20-YEAR SUSTAINABILITY STRATEGY
FOR THE UNIVERSITY OF BRITISH COLUMBIA
VANCOUVER CAMPUS

2014
ACKNOWLEDGEMENT

The University of British Columbia (UBC) acknowledges that its Vancouver campus is located on unceded, traditional xʷməθkʷəy̓əm (Musqueam) territory. The xʷməθkʷəy̓əm people have been present in their traditional territory, which includes all of present-day Vancouver, the University Endowment Lands, and surrounding areas, since time immemorial (archaeological records show occupation in the territory for over 9,000 years). The main winter village, now known as Musqueam Indian Reserve #2, is located south of Marine Drive near the mouth of the Fraser River. The name xʷməθkʷəy̓əm means place of məθkʷəy̓ and relates to the məθkʷəy̓, a flowering plant, which grows in the Fraser River estuary in the tidal flats and marsh lands.

The territory was once rich in natural resources and Musqueam people moved throughout the territory to fish, hunt, trap and gather. In return for this abundance, the people were and still are the keepers of the lands and waters that sustain them. Today, the Musqueam people still use many of these resources for economic and traditional purposes.

As they have been stewards of this unceded, traditional territory since time immemorial and presently hold lands adjacent to UBC campus, UBC works with Musqueam First Nation to ensure they are partners in the pursuit of sustainability.

nîʔ čt xici̓łxwaxʷ. We are caring for this land.
About UBC

The University of British Columbia is a global centre for research and teaching, consistently ranked among the 40 best universities in the world.

Since 1915, UBC’s West Coast spirit has embraced innovation and challenged the status quo. Its entrepreneurial perspective encourages students, staff and faculty to challenge convention, lead discovery and explore new ways of learning. At UBC, bold thinking is given a place to develop into ideas that can change the world.

For more UBC facts visit ubc.ca/facts.
CONTENTS

1 VISION

2 DESCRIPTION OF SUCCESS

3 OVERVIEW
Purpose
Scope

5 TEACHING, LEARNING AND RESEARCH
Description of Success in 2035
Strategic Goals

6 OPERATIONS AND INFRASTRUCTURE
Description of Success in 2035
Strategic Goals

7 UBC COMMUNITY
Description of Success in 2035
Strategic Goals

8 STEERING COMMITTEE
Students
Faculty
Staff
Community Partners
External Partners

APPENDIX
Milestones, Targets and Accomplishments
At UBC’s Vancouver campus, sustainability means simultaneous improvements in human and environmental wellbeing, not just reductions in damage or harm. By 2035, such regenerative sustainability is embedded across the University throughout teaching, learning, research, partnerships, operations and infrastructure, and the UBC community. UBC is a vibrant, healthy and resilient community, deeply engaged with its neighbours, surrounding region, partners around the world, and in a supportive and mutually respectful relationship with the Musqueam people.
DESCRIPTION
OF SUCCESS

Campus as a Living Laboratory
UBC faculty, staff and students, working with private, public, NGO and community partners, use the UBC campus, and its operational, educational and research capabilities, as a living laboratory, to test, study, teach, apply and share lessons learned, technologies created and policies developed.

Agent of Change
As an agent of change, the University aspires to teach future sustainability leaders, and also to work with private, public, NGO and community partners to learn together how to foster sustainability in the larger world outside the campus.

UBC is a leader in a global network of post-secondary institutions that have turned their campuses into research, development and demonstration sites for sustainable behaviour, infrastructure and community. The University works with partners in the private, public and NGO (non-governmental organization) sectors and the community, to jointly learn lessons about sustainability and share innovative, regenerative practices on and beyond the campus. In this way, UBC and other campuses around the world act as living laboratories, advancing sustainability scholarship, and implementing and teaching sustainability in ways that allow them and their non-academic partners to become agents of change around the world. These actions influence sustainability practices around the world. In support of these processes, UBC continues to build on sustainability successes in its operations and communities, to research the problems, barriers and issues involved in implementing such practices successfully on campus and off, and to prepare students with sustainability knowledge and skills.
UBC embraces sustainability as a societal conversation about the kind of world we live in, informed by an understanding of the ecological, social and economic consequences of our individual and collective actions.

The University believes in sustainability because it is necessary as the ecological and human consequences of unsustainability are devastating; it is the right thing to do ethically and in terms of distributive justice; and, it is desirable in itself, offering the possibility of a better life for people and the planet.

As part of UBC’s commitment to sustainability, this strategy was developed in consultation with the community, including students, faculty, staff, campus residents, the University Neighbourhood Association (UNA), the Musqueam First Nation and external community partners, in order to guide our future efforts towards not only a more sustainable university, but a more sustainable world.
Purpose
The purpose of the 20-year Sustainability Strategy is to provide a document outlining UBC’s sustainability vision and aspirations, and in so doing set the long-term direction towards a more sustainable university. It builds on UBC’s Sustainability Academic Strategy (SAS) (2009), a mid-level plan under Place and Promise, UBC’s Strategic Plan, and it is intended to guide decision-making at UBC’s Vancouver campus with regard to sustainability.

The strategy is a living document, periodically updated to reflect new discoveries, innovative practices, changing environmental conditions and stakeholder preferences.

Scope
The strategy addresses how sustainability will be advanced across the following three components: 1) teaching, learning and research, 2) operations and infrastructure and 3) UBC community.

Several cross-cutting themes serve as guiding principles: partnerships, integration, campus as a living lab, and university as an agent of change off-campus. To this are added two key concepts, human and environmental wellbeing, which are infused throughout.

The strategy was developed for UBC’s Vancouver campus, in the spirit of respectful collaboration with the Musqueam First Nation. It is non-binding on the UNA, yet opens possibilities for further co-operation on specific initiatives that may be replicated by either party or the wider community.
Description of Success in 2035

Sustainability is integrated throughout UBC teaching, learning and research activities. Students are provided with knowledge, skills and experience enabling them to serve as agents of change, community leaders and responsible global citizens.

As the result of continual improvement and flexible and adaptive learning, UBC is recognized for transformative scholarship of teaching and learning in sustainability.

UBC excels across the spectrum of fundamental and applied sustainability research, addressing issues at multiple scales and in multiple communities. At the campus scale this leads to innovative exchanges that improve UBC’s environmental and human wellbeing, and connect UBC’s living lab to campus operations and external agent of change activities. UBC researchers are also actively engaged in research contributing to addressing sustainability issues in many other communities and jurisdictions.

Strategic Goals

1. The University’s curriculum is transformed, with every undergraduate student able to pursue a pathway in sustainability. UBC is internationally renowned for its many world-class graduate programs, which address the full range of ecological, social and economic dimensions of sustainability.

2. UBC is a preferred destination for undergraduate and graduate students, postdoctoral fellows, visiting scholars, and professionals who wish to develop trans-disciplinary or more specialized skills in sustainability.

3. UBC’s sustainability research and scholarship excellence plays an important role in faculty and staff recruitment and retention.

4. The University operates internationally recognized centres of excellence formed in response to critical societal needs and which advance trans-disciplinary and crosscutting sustainability research, linking it to on and off campus partners.
Description of Success in 2035

UBC has internalized sustainability as a planning and implementation imperative across all campus operations and infrastructure. The focus has long since shifted from damage limitation and harm reduction to the creation of net positive outcomes in environmental, social and economic terms. A strong emphasis on human and environmental wellbeing is built directly into the operational mandate.

The University embraces an adaptive approach to long-term operational planning. This recognizes the unique ecological characteristics of UBC’s Vancouver campus, the environmental and social impacts of our activities, and complexity and uncertainty associated with global and regional environmental, social and economic conditions. Such an approach permits the development of operational plans that enable UBC to be resilient and respond quickly and effectively to changes in external circumstances.

UBC is a thriving living lab, treated as a societal test-bed, engaging partners from the private, public, NGO (non-governmental organization) sectors, and the community, including First Nations, and working with university staff, students and faculty in testing innovations and real world solutions on campus.

Strategic Goals

1. A sustainability lens is applied to operational decision-making at UBC.

2. The integration of campus-scale energy, water, waste, and food systems is linked to improved quality of life for students, staff, faculty and campus community and to enhanced ecological integrity.

3. UBC continuously and iteratively improves sustainability practices through meaningful community and stakeholder engagement, collaboration and scenario analysis, directed at reaching solutions.

4. The built environment demonstrates regenerative design and operation throughout the UBC community.

5. Effective strategic partnerships are in place, leading to the development and application of real world solutions to sustainability challenges; UBC is a key contributor to dozens of such processes locally and around the world.

OPERATIONS AND INFRASTRUCTURE

Sustainability Lens

A sustainability lens is a set of decision-making tools and processes used to evaluate the social, environmental and financial implications of operational decisions.

Select Targets

UBC’s Vancouver campus set bold targets to reduce GHG emissions (relative to 2007 levels) and committed to:

- 33% reduction by 2015
- 67% reduction by 2020
- 100% reduction by 2050

Select Accomplishments

In 2013, UBC’s Vancouver campus achieved a 14% reduction in GHG emissions compared to 2007 levels.
Description of Success in 2035

The Vancouver campus community is a model of a vibrant, complete, sustainable community at an urban neighbourhood scale. The UBC community reflects and promotes strong sustainability values related to human and environmental wellbeing.

UBC, in partnership with the UNA, has transformed from a commuter campus to a live-work-learn community. Many off-campus partners work with campus residents, UBC staff, faculty and students in implementing and deriving lessons from this successful sustainable community living lab experiment.

The University is a resilient and engaged community that addresses change collectively and collaboratively. Intercultural fluency, diversity and equality are fully integrated into UBC’s social sustainability efforts.

Strategic Goals

1. The campus housing and community development policies enable diverse and more affordable housing options for faculty, staff and students reducing commuting and financial stress, and supporting the development of a compact, complete and adaptive community.

2. Integration of social sustainability demonstrates improvements in health, productivity and quality of life of the UBC community.

3. Innovative engagement programs strengthen linkages across the campus to generate a sense of place and support the creation of a vibrant, animated, and sustainable live-work-learn community.

4. UBC is a universally accessible and automobile-restrained community and is a leader in utilizing alternative modes of transportation.

5. UBC models a sustainable and integrated food system that equally values environmental, social, and economic outcomes and assesses the impacts of food production, transformation, and consumption on environmental, personal, and community health.

Intercultural Fluency

The combination of attitudes towards diversity, knowledge about cultures and difference, and interpersonal skills that contribute to one’s capacity for communication and relationship-building across different cultures.

Select Targets

Aspire to provide capacity to house up to 50% of full-time students.

Aspire to build up to 30% of all new housing on campus as rental, subject to market demand.

Select Accomplishment

In 2013-2014, provided capacity to house 30% of 2010 full-time students (10,041 beds).
John Robinson, Chair of Steering Committee  
Associate Provost, Sustainability

Marko Pajalic, Committee Facilitator  
UBC Sustainability Initiative

**STUDENTS**

Collyn Chan  
Alma Mater Society (AMS)

Amy Jiang  
Common Energy

Paul Save  
Graduate Student Society (GSS) / BC Sustainable Energy Association

Katya Sen  
Commerce Undergraduate Society Sustainability / Sauder Philanthropy Program

**FACULTY**

Daniel Heath Justice  
Faculty of Arts

Tara Ivanochko  
Faculty of Earth, Ocean and Atmospheric Sciences

Susan Nesbit  
Faculty of Applied Science

Andrew Riseman  
Faculty of Land and Food Systems

James Tansey  
Sauder School of Business

**STAFF**

Alex Bayne  
Human Resources

Orion Henderson  
Campus and Community Planning

John Metras  
Infrastructure Development

Victoria Wakefield  
Student Housing and Hospitality

**COMMUNITY PARTNERS**

Leona Sparrow / Jessica Lea Carson  
Musqueam First Nation

Ralph Wells  
University Neighbourhood Association

**EXTERNAL PARTNERS**

Anne Murray  
Vancouver International Airport

Amanda Pitre-Hayes / Sean Pander  
City of Vancouver

Peter Robinson  
David Suzuki Foundation

Victoria Smith  
BC Hydro (until November 2013)
Beginning in Fall of 2013, UBC began a comprehensive 8 month process to develop a strategy for next generation sustainability at UBC’s Vancouver campus. The process directly engaged over 2,000 people and helped inform the 20-year Sustainability Strategy.

Steering Committee

UBC convened a Steering Committee of 21 members, including, faculty, staff, students and community members, chaired by the Associate Provost, Sustainability, in order to steer the engagement process, consider community feedback and draft the strategy. The composition of the Committee provided a broad and diverse range of perspectives and expertise across teaching, learning and research, operations and infrastructure and community pillars.

The Steering Committee was supported by an Internal Working Group which operationalized the engagement process and implemented Steering Committee recommendations.

Communication and Engagement Activities

<table>
<thead>
<tr>
<th>Outreach</th>
<th>Feedback Gathering</th>
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<tbody>
<tr>
<td>Digital communications</td>
<td>Stakeholder meetings</td>
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<tr>
<td>Community booths</td>
<td>Online survey, including mobile and kiosk deployment</td>
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<tr>
<td>Presentations</td>
<td>In-person workshops</td>
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<tr>
<td>Campus media</td>
<td>Open houses</td>
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</tbody>
</table>

Engagement Achievements

- Over 2,000 people directly engaged
- 800 in-person engagement touch-points
- 1,368 total online feedback submissions indicating overall support for the vision (participant distribution: 64% students, 26% staff, 8% faculty, 2% others)
- 3 integrated faculty and staff workshops with total of 100 participants
- Sustainability Coordinators (staff) and Sustainability Ambassadors (students) workshops
- 2 open houses for on-campus and neighbourhood communities
- 3 community booths at major campus events
- 10+ presentations to undergraduate and graduate students councils and groups, the UBC staff association, the neighbourhood association, and at several community events, including the UBC Farm Symposium and the Student Leadership Conference
- 5,200 visitors to the project webpage
SUSTAINABILITY MILESTONES

For additional information visit: sustain.ubc.ca/milestones

UBC signs Talloires declaration

Becomes Canada’s first university to adopt a sustainable development policy

Launches ECOTREK (2001-2008), the largest energy and water retrofit program at a Canadian university

Publishes comprehensive campus-wide sustainability strategy, a first for a Canadian university

Integrates sustainability as a core pillar in UBC’s highest level strategic plan

Sets bold targets to reduce GHG emissions

Establishes the UBC Sustainability Initiative (USI)

Earns designation as Canada’s first Fair Trade Campus

Opens the Centre for Interactive Research on Sustainability (CIRS)

Along with partners, opens Bioenergy Research and Demonstration Facility which will reduce GHG emissions by 9%

Completes comprehensive Zero Waste Action Plan and launches Sort It Out campaign across campus

2010

Initiates 5-year Building Tune-Up program, which will reduce GHG emissions by 10%

2011

Starts one of the largest steam to hot water conversion projects in North America, which will reduce GHG emissions by 22%

Earns Gold rating in STARS, first Canadian university to do so

2012

CIRS achieves LEED Platinum certification, a first for UBC

2013

UBC signs Talloires declaration

Opens C.K. Choi Building, setting new green building benchmarks worldwide

Canada’s first university to open a Campus Sustainability Office

2001

Pioneers the U-Pass program, which has quadrupled transit ridership since 1997

2003

Meets Kyoto Protocol greenhouse gas (GHG) reduction targets for academic buildings 5 years early

2006

Develops the Sustainability Academic Strategy

2009

Publishes comprehensive campus-wide sustainability strategy, a first for a Canadian university

Sets bold targets to reduce GHG emissions

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2014
# SUSTAINABILITY TARGETS

For additional information visit: sustain.ubc.ca/reporting

<table>
<thead>
<tr>
<th>Select Targets</th>
<th>Target Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Greenhouse Gas Emissions</strong></td>
<td></td>
</tr>
<tr>
<td>33% reduction*</td>
<td>2015</td>
</tr>
<tr>
<td>67% reduction*</td>
<td>2020</td>
</tr>
<tr>
<td>100% reduction*</td>
<td>2050</td>
</tr>
<tr>
<td>*Relative to 2007 levels</td>
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<tr>
<td><strong>Waste</strong></td>
<td></td>
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<tr>
<td>70% overall waste diversion</td>
<td>2016</td>
</tr>
<tr>
<td>80% overall waste diversion</td>
<td>2020</td>
</tr>
<tr>
<td>Achieve a steadily decreasing trend in operational waste disposed to landfill/incineration despite forecasted campus growth.</td>
<td>Ongoing</td>
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<tr>
<td><strong>Transportation</strong></td>
<td></td>
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<tr>
<td>Reduce single occupancy vehicle trips and enable and promote sustainable modes of transportation.</td>
<td>Ongoing</td>
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<tr>
<td><strong>Green Buildings</strong></td>
<td></td>
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<tr>
<td>LEED/REAP Gold certification mandatory for all new buildings and major renovations.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Energy Use Intensity targets required for new building projects.</td>
<td>Ongoing</td>
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<tr>
<td><strong>Community</strong></td>
<td></td>
</tr>
<tr>
<td>Aspire to provide capacity to house up to 50% of full-time students.*</td>
<td>Ongoing</td>
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<tr>
<td>Aspire to build up to 30% of all new housing on campus as rental, subject to market demand.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>*Calculated using the number of full-time students in 2010.</td>
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<tr>
<td><strong>Teaching, Learning, and Research</strong></td>
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<tr>
<td>Provide each student, regardless of their degree program, with access to sustainability education.</td>
<td>Ongoing</td>
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</table>
SUSTAINABILITY ACCOMPLISHMENTS

For up-to-date information visit:
sustain.ubc.ca/reporting

For a list of UBC’s sustainability awards visit:
sustain.ubc.ca/awards

Select Accomplishments (part 1 of 2)

Achieved a 14% absolute reduction in GHG emissions compared to 2007 levels.

Water (2013/2014)
Achieved a 35% absolute reduction in water consumption in institutional buildings compared to 2000.

Waste (2013/2014)
Achieved 61% overall waste diversion rate.

Transportation (2013/2014)
71% of trips by sustainable modes of transportation (transit, carpool, walking, cycling).
Achieved decreases in auto-trips and parking spaces despite increases in daytime population and number of residents.

Housing and Amenities (2013/2014)
Continued implementation of Housing Action Plan to improve housing affordability and choice on the Vancouver campus for faculty, staff, and students.
Provided 10,041 student beds, providing capacity for 30% of 2010 full-time students.

Green Buildings (2013)
23 LEED* Projects (8 certified, 15 registered)
27 REAP** Projects (20 certified, 7 registered)

* Leadership in Energy and Environmental Design (LEED)
** Residential Environmental Assessment Program (REAP)
Select Accomplishments (part 2 of 2)

Engagement (2013/2014)

Continued the Sustainability Coordinators program for offices with over 80 coordinators across various departments and expanded program into labs.

Completed 86 SEEDS projects, involving 896 students, faculty and staff in applied sustainability research projects on campus.

Continued strategic sustainability partnerships with BC Hydro, City of Vancouver, Modern Green and the University Neighbourhoods Association.

Facilitated the Regional Sustainability Council comprised of 24 members from leading organizations in the region.

AMS Sustainability Projects Fund awarded over $150,000 for student led projects since 2011.

Teaching, Learning and Research

14.5% of total faculty involved in sustainability research (2010/2011).

509 sustainability-focussed and sustainability-related courses.

More than 40 undergraduate, graduate and professional programs that allow students to orient their studies to sustainability.

Health and Wellbeing

Healthy UBC Initiatives continue to grow with aim to promote individual and organizational changes and create a healthy, sustainable workplace at the University.

The Alma Mater Society (AMS) at UBC’s Vancouver campus continues to support students by creating safe spaces on campus, through services such as the Health and Dental Plan, Volunteer Avenue, Speakeasy, Safewalk and Student Resource Groups. The AMS also actively funds student research regarding health and wellbeing on campus through the AMS Impact Grant.
PHOTO CREDITS

Acknowledgment page: Contribution by Musqueam First Nation
Page 2: Hover Collective
Remainder of photographs used: Don Erhardt, Martin Dee

To learn more about sustainability at UBC visit sustain.ubc.ca