



THE UNIVERSITY OF BRITISH COLUMBIA

sustainability

2020/21

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

A Snapshot of UBC Activities





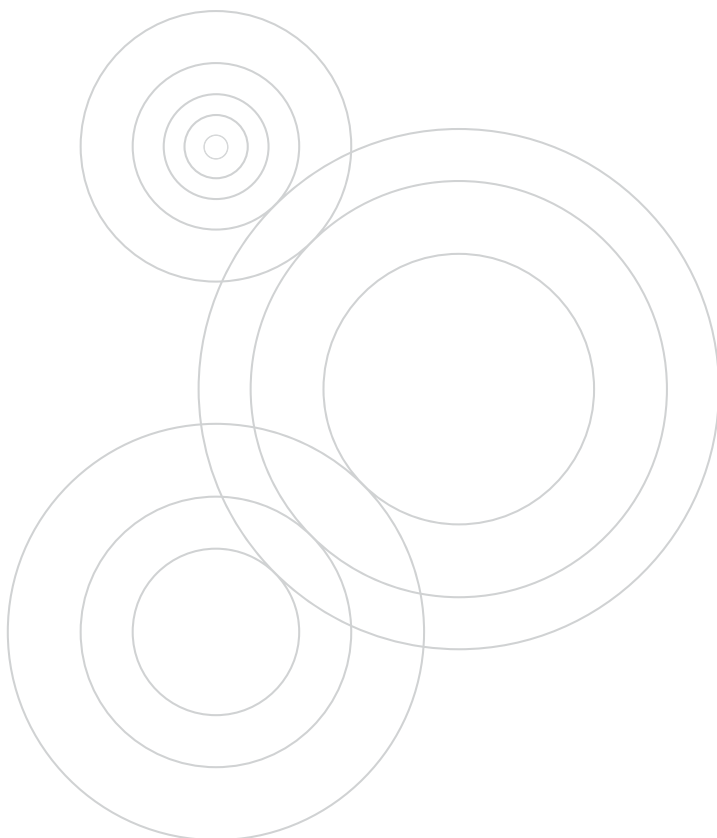
Indian Residential School History and Dialogue Centre and Irving K. Barber Learning Centre

ABOUT UBC

The University of British Columbia is a global centre for teaching, learning and research, consistently ranked among the top 20 public universities in the world.

When curiosity and drive fuel a vision for a better world, UBC opens doors to opportunity. A world-leading centre of teaching, learning and research excellence, UBC transforms personal initiative into innovation, and new ideas into impact. UBC supports inspired students, staff and faculty on their journey of discovery, and challenges them to realize their greatest potential.

UBC recognizes that the UBC Vancouver campus is situated on the traditional, ancestral and unceded territory of the Musqueam (xʷməθkʷəy̓əm) people and that the UBC Okanagan campus is situated on the territory of the Syilx Okanagan Nation.





Students at UBC Okanagan

INTRODUCTION

A simple bold promise lies at the heart of the United Nations Sustainable Development Goals (SDGs): to end poverty and leave no one behind. At UBC, our research, learning and teaching, operations, and student engagement activities contribute to Canada's commitment to achieve these goals.

Across UBC's two campuses, over 100,000 people live, work, learn, play, and visit each day. The campuses in Vancouver and Kelowna provide a sustainable environment for their residents, workers and learners, and play a key role in the cultural life of their communities, providing public access to buildings, libraries, museums, green spaces and natural heritage sites of cultural significance.

In 2021, UBC achieved a combined 24% reduction in total offsetable greenhouse gas (GHG) emissions at both campuses (since 2007); despite an overall 31% growth in floor space and 52% increase in student enrolment. Overall, UBC has achieved a 50% GHG emissions reduction per full-time equivalent student since 2007. In 2010 UBC established its original Climate Action Plan that set some of North America's most aggressive GHG emission reduction targets, with a goal of a 100% emissions reduction by 2050. The recently completed bioenergy expansion is just one example of

how UBC is working towards achieving this target.

In December 2021, the UBC Board of Governors endorsed a UBC Climate Action Plan 2030 for each campus, which commit the university to take urgent action to reduce GHG emissions in response to the global climate crisis. These plans include ambitious GHG reduction targets for 2030, 85% for operational scope 1 & 2 (2007 baseline), 45% for scope 3, including commuting, business travel, food systems, embodied carbon, waste and materials (2010 baseline), and a new net zero operational emissions target for 2035.

UBC campuses are living labs for sustainability research and knowledge, equipping faculty, students and staff to become responsible global citizens and agents for change. They provide an outstanding environment for collaborations with private, public and NGO partners, leveraging UBC's physical infrastructure and research expertise to test, study, teach and apply new knowledge, technologies and policies developed to address global challenges like the SDGs.

This report highlights a sample of UBC's efforts towards furthering the world's response to the UN Sustainability Development Goals.

Funding for Former Youth in Care

UBC is committed to supporting current and former youth in care in their endeavours at UBC. Students who were formerly in care face many barriers to success in post-secondary education, including precarious housing, financial assistance, health care and emotional support. The Okanagan and Vancouver campuses have a number of programs and services in place that help remove barriers faced by current and prospective students, such as providing help navigating the admission process, tuition waiver programs, housing, government resources, support with living expenses and space for communal connections and belonging.

Action Framework for a Nutritionally Sound Campus

Approximately 40% of university students experience some degree of food insecurity at Canadian higher education institutions, including UBC. Across our campuses, students, faculty and staff are working together through the UBC Food Security Initiative — a collaborative, multi-disciplinary initiative that takes a systems-based approach to addressing food insecurity at UBC. The initiative has three goals: deepen our understanding of food security within the higher education context; alleviate immediate pressures of food insecurity while addressing longer-term food security and affordability solutions for the UBC campus community; and, foster knowledge exchange and advocacy efforts to promote food security within UBC and beyond.

1 NO POVERTY



End poverty in all its forms everywhere

2 ZERO HUNGER



End hunger, achieve food security and improved nutrition and promote sustainable agriculture



UBC Farm

Wellbeing Strategic Framework

The Wellbeing Strategic Framework is our shared vision for UBC as a health-and-wellbeing-promoting university where people, places and communities can flourish. Guided by the calls to action in the Okanagan Charter, it connects our long-term, university-wide aspirations with actions that promote wellbeing in six priority areas: collaborative leadership, mental health and resilience, food and nutrition, social connection, built and natural environments and physical activity. A highlight of the wellbeing initiative is Thrive, an annual November event in which the UBC Vancouver community comes together to learn about, talk about and explore, ways to support mental health.

3 GOOD HEALTH AND WELL-BEING



Ensure healthy lives and promote wellbeing for all at all ages

Employment Equity Advancement

Tackling the world's biggest problems requires diverse perspectives. UBC is committed to equity, diversity and inclusion (EDI); it recognizes the importance of EDI in attracting and retaining the best and brightest students, staff and faculty from around the world, and in understanding how we best create the environments in which we work, learn and live. UBC's Inclusion Action Plan operationalizes the theme of inclusion, and supports innovation and collaboration through its five goals and assigned actions. The plan, launched in 2019, has a seven-year horizon and will focus on developing equitable practices concerning student admissions, faculty and staff recruitment, and career development.

5 GENDER EQUALITY



Achieve gender equality and empower all women and girls

UBC Educational Outreach

UBC is committed to offering accessible and innovative educational opportunities to students, staff and the wider community. The English Language Institute, which celebrated its 50th anniversary in 2019, provides an immersive learning experience for students seeking to gain English language skills. UBC Extended Learning makes education attainable to all through flexible courses designed to meet the career and personal needs of learners in every age group. Located in the complex neighborhood of the Downtown Eastside of Vancouver, the UBC Learning Exchange is a non-traditional academic space that connects people — local residents, students, faculty and community organizations — to gain knowledge in new ways.

4 QUALITY EDUCATION



Ensure inclusive and quality education for all and promote lifelong learning

UBC Essential Water Systems

UBC is responsible for providing safe and sustainable water supplies. With this responsibility and control of infrastructure comes the ability to investigate and develop leading approaches to water management strategies that target conservation and water quality. Water is used for drinking, research, irrigation, sanitation and fire suppression. UBC Vancouver's Integrated Stormwater Management Plan ensures runoff from the campus is controlled and stormwater quality is significantly improved before entering the ocean. UBC Okanagan's Integrated Rainwater Management Plan requires 100% diversion of rainwater from municipal systems. Targets for rainwater management on UBCO development sites incorporate future climate projections, mitigate flood risk, support the natural hydrological cycle, and achieve co-benefits to for campus ecology and biodiversity.

6 CLEAN WATER AND SANITATION



Ensure access to water and sanitation for all



Green Labs Initiative

HIGHLIGHT

UBC Green Labs Program

The Green Labs Program supports researchers on both UBC campuses to reduce the environmental impact of laboratory-based activities by implementing sustainable practices and technologies. They provide UBC faculty, staff and students with the opportunity to learn about environmental wise practices, exchange ideas, access recycling and energy conservation programs.

They help researchers to:

- implement sustainable solutions using Green Labs resources,
- access funding to help reduce environmental impact,
- participate in friendly conservation competitions with labs across UBC.

The Green Labs Chill Up Challenge, for example, succeeded in reducing energy consumption and increasing longevity of the ultra-low temperature freezers in the UBC Michael Smith Laboratories and Life Sciences Centre.

Renewable Energy Hub

In 2021, UBC unveiled plans for a \$24 million renewable energy hub that will transform an entire city block at the Vancouver campus into a smart energy district. Spearheaded by UBC's MéridaLabs, the project will include a solar array, intelligent charging infrastructure for electric vehicles (EVs), and BC's first-ever electrolytic hydrogen refueling station for light- and heavy-duty vehicles. The reversible EV charging stations will begin operating in February 2022, the hydrogen refueling centre is scheduled to open in October 2022 and the solar array will be operational by March 2023.

7 AFFORDABLE AND CLEAN ENERGY



Ensure access to affordable, reliable, sustainable and modern energy for all

Fair Trade and No Sweat Campus

Every day people at UBC purchase goods and services that have economic, social and environmental impacts. UBC Finance created a guide to help staff, faculty and students to purchase sustainable goods and services. The guide reflects a triple-bottom-line approach that balances best value, social equity and environmental protection. Elements include a supplier code of conduct that sets ethical performance expectations, Fair Trade and No Sweat purchasing policies, and reuse and recycling programs. UBC is a member of the Canadian Collaboration for Sustainable Procurement (formerly the Municipal Collaboration for Sustainable Procurement) a network of Canadian public-sector institutions working to align their spending with their values and commitments on sustainability.

8 DECENT WORK AND ECONOMIC GROWTH



Promote inclusive and sustainable economic growth, employment and decent work for all



Brock Commons Tallwood House: 18th Floor Lounge - image credit: Acton Ostry Architects and the University of British Columbia

Brock Commons Tallwood House

As both a leading research university and a vibrant community, UBC leverages its network of infrastructure to demonstrate innovative sustainability solutions at a municipal scale. With a continuously evolving built environment, UBC uses new building development and retrofits as an opportunity to test emerging approaches to sustainable construction.

A recent addition to UBC's green building portfolio, Brock Commons Tallwood House showcases the advantages and potential of sustainable wood building construction.

Wood is a sustainable and versatile building material that stores, rather than emits, carbon dioxide over the life of the structure. In addition to wood's carbon storing properties, its lower energy consumption during manufacturing results in lower greenhouse gas emissions than from the production of other building materials. Compared to other construction materials, using wood for Brock Commons reduced carbon emissions by 2,432 metric tonnes — the equivalent of taking around 500 cars off the road for a year.

In addition to providing accommodation for more than 400 students, Tallwood House also aligns with UBC's Campus as a Living Lab initiative, as a demonstration

of innovation and an opportunity for research and learning. Tallwood House provides a unique opportunity to study mass timber design and construction in a tall wood building. A research collaboration between UBC's Sustainability Initiative and faculty members in forestry and civil engineering has been studying the design, manufacturing, construction, commissioning and operation processes and document the challenges, solutions and lessons learned. Sensors embedded within the mass-timber elements will enable researchers to study the long-term performance of the structure.

The experiences and lessons learned from Tallwood House contribute to a growing body of knowledge of mass timber and tall-wood projects that can inform future research, building projects, policies and regulations. This project has already led to innovations in BC's building code that now allow for more widespread construction of this low-emission form of construction.



Build resilient infrastructure, promote sustainable industrialization and foster innovation

EDI in Learning, Research and Engagement

UBC has committed to fostering environments of learning, research and engagement that value building and exchanging multiple and intersectional ways of knowing. This includes rethinking the university's approach to teaching, funding and relationships with the broader community. Through UBC's Inclusion Action Plan, the university has set goals that will advance the university's practices pertaining to student and faculty awards, academic assessment and progression, and the classroom experience. Progress towards these goals is reported annually by the relevant UBC administrative leads.

10 REDUCED INEQUALITIES



Reduce inequality within and among countries

Wesbrook Village

UBC supports a vibrant community, providing homes for faculty, staff, students and others, and generating revenue to support its academic mission. UBC Vancouver's largest neighbourhood to date, Wesbrook Village, is a complete community that offers a wide range of amenities and services guided by an integrated whole-system approach to planning and development. From a community centre and school to restaurants and shops, daily needs can easily be met on foot. Housing in Wesbrook Village supports the UBC community with 50% of all units designated as "work-study," meaning that at least one member of the household works or studies on campus. Neighbourhood designs encourage sustainable transportation by providing a network of connected greenways, cycling infrastructure, access to frequent local and regional bus service, and a campus-wide public bike share program; and with supporting land uses and densities that provide amenities and services that are well served by these networks.

11 SUSTAINABLE CITIES AND COMMUNITIES



Make cities and communities inclusive, safe, resilient and sustainable

Zero Waste Foodware Strategy

UBC Vancouver is leading the region in eliminating single-use plastics through a new Zero Waste Food Ware Strategy developed in consultation with on-campus food providers. The strategy is a step toward a zero-waste future for food and beverage on campus. The strategy focuses on three main elements: fees for single use items to encourage the transition to reusable foodware, more sustainable materials for single use items, and improved in-store recycling bins and signage. The foodware strategy and policy will help us reduce, recycle and compost waste more effectively.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Ensure sustainable consumption and production patterns



Students Using Reusable Cups on UBC Campus



Public art installation by Les Louis at UBC Okanagan

HIGHLIGHT

Nsyilxcn Language Fluency

UBC is deeply committed to collaborating with Indigenous peoples and communities to co-develop knowledge and relationships. In 2021, UBC's Okanagan campus — located on the traditional, ancestral and unceded territory of the Syilx peoples — became the first university in Canada to offer a bachelor's degree in Indigenous language fluency. The Bachelor of Nsyilxcn Language Fluency (BNLF) program, created in collaboration with the Nicola Valley Institute of Technology (NVIT) and the En'owkin Centre, is designed to work closely with the community to provide a comprehensive education in Nsyilxcn — the language spoken by members of the Syilx Okanagan Nation — and to imbue new, fluent speakers with a deep understanding of the language,

culture and customs.

"The idea that there's only knowledge in English or French is absolutely not true," says Dr. Jeannette Armstrong, Associate Professor of Indigenous Studies at UBC Okanagan and academic lead on the BNLF. "Language is identity. Indigenous knowledge systems and an Indigenous paradigm — how we view the world and how we interact — is deeply rooted in language."

According to Dr. Armstrong, UBC Okanagan is the first in Canada and among the first in the world to offer a degree program in an Indigenous language, something she says is a testament to UBC's commitments to the Truth and Reconciliation Commission of Canada (TRC) Calls to Action.

Climate Action Plan 2030

UBC plays a unique role as a global leader in climate action and sustainability. For over 20 years, these components have been at the foundation of the university — in campus operations, research, teaching and student engagement. UBC has already set some of the most aggressive GHG reduction targets in North America. In December 2019, UBC declared a climate emergency, which was championed by student mobilisation and endorsed unanimously by the university's Board of Governors. The declaration set out a number of commitments, including accelerating the reduction of emissions at UBC Vancouver and UBC Okanagan in response to the climate crisis. To help meet this commitment, the UBC Climate Action Plan 2030 (CAP 2030) process was initiated in early 2020 for both campuses and the plan was endorsed by the Board of Governors in December 2021.

CAP 2030 represents an update and third CAP for the Vancouver Campus, building on existing climate achievements guided by CAP 2010 and CAP 2020. CAP 2030 provides the overarching campus climate policy direction to make informed, strategic investment decisions to support UBC system-wide GHG emission reduction targets across nine action areas, including commuting, food, waste and business air travel.

Key targets developed as part of CAP 2030 include:

- 2030 targets
 - 85% reduction in UBC's operational scope 1 & 2 GHG emissions
 - 45% reduction in UBC's extended impact scope 3 GHG emissions, such as emissions from UBC-related commuting, business air travel, food, waste and materials, and embodied carbon.
- 2035 net zero campus operations target
 - 100% reduction in GHG emissions

In line with the Paris Agreement target to limit global warming to 1.5°C, the UBCO CAP 2030 establishes ambitious goals to achieve a 65% reduction of operational emissions and a 45% reduction of extended emissions by 2030. The UBCO CAP 2030 provides a clear pathway to meet our GHG reduction targets, as well as accountability measures to demonstrate how we are enacting bold changes to address UBC's Climate Emergency Declaration.

CAP 2030 will enable UBC to accelerate the pathway to becoming net zero through clean energy solutions and

energy-efficient technologies, to increase adaptation and resiliency and to reduce medium to longer term operational costs associated with increased carbon pricing. The climate emergency is one of the most pressing issues of our time and UBC will continue to leverage its institutional and intellectual capacities to demonstrate sustainability and climate leadership through a climate justice lense. At this pivotal moment CAP 2030 will chart an accelerated pathway building on past success and deploy new innovations with an aim to materially exceed the Paris 1.5°C target for 2030 and move forward the University's long-term aspirational carbon goals to be achieved prior to 2050 and to expand UBC's efforts to address indirect scope 3 emissions.



The Skeena Building at UBC Okanagan is the first student residence in Canada to meet Passive House certification.

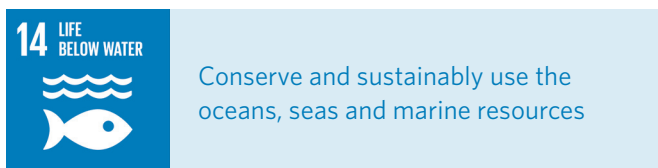
13 CLIMATE ACTION



Take urgent action to combat climate change and its impacts

Centre for Indigenous Fisheries

The oceans are home to 99% of the Earth's biosphere. Dynamic and fragile, they provide habitat for an extraordinary diversity of life and social-ecological systems. UBC is furthering its contributions to a transformative global shift toward sustainable coastal ecosystems, oceans and fisheries through the recent launch of the Centre for Indigenous Fisheries (CIF). The CIF's research is fundamentally community-centered and employs research methodologies, tools and understandings from both Indigenous and modern sciences. The centre aims to support the management and protection of culturally significant fish and fisheries in ways that uphold and respect Indigenous rights, values, practices and knowledge systems.



Urban Forest Research Report

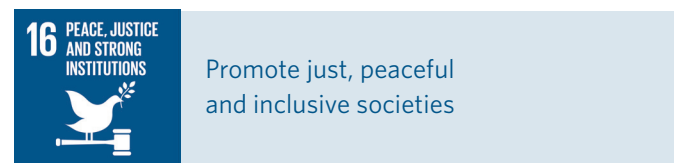
Healthy urban forests can help communities adapt and cope with climate change impacts, while contributing to the health and wellbeing of people and planet. At UBC Vancouver, the Campus Biodiversity Initiative: Research and Demonstration (CBIRD) connects academics, practitioners and the wider community in collaborative applied research to advance scalable urban biodiversity ideas, policies and actions. In 2021, CBIRD launched an applied research report, UBC in a Changing Climate: Urban Forest Edition. This report showcases recent student-led research and community efforts that have the common aim of establishing a baseline assessment of the campus urban forest.



Totem Park on UBC's Vancouver campus

Centre for the Study of Democratic Institutions

The Centre for the Study of Democratic Institutions (CSDI) at UBC will celebrate its 20th anniversary in 2022. Through its programs, the CSDI promotes excellence in research and teaching, brings together scholars, public officials and students from diverse backgrounds and academic disciplines, and works with governmental and non-governmental organizations. One of the CSDI's major activities is the Institute for Future Legislators, an innovative program which provides intensive hands-on mentoring and training for those seeking the experience and knowledge necessary to make a difference. The CSDI aims to invigorate academic and public discourse on democracy and, ultimately, contribute to Canada's progressive leadership in the world.





National Forum on Anti-Asian Racism campaign artwork

HIGHLIGHT

National Forum on Anti-Asian Racism

To address the ongoing crisis of escalating anti-Asian racism in Canada, UBC hosted the two-day National Forum on Anti-Asian Racism. From June 10-11 2021, a constellation of community organizers, scholars and public intellectuals, along with key figures in government, health care, media, journalism, the corporate world and the not-for-profit sector convened frank discussions about anti-Asian racism with the aim of articulating bold and concrete recommendations for action. The sessions focused on issues impacting Asian Canadians, coalition building across Asian Canadian communities, and effective access and advocacy for systemic change, among other relevant topics. The forum brought together 126 panelists and 2,100 attendees across generations, sectors and the country to share stories and find common themes to move forward against anti-Asian racism in Canada.



View from UBC Vancouver Campus

Global Engagement Strategy: In Service

In 2021, UBC launched its new global engagement strategy, In Service, a call to action for the university's role as a global actor to address, in partnership with a broad range of institutions, the pressing development needs of our planet, and to help build a more just and sustainable world. As the UN notes, a successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships, built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local level.

Building on a strong and impactful platform of long-standing partnerships that contribute significantly to research, new knowledge and greater understanding, the strategy embraces a "5 Cs" approach to convening a broad canvas of partners including colleges/universities, corporates, community organizations,

cities and countries, to work together on complex issues of global relevance, such as those called out in the SDGs.

These partnerships take many forms — from clinical faculty collaboration and training at a spinal cord rehabilitation centre in Nepal to curriculum co-creation for a new earth and environmental sciences degree program in Tajikistan; from multi-university student teams working with faculty and community partners on projects to enhance the quality of life in informal settlements in Kenya to a network of universities, companies and non-profits developing bioenergy technology in Canada and China. UBC is committed to expanding this broad canvas of partnerships globally and locally, across disciplines, countries and sectors, recognizing that no one institution can tackle the complex challenges facing our world alone.

17 PARTNERSHIPS
FOR THE GOALS



Revitalize the global partnership
for sustainable development

