and their benefits.
- Development of Zero Waste Catering Guidelines to promote zero waste events.
- More availability of sorting stations/bins in buildings or work areas.
- Improved signage, information, or eye-catching displays to help with waste sorting.
- Public engagement campaigns/communications like “Sort It Out” that provide a “nudge” toward zero waste behavioural choices.
- Group recognition and rewards (e.g. cross-building/cross-department waste reduction competitions).
- Other: Make items with single-use packaging more expensive and items with sustainable packaging more affordable; additional Sort-It-Out education; expand composting infrastructure; waste streams are best managed by the institution, not individuals.
Section 7: General Feedback

The following qualitative analysis reflects what we heard from the two open-ended questions in the CAP 2030 Vancouver survey. The themes shaded in grey represent the top themes we heard from participants, while the unshaded themes are included for transparency and interest. To see the verbatim survey responses, please refer to Appendix III.

1. To help us understand the climate action efforts currently taking place across UBC, please let us know if you and/or your UBC community are involved with any initiatives aimed at reducing GHG emissions on campus (and, if possible, the name of your community):

Top themes for this question included responses from those already undertaking general climate actions in their daily lives, and a notable number of survey respondents that are participating with the UBC Vancouver Library Climate Action Team.

<table>
<thead>
<tr>
<th>Feedback Comments</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>12</td>
</tr>
<tr>
<td>General climate actions in pursuit of sustainability</td>
<td>7</td>
</tr>
<tr>
<td>Looking for opportunities but not currently involved</td>
<td>2</td>
</tr>
<tr>
<td>External organizations to UBC</td>
<td>1</td>
</tr>
<tr>
<td>Switching from gas/diesel to electric equipment</td>
<td>1</td>
</tr>
<tr>
<td>Started working at UBC during COVID - so still learning what is available</td>
<td>1</td>
</tr>
<tr>
<td>Student club or organization</td>
<td>11</td>
</tr>
<tr>
<td>Engineering Undergraduate Society</td>
<td>2</td>
</tr>
<tr>
<td>Sustaining engineering Design Team</td>
<td>2</td>
</tr>
<tr>
<td>Asian Studies Sustainability Committee</td>
<td>2</td>
</tr>
<tr>
<td>UBC Sustainability Ambassadors</td>
<td>1</td>
</tr>
<tr>
<td>UBC Climate Hub</td>
<td>1</td>
</tr>
<tr>
<td>Vegans at UBC Club</td>
<td>1</td>
</tr>
<tr>
<td>Student Sustainability Council</td>
<td>1</td>
</tr>
<tr>
<td>Studying high performance buildings</td>
<td>1</td>
</tr>
<tr>
<td>Academic group</td>
<td>11</td>
</tr>
<tr>
<td>Peter Wall Institute Scholar Program</td>
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</tr>
<tr>
<td>Emerging Media Lab</td>
<td>1</td>
</tr>
<tr>
<td>Sustainable PostDocs - PostDoc Association</td>
<td>1</td>
</tr>
<tr>
<td>Emeritus College</td>
<td>1</td>
</tr>
<tr>
<td>Mitacs - Green Initiative</td>
<td>1</td>
</tr>
<tr>
<td>Faculty of Applied Science</td>
<td>1</td>
</tr>
<tr>
<td>Project Drawdown</td>
<td>1</td>
</tr>
<tr>
<td>Green Chemistry Group</td>
<td>1</td>
</tr>
<tr>
<td>Urban Forestry Research Hub</td>
<td>1</td>
</tr>
<tr>
<td>Institute of Oceans and Fisheries</td>
<td>1</td>
</tr>
<tr>
<td>Michael Smith Laboratories</td>
<td>1</td>
</tr>
<tr>
<td>Climate Emergency and CAP 2030</td>
<td>8</td>
</tr>
<tr>
<td>Library Climate Action Team</td>
<td>5</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Earth, Ocean and Atmospheric Sciences Climate Emergency Committee</td>
<td>1</td>
</tr>
<tr>
<td>Climate Emergency Committee - Dept of Geography</td>
<td>1</td>
</tr>
<tr>
<td>Climate Friendly Food System Working Group</td>
<td>1</td>
</tr>
</tbody>
</table>

**Food systems**

<table>
<thead>
<tr>
<th>UBC Farm and Farmers Market</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant-based menus</td>
<td>2</td>
</tr>
<tr>
<td>UBC Roots on the Roof</td>
<td>1</td>
</tr>
<tr>
<td>Vancouver Fruit Tree Project</td>
<td>1</td>
</tr>
<tr>
<td>Community garden</td>
<td>1</td>
</tr>
<tr>
<td>Sprouts</td>
<td>1</td>
</tr>
</tbody>
</table>

**Sustainability engagement**

| Sustainability Coordinators Program | 2 |
| Green Labs | 2 |
| UBC Children's Garden | 1 |
| SEEDS Sustainability Program | 1 |

**Commuting**

| UBC Parking - Access Services (i.e. EV infrastructure, smart technologies for data collection) | 2 |
| Shared office bikes | 1 |
| #AllOnBoard campaign for affordable transportation in BC | 1 |
| Bike to Work Week | 1 |

**Waste**

| Zero Waste Squad | 1 |
| Waste sorting | 1 |
| First Nations House of Learning Waste Management Program | 1 |
| Recycling | 1 |

**Staff department or group**

| SHCS and Facilities Management | 2 |
| University Sustainability Initiative | 1 |
| University Neighbourhoods Association | 1 |

**Air travel**

| UBC's Fossil Fuel Free Pension Fund | 1 |
| Sustainable Travel Industry best practices | 1 |

**External partnerships**

| Perkins&Will + Building Transparency | 1 |
| OurTime Vancouver | 1 |

**Climate justice**

| Climate Justice UBC and UBC Social Justice Centre | 1 |

**Grand Total** | 74 |
2. Do you have any feedback about the emerging CAP 2030 directions and targets, or any other considerations (i.e. equity, climate justice) to add that we should be aware of as we develop the CAP 2030?

Top themes for this question included encouraging a hybrid back to work and campus model post-COVID, considering elements of climate justice in the CAP 2030, ensuring UBC as an institution is not shifting responsibility to individuals, and general support for the CAP 2030 and planning process.

<table>
<thead>
<tr>
<th>Feedback Comments</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAP 2030 Process</strong></td>
<td>48</td>
</tr>
<tr>
<td>General support</td>
<td>12</td>
</tr>
<tr>
<td>General support</td>
<td>12</td>
</tr>
<tr>
<td><strong>Barriers</strong></td>
<td>15</td>
</tr>
<tr>
<td>UBC shifting too much responsibility onto the individual and away from the university/institution</td>
<td>13</td>
</tr>
<tr>
<td>Include more costing and resourcing nuances for targets</td>
<td>2</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>21</td>
</tr>
<tr>
<td>Include more costing and resourcing nuances for targets</td>
<td>6</td>
</tr>
<tr>
<td>Be more ambitious with our target setting and timelines</td>
<td>5</td>
</tr>
<tr>
<td>Real change requires UBC leadership to lead local and regional policy change by example</td>
<td>4</td>
</tr>
<tr>
<td>Support for specific CAP 2030 goals</td>
<td>3</td>
</tr>
<tr>
<td>Any CAP recommendations for individuals need to be affordable and convenient</td>
<td>3</td>
</tr>
<tr>
<td><strong>Commuting</strong></td>
<td>34</td>
</tr>
<tr>
<td>Barriers</td>
<td>5</td>
</tr>
<tr>
<td>Public transit much more inconvenient than commuting by car alone</td>
<td>2</td>
</tr>
<tr>
<td>Public transit currently feels unsafe</td>
<td>2</td>
</tr>
<tr>
<td>Cannot bike for health reasons</td>
<td>1</td>
</tr>
<tr>
<td>Opportunities</td>
<td>29</td>
</tr>
<tr>
<td>Encourage hybrid model of remote working and learning</td>
<td>21</td>
</tr>
<tr>
<td>Explore new approaches to sustainable commuting (i.e. Staff/faculty U-Pass, combined transit/parking pass)</td>
<td>6</td>
</tr>
<tr>
<td>Promote SkyTrain to UBC</td>
<td>2</td>
</tr>
<tr>
<td><strong>Climate justice</strong></td>
<td>21</td>
</tr>
<tr>
<td>Opportunities</td>
<td>21</td>
</tr>
<tr>
<td>Consider equity, fairness and Indigenous values</td>
<td>16</td>
</tr>
<tr>
<td>Prioritize affordable housing for faculty/staff/students on campus</td>
<td>3</td>
</tr>
<tr>
<td>Support poverty reduction and community education</td>
<td>2</td>
</tr>
<tr>
<td><strong>Waste</strong></td>
<td>17</td>
</tr>
<tr>
<td>Barriers</td>
<td>3</td>
</tr>
<tr>
<td>Strengthen waste and composting infrastructure</td>
<td>2</td>
</tr>
<tr>
<td>Recycling does not feel meaningful or impactful</td>
<td>1</td>
</tr>
<tr>
<td>Opportunities</td>
<td>14</td>
</tr>
<tr>
<td>More e-resources to avoid printing in UBC offices and libraries</td>
<td>5</td>
</tr>
<tr>
<td>Strengthen waste and composting infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>Reduce single-use plastics</td>
<td>3</td>
</tr>
<tr>
<td>Category</td>
<td>Opportunities</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td><strong>Invest in longer-life technology and equipment</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Arrival care package of reusable items for new students</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Wastewater reuse</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Long-term planning for landscapes and tree protection</strong></td>
<td>11</td>
</tr>
<tr>
<td><strong>Environmental standards and requirements for UBC industry and corporate partners</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Barriers</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Sustainable divestment</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>Automatically turn off building and field lights at night</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Prioritize affordable housing for faculty/staff/students on campus</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Stormwater management opportunities</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Acknowledge climate impacts of technology</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Need environmentally friendly strategies for long-term campus design</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>11</td>
</tr>
<tr>
<td><strong>Air travel</strong></td>
<td>12</td>
</tr>
<tr>
<td><strong>Barriers</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>11</td>
</tr>
<tr>
<td><strong>Need a culture shift for reducing air travel led by UBC leadership</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>New evaluation models that reduce international travel (i.e. naming and shaming frequent flyers)</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>Air travel surcharge to contribute to climate action initiatives</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>Culture shift for not rushing to spend money by the end of fiscal</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Incentivize students staying on campus during holidays</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>9</td>
</tr>
<tr>
<td><strong>Buildings</strong></td>
<td>9</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>9</td>
</tr>
<tr>
<td><strong>Thermal comfort and wellbeing considerations for building design</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>Reduce waste and emissions from construction, new building materials and retrofits</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Food Systems</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Barriers</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Shift retail and food outlets towards more local and plant-based options</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Research and Partnerships</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Partner with UBC groups researching climate solutions</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>UBC should publish more public-facing climate information and research</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Create UBC Climate Policy Institute</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Community Engagement and Education</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Opportunities</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Performing arts are a powerful community engagement tool</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>185</td>
</tr>
</tbody>
</table>
## Appendix III – Verbatim Survey Responses

**Question:** To help us understand the climate action efforts currently taking place across UBC, please let us know if you and/or your UBC community are involved with any initiatives aimed at reducing GHG emissions on campus (and, if possible, the name of your community).

<table>
<thead>
<tr>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not involved in initiatives but I do support the UBC Farmer's Market and try to get most of my produce from them.</td>
</tr>
<tr>
<td>We have a pool of two office bikes purchased through a centrally-funded program (forget the name) that team members can use to get to meetings across campus (when the weather is good).</td>
</tr>
<tr>
<td>Yes we promote predominantly plant forward menus at all locations.</td>
</tr>
<tr>
<td>More spaces to grow? UBC Farm gets smaller. UBC KILLED the Orchard Garden. Green space that could be used to grow is seen as housing.</td>
</tr>
<tr>
<td>I live close to campus. I promote stories of sustainability. I am committed to taking climate action. Green chemistry UBC group. Asian Studies Sustainability Committee. Yes, have implemented several initiatives and they have all come to fruition and have been implemented. Parking: removing gates at parkades has eliminated idling vehicles waiting to enter/leave; they installed 75 EV charging stations at their own expense; they are an integral part of developing the clean energy hub at Thunderbird parkade; they participate in SEEDs projects; they have financially contributed to emissions research within parking facilities; they are supporting wayfinding projects within the Rogers 5G projects; they are using smart city technologies to collect data on parking habits and parking facility usage Urban forestry research hub at UBC Forestry. #AllOnBoard campaign is working on affordable transportation in BC. This will also lessen the need for parking lots at UBC. Less cars means better air quality and safer for bikers. Unfortunately, it seems to me that the efforts were left to the individuals. I wholeheartedly support a more through Climate Action Plan. I led the creation of UBC's Fossil Fuel Free Pension Fund, and (as you can tell from this survey), have been lobbying for a decade for us to profoundly reduce our air travel. Please reach me to volunteer for that at <a href="mailto:Erica.Frank@ubc.ca">Erica.Frank@ubc.ca</a> N/A - I have to look outside of my job and what is available to me at UBC. I volunteer for an outside organization climate friendly food system working group Electric Charging Stations (Parking) Geography has a climate emergency committee I was previously involved in Sprouts. I continually keep up to date with sustainable travel industry best practices for public and private organizations/corporations, in various markets (CDA, Intl) through webinars, articles, networking and virtual conferences. This year a new emerging action by the hotel industry is to improve visibility and create standards where they can be measured by Water, Energy and Waste reductions N/A (Bike to Work Week once in a while) Not at this time. I started working at UBC 3 weeks before the lockdown and didn't have a lot of opportunity to find out about many groups.</td>
</tr>
</tbody>
</table>
We are switching lots of our equipment from gas/diesel powered to electric powered. Unfortunately, we are often limited by the added cost and electric replacements may not meet our needs.

We are working on Green labs project under ubc sustainability

Yes, with the UBC Climate Hub.

Peter Wall Institute Wall Scholar program: https://pwias.ubc.ca/wall-stories/2018-wall-scholars-launch-initiative-address-ubc-flight-emissions

Green Labs, LSC Sustainability Leadership Team

As a student involved in the Engineering Undergraduate Society, I work with a team of fellow engineering students to embed sustainability into the EUS operations and promote sustainable practices to students. We just got started on our work about a year ago and recently passed policy within the Society to mandate sustainable initiatives aimed at reducing waste and raising awareness.

IOF

The Library #ClimateAction Team has developed an Air Travel decision tree to assist UBC Library employees in choosing which conferences to attend in person and which virtually.

member of Asian Studies Sustainability Committee

The Emeritus College is familiar with the general principles advocated by the CAP, but does not have specific programs in place. That may change once the College has permanent premises.

I am not involved with any initiative but am looking for opportunities to do so.

The Michael Smith Laboratories has implemented many sustainable practices over the years and taken part in many pilots (recycle styrofoam before it available campus wide, amber glass recycling, soft plastic segregation, compose before it was campus wide, ice pack reuse, AirCuity, LED lights in labs and offices, ultra low freezer 'warm-up', change tap on film processor to stop constant flow of water and now elimination of instrument all together). I'd love to give a tour (virtual okay too) to showcase some of these successes.


no yet bout would love to get involved

EOAS Climate Emergency Committee

It's great that UBC is committed to these actions and providing support to all campus members in achieving the goals and targets.

UBC Roots on the Roof

SHCS

We work on our community garden with our preschoolers

Thanks for organizing this survey. I could imagine that it is highly biased though, since the majority of people who contribute to this questionnaire are already involved in SD activities. I personally for example just started a new group of "sustainable Postdocs" at the UBC (we don't have a name yet, but are part of the Postdoc Association).

UBC Library now has a Library Climate Action Team with members from different employee groups and library branches/units. Thus far we've hosted a climate research panel, drafted guidelines around air travel, held climate change movie nights, creating a webguide for climate research, and shared information with each other. Now we are reviewing the emergency task force report to identify how our work can align with the priorities.

I am a physician, clinical assistant professor of medicine - interested in supporting efforts to reduce GHG emissions at work, and increase access to plant-based foods - making things like bringing your own cup, and ordering plant based the default - extra costs if adding meat, cheese or a plastic cup

Library Climate Action Team

I am generally in touch with colleagues at APSC in the topic of long term work-from-home arrangements that could benefit students, staff, and faculty and also reduce GHGs.
I am President of Vancouver Fruit Tree Project. Thanks to UBC Triumph support, we have been able to harvest the extra fruit from their trees to distribute them to community members. In addition to strengthen food security in our community, this harvest allows to reduce food waste.

yes

USI

Mitacs has its Green Initiative that are aimed at reducing our carbon footprint (at our UBC office and beyond)

UBC SEEDS Sustainability Program

At the Emerging Media Lab we are doing limited work on digital collaboration technology but our budget compared to how much is spent on travel annually is laughable.

I am studying High Performance Buildings

I am part of the Sustainability engineering design team, and a member of the EUS Sustainability Council

Library

Project Drawdown - only buy from fossil-reducing sellers

I am working with Perkins&Will (an architecture firm) and Building Transparency (a non profit) to help reduce embodied and operational carbon in buildings in BC.

Sustainability coordinator program, lighting upgrades, awareness exhibits addressing "ghost nets," oil pipelines, etc.

sustainability coordinator program, Library #ClimateAction Team

I'm a recent graduate (I hope it's okay I completed this) and am now involved with organizing beyond the UBC community (e.g. with OurTime Vancouver).

ubc children’s garden

UNA

Engineering Design Team bring sustainability and reduced emissions into our design.

Recycling

Executive at Vegans of UBC club which promotes sustainable/ethical food choices on campus; member of Zero Waste Squad (paused for covid) which sorts waste on campus and has education events; council member on Student Sustainability Council which gets student feedback on sustainability initiatives; support initiatives done by Climate Justice UBC and UBC Social Justice Centre

While normally I take transit, I've been commuting via car since June 2020, when my place of work reopened to on site employees. I don't like driving to get to work. Other than that, I try to use as many reusable dishes for meals, do my recycling, not waste work supplies, etc.

UBC Sustainability Ambassadors

Garbage classification

I am very engaged in climate-friendly living for many years already. However, as a Postdoc in Canada, I actually spend way to much money to stay truthful to his environmentally friendly living style. I think that this a structural problem, so UBC should support people of all sorts of salary classes to live a sustainable life. I still feel living consciously in Canada demands from you to be a little rich, in particular, when it comes to food!

Question: Do you have any feedback about the emerging CAP 2030 directions and targets, or any other considerations (i.e. equity, climate justice) to add that we should be aware of as we develop the CAP 2030?
Perhaps as the planet continues to warm, develop green ways to stay cool during the summer and warm during the winter. Eliminating bottled drinks and water from being sold on campus and eventually from Canada.

To realistically pursue its targets, UBC needs to reform from a majority commuter campus to more hybrid models of learning and teaching without detriment to students and faculty. Remote work has proven effective and should be supported where sensible rather than discouraged on principle!

Not sure if this is important here but I see a gap in reusing resources - are we looking at infrastructure which would allow water reuse/recycling? I know we have a lot of park/green space - can we recapture water from buildings to reuse for landscape? Projects like that would be very interesting.

Allowing remote work to continue would be significant.

I strongly believe that UBC as an institution must enact systemic change as opposed to putting the onus on individuals to bring reusable mugs, pack lunches from home, etc. As a staff member, the transit to and from campus is my largest contribution to greenhouse gas emission and I would love to see a discounted staff/faculty transit pass to incentivize taking public transit, as well as UBC continuing to allow staff to work remotely if their position and duties allow. Something like this would greatly benefit myself and other staff in a similar position as me.

UBC Supported boycott and divest from the petro chemical industry. Is it about time we do the same for China? A boycott divest campaign from China the worlds leading polluter of the Air, land and sea (as well as their horrendous human rights violations in the Xinjiang province? [https://www.forbes.com/sites/rrapier/2018/07/01/china-emits-more-carbon-dioxide-than-the-u-s-and-eu-combined/?sh=7c5008e9628c]

Getting academics to avoid air travel to go to conferences is going to be a tough sell and, if too stringent, could make it hard to attract top talent.

Yes I strongly encourage the University to ban or put a tax on individual meals being delivered to campus from delivery services like Uber Eats, Doordash, Skip the Dishes, Fantuan etc... These create a BIG carbon footprint. a 20km food delivery is the equivalent of 7 kg of CO2.

Most of these questions about individual actions seemed to be about visible forms of climate impacts (waste, air travel). Some kinds of computing resources (esp. high-fidelity video conferencing for online classes and high intensity computation, such as in machine learning applications) have less visible climate effects. I would like to see UBC consider making known the climate costs of technology and acknowledging computing power as being a relevant consideration in climate action.

2030? Why not TODAY!

I would like to see organizations such as UBC use their purchasing clout to increase the life of technology equipment such as laptops, workstations, phones etc. Shift the focus on speed to life span - five years for a workstation is wasteful and unsustainable.

In terms of air travel, UBC could tack on a surcharge to all air fares purchased with UBC funds and use the money raised on climate initiatives and/or carbon offset programs.

If more staff were able to work part of the week from home, it might not be necessary to have as much dedicated office space. This could in turn free up existing space for other purposes and ideally limit the amount of construction at UBC. Don't raise a building, plant more trees.

What about pushing for more e-resources in the library so that it is not purchasing and supporting a print-based economy.

Your questions around public transit don't really cover all the issues related to our bus system. Buses are overcrowded, dirty and unhealthy. Is there a way to make public transit less unattractive from a health perspective.
- Working from home can greatly reduce our carbon footprint as an institution.
- Air travel should be restricted or carbon offsets should ALWAYS be purchased for every flight taken.
- Remote work options extended to anywhere in Canada could help us make a broader impact.

Equity and Climate Justice and Indigenous values are important and would be good inclusions to CAP for a robust holistic solution.

Thanks and continue with the good work!

| Need to look at whether retrofitting older buildings would be paid off (both financially and environmentally in terms of CO2) before the building is rebuilt/replace. |
| UBC's industrial and corporate partners should be held to strict environmental standards as well as UBC's preferred vendors, couriers, and other services |
| Too much tuition $$$ being spent on pet projects such as climate action plans. Individuals are already doing so much. |

Not at this time. I am interested in learning more and appreciate the university’s initiative to educate us as staff, faculty and students, because in turn, we as individuals, can educate our families and our communities off campus. I am optimistic that we as a larger community, at UBC, and a leader in our province can demonstrate what is possible and lead the way.

remote work option would make most difference in impact for office-based staff, particularly as COVID anxiety may result in more people choosing to drive.

The financial aspect of this is the biggest target. It is understandable that we require industry and to sell/purchase goods and services in order to keep our economy rolling. Historically consumers have been offered all types of products and it is "their choice" whether they wish to use them or not. Tobacco; unhealthy snacks; vape products are a few that come to mind. Industry makes money selling and they will continue to do so without regard for human health or environmental impact as long as our system allows them to reap benefits from selling harmful products. Industry must be made responsible for making money off of consumers. Their products must be fully recyclable non-toxic or they should not be available for sale. If their product causes physical harm (e.g. diabetes) then there must be a tax placed on selling of the item so the cost of down the road healthcare does not fall once again into the hands of the tax payers. Politics must stop bowing down to big money industries.

If the university changed the culture around air travel and conferences it would have a big impact. So much business travel is unnecessary, especially by senior executives.

The questionnaire is very targeted on individual actions, which have been shown to have too limited impact and won't be sufficient.

We need to stop talking about parking and start talking about access: that changes the context and puts the focus onto sustainable, affordable mass transportation. UBC cannot solve it's access issues one vehicle at a time. We also need to look at UBC vehicles - how do we 'green' the UBC fleet (and how do we stop Dept's buying vehicles instead of sharing existing ones...just because you have a grant doesn't mean you should use that on a vehicle). There is a HUGE amount of work to be done on sustainable transportation.

Any recommendation on individual action must be made with affordability in mind. Financial pressure, especially on the younger population, has increased significantly with the pandemic. If the recommended climate friendly choices, e.g. organic foods, are the more expensive option, then it will never be adopted. A large portion of the student body is food insecure, raising the price of food on campus to meet climate targets would be horrifyingly cruel. You cannot get people facing pressing short term problems (e.g.: hunger) to care about long term issues (climate change), no matter how dire.
I think UBC needs to continue to support working remotely post covid (more often than pre covid). I have two young children and I have to drop them off at daycare in the morning. Taking the transit was not an option for me. The only way I can put my effort into climate action is by working from home, so I don’t have to drive my car out everyday. This also saves me lots of commute time which I can then use in other areas, for example choosing more climate friendly foods when cooking for my family. I can also use the money I save from not have to purchase a parking permit on things such as climate friendly products. Those are often times much expensive than what I usually purchase.

UBC NEEDS to include its natural landscape in the CAP. On campus tree cover loss is a big issue. Additionally, sustainable management of turf and other landscapes should definitely be integrated into the plan. Landscape management and operations can have substantial carbon emissions! This is beyond the scope of the biodiversity plan.

I recycle, but most recycling is pointless anyway: only a tiny percentage of anything actually gets recycled. Most plastics aren't recycled effectively. Separating food is a waste of time and effort as it breaks down anyway. I do it, but it's yet another drain on my already limited time.

To reiterate a previous point, commuting to campus by public transit is not an option for me, and I live too far away to cycle. By the time I walk to the bus stop, wait for the bus and -- if I'm lucky enough that it's not full -- then stand all the way to campus, and then walk to my office or the classroom, it has taken at least twice as long as it does to drive (and often even longer), not just because the route is less direct, but because of the additional walking and waiting and because of the slower nature of public transit. I'm also typically carrying at least one very heavy bag, which makes things harder still. If I have to stop on the way to campus or home, for example to buy groceries or to go to the post office, it increases the time even more significantly. I already spend more time working than anything else in my life, and it's exhausting. I am simply not willing to give up even more of my limited free time to commute. With Covid I'm even less likely to take public transit. But, as I rarely travel, drive a car that's relatively low emissions (and also, with working from home I've barely driven at all for the last year), don't have children, don't redecorate my home every year or buy new clothes every month, always cook at home, and don't do the many other things that increase people's carbon footprint, I have no concerns about driving my car to campus, and UBC should have no concerns about my driving to campus either.

UBC can and should do more to improve work-life balance for its employees, and that means not adding yet more chores and more responsibility and more stress to our lives. Instead of adding burdens on individuals, the focus should be on the corporations that are actually responsible for the majority of pollution. UBC as an institution can easily make changes, for example by ending the sale of bottled water on campus, requiring reusable drinkware in all food establishments, and phasing out the use of plastic utensils and single-use plastic containers. Those actions would require little direct action on the part of students and staff.

Divestment of all UBC investments from fossil fuels, polluting industries, and resource-extraction is the most impactful thing the university can do to help reduce the impact of climate change.

Climate action has too many layers associated with it and it is, therefore, a very complex issue. One layer that does not seem to be very well accounted for in here is the issue of time-commitment. For example, recycling and reusing takes time because one has to learn how to do it right first and then execute it. In execution times is allocated for sorting and cleaning some of the things one is trying to recycle or reuse. Another example is transportation, it is very quick and comfortable to go to work driving your own car as opposed to using public transit, which results in about double to time
commuting, or ridding a bike, which results in triple the time or more depending on where one lives. Let's also consider that the closer to UBC campus, the more expensive the property, so riding a bike may not even be possible for most students and commuting by public transit takes longer. So, time allocation to commuting must also be considered.

Picture a grad student with a lot on their plate by mere fact that they are conducting research. That, by and of itself is a huge time commitment. This person also has to find time to self-care by sleeping enough hours (8 hours per day), eating well (accounting for grocery shopping and time dedicated to cooking a healthy home meal: 4 hours per day), exercising (an often times disregarded element in academia, but our bodies DO need exercise: 2 hours per day), mental health caring (also disregarded often times in academia: 1 hour per day). These very basic needs already add up to 15 hours per day. On top of that, that student also has to maintain a job because UBC underfunds their students (best case scenario: 2 hours per day), conduct their research (again, best case scenario: 4 hours per day). Up to this point this student has already at 21 hours of their day gone! With only 3 hours of their day left, this student has to dedicate time to their family if they have one, commute to UBC, get involved in campus activities like this climate action stuff, participate in "leadership" activities if they want to get any additional funding so that they can one day stop working and have more time to complete their degrees instead of having to work, etc., etc., etc...

So, when asking about climate initiatives, please consider time-commitment as a parameter. If UBC would fund their students better, students would have time to network and participate in campus-wide activities that would have a positive impact within UBC. As it currently stands, the situation is such that grad students are below poverty level in Vancouver and need to find additional sources of income, which is a time commitment. Eliminating this time commitment would allow them to be more active and generate ideas that would favor UBC goals.

While individual action is important I strongly believe that UBC is failing to put in place the institutional capacity to develop climate policies that could reduce GHG emissions not only on campus but in Vancouver, BC, Canada and other countries. A fully funded UBC Climate Policy Institute would be awesome and innovative and would show that UBC is serious about identifying, analyzing and evaluating potential climate policy solutions. The effects would dwarf the impact of on campus and individual behavioural changes ...

I recently purchased an electric vehicle and because of my lengthy commute would like to be able to charge at work, however its often hard to leave to move my car after 4 hours --- the parking spaces are also limited. I don't think the charging stations are ever full.

It is important to shift away from placing emphasis on individual responses to holding institutions responsible for implementing sustainable solutions. Currently, the burden is placed on individuals to change their behavior when it is corporations and institutions that are economically benefitting from using and purchasing unsustainable cheaper options. For example, a department will buy cheaper furniture from the States rather than buy something a little bit more expensive locally. People will make good choices when given the opportunity. Vancouver is highly unaffordable so this is a barrier too many people when it comes to making sustainable choices. Compassion is needed to recognize that people have different needs and the solutions will be complex. Marginalized communities will be more impacted by climate change so please be aware of that when taking about timelines.

It is the time to really carefully think about architecture, health and climate sustainability of campus buildings. Many buildings have terrible indoor air, problematic heating and cooling, so that is the problem that needs to be, and that can be addressed sustainably with more research and planning. Also how about more plants, for food, for roof gardens, for indoor green walls?
Through Covid-19 faculty, staff and students have shown great adaptability in teaching, researching, working and learning from home. I hope UBC will also be as adaptable and encouraging of these practices after things return to normal. Commuting to UBC should be done as needed not every single day. This is a great opportunity to reduce pollution through traffic reduction. We’d have less packed buses too!

On air-travel I really hope to see senior leaders at UBC take the lead on reducing their air travel. If they can model good behaviour and reduce their travel I think this will encourage everyone to reduce their air travel carbon footprint.

UBC remains caught in the "more and bigger" agenda of progress that encourages longer CVs, more travel for prestigious research consortia, bringing in international tuition dollars, etc. Even living in Wesbrook Village pre-pandemic (allowing me to walk to the office), all I saw was more expensive for-profit construction (for non-UBC folks) and limited retail options, still forcing UBC faculty and staff who live there to drive frequently to shop off campus. Climate Action will involve campus and neighbourhood planning that STARTS from the premise of ecological sustainability. Perhaps it’s time to focus more on the local? I would also like UBC to just take some non-sustainable travel/food/operations options off the table, because "we just don't do that anymore."

For the love of our environment, UBC's planning office needs to do a better job of long-term campus design. Over the last number of years, I have frequently seen concrete poured for new sidewalks and meeting areas across the Point Grey campus, then seen them torn up 1-2 years later in order to change or build something else. That's incredibly wasteful and increases the amount of carbon our campus produces.

Advanced Planning to Support Robo-Taxi Network

Put pressure on provincial government to build the sky train to UBC NOW

As a UBC staff member (and previous student), I've done a lot of surveys over the years. This was one of THE best surveys I've seen yet. I really appreciated the contextual information, the definitions, and the overall survey design. But what I loved most was the selection of practical solutions you offered for each problem. Thanks for putting together this survey. Please tell the survey designers that they've done a good job.

There have been a lot of "Sustainable plantings" but they aren't. A lot of plantings are not designed for plants to grow, and will probably die within 10-20 years. A fair amount of the construction work does not appropriately protect trees, despite UBC have tree preservation rules. There is an island by the intersection of agronomy and westbrook mall that has a sewer drain, and there's no vegetation around it so the soil, mulch, other debris is just going down the sewer. Also there are a lot of opportunities for stormwater management, like the westbrook remodel, but there are never curb
cuts. Plant management and maintenance is poor which increases risk of injury & damage to humans and buildings

I would like to see divestment from companies that emit large amounts of GHG emissions added to the CAP target.

The survey/current approach do not address the significant impact of the use of technology/social media on the carbon emissions (the use of energy associated with data processing/storage/transmission; the associated hardware and software, etc.). The survey itself seems to be rather selective in its focus (e.g., as it asks about the use of reusable food containers, it overlooks the impact on water pollution). The list of suggested actions/remedies is too repetitive and limited - and misses opportunities uniquely related to UBC as an academic/research community (e.g., no suggestions of encouraging researchers to acknowledge sustainability considerations as they develop their proposals (regardless of the study focus, whether it has anything to do with sustainability or not); no reference to any expectations of UBC community members taking personal responsibility for their use of mobile phones/technology/social media from the environmental perspective, etc.)

There is currently no composting at the UBC Hospital site/building that I work at. I would like to see UBC make some efforts to implement composting in all of its buildings (whether it's on campus, or otherwise).

Working and studying from home does eliminate to/from emissions from vehicles. Offering at home options could help to reduce transportation emissions.

Systemic change is needed. Targets won't be met by individual behavioural changes alone. New UBC neighbourhoods are conventional design- need more vision. Don't deflect responsibility to the individual, UBC as a major institution with a massive budget should put its money where its mouth is and make decisions according to the fact that we are in an emergency. Not clear that message has sunk in.

--Related to the above, another major cultural shift needs to be made around spending money at the end of a fiscal year. There are huge problems in doing so during a pandemic fiscal year end and it's never really been clear to me why this is even a thing. It's hypocrisy and makes no sense to say departments need to cut back, and then tell departments to spend money that has so far been unallocated.

--I'm quite shocked to see such a large emphasis on air travel and that there is even an option for people to state that they are 'required' to travel by air. No one is forced to travel for work, and UBC seems to have this culture of requiring face-time 'to build relationships.' I understand this, but there really needs to be a cultural shift away from these perceptions of forcing people to be physically present in a particular location.

--Organic and plant-based foods aren't necessarily more sustainable or environmentally/climate friendly and shouldn't be presented as such without context.

Feedback on content:
--I appreciate that targets need to be made, but we should be looking at a 100% reduction, not just 75% by 2030. We need to be thinking longer term all the time, and CAP 2030 should reflect a phase/stage rather than a goal. People need to understand that this is just one part. It's shocking this isn't addressed anywhere and that UBC is taking a truncated approach.

--Continuing to work from home post-COVID would help reduce car emissions.

In general I think UBC needs to be aware that the greatest impacts will be made through large-scale structural change and supporting appropriate policy directions at various governmental levels.
Continue remote work after the pandemic ends. Commuting is not only an environmental issue, it's a massive waste of time. I am better able to participate in sustainable food systems (buying local, cooking at home, etc) by working remotely. Commuting will mean returning to highly packaged/distributed food that is a massive waste. Allowing a majority of your staff remain remote will make a huge impact just in terms of commute and food alone.

Why does our printing contractor, Xerox, still not use tree-free paper?! They need to be using this by default, but currently do not.

I believe if we look within our own communities and support the reduction of poverty by supporting community educational opportunities it will help with sustainability as well.

Yes. The #1 step the university should take on its Vancouver Climate Action Plan is to make superior affordable housing available for purchase for faculty and staff, so that they can live on campus long term. Currently, UBC has plenty of land, but it seems to be prioritizing leasing it to developers who then sell to non-UBC people, meaning that UBC faculty and staff have to commute from far away. Rentals are available, but renting is not a long-term solution and the Village Gate units are way too small for families.

It is vitally important that climate change issues are not isolated from the huge socio-economic disparities that existed prior to covid, and have been exacerbated by the pandemic. Increasing socio-economic inequalities should be just as much a priority for UBC as climate change. Unfortunately, some activities undertaken in the name of climate change will increase these disparities.

need to fix the temperature in buildings so as not to waste resources

I am pleased to see that reduction of unnecessary air travel is a priority of UBC's. I believe that systematized mechanisms should be put in place to discourage unnecessary air travel. Examples would include: (A) formal demerits on the annual review for promotion and tenure of professors who flew more than some number of times (e.g., once) per year; (B) increased infrastructural support for virtual attendance of conferences; (C) financial rewards and/or faster advancement to promotion and tenure based on virtual attendance of conferences; (D) financial rewards to departments that generate the lowest amount of carbon emissions per head due to flights; (E) a publicly available yearly report on the collective amount of carbon emissions generated by flights taken by UBC's professoriate; and (F) other measures in that same general vein.

Let staff work from home. We have such a long commute to UBC and many have to drive, we don't want to.

Faculty and Staff housing (which allows walking or cycling to work for the parents and school of their kids) was created to be exactly that - for faculty AND staff. Then a few loud and controversial faculty voices took over the conversation and intimidated and belittled staff. Now it's mostly faculty ad the rental rates reflect that. On-capmpus housing needs to be returned too being for faculty AND staff and rental rates need to be adjusted to reflect how much less staff make in comparison to faculty.

Your scope and framing look excellent!

We have seen the value of reducing commutes and cleaner air quality. This should be a consideration. Climate wellness, human wellness. More time to participate in communities, including those who live at UBC.

It looks sufficient

Remote work/education reduces commuting, waste and provides better food choices. If you are serious about this, don't let departments go back to the way things were just because some manager works better that way and thinks everyone else should too.

Printers! Discourage the use of printers in every office especially as most units have a large printer/Xerox accessible for large numbers of staff.
Having a printer beside someone's desk so they don't have to get up and walk down the hall should be strongly discouraged!

E-waste bins should be located around campus so that students/staff can dispose of broken/old/hardware. Is e-waste to Building operations promoted at student residence? Or even in office spaces?

**Climate justice, gentrification, white-washing of programs and initiatives**

I think the plan should include emissions targets in relation to new buildings being built on campus and a commitment to divest all university pension funds and any other investments from fossil fuels or other climate change causing businesses or areas of the economy.

I would like to see UBC focus on its financial investments (divestment from fossil fuels was a really wonderful step), on supporting climate research, and on working with the Musqueam and other Coast Salish Nations to promote Indigenous-led climate action and climate justice. I'd also like to see more campus shuttles. I would not like to see a lot more energy put into recycling and whatnot--I think we are doing a pretty good job with that and have been for a while. Also, as a member of the research faculty, I'd like to be funded and evaluated in a way that would encourage fewer, longer international trips. Thank you!!!

Ensure that the onus of change is on the institution not on individuals. Ensure that an intersectional lens is taken to understanding the impacts of climate action policies on multiply-marginalized groups.

The investments that the university engages with will also have an important impact, as will UBC's business partnerships, etc. The impact of these cannot be ignored while asking under-resourced students and staff to take action.

UBC should encourage plant based catering at events by departments and Centres etc.

I think UBC should also be implementing sustainable buildings on campus, as well as sustainable building/construction practices. It's always discouraging to see how UBC continues to cut down more trees.

My above thoughts continued. The management is not holding staff with respect or showing good will in terms of reciprocity. I think in order to do the work with the land we need to work with one another. We need to take these values and apply them across the board. This requires a look at structures that management uses which is a harsh power over model vs a power together model. We can't just decolonize our time in the garden or walking in the woods with children. We need to change our thinking by looking at the hierarchical structure that's in place right now and replace it with a form of management that reflects respect, reciprocity and reverence. This process has to be for everyone. UBC needs to rethink their management choices at UBC childcare and take the leap to promote harmony and well being for employees so they feel safe and supported to do this decolonizing work.

While a mandate may not be feasible or appropriate at this time, UBC adopting and communicating a 'virtual-preferred' policy for business travel could be very supportive in shifting the norm to online conferences etc.

have not fully reviewed yet but hope to provide input. Thank you for this important work!

When I first arrived at UBC as an international student, I was overwhelmed with the amount of expenses I had in my first months, considering the costs of travel/moving, tuition/students fees, unaffordability of rent in Vancouver, high living costs, etc. I was also chocked with the discovery of the "take-out", single-use culture in North America that is less prominent in my culture. I would like to help students chose zero-waste options over single-use and I believe one first step would be in the
financial incentive. Supporting students in this initiative through financial relief or a "arrival care package" of reusable items could be an effective first push towards zero-waste.

It's important to provide containers to collect waste paper, garbage, etc; but it's equally important to keep them serviced and clean--not always the case, unfortunately.

This is very important and it would be good if we had strong leadership guiding the UBC community.

Individual choices are such a small drip in the bucket. UBC should also lend their voices to collective climate change and ensuring pension funds do not support oil/gas industries. Climate change is inherently tied to Indigenous sovereignty and efforts of land defenders need to be supported fully by UBC. I would like to see stronger statements in regards to opposing pipeline construction in BC.

The targets are succinct, aggressive yet achievable with the required resources.

"Academic District Energy System: By 2030, 100% of the energy used by the Academic District Energy System will come from low carbon sources." seems very aggressive and not achievable.

The costing section of the draft targets are very limited to the cost of carbon liability but does not address the increased costs (both financially and staff required) of achieving these targets. For example, at the current budget and rate of replacement, we will not electrify all building level gas fired equipment; we currently do not have a way of quantifying food related carbon footprint, will we have the resources to facilitate this?

Metrics drive behavior so we need to ensure that we review how we measure things to ensure we drive the desired behavior. We need a more systematic change in the way we operate.

It will further destroy Canada's economy relative to the rest of the world.

Encouraging other offices connected with UBC ( Medical, law, contract companies,..) to replace mail communications with electronic communications such as secure fax or email and spread the climate action beyond the campus.

Need a lot more focus on the system/decision making level. Infrastructure, renewable energy, governance and decision making throughout the organization, climate KPIs.

I often wonder with our food vendors why they are allowed to sell items in single-plastic use containers when more eco-friendly options are clearly available, e.g. plastic beverage bottles when metal or glass are clear alternatives.

Thank you for taking action on the climate emergency. I am happy to participate more and love how the momentum of this project provides additional motivation.

Please consider built environment factors and system design that support individuals to take more sustainable action without really having to think about it or 'choose' it. For example, so many people are confused about how to sort their own waste or dont have the time. So ensuring that the waste being produced is more easily/obviously sorted (ex. everything is compostable other than cans/glass) would be extremely helpful for changing individual behavior. Or hiring people to sort waste.

UBC is in a position to offer public data on both its own operation and the wider business community.

UBC should be a clearing house for reliable data and best science on climate issues. For example, SFU published an assessment of TMX https://biv.com/article/2021/03/sfu-study-says-tmx-provide-no-net-benefit. UBC should increase its media footprint on climate matters.

It is odd that public-facing climate information comes from online projects like skepticalscience.com and not from large research-oriented universities like UBC. That needs to change, because universities like UBC are an authoritative voice that can reply to the immense effort of disinformation coming from the fossil fuel industry in particular, but from the business community in general, which
promotes to our peril the business as usual model in a time of crisis.

On a practical level, UBC should use its influence to put pressure on the businesses it works with. Vendors should be ranked according to their sustainability and more sustainable vendors should be preferred. Rankings should be made public.

Air travel, students: Try to reduce air travel by students.
For example:
- Provide incentives for students to stay on campus between the winter terms
- Reduce (or stop increasing) number /percentage of international students.

Just to keep in mind that the sustainable choice may often come with a larger ongoing cost to maintain that choice, and ongoing funding will need to be allocated to ensure those choices are fiscally sustainable.

I think the focus should definitely be on policies and collective action rather than individual behaviors.

Continue to maintain the university campus more Greenpeace

Here are some ideas:

- Invest in green investments
- Monitor the carbon footprint (of individuals/faculties etc)
- Make penalty/incentive for low footprints
- Vegan options as default
- Extra high parking fees
- More protected bike lanes
- Start Parking Days
- Free bike-repairs services? Service to swap/buy used bikes? Security against theft?
- Subsidize e-bikes
- Green insurances
- Include ESD in all different subjects!!
- Make plant-based products the cheapest option in UBC canteens
- Stipends/awards for sustainable research
- Encourage people to vote for a sustainable party
- Offer sustainable food, i.e. local, seasonal, vegan, organic. It should be cheap and fresh, potentially subsidized by the UBC.
- Forbid certain plastic products?

Climate Venture Studio supporting translation of research to societal impact for climate solutions via Innovation UBC and entrepreneurship@UBC

I think the most important thing to remember is that changes need to be as easy for people to adopt as possible. Don't make actions harder than they need to be or force people to go out of their way to be sustainable - make it the easier choice! Keep information clear and any physical places/resources easily accessible; messaging should not indicate that behavioural change is a sacrifice, but a good and easy thing to do! Do also keep in mind that while working from home or reducing conference travel is good for the planet, it's also really important to maintain good networking opportunities, and a virtual conference will simply never be the same as an in-person one. One way to reduce emissions could be a yearly quota for travel, but with a cap-and-trade system so people who don't need to travel much could "transfer" their quota to others who do (making it more equitable in that way as well). I also know how difficult this will be due to COVID, but encouraging sharing of resources and repair of items
instead of single-use will go a long way. And of course, we need more research on how to reduce emissions, along with ways of implementing that research into policy and practice. I believe that special support should be given to sustainability-related entrepreneurship and research to help us find better ways of doing the things we already do, so that we can maintain our current lifestyles to some degree as well!

**Banning meat products on campus would directly contribute to reducing emissions and would make a bold statement to the UBC community and beyond.**

**All individuals are responsible to make our lives more sustainable - but as a leading institution, UBC must recognize how intersections of experience affect people’s financial and physical options (driving, parking, part-time staff with invisible disabilities not qualifying for COVID office supplies...etc). How can UBC make the largest impact by asking those in positions of privilege to do do things differently? Stop flying, stop cutting costs on purchasing large orders of unsustainable UBC SWAG, make sure all janitorial supplies are biodegradable, sustainable, recycled TP etc) Whose job is it to review the big spending and ensure it is in line with Climate Action commitments? Thanks for this work &lt;3**

**Working from home reduces commuting impacts as well as increasing how well I eat and minimizing the waste I create in my meals**

**I am still learning about CAP 2030 -**

**Perhaps as well as UBC centered initiatives - to provide resources on how we can make wider policy changes - for things ranging from pipelines to animal agricultural subsidies - how can UBC harness its community to be a leader in addressing climate change?**

**Myself and many staff strongly urge UBC to lead by making at least hybrid work-from-home arrangements permanent for staff to bounce forward rather than back and help reduce GHG emissions through this initiative.**

great target but we need to make it financially work as a non core faculty

**Focus on the "big stuff" - hold the institutions of UBC accountable. Also, the appetite for online learning will be very close to zero post Covid, and perhaps focusing on green commuting/sustainable campus living would be a much better focus than pivoting to online learning.**

1.) Given that commuting is a huge source of GHG and there is an acute housing crisis in V, why is the University not focusing on providing more affordable housing on campus for students, staff and faculty? Costs on campus are higher than off campus.

2.) What is being done to reduce single-use plastics in labs? There is a hidden crisis of plastic waste in labs that is not being adequately addressed. Most labs do not work sterile and could reuse plastic, yet there is neither the education nor the infrastructure to reduce and reuse. A solution here would be to have a centralized plastics pick-up and cleaning service on campus.

**Urban biodiversity, inclusion**

**Please do not hesitate to be bold and ask for redirecting funds from travel towards research on digital presence tech in order to minimize the need for travel.**

**I strongly disapprove of buying carbon offsets: this is an accounting trick to trade money for real progress. Let's be alert to other fake ways to improve poorly-designed performance metrics and make sure our improvements are real.**

**We could cut UBC's CO2 emissions to zero by closing the University forever. That would obviously be a greater reduction than anything the CAP might produce, and yet the net impact on global emissions would still be too small to measure. My point? The direct benefit of CAP 2030 will be completely irrelevant to solving the world's climate emergency. We must admit this and push hard on maximizing the indirect benefit instead. That is, we need swift global change on an utterly unprecedented scale. The main point of the CAP should be to earn UBC enough clout and credibility that we can**
effectively change the behaviour of public opinion and world leaders. This means that the communications and promotional aspects of the plan must be given very high priority. (And for this, honesty and transparency are essential -- a callback to the previous paragraph.)

I hope that UBC will recycle material from buildings that are gutted or taken down. And when UBC contracts out to construction companies that sustainable practices will be a major factor in who to choose.

This is probably the most important thing for the UBC Community to work on over the next few years. Thank you for your work!

No project is well supported

There are 117 months to 2030. We need 1% of today's level of fossil emissions cut each month down to 0% by 2030.

I would like to connect with some folks about the UBC Climate Action Plan to see whether we could collaborate or support your effort by providing embodied carbon, circular design, and operational carbon expertise. My contact info is: Jesce Walz jesce.walz@perkinswill.com

I think we should go carbon neutral

Fair, of course

Focus on fairness and justice

YES

YES

Pay attention to the fair

Energy conservation and emissions reduction

Energy conservation and emissions reduction

fair

fair

Expand scope to define project work development

I hope to be fair and just

Taking into consideration materials, supply chain, delivery emissions and maintenance costs, etc. I would like to see signage in bathrooms across campus explaining which is more sustainable: air dryers or paper towels

Climate change is happening, for all of us. No country or community is immune.

UBC should stop cutting down trees!

Thank you for doing this urgent and important work!

I think climate justice and an intersectional approach to this action need to be central to this plan. I hope that UBC will also aim for more than 45% reduction in extended impacts as it's not clear why this number was set and if the university takes strong actions to support sustainable transit and food choices while discouraging air travel, etc. I would hope a higher reduction could be achieved.

Thanks for the work your team is doing for CAP! Excited to see many of these ideas come to life :)

Minimise commutes by allowing people to work remotely multiple days per week post-pandemic. Also helps with the inequities as poorer people cannot afford housing in Vancouver anymore, so enables people to live further and only come in now and then.

please include the role of sustainable buildings, wildlife-friendly products (bird-friendly coffee), wildlife-friendly landscaping.

I hope the plans will embrace the idea that the performing arts are a really powerful way to engage in these topics and with the community-at-large around these issues.
Stop worrying about disposable coffee cups and focus on what UBC’s role is in lobbying for better mass transit.

Textbooks usage is a big part of GHG emissions. Professors should encourage electronic versions, sharing or using old editions more often.

Behaviour change is very important, but institutional change has the biggest impact.

The ability to work from home will reduce travel emissions (cars, etc.), and it reduces the carbon footprint from reduced building occupancy, and more effective use of building spaces. Work from home should continue to be encouraged even post-pandemic.

While the efforts UBC is taking are commendable, I must ask what is being attended to regarding the design of new buildings and the retrofitting of older ones? This is a huge issue for energy use and long-term impacts on our environment, locally and globally. I know you've been working on this. I've also noticed that one overall issue with newer buildings like the CIRS (Centre for Interactive Research on Sustainability), the Beaty Biodiversity Museum or the AMS Nest is that they favour open interior architecture, which leads to a loud and overly-stimulating environment. I find this incredibly difficult to deal with, and wonder if or how these stark places can be noise-dampened in some way. Also, the "smart" toilets in the AMS Nest have a prolific tendency to flush at least four+ times while one is using them, or even just changing for a yoga class. Not terribly intelligent if you ask me. I also expect that climate control might be more difficult in large open spaces, whether heating or cooling.

For myself, I've found parts of helping with this effort much more difficult during Covid due to having to use more single service consumables and commuting to work with my personal car. Given that I'm one of the staff that needs to be on-campus to work my job, this is very frustrating. Perhaps I can start cycling with spring's opening. I prefer public transit, due to not having to drive, but I cannot risk my health by using it. It also restricts the daily walking I do, which isn’t good either.

While it’s great that we have a 2030 plan to be carbon neutral, shouldn't this have mostly happened a decade ago? What happened to Kyoto 2012 goals? I'm so tired of hearing the talk from everywhere in our country and not seeing more action on really cutting back to change our spiking temperatures across the globe and the often permanent detriment to environments around the world. This is far more an institutional, corporate and large firm issue than just what individuals can contribute to (though I'm not saying we shouldn't try). Are we teaching students about what the large banks are investing in, such as oil & gas, mining and chemicals? Or poor forestry and large agri-business practices that are not sustainable? What about more active respect for our First Nations throughout BC and Canada: their causes and needs for environmental and social restitution from us?

If we cannot make wise choices with where we entrust our finances, how can we change the impacts of large financial banks & insurance companies on what they support? Does UBC teach students (not just business students) about better, sustainable companies that are developing for the future beyond where our economy and society stands now? What is life going to look like post-oil and in a land that switches to more long-term strategies for harvesting our forests and growing food that we need in our country - even restoring more of the manufacturing sector that has been divested into China and other countries over the years. These are huge issues that need addressing and that UBC has the capacity to do if you choose to. As a large university that has a great deal of influence around the Americas and the world, this is something that we need to stand out on - not just with words, but with serious and sustained action.

Focusing on systemic and policy changes at the institutional level (eg divestment) should be prioritized over individual behavior changes (eg educational materials about recycling)

Incorporating a meaningful biodiversity strategy into CAP 2030 will have social, cultural, economic, and environmental benefits; many biodiversity management strategies also have significant climate co-benefits (e.g. carbon sequestration through urban forests, green roofs for urban temperature
regulation, ecosystem-based stormwater management systems). It is also critical that racial justice and Indigenous sovereignty are included and addressed in CAP 2030, as any climate policies must recognize the communities on the frontlines of the climate crisis.

We need a tree canopy coverage inventory and a plan to increase our canopy coverage. As it stands now we do not know how much tree canopy coverage we have or are losing. With this plan should include storm water management and recovery.

Please make an effort campus wide to reduce the number of people coming to campus each day by way of zoom or virtual learning. This will improve the quality of life for so many staff who commute to campus each day. They gain valuable time with family and the ability to take care of themselves much more than sitting in a car for hours each day to travel to work. Please make a meaningful effort to encourage work from home whenever possible for people and for the planet.

We need bold action from UBC Leadership to ensure individual departments are supporting staff to address the climate emergency through remote work and reducing air travel with virtual meetings/events. For instance, we need a university-wide policy that allows all eligible staff to work 3-5 days a week from home if they want to...more impact will happen if this is something mandated across the University as oppose to left up to individual units to decide (where work place cultures differ so widely).

Thanks for the opportunity to provide feedback. I believe that while education that enables individual choices can be empowering, there needs to be more cultural/structural attention to addressing this issue immediately. This should include divesting of all fossil-fuel related investments by the university and provision of financial incentives/perks/subsidies for behaviours that will support the transition to a sustainable future. As someone who already engages in a low-waste, climate friendly lifestyle as much as possible, I recognize the financial and capacity-related issues that might be barriers for many. In fact, it has been difficult for me, someone who has relatively good access to financial resources and time needed to make informed choices, to stick to my principles. And that can be agonizing and difficult. Workshops and educational materials alone are not sufficient for people to be able to make needed changes personally.

I often noticed that the lights in the fields/track fields were left on even no one was using them. I live on campus, and I feel it's a lot of electricity waste when I see the lights on around 11pm. Are there any automatic switch that turns them off at the certain time?

I pay for parking every day. I’m not against transit (but takes a while from Richmond - 2 exchanges/3 vehicles), but refuse to pay monthly parking AND transit pass. I would love a combined pass that allows for either Transit Ride OR parking (since I can't use both on the same day).

There is very little discussion in my department about climate or environmental impacts resulting from department activities. A mandate to report on impacts would be great!

I started working for the ISC in January 2021. I've worked remotely the entire time and see no need to return to campus full time. Working from home saves not only on commute but reduces food waste and packaging.

During the Covid-19 pandemic, my building sat empty, yet for every single day and night the lights remained on throughout the building's halls. Investing in a lighting retrofit for motion activation would not only save money but also the environment

I am off work right now with an immune deficiency disease but when I return I would like to decolonize the daycare I work at. I intend to use Braiding Sweetgrass and the ideas od the Honorable harvest to start this conversation. I am interested in the ideas of respect, reciprocity and reverence in terms of the natural word and us as humans being a part of this. Unfortunately the climate with management and the childcare workers has eroded so much up at UBC childcare services under covid
<table>
<thead>
<tr>
<th>The woods on and around campus are amongst the most precious resources. Grow it, don't cut it. Reduce streets and parking.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing about UBC divestments in oil. Nothing about converting farm land into housing. Nothing about making affordable ownership of housing for faculty and staff on campus. Nothing about loss of growing land to development.</td>
</tr>
<tr>
<td>just think of people who CANNOT bike for health reasons before telling everyone to bike to work</td>
</tr>
<tr>
<td>Turn off the lights as soon as possible</td>
</tr>
<tr>
<td>I think policy changes are really the only effective way to change people's behavior to the extent that it makes a major impact.</td>
</tr>
<tr>
<td>Buses from downtown and along the Broadway corridor are too busy and take too long. I have lived in NYC and London, and commuting there was better than commuting to UBC. Driving my own car to campus is the only feasible option for me. My commute takes me less than 30 mins door to door in my car; it takes more than 1.25 hours if I take transit. This is not feasible.</td>
</tr>
<tr>
<td>We ship our green waste off campus instead of reusing it like we have in the past so we are going backwards. Building operations.</td>
</tr>
</tbody>
</table>