UBC Climate Action Plan 2020 – Phase 2

Public Consultation Summary Report

May 2016

campus + community planning



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

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1. Executive Summary

UBC is undertaking a process to develop a new Climate Action Plan (CAP 2020) for the Vancouver Campus. Over the past 9 months, UBC Campus and Community Planning (C+CP) has been seeking input from the campus community on what actions the University could take to achieve the Board of Governors 2020 climate action target of reducing our greenhouse gas (GHG) emissions by 67 per cent below 2007 levels.

The process to develop the CAP 2020 builds on UBC's Climate Action Plan 2010, which set a target of reducing Vancouver Campus GHG emissions by 33 per cent below 2007 levels by 2015. In 2015, UBC achieved a 30 per cent reduction in GHG emissions below 2007 levels, which is a significant achievement given the increase to both campus floor space and enrolment since 2007.

This report summarizes the input received during the second phase of public consultation on the CAP 2020, which took place from March 14 – 27, 2016, with opportunities to provide input in person at the six public open houses and online.

C+CP provided notification of the public consultation opportunities through advertising, email, online, and outreach to 100 campus stakeholder groups. As a result of these efforts, we had:

- 614 unique page views to the CAP 2020 pages on the C+CP website
- Over **350** people attended the six public open houses
- 46 questionnaires completed, and
- 1 letter submission.

Executive Summary of Feedback Received

We heard support for the proposed option of expanding biomass capacity at the Bioenergy Research and Demonstration Facility, however some were concerned about the cost of this option and the sustainability of the energy source. With regards to the option of pursuing renewable natural gas, we heard concerns regarding it not being a sustainable energy source as well as concerns regarding cost, availability of supply and health and safety considerations.

With regards to the proposed actions, we heard support for actions related to new and existing buildings, particularly for improving performance of existing buildings. Support was also expressed for introducing more electric vehicles in UBC's fleet. For UBC-owned vehicles, there was a concern that investment in in this area would not result in a significant reduction to GHG emissions. For behaviour change we heard support for introducing incentives to change behaviour, more education, for pursuing behaviour change programs that are validated by research and quantitative findings, and support for behaviour change actions related to sustainable transportation. We heard strong support for UBC investing in sustainable transportation options to reduce GHG emissions, as well as support for UBC pursuing rapid transit to the Vancouver campus.

A few comments were received urging UBC to divest from fossil fuel investments.

Detailed feedback and responses are included in Section 5.

2. Public Consultation Process Overview

The public consultation process to develop UBC's CAP 2020 has taken place over two phases – September 2015 (Phase 1) and March 2016 (Phase 2).

In Phase 1 (September 2015), public consultation focused on ideas generation and asking researchers and the broader campus community to submit their ideas on how UBC might reduce its GHG emissions towards the 67 per cent target by 2020. In this phase we were seeking ideas in four key areas of emissions reductions – behaviour change, UBC-owned vehicles, energy supply options and energy use in buildings (new and existing). A report detailing what we heard in Phase 1 can be found <u>here</u>.

In Phase 2 (March 2016), after evaluating ideas received and through further technical and feasibility analysis, we consulted the campus community on potential actions and options UBC could pursue in the CAP 2020 around the same four areas identified in Phase 1.

The opportunities to learn about the process and provide input in March 2016 included:

- Online consultation from March 14 27 at planning.ubc.ca
- Public Open Houses (6)
 - o Tuesday, March 15, 11:00am 1:00pm, Martha Piper Plaza (Ripple Campaign Event)
 - o Wednesday, March 16, 11:00am 1:00pm, I.K. Barber Learning Centre, 2nd Fl Lobby
 - o Thursday, March 17, 11:00am 1:00pm, AMS Student Nest, Upper Agora
 - o Tuesday, March 22, 11:am 1:00pm, Pharmaceutical Sciences Building, Atrium
 - o Wednesday, March 23, 11:00am 1:00pm, CIRS, Lobby
 - o Thursday, March 24, 11:00am 1:00pm, Fred Kaiser Building, Atrium

3. Public and Stakeholder Notification and Outreach

Notification of Public Consultation

C+CP provided broad notification of the March 14-27 public consultation through the following channels (circulation numbers, when known, are shown in brackets).

Print Advertising

- Vancouver Courier, published on March 3 and 10 (circ 51,850)
- The Ubyssey, published on March 8 and 15 (circ 12,000)
- The Campus Resident, published on March 14 (circ 9,500)

Newsletters

- UNA e-newsletter on March 10, 17 and 24 (circ 2,475)
- The C+CP e-newsletter on February 11 and March 10 (circ 2,135)

Website

- C+CP website project webpage (614 unique page views)
- The C+CP website event calendar
- UBC Events web page on from March 14 27
- Post on UBC internal communication website (http://faculty-staff.ubc.ca/)

Print Materials

- Posters distributed to residences (363)
- Posters distributed to affiliated theological colleges (15)
- Bookmarks distributed at outreach events (750)

Digital and Social Media

- Campus digital signage between March 14 27
- Posts to C+CP Twitter account between March 14 27 (1,831 followers)
- Posts to UBC Sustainability Twitter account between March 14 27 (9,430 followers)
- Posts to UBC Sustainability Facebook account between March 14 27 (2,127 followers)
- Posts to UBC Twitter account between March 14 27 (25,300 followers)
- Posts to UBC Facebook account between March 14 27 (143,855 followers)
- Posts UBC Student Twitter account between March 14 27 (2,999 followers)

Stakeholder Engagement

An email toolkit with information on the public consultation, opportunities to provide input online and in person, links to the website and online survey, and a request to share the information with their networks was sent to 100 campus stakeholder groups (see Appendix II for a detailed list).

In addition to the email toolkit, a Lunch and Learn event was held on March 8 for sustainability focused campus stakeholders to share information about the consultation process and opportunities to provide input. The following campus sustainability groups were invited to attend:

- AMS
- Arts Undergraduate Society
- Bike Co-op
- Botany Enthusiasts Club
- Commerce Undergraduate Society
- Common Energy
- Engineers for a Sustainable World
- Forestry Undergraduate Society
- Land and Food Systems Undergraduate Society
- Geography Students Association
- Global Lounge, Student Affairs
- GSS

- UBC Sustainability Coordinators
- UBC Sustainability Ambassadors
- SHHS Resident Life Managers
- Social Justice Centre
- Sprouts and Seedlings

4. Public Consultation Format

Public Open Houses

Six public open houses took place during the consultation period in high traffic areas across campus for two hours over lunch time (see Section 2 for event details). Each event had display boards set up that summarized the background, scope and process to develop the CAP 2020, the proposed actions and options, and the opportunities to provide input online or in person.

C+CP technical and public engagement staff were on hand to answer questions and discuss the consultation materials. In addition to C+CP staff, a few of the open houses also included participation from Common Energy students.

The questionnaire and public open house display boards are included in Appendix I and Appendix III.

Online Consultation

Online consultation on the C+CP website provided an overview of UBC's successes to date in climate action planning, choosing the path forward, the analysis that was applied to the proposed actions and options gathered through stakeholder feedback and public consultation, the proposed actions and options related to energy supply, energy use in buildings, UBC's fleet, individual behaviour and other complementary opportunities, in addition to a summary of the process and timeline, and consultation information (including a link to the questionnaire). Links to climate change and climate action planning resources were also included.

Online consultation took place between March 14 and 27.

A copy of the website information is included in Appendix IV.

5. Feedback Summary

Online and Public Open House

Questionnaires – What we Heard

Below is a summary of the comments we received through the online and public open house questionnaires. The tables below reflect the comments we most frequently heard from the 46 questionnaire respondents. Comments received 2 or more times are represented in the tables below, along with how the feedback has been addressed in the submission being provided to the UBC Board of Governors for approval.

Verbatim questionnaire comments are included in Appendix V.

Question 1(a) – Renewable Natural Gas (RNG)

What comments do you have regarding the proposed energy supply options UBC is considering pursuing to further reduce GHG emissions?

Theme	#	Outcome
Concerns about RNG not being a sustainable energy source.	13	Additional study and review is being done on renewable natural gas prior to any decision on this energy supply option. RNG is generated from organic waste. Because of its biological source, as an energy source it is considered carbon dioxide neutral.
Concern about the costs associated with the RNG energy supply option.	9	Additional study and review is being done on renewable natural gas prior to any decision on this energy supply option. Further financial modeling is being undertaken with regards to energy supply options and will be subject to meeting criteria such as financial return on investment.
Suggested alternative energy supply options to meet energy demand (biomass, solar, wind and geothermal).	6	Alternative options have been reviewed and those not recommended may be reconsidered in the future as financial factors change.
Support for the proposed renewable natural gas energy supply option as a supplementary option, to meet demand that cannot be met by the expansion of the BRDF.	5	Support is welcome and appreciated.
General comments of support for the RNG energy supply option.	4	Support is welcome and appreciated.
Concerns about the available supply of renewable natural gas.	4	Additional study and review is being done on renewable natural gas prior to any decision on this energy supply option.

Theme	#	Outcome
Confusion about what renewable natural gas is.	3	Renewable Natural Gas, or RNG, is 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, as an energy source it is considered carbon dioxide neutral. This clarification has been added to the CAP.
No opinion.	3	
Suggested energy efficiency measures instead of energy supply options	2	The CAP 2020 includes actions to explore further energy efficiency measures, and also to strengthen behaviour change programs in order to reduce energy consumption.
Concerns about health and safety associated with the renewable natural gas energy supply option.	2	Renewable natural gas does not carry any health and/or safety risks for the campus community since the fuel is generated off-campus, is interchangeable with conventional natural gas and is carried within the existing gas network in BC.

Question 1(b) – Biomass Expansion

What comments do you have regarding the proposed energy supply options UBC is considering pursuing to further reduce GHG emissions?

Theme	#	Outcome
General comments of support for the biomass energy supply option.	17	Support is welcome and appreciated.
Concerns about biomass not being a sustainable energy source.	8	Additional study and review is being done on biomass expansion prior to any decision on this energy supply option.
Concern about the costs associated with the biomass energy supply option.	5	Additional study and review is being done on renewable natural gas prior to any decision on this energy supply option.

Theme	#	Outcome
Suggested alternative energy supply options to meet energy demand (hydro and waste-to-heat).	3	Alternative options have been reviewed and those not recommended may be reconsidered in the future as financial factors change. In most cases, if an alternative sources was not pursued it was due to an expected negative return on investment.
Suggested energy efficiency measures instead of energy supply options.	2	The CAP includes actions to explore further energy efficiency measures. Note also that the analysis indicated that meeting targets will not be possible given energy efficiency measures alone.
No opinion.	2	

Question 2(a) – New and Existing Buildings

What comments do you have regarding the proposed actions to further reduce GHG emissions?

Theme	#	Outcome
General support for actions identified to reduce GHG emissions in new and existing buildings	11	Support is welcome and appreciated.
Support for investing in improving performance of existing buildings	6	Support is welcome and appreciated.
Support for UBC being even more innovative in its approach to achieving GHG reductions in new and existing buildings	4	The CAP 2020 includes actions to explore further energy efficiency measures and continues to strive for excellence in operational sustainability within the resources and avenues available to the University. Innovative solutions will continue to be sought as part of the Green Building Plan and Campus as a Living Lab projects.
Support for adopting Passive House design principles for new and existing buildings	3	These will be considered within the UBC Green Building Plan, which will be developed in 2016/17 with input from the public and stakeholders.
Concern regarding loss of trees and green space with construction of new buildings	2	UBC has a policy regarding relocation or replacement of trees lost (a one for one replacement requirement in neighbourhood developments) and makes every effort to retain trees when possible.

Theme	#	Outcome
		UBC also plans to develop a Forest Management Plan in 2017-18 that can explore opportunities to enhance tree cover on campus.

Question 2(b) – UBC-Owned Vehicles

What comments do you have regarding the proposed actions to further reduce GHG emissions?

Theme	#	Outcome
General support for actions identified around reducing GHG emissions and UBC-owned vehicles	10	Support is welcome and appreciated.
Support for using more electric vehicles	9	Pursuing more electric vehicles is included within the CAP 2020 detailed actions.
Concern that GHG emissions related to UBC-owned vehicles have a minor impact on UBC's overall emissions	3	This point is acknowledged in the CAP 2020 Plan.
Suggestion to increase the number of electric charging stations on campus	2	Reviewing charging station infrastructure is included within the CAP 2020 detailed actions.
Support for using more hybrid vehicles	2	Pursuing more alternative/high efficiency vehicles is included within the CAP 2020 detailed actions.
Support for using appropriately sized vehicles for maintenance work	2	Support for right sized vehicles is included in the detailed CAP 2020 actions.

Question 2(c) – Behaviour Change

What comments do you have regarding the proposed actions to further reduce GHG emissions?

Theme	#	Outcome
General support for behaviour change actions identified	7	Support is welcome and appreciated.
Support for pursuing behaviour change actions that are evidence based	4	Research and monitoring of effectiveness are included within detailed CAP 2020 actions.
Support for introducing incentives to change behaviour	4	Support is welcome and appreciated.
Support for investing in more education around behaviour change	3	Support is welcome and appreciated.

Theme	#	Outcome
Suggestion that changes to building systems will better achieve GHG emission reductions rather than investing in behaviour change measures	3	Building system optimization is also included within the CAP 2020 actions.
Suggestion to focus behaviour change on actions such as turning off lights and computers	3	These actions will be included in behaviour change program design due to cost saving potential.
Support for introducing ways to enforce behaviour change, such as a campus carbon tax	3	Measures like this will be considered in future investigation of incentives.
Support for UBC divesting from fossil fuel investments	3	Divestment from fossil fuels is out of scope for this planning process, which focuses on reducing UBC's GHG emissions.
Support for behaviour change actions related to sustainable transportation modes (biking, transit)	2	Support is welcome and appreciated.

Question 2(d) – Other Ways UBC Can Reduce Emissions

What comments do you have regarding the proposed actions to further reduce GHG emissions?

Theme	#	Outcome
Support for investing further in sustainable transportation options for the campus community (e.g. car share, cycling, use of transit, subsidies or incentives)	11	Support is welcome and appreciated.
Support for rapid transit line to UBC	7	Support is welcome and appreciated.
Suggestion to look further into existing systems and other opportunities to reduce GHG emissions	3	CAP actions will be reviewed and updated periodically as part of implementation, including incorporation of latest research.
Suggestion to reduce air travel for movement of goods and services, as well as faculty and staff travel	2	Goods air travel is outside the scope of the CAP 2020 process, however faculty and staff travel action is proposed as part of the CAP.
Suggestion to look at the education model and class schedules to identify opportunities to reduce GHG emissions	2	Captured within the detailed CAP 2020 actions for facilities planning.
Support for encouraging telecommuting and use of videoconferencing to reduce GHG emissions	2	Included within the CAP 2020 business travel actions.
Suggestion to further explore GHG emission reduction opportunities related to food (e.g. institute Meatless Mondays across campus)	2	Food-related GHG reduction opportunities will be further explored, as per the proposed CAP 2020 actions under Complementary Opportunities.

Question 3.

Other comments.

Theme	#	Outcome
Suggested alternative energy supply options to meet energy demand (tidal, hydro, solar).	4	Alternative options have been reviewed and those not recommended may be reconsidered in the future as financial factors change.
Suggested actions to decrease scope 3 GHG emissions from transportation (encourage the use of public transit by supporting the U-pass program, address high-cost of housing on campus to, stagger work and class hours on campus to decrease traffic congestion).	2	Note that since Scope 3 emissions are not included in the GHG reduction targets they are not the main focus of the plan. However, UBC continues to support U-pass in conjunction with the Compass card. The CAP includes an action to continue to develop additional housing options on campus. The CAP action matrix also includes an action to further investigate the opportunities to change class schedules.
Request that more information on the energy supply options be provided.	2	Additional study and review is being done on energy supply options and no decision has been made yet. These studies are expected to complete in early 2017, at which time recommendations will be brought forward to the UBC Executive and Board of Governors.
Suggested waste reduction to decrease GHG emissions.	2	Included in the CAP 2020 actions.
General comments of support for the UBC CAP 2020.	2	Support is welcome and appreciated.
Proposed other climate actions to reduce GHG emissions (encourage the use of electric vehicles on campus).	2	The CAP includes an action to continue to pursue more electric vehicles on campus as they become feasible.

Letter Submissions

One letter submission was received expressing support for implementing automatic light switch offs or movement sensors for lights when rooms or buildings are not in use (e.g. overnight).

Outcome

Building automation energy conservation measures will continue to be pursued where feasible, and automated lighting controls are normally considered within new green building projects. However,

while lighting controls are important, they are a lower priority in the CAP than measures that reduce GHGs, due to the relatively low carbon footprint of electricity, particularly in existing buildings.

6. Participant Demographics

The participant demographics below reflect the responses from the 46 questionnaires.

How are you associated with UBC?	Count
Staff	24
Faculty	11
Alumni	8
Student	7
Other (UEL resident, consultant/contractor, former staff, post doc)	5
Neighbourhood resident (UNA)	4
No direct association to UBC	0

How did you find out about this event?	Count
Email	33
Other	5
E-newsletter (UNA e-newsletter, C+CP e- newsletter)	4
Someone told me about it	3
Advertising in the Ubyssey, Campus Resident or Vancouver Courier	1
Twitter	0
Poster	0
Campus + Community Planning website	0

7. Next Steps

The draft CAP 2020 incorporates input received through public and stakeholder consultation and will be presented to the UBC Board of Governors in June 2016. The June 2016 Plan presents both actions that UBC can continue to take towards the 67 per cent reduction in GHG emissions by 2020 (energy use in buildings, UBC-owned vehicles, and behavior change), as well as a recommendation that further technical analysis and financial modeling be pursued on the energy supply options (biomass expansion and renewable natural gas). Recommendations on the energy supply options will be presented to the Board of Governors in 2017.

8. Appendices

Appendix I: Feedback Form Appendix II: Stakeholder Outreach List Appendix III: Open House Display Boards (attached) Appendix IV: Website Information (attached) Appendix V: Verbatim Online Questionnaire Feedback and Letter Submission (attached)

Appendix I: Feedback Form

Feedback Form

Phase II - Climate Action Plan 2020

Thank you for taking the time to provide feedback!

1. What comments do you have regarding the proposed energy supply options UBC is considering pursuing to further reduce GHG emissions?

Renewable Natural Gas

Biomass (increased capacity for Bioenergy Research and Demonstration Facility)

2. What comments do you have regarding the proposed actions to further reduce GHG emissions?

New and existing buildings

UBC-owned vehicles

Behaviour change

Other ways that UBC could reduce GHG emissions (e.g. commuting, business travel etc)

3. Other comments

Tell us about you:

1.	How are you associated with	UBC? (pleas	e check all relevant boxes)	
	Student	🗆 Alumni	□ Professor Emeritus	\square Resident	\Box UNA
	No direct association \Box O	:her:	_		

2. How did you find out about this event? (please check all relevant boxes)
□ Email □ C+CP website □ Ad in (Courier, Campus Resident, The Ubyssey)
□ Friend or Colleague □ Other: _____(please specify)

Privacy Notification:

<u>The contents of this Feedback Form may be made available for public viewing</u>. Any personal information you provide in this Feedback Form is collected under the authority of section 26(c) of the *Freedom of Information and Protection of Privacy Act*. UBC Campus and Community Planning is collecting this information for the purposes of this consultation process. For more information about the collection of your personal information, contact Gabrielle Armstrong, Senior Manager, Public Engagement, at (604) 822-9984 or by email at gabrielle.armstrong@ubc.ca

If you would like to drop off, email or mail in this feedback form, please return it by end of day, March 27, 2016 to:

Campus and Community Planning, UBC, 2210 West Mall, Vancouver, BC V6T 1Z4 Attention: **Gabrielle Armstrong, Senior Manager, Public Engagement** For further information, please contact **gabrielle.armstrong@ubc.ca** or **(604) 822-9984**

Appendix II: Stakeholder Outreach List

- 1. Acadia Park Residence Association
- 2. Alumni UBC
- 3. Alma Mater Society of UBC
- 4. Arts Undergraduate Society
- 5. Botany Enthusiasts Club
- 6. Centre for Student Involvement
- 7. Civil Engineering Club
- 8. College of Health Disciplines
- 9. Commerce Undergraduate Society
- 10. CUPE 116
- 11. CUPE 2278
- 12. CUPE 2950
- 13. Dentistry Undergraduate Society
- 14. Education Students Association
- 15. Efficiency Club
- 16. Engineering Undergraduate Society
- 17. Engineers for a Sustainable World
- 18. Enrolment Services
- 19. Environmental Design Club
- 20. Environmental Design Society
- 21. Environmental Engineering Student Association
- 22. Environmental Science Student Association of UBC
- 23. Faculty Association
- 24. Faculty Association
- 25. Faculty of Dentistry
- 26. Faculty of Education
- 27. Faculty of Forestry
- 28. Faculty of Land and Food Systems
- 29. Faculty of Law
- 30. Faculty of Medicine
- 31. Faculty of Pharmaceutical Sciences
- 32. First Nations House of Learning
- 33. Forestry Undergraduate Society
- 34. Fraternities (Beta Theta Pi)
- 35. Geography Students' Association
- 36. Green College
- 37. Graduate Student Association of UBC
- 38. Integrated Sciences Student Association
- 39. Interfraternity Council
- 40. International House
- 41. International Student Association
- 42. Kinesiology Undergraduate Society

- 43. Land and Food Systems Undergraduate Society
- 44. Law Students Association
- 45. Library and Archival Studies Student Association
- 46. Master of Education in Education in Sustainability
- 47. Medical Undergraduate Society
- 48. Music Undergraduate Society
- 49. Nursing Undergraduate Society
- 50. Oikos Vancouver
- 51. OXFAM
- 52. Pharmacy Undergraduate Society
- 53. Planning Students Association
- 54. Professors Emeriti
- 55. Psychology Students' Association
- 56. Public Affairs
- 57. Regent College
- 58. Residence Hall Association
- 59. Sauder Net Impact
- 60. Sauder School of Business
- 61. School of Architecture and Landscape Architecture
- 62. School of Audiology and Speech Sciences
- 63. School of Community & Regional Planning
- 64. School of Continuing Studies
- 65. School of Journalism
- 66. School of Kinesiology
- 67. School of Library, Archival and Information Systems
- 68. School of Music
- 69. School of Nursing
- 70. School of Population and Public Health
- 71. School of Social Work
- 72. Science Undergraduate Society
- 73. Seedlings Café UBC
- 74. Social Enterprise Club
- 75. Social Justice Centre
- 76. Sprouts (UBC Sprouts)
- 77. St. Marks and Corpus Christi
- 78. Student Communications Services
- 79. Student Environment Centre (UBC Student Environment Centre)
- 80. Student Housing & Hospitality Services
- 81. UBC Association of Professors Emeriti
- 82. UBC BC Water and Waste Association
- 83. UBC Bike Co-op
- 84. UBC Birding Club
- 85. UBC Botanical Garden

- 86. UBC Common Energy
- 87. UBC Community Partnership Unit
- 88. UBC Communications and Marketing
- 89. UBC Faculty of Applied Science
- 90. UBC Faculty of Arts
- 91. UBC Faculty of Graduate Studies
- 92. UBC Faculty of Science
- 93. UBC Internal Communications (Operations)
- 94. UBC Internal Communications
- 95. UBC Sustainability Initiative
- 96. UBC Theatre Department
- 97. University Community Services
- 98. University Endowment Lands (Administration)
- 99. University Neighbourhoods Association
- 100. Vancouver School of Theology