

RESEARCH TO ACTION: ADVANCING URBAN SUSTAINABILITY

Agenda

1:00 pm

Welcome & Opening Remarks

1:15 pm

Guest Speaker: Melissa Lem, President: Canadian Association of Physicians for the Environment

1:55 pm

Panel Sessions Open

2:00 pm

Concurrent Panel Sessions

Biodiversity & Habitat 1 | Moderator: Linda Nowlan, UBC Sustainability Hub | Breakout Room A

Adaptation & Resilience | Moderator: Eliana Chia, Fraser Basin Council | Breakout Room B

Climate Action: Increasing Engagement | Moderator: Sarah Labahn, City of Vancouver | Breakout Room C

Livable Cities 1 | Moderator: Anthony An, UBC Sustainability Hub | Breakout Room D

2:55 pm

Break/Transition

3:00 pm

Concurrent Panel Sessions

Climate Legislation & Partnership Activities | Moderator: Sam Filipenko, IRSI | Breakout Room A

Planetary Health & Food Security | Moderator: Maura Brown, BC Cancer | Breakout Room B

Capacity Building: Youth Engagement | Moderator: Kshamta Hunter, UBC | Breakout Room C

Livable Cities 2 | Moderator: Ralph Wells, UBC | Breakout Room D

Transportation 1 | Moderator: Krista Faulkner, UBC | Breakout Room E

3:55 pm

Break/Transition

4:00 pm

Concurrent Panel Sessions

Biodiversity & Habitat 2 | Moderator: Paul Simonin, A Rocha | Breakout Room A

Flood Mitigation, Adaptation, Resilience | Moderator: John Cathro, Xeni Gwet'in First Nation Government
| Breakout Room B

Transportation 2 | Moderator: Kristi Denby, BC Assembly of First Nations | Breakout Room C

Livable Cities 3 | Moderator: Penny Martyn, UBC | Breakout Room D

5:00 pm: Conference Ends

Panel Sessions: Detail View

	Biodiversity & Habitat 1 (Room A) Moderator: Linda Nowlan, Sustainability Hub	Adaptation & Resilience (Room B) Moderator: Eliana Chia, Fraser Basin Council	Climate Action: Increasing Engagement (Room C) Moderator: Sarah Labahn, COV	Livable Cities 1 (Room D) Moderator: Anthony An, Sustainability Hub	
2:00 – 2:55 pm	<ul style="list-style-type: none"> The case for expanding the critical habitat of endangered Southern Resident killer whales (Dane Pedersen) Classifying and mapping urban green interventions to support biodiversity and connectivity in Vancouver (Vanessa Amorcho) Policy review to support establishment of an urban marine park in False Creek (Yash Mehta) 	<ul style="list-style-type: none"> Research to develop case studies on climate change adaptation in the Global south that can be applied to the BC context (Neftali Hernandez) UNDRIP framework to advance Indigenous climate and energy resilience (Sopurucho Christian) Developing a GIS-based urban building energy assessment model to support decision making in Richmond (Yang Li) 	<ul style="list-style-type: none"> A guide to climate action: A toolkit for engaging adults in meaningful, locally situated & long-term climate action (Gabrielle Edwards) Development of graphics to visualize climate action and inaction in Vancouver: What does our future look like? (Taylor Legere) Listening to untold stories: Curation of a radio program on the Fraser River Estuary (Viola Provost) 	<ul style="list-style-type: none"> Recommendations to improve the health of Vancouver's street trees surrounded by hardscape (Elliot Bellis) Scoping an Online Green Roof Asset Tracking and Inventory Management System for the City of Vancouver (Emily Edwards) Zero emissions municipal buildings policy research (City of Port Moody) (Sonia Tsang) Lifecycle cost analysis of new single-family building construction and electrification on Musqueam (Haonan Zhang) 	
	Climate Legislation & Partnership Activities (Room A) Moderator: Sam Filipenko, UBC IRSI	Planetary Health & Food Security (Room B) Moderator: Maura Brown, BC Cancer	Capacity Building: Youth Engagement (Room C) Moderator: Kshamta Hunter, UBC	Livable Cities 2 (Room D) Moderator: Ralph Wells, UBC	Transportation 1 (Room E) Moderator: Krista Faulkner, UBC
3:00 – 3:55 pm	<ul style="list-style-type: none"> The role of provincial climate legislation in accelerating climate action at BC universities (Grace Schaen) Indigenous data sovereignty: Informing an Urban Indigenous Partnership Model for the City of Vancouver (Hilal Kina) Development of an inventory of UBC's climate research partnerships with First Nations in BC (Michael Monclou) 	<ul style="list-style-type: none"> Engagement plan to increase clinician participation in sustainable healthcare (Eunice Bawafaa) Research to Advance Food Growing Initiatives in Multi-Unit Residential Buildings (MURBs) (Muh Syukron) Strategic communication plan and assets on food for planetary health and cultural safety (Patricia Unung) 	<ul style="list-style-type: none"> Long-term impact of a nature-based youth program (Amy Bu) Opportunity windows for youth engagement in climate-related initiatives (Giulia Belotti) 	<ul style="list-style-type: none"> Heat-pump retrofits in multifamily buildings at UBC (Haley Magrill) Challenges and successes of carbon reduction projects in healthcare facilities (Pooya Pourreza) Community relationships crucial to extreme heat planning in Vancouver (Rajpreet Sidhu) Effectiveness of HVAC systems & protocols in healthcare facilities (Stanley Wang) 	<ul style="list-style-type: none"> EV charger retrofit strategy options for Multi-Use Residential Buildings in New Westminster (Drew Seguin) Understanding the Sustainability and Equity Benefits of Vancouver's Public E-bike Share System (Madison Lore) Opportunities to reduce financial barriers to purchasing zero emissions commercial vehicles (Aigerim Akiltayeva)
	Biodiversity & Habitat 2 (Room A) Moderator: Paul Simonin, A Rocha	Flood Mitigation, Adaptation, Resilience (Room B) Moderator: Jon Cathro, Xeni Gwet'in First Nation Government	Transportation 2 (Room C) Moderator: Kristi Denby, BC Assembly of First Nations	Livable Cities 3 (Room D) Moderator: Penny Martyn, UBC	
4:00 – 4:55 pm	<ul style="list-style-type: none"> Informing transboundary collaboration in the Boundary Bay Basin to improve water quality and restore shellfish harvesting for Semiahmoo First Nation (Bryce Henney) Strengthening biodiversity protection: Expanding BC's protected areas (Maithili Devadas) Cultivating for Waders: Beneficial farming practices for shorebird conservation on agricultural lands on the Fraser River Delta (Vincent Steinfeld) 	<ul style="list-style-type: none"> Fostering a shared stewardship of the Bert Brink Wildlife Management Area: Graphic renderings of a restored Fraser floodplain habitat (Frances Ramsay) Workshop Series on Designing for Flood Resilience (Mauricio Carvalho Aceves) 	<ul style="list-style-type: none"> Green rainwater infrastructure toolkit for underground rapid transit stations (Laura (Yumeng) Liu) Factors influencing travel mode decisions to access regional parks (Yiyang Wang) Active transportation to childcare in Vancouver (Molly Barkowsky) Equitable, reliable, safe, and low-carbon transportation in BC First Nations (Charlotte Bull) 	<ul style="list-style-type: none"> Retrofitting North Vancouver: Large building analysis and best practice review for the City of North Vancouver (Amir Kari) Researching Innovative Strategies to Mitigate Overheating and Increase Resilience in Multi-Family Buildings (Atiyeh Baratloo) Development of a building retrofit toolkit to address extreme heat events for the City of Burnaby (Oluwasina Agunbiade) 	

Panel Presenters

Aigerim Akiltayeva has over 8 years of experience in the energy and environment sector. Her background in consulting and investment banking has allowed her to assist cities and organizations in defining decarbonization objectives, implementing climate initiatives, and crafting low carbon strategies. She is presently pursuing a Master of Engineering Leadership in Clean Energy Engineering.

Amir Kari is a Ph.D. student in Structural Timber Engineering at UBC-Vancouver. In 2021, he served as a UBC Sustainability Scholar, working on a project for the District of North Vancouver to develop policies and tools for reducing embodied emissions in new construction. He aspires to become a green building engineer and sustainability specialist in Canada.

Amy Bu is a second-year Masters student in the Faculty of Education, Human Development, Learning, and Culture. Amy is interested in migration, identity, and belonging, and how environmental and social factors inform these experiences. Her project this summer investigated the qualitative effects of a nature-based youth program in BC.

Atiyeh Baratloo is a high-performance building professional with a background in architecture, completing a Masters of Engineering Leadership degree in high performance buildings at UBC. She aims to join other enthusiasts in making buildings greener to make the cities more sustainable and combat climate change. In her free time, she enjoys hiking, cycling, and urban sketching.

Bryce Henney is a settler-colonizer from the traditional lands of the Potawatomi and Ojibwe (Metro Detroit) with an interdisciplinary background and experience. He hopes to uplift settler operating paradigms by realigning with life-affirming values and support collaboration, co-design, and co-existence with Indigenous communities (reconciling ways of knowing) in the context of sustainability and resiliency planning.

Charlotte Bull is a second-year Master of Public Policy and Global Affairs student. She has an interdisciplinary background in climate change and security policy, having studied Political Science and Geography at Trinity College Dublin. She aspires to foster positive change for marginalized communities through a public service career.

Dane Pedersen is a PhD student in the Faculty of Forestry at UBC. She completed her MSc at McGill University, where she studied the transboundary network tasked with protecting the Southern Resident Killer Whale (SRKW). Dane is deeply committed to protecting the lands, waters, and diverse communities of the British Columbia.

Drew Seguin is a second-year student in the Master of Engineering program in Electrical and Computer Engineering. His main focus is power system decarbonization and he is passionate about the integration of electric vehicles and renewables into Canada's existing energy infrastructure. His goal with his Sustainability Scholars project was to help bridge the gap between sustainability technology and policy.

Elliot Bellis is a second-year student in the Master of Landscape Architecture program. His background is in urban forest planning and he is passionate about managing urban forests that are integrated with the people who inhabit them. He is interested in helping others learn about themselves through plant communities.

Emily Edwards is a PhD student at the Institute for Resources, Environment, and Sustainability. With a background in water quality and alternative water sources, her current research focuses on the effects of decentralizing urban water supply, and the relationships between people, policy, and small-scale water management via green infrastructure.

Eunice Bawafaa (she/her) is a Ph.D. candidate at the School of Nursing, UBC. She is passionate about women's health and her research interest are in health equity, nurse/patient empowerment, community health, and nursing care that seeks to sustain social justice activism in healthcare.

Frances Ramsay is a student in the Master of Landscape Architecture program at the University of British Columbia, and a summer 2023 Sustainability Scholar. Incorporating her background in environmental science, she is interested in designing spaces that are both educational and can positively impact the environment.

Gabrielle Edwards recently completed her PhD in Curriculum Studies and is passionate about food and environmental education and empowering the next generation to be actors of change in their communities. Dr. Edwards is currently a postdoctoral research fellow at the University of Gothenburg in Sweden specializing in sustainable food education.

Giulia Belotti (she/her) is a second-year graduate student at the Institute for Resources, Environment and Sustainability. She has a background in political science and international relations and her current research focuses on the intersection between the climate crisis and the housing crisis. She strongly believes in the possibility of achieving structural change within society and working towards a more sustainable, inclusive and just world.

Grace Schaen is a Master of Arts student in the Institute for Resources, Environment and Sustainability and is supervised by Dr. Kathryn Harrison. Grace is primarily interested in researching policy for climate change. For her master's thesis, she is exploring the politics of carbon pricing in Saskatchewan and political communication on Twitter. Grace completed a Bachelor of Arts in Environmental Studies at the University of Regina in 2020.

Haley Magrill is a second year Master's student in the Political Science program at UBC. Her research focuses primarily on climate policy with intersections in misinformation and political behaviour.

Haonan Zhang is a PhD student in Civil Engineering. He is currently working as a Graduate Research Assistant at the Life Cycle Management Lab. His research mainly focuses on building energy management, building energy retrofits, and life cycle assessment.

Hilal Kina is a PhD candidate in Anthropology at the University of British Columbia. Her research deals with the systematic dispossession and marginalization and resilience of the historical Armenian community in her country of origin, Turkey. Previously, she has been engaged in various projects involving social justice, memory and decolonization in both Turkey and Canada.

Laura Liu is a passionate and dedicated Master of Landscape Architecture candidate with a background in urban forestry. She has a keen interest in creating sustainable and resilient urban environments and her academic journey has been fueled by a deep-rooted belief in the power of thoughtful design to address pressing environmental challenges.

Madison Lore is a PhD student in the School of Community and Regional Planning (SCARP). Prior to joining SCARP, Madison worked in applied mathematics and data science. Her research involves applying machine learning to understand the physical and social barriers that prevent widespread reduction in personal vehicle dependence.

Maithili Devadas is a PhD student at the Faculty of Land and Food Systems. Her research focusses on studying human-wildlife interactions and mitigating conflict, with the aim of fostering coexistence for the benefit of ecosystems and communities.

Mauricio Carvallo Aceves (he/him) is a PhD candidate at the Institute for Resources, Environment and Sustainability. He is greatly interested in green infrastructure and sustainable urbanism. His research focuses on how to help cities plan for climate change impacts in an uncertain future. As a Sustainability Scholar, he helped facilitate workshops and prepare summary reports discussing issues related to flood infrastructure and salmon habitat restoration.

Michael Monclou is a Latino and Colombian who arrived at UBC Okanagan as a PhD student in 2022. In Colombia, he was engaged in advocating for the land rights of campesinos. His current research is centered around studying transitional justice and how we can reconstruct a country and its institutions amidst an armed conflict. Michael is particularly interested in issues related to land ownership access for both campesinos and Indigenous communities.

Molly Barkowsky is a second-year student in the Master of Community and Regional Planning program. She is passionate about active transportation planning, particularly focussing on design and accessibility. Her research as a Sustainability Scholar explores improving family mobility to childcare facilities in Vancouver.

Muh Syukron is a Ph.D. student in forestry, specializing in resource management, human-environmental interactions, and food systems. With a passion for sustainable solutions, he strives to connect ecology and society for a greener future.

Neftali Hernandez is a Zapotec PhD candidate at UBC. His experience focuses on sustainable development in rural communities through natural resource management, with a strong emphasis on Indigenous governance. He is currently involved in implementing UBC's Indigenous Strategic Plan.

Oluwasina Agunbiade is currently pursuing a Master of Engineering Leadership in High-Performance Buildings. He holds a Master of Science in Architecture and has over three years of experience in the fields of architectural design, construction, and residential real estate development. Sina is a LEED Green Associate, a WELL Accredited Professional, and an EDGE Expert. His interests include ESG, building retrofits, and low-carbon tech.

Patricia Unung is a curriculum scholar, educational consultant/policy analyst, researcher, and a global Indigenous food sustainability advocate, pursuing a doctorate in Curriculum Studies at UBC. Currently her research focusses on the strategical positioning of Indigenous food sustainability to ameliorate the climate crises towards resiliency in combination with an emphasis on reducing food-related anthropogenic climate change locally and globally.

Pooya Pourreza recently completed his MASc in Engineering. He is a dedicated Sustainability Analyst with a passion for improving healthcare systems and reducing carbon footprints. With a background in programming, data analysis, and sustainability assessment, he is well-equipped to tackle the pressing sustainability issues facing our world today.

Rajpreet Sidhu (she/her) is a Master of Community and Regional Planning student in the Indigenous Planning concentration at UBC. Rajpreet is passionate about cultural planning, innovative land use management and transit equity. She is currently working with the

UBC Learning Exchange in the Downtown Eastside, supporting Marpole Neighbourhood House in an SSHRC-funded research project and volunteering at the Vancouver Black Library.

Sonia Tsang is pursuing a Masters in Engineering Leadership, specializing in high performance buildings at UBC. Formerly a green building certification consultant in Hong Kong, she enriched her Sustainability Scholars project this summer with valuable insights from her buildings and sustainability focused experience.

Sopuruchi Christian is a university teacher, lawyer and legal researcher. Here in BC, his efforts are directed towards building a resilient sustainable community for black and Indigenous residents. Back home in Nigeria, Sopuruchi leads the Precious Fountain Foundation, an initiative that is committed to supporting African education through capacity building workshops and charitable interventions.

Stanley Wang is a student in the Master of Engineering Leadership program specializing in high performance buildings. Before attending UBC, he worked as a Postdoc Scholar for four years, conducting academic research in office buildings focusing on indoor air quality and occupant comfort.

Taylor Legere (she/her) is a Masters student studying Landscape Architecture at the School of Architecture and Landscape Architecture. Previously she studied Peace and Conflict Studies at the University of Waterloo, and managed the Intact Centre on Climate Adaptation, an applied research centre focused on preparing Canadians for climate change. Her primary research interest is how to design climate resilient and equitable landscapes

Vanessa Amorcho recently completed a Master of Community and Regional Planning degree, specializing in environmental planning. She is a biologist and environmental engineer by training and is passionate about the use of geospatial and remote sensing technology to understand natural environments. Her ultimate goal is to help restore biodiversity through knowledgeable, strong social and environmental policy.

Vincent Steinfeld is a PhD student in the department of English Language and Literatures. They study early modern literature as it relates to issues of ocean ecologies, gender and sexuality, and colonialism. Vincent is a passionate birder and plant person and has been delighted to help Birds Canada develop shorebird-friendly conservation recommendations for farmers in the Fraser Estuary.

Viola Provost is a German-Canadian researcher pursuing a PhD at the University of British Columbia in the Business, Technology, and Sustainability Lab, researching environmental communication on social media. She holds a BSc in Biology, an MSc. in Freshwater and Marine Biology, and a Major in Science Communication. In her work, she has a profound dedication to fostering co-creative dialogues between science and society.

Yang Li is a PhD student in the Faculty of Forestry. Her research focusses on applying geospatial technologies to assess urban building energy systems, with the aim of achieving net-zero energy/emissions targets.

Before joining UBC's MEL Urban-Systems program, **Yash Mehta** worked on sustainable urban development projects in diverse settings, from the mountainous terrains of the Himalayas to Sri Lanka. He is passionate about collaborative urban planning approaches, bridging Western and Indigenous legal systems. Currently, he's involved in Vancouver's False Creek South, focusing on community-led, bottom-up initiatives aimed at sustainable marine environments.

Yiyang Wang, is completing a Master of Science in Forestry degree. She holds a Bachelor's degree in Urban Forestry with a minor in Landscape and Recreation Planning from UBC. Specializing in urban and transportation planning with a focus on green equity, Yiyang's research contributes to sustainable urban development.

Moderators & Speakers

Anthony An is the Campus as a Living Lab (CLL) Research Manager at the UBC Sustainability Hub, contributing to diverse initiatives, programs, and projects that leverage university infrastructure for research, learning and knowledge transfer. Prior to joining the hub, he managed a UBC industry partnership program to foster technological innovations on sustainability. Anthony holds a PhD and MASc in Mechanical Engineering from UBC and is a registered professional engineer.

Eliana Chia joined the Fraser Basin Council in 2015 as part of the Climate Change and Air Quality Program and she is now the Program Manager of Climate Change. At FBC, she leads on their climate resilience and community energy programs. She graduated from the University of British Columbia's School of Community and Regional Planning with a Master's Degree in Planning, specializing in social planning and community development. Eliana is passionate about building community resilience and engaging communities on social, economic and environmental sustainability.

John Cathro and his family live in the heart of Ktunaxa ?Amak?is in Kaslo, BC, where they enjoy the mountains, grow food, and celebrate being part of a rich community. John is an independent consultant whose clients include First Nations, communities,

companies, organizations and governments across BC and around the world. He works on issues that include community wildfire risk reduction, ecosystem restoration, strategic land use planning and conservation area design.

Karen Taylor manages the Sustainability Scholars Program, a paid internship program for UBC graduate students to work on applied sustainability-related research projects for organizations throughout the lower mainland, Vancouver Island, and the B.C. interior. A UBC graduate with a BA in English and an MA in Children's Literature, Karen has an extensive and varied background in program management, project management, marketing, academic writing, academic research, and editing.

Kshamta Hunter Kshamta Hunter brings over a decade of experience in sustainability learning and teaching, curriculum design and program management. She holds a PhD in sustainability curriculum and pedagogy, and teaches in the Faculty of Education at UBC. Kshamta's research explores the intersections of sustainability learning and leadership, using Transformative Learning and social innovation frameworks. Kshamta is a recipient of the 2023 President's Service Awards for Excellence in recognition of her outstanding contributions to UBC

Krista Falkner is the Manager of Transportation Engineering in Campus and Community Planning at UBC. Her work ranges from high level planning such as Campus Vision 2050 through to detailed design and implementation such as the upgrades to Wesbrook Mall. She is heavily involved in day-to-day operations and works closely with Building Operations to manage UBC's roads, pathways, cycling facilities, signals, signage, and wayfinding infrastructure.

Kristi Denby (she/her) is the Climate Change - Environment Policy Analyst at the British Columbia Assembly of First Nations. A researcher and sustainability professional, her diverse career has led her to work on water and land reform policy research in South Africa, sustainable and regenerative tourism training and development across Canada, environmental assessments with a focus on Indigenous community impacts in Northeast BC and Alberta, and sustainable value chain projects in the high Amazon region of Peru. With over a decade of experience, Kristi has incorporated a climate change, gender and social justice lens in her work and has had the privilege to learn from and work side by side with Indigenous Peoples in Peru, Tanzania, South Africa and Canada.

Linda Nowlan leads the UBC Sustainability Hub as the Senior Director. She has over twenty-five years of experience in sustainability as a public interest environmental lawyer and NGO leader. She is a member of the Board of Trustees of the Canadian Museum of Nature and the IUCN Commission on Environmental Law, and previously served on Vancouver's Greenest City Action Team and the Boards of the Fraser Basin Council and Smart Growth BC. Her advocacy contributed to many legal reforms, and her publications cover topics ranging from groundwater protection to marine spatial planning and extinction art.

Dr. Maura Brown is a diagnostic radiologist at BC Cancer, Clinical Assistant Professor Department of Radiology UBC, and Lower Mainland Medical Imaging CT medical practice lead. A lifelong enjoyment of the outdoors, a love for all living things and a health professional's commitment to improving health for all led to her interest in the health impacts of the climate crisis and biodiversity loss. Dr Brown co-chairs the BC Cancer Planetary Health Unit and recently completed a Master of Health Administration (2021-2023) at UBC.

Dr. Melissa Lem is a Vancouver family physician who also works in rural and northern communities within Canada. President of the Canadian Association of Physicians for the Environment and Director of PaRx, Canada's national nature prescription program powered by the BC Parks Foundation, she is an internationally recognized leader in the field of nature and health. She has also engaged in advocacy and policy work on issues ranging from climate change and hydraulic fracturing to sustainable health care and low-carbon transportation.

Paul Simonin is a fisheries scientist with experience conducting interdisciplinary fisheries conservation projects alongside local partners. He is a member of the core team of the Shared Waters Alliance and serves as the Conservation Science Director for A Rocha Canada. He is of settler background, originally from the Northeast part of the US, and currently lives and works out of A Rocha's field station near Steloqwen (Boundary Bay) in South Surrey.

Penny Martyn is the Green Building Manager at UBC and a registered architect. Her work covers campus academic buildings and residential projects in the neighbourhood residential areas. She was instrumental in the development of UBC's Green Building Action Plan—and its vision that campus buildings contribute to human and natural systems—and is now supporting its implementation.

Ralph Wells As Community Climate and Energy Manager for the University of British Columbia, Ralph is responsible for reducing GHG emissions and energy consumption, and addressing climate resiliency in the residential neighbourhoods on the UBC Vancouver campus. Ralph has gained a wide range of sustainability experience over a broad career spanning nearly 3 decades, has completed a UBC Master of Clean Energy Engineering and holds a Master of Resource and Environmental Management from SFU.

Sam Filipenko (he/him) is the Research Program Manager at the UBC Indigenous Research Support Initiative (IRSI). He is a non-Indigenous person of White-settler ancestry, born and raised on unceded and occupied Musqueam territory. Research practices and

policies need to better encompass the priorities, experiences, and protocols of First Nations, Inuit, and Métis peoples, and Sam has been taught that we all hold a piece to the puzzle in making research environments more equitable.

Sarah Labahn (she/her) is a Sustainability Policy Analyst working with the City of Vancouver's Climate Adaptation and Equity Team. Since joining the City, she's had the opportunity to work in several roles, gaining knowledge and experience in communications and engagement, delivery of climate programs, and climate action policy analysis. Sarah holds a Masters degree in Community and Regional Planning from UBC (2019), a Bachelor of Arts in Political Science from the University of Alberta (2015), and various certificates in public engagement and participation.

You can find copies of all current and past UBC Sustainability Scholars projects online:

<http://sustain.ubc.ca/scholarslibrary>