

RESEARCH TO ACTION: ADVANCING URBAN SUSTAINABILITY

Agenda

1:00 pm

Welcome & Opening Remarks

1:15 pm

Guest Speaker: Andrea Reimer

1:50 pm

Panel Sessions Open

2:00 pm

Concurrent Panel Sessions

Climate Resilience | Moderator: Rebeka MacDonald, Fraser Basin Council | BC Hydro Theatre

Food Systems & Health | Moderator: Emily Van Halem, City of Vancouver | Policy Lab A

Reducing Transportation Emissions | Moderator: Gavin Esdale, UBC | Policy Lab B

2:50 pm

Break/Transition

3:00 pm

Concurrent Panel Sessions

Let's Talk About Carbon | Moderator: Megan Badri, UBC | BC Hydro Theatre

Equity, Justice, Inclusion & Engagement | Michelle Hak Hepburn, UBC | Policy Lab A

Urban Ecology & Green Infrastructure | Moderator: Pamela Zevit, City of Surrey | Policy Lab B

Social Sustainability & Just Transition | Moderator: Tanya Ratzlaff, HPSC | Wellbeing Design Lab

3: 50 pm

Break/Transition

4:00 pm

Concurrent Panel Sessions

Building Resilience in a Changing Climate | Moderator: Ralph Wells, UBC | BC Hydro Theatre

Energy Reporting & Demolition Best Practices to Inform Bylaws | Moderator: Anthony An, UBC | Policy Lab A

Supply Chain & Procurement Best Practices | Moderator: Nina Akhtar, Fraser Health | Policy Lab B

5:00 pm: Conference Ends

Panel Sessions: Detail View

2:00 – 2:50 pm	<p>Climate Resilience (BC Hydro Theatre) Moderator: Rebeka MacDonald, Fraser Basin Council</p> <ul style="list-style-type: none"> Advancing Flood Resilience Best Practices for the Lower Mainland (Charlotte Milne) Policy and Best Practice Research to Inform Climate Resilient Development in Kamloops (Shiyao Zhu) 	<p>Food Systems & Health (Policy Lab A) Moderator: Emily Van Halem, City of Vancouver</p> <ul style="list-style-type: none"> Evaluating how Vancouver Business Improvement Associations incorporate diversity, equity, and inclusion into their practices (Anjana Donakonda) Challenges and opportunities of the government-led emergency food assistance program to support Asian migrants in Kelowna (Muh Syukron) 	<p>Reducing Transportation Emissions (Policy Lab B) Moderator: Gavin Esdale, UBC</p> <ul style="list-style-type: none"> Research to inform the development of a zero emissions maritime fuel collaborative (Ka Lai Or) Estimating emissions from non-road engines in the Metro Vancouver region (Rudri Bhatt) 	
	<p>Let's Talk About Carbon (BC Hydro Theatre) Moderator: Megan Badri, UBC</p> <ul style="list-style-type: none"> Cost, Performance, and Emissions Analysis of Sustainable Concrete Alternatives for Sidewalk Construction (Fisher Yu) Research and test tools and methods for assessing carbon sequestration in parkland (Nelson Cheung) Researching opportunities to reduce embodied carbon in new MURB construction for the City of Victoria (Simarjeet Nagpal) 	<p>Equity, Inclusion & Engagement (Policy Lab A) Moderator: Michelle Hak Hepburn, UBC</p> <ul style="list-style-type: none"> A public program of events centred on the significance of the Fraser Estuary (Ihomehe Agbebaku) Universal Basic Access: Case Studies and Future Directions (Najma Nizar) Transportation barriers and opportunities for newcomers (Pegah Ghane) Framework to assess the effectiveness and impact of a residential community building model (Paige Cummings) 	<p>Urban Ecology & Green Infrastructure (Policy Lab B) Moderator: Pamela Zevit, City of Surrey</p> <ul style="list-style-type: none"> Standardizing methods for citizen science BioBlitzes to monitor and support urban ecology (Clare Price) Designing a Citizen Science Protocol for Monitoring Mini Forests in the Fraser Estuary (Kylie Clark) Research and GIS analysis of urban tree canopy and green rainwater infrastructure to inform design and construction practices (Ming Cao) 	<p>Social Sustainability & Sustainable Workforce (Wellbeing Design Lab) Moderator: Tanya Ratzlaff, Home Performance Stakeholder Council</p> <ul style="list-style-type: none"> Exploring the potential for a holistic indicator of social sustainability and quality of life in Vancouver (Mana Mohebbian) Research to Inform a Workforce Attraction Strategy for Residential Retrofit Excellence (Ulziilkham Enkhbaatar) Assessing high streets in the City of Vancouver (Viola (Zhujun) He)
3:00 – 3:50 pm	<p>Building Resilience in a Changing Climate (BC Hydro Theatre) Moderator: Ralph Wells, UBC</p> <ul style="list-style-type: none"> Building Collaborative Knowledge of Extreme Heat Events and Preparedness Strategies in Vancouver (Radhika Singh) Neighbourhood scale nature-based urban design solutions to address urban heat islands, enhance outdoor resiliency and reduce cooling energy demand in buildings (Tabitha Kennedy) 	<p>Energy Reporting & Demolition Best Practices to Inform Bylaws (Policy Lab A) Moderator: Anthony An, UBC</p> <ul style="list-style-type: none"> Developing a covered buildings list to inform an energy reporting bylaw in Whistler (Forrest Paul) Research to update the demolition bylaw for the City of Richmond (Yumna Jilani) 	<p>Supply Chain & Procurement Best Practices (Policy Lab B) Moderator: Nina Akhtar, Fraser Health</p> <ul style="list-style-type: none"> Toolkit to Integrate Embodied Carbon into Municipal Procurement (Christine Lee) Assessing the environmental and social impact of Herschel Supply's supply chain (Lucy Binfield) 	
	4:00 – 4:50 pm			

Panel Presenters

Ali Hyder is a seasoned engineering management professional with over eight years of expertise in renewable energy, having delivered 50+ projects worth \$350MM. A recognized leader featured on the Solar Power 100 list - Most Influential Leaders in Solar PV Industry, currently pursuing Master of Engineering Leadership (Clean Energy Engineering) at UBC and has pioneered solar PV, EV infrastructure, and GHG reduction strategies.

Anjana Donakonda is a second-year master student at UBC's School of Public Policy and Global Affairs. With a decade of experience in rural management in India, she has led several government projects that positively impacted marginalized women and children. She aspires to be a policy advocate for inclusive change and contribute to social justice.

Charlotte Milne is a UBC PhD student in the Institute for Resources, Environment and Sustainability, a Public Scholar, and a graduate research fellow with the Disaster Resilience Research Network. While originally trained as a fluvial geomorphologist (researching rivers and how they behave) Charlotte has since shifted her work towards the ways in which rivers can impact societies, focusing on flood disasters and how we map them.

Christine Lee (she/her) is a second-year MA student in the Department of English Language and Literatures at the University of British Columbia. She earned her BA in Comparative Literature from the University of Illinois and a law degree from Northwestern University. Her research as a Sustainability Scholar draws on her prior experience working in city government.

Clare Price is a graduate student at the Institute for Resources, Environment, and Sustainability (University of British Columbia) studying urban soundscapes and perceptions of nature. She completed her undergraduate degree in Geography and Environmental Science at UBC, keenly pursuing knowledge on the intersection of community-led governance, ecological resilience, and pathways towards just futures for human and non-humans.

Fisher Yu is currently pursuing a Masters of Engineering Leadership (MEL) with a focus on sustainable process engineering. As a Material Science Engineer (Northeastern University, 2012), Fisher spent five years focusing on process improvement and has four years of experience in the entrepreneurial/start-up space.

Forrest Paul is a second-year student in the Master of Engineering program in Electrical and Computer Engineering. Motivated by his experience as an electrical buildings consultant, he is interested in leveraging the strength of big data and machine learning technologies to improve the capabilities of smart buildings, particularly in the reduction of building energy consumption and greenhouse gas emissions.

Ihomehe Agbebaku is a dedicated sustainability advocate and an MFA candidate in Creative Writing at UBC. With a background in environmental advocacy and creative projects, Ihomehe merges creative expression with environmental consciousness. Her work with the CIRS at UBC and Other Sights for Artists has focused on the importance of the Fraser River, highlighting the intersections of art, community, and ecological stewardship.

Ka Lai Or is a Master of Arts student at the Institute for Resources, Environment and Sustainability (IRES) with a research interest in international climate governance and collaboration. Prior to joining IRES, Ka Lai worked as a corporate sustainability and ESG practitioner in the maritime shipping industry.

Kylie Clark is a recent Master's of Community and Regional Planning graduate. With a background in architecture and 5+ years of experience, Kylie brings a design-based perspective to her planning work researching the intersection of climate resiliency, affordable housing, and equity. She is driven by the motto "think global, act local" and aspires to co-create with community plans and policies which are local in nature but global in impact.

Lucy Binfield is a PhD Candidate in the Faculty of Forestry at UBC. Her research looks at the social and environmental impact of efforts to grow the bamboo industry in the Global South. Her background is in environmental science, communications, and international development and she is passionate about sustainable consumption and climate justice. Originally from the UK, Lucy lived in Beijing for five years before moving to beautiful British Columbia in 2020.

Mana Mohebbian is a PhD candidate in the School of Population and Public Health at UBC. Her research primarily focuses on mental health and substance use, employing quantitative methods to analyze population-level health data. As a Sustainability Scholar with the City of Vancouver this summer, she was involved in a project exploring holistic indicators to assess well-being, social sustainability, and quality of life.

Ming Cao recently completed an MSc in Resources, Environment and Sustainability at UBC. Ming's academic background focused on forestry and hydrology. She has always been fascinated by natural spaces and plans to work in a field that continues her passion.

Muh Syukron (Syu) is a doctoral student in the Faculty of Forestry at the University of British Columbia (UBC), where he is part of the Business, Sustainability, and Technology Lab. His research explores the intersection of human activities and environmental sustainability in the digital age, with a current focus on digital activism related to palm oil sustainability in Indonesia and its global implications.

Najma Nizar is a second-year Master's student at the School of Public Policy and Global Affairs, specializing in Energy, Resources, and Sustainability. With a background in Civil Engineering and a passion for equity, she aims to contribute to inclusive policy making while leveraging her expertise and enthusiasm for sustainability, climate, and infrastructure development.

Nelson Cheung is a second-year Master of Science student in the Forestry program at UBC. His research examines urban soil properties and their development over time, highlighting their impact on the sustainability and resilience of urban forests.

Paige Cummings is a second-year student in the Masters of Public Policy and Global Affairs Program at UBC, specializing in sustainable development and social change. She believes in placing community engagement at the center of the policy process. Through her Sustainability scholar project, she found a passion for community building and hopes to continue supporting the development of sustainable, equitable, and resilient communities.

Pegah is a second-year Masters student in Civil Engineering at UBC, specializing in transportation studies. With a background in urban planning and design she joined the REACT LAB in 2023 to explore the intersection of planning and transportation. Taking an interdisciplinary approach with a focus on active transportation, Pegah is committed to developing safe, equitable, and efficient urban mobility systems.

Radhika Singh is an Indian architect and a graduate student in the School of Community and Regional Planning at UBC. She specializes in climate action, heat preparedness and environmental sustainability, applying sustainable solutions to real-world challenges and making complex urban concepts accessible to the public. She has been actively involved in extreme heat preparedness work in Vancouver and is dedicated to creating a sustainable, inclusive, and equitable urban future.

Rudri Bhatt is a PhD candidate at UBC in the Institute for Resources, Environment and Sustainability, working with Dr. Milind Kandlikar. Her research is focused on clean energy technologies and the electrification of non-road equipment in British Columbia from an air quality perspective. She is interested in reducing emissions from non-road and on-road sources. She has an MSc in Resources, Environment and Sustainability from UBC.

Shiyao Zhu is a PhD student in the Faculty of Forestry. Her research focuses on exploring the environmental impacts of urban wood waste circulation through deconstruction, with the goal of achieving a circular economy and enhancing urban resilience.

Simarjeet Nagpal is an urban planner focused on sustainable design and climate policy, with experience working on embodied carbon reduction strategies. His recent projects include consulting for the City of Victoria and UBC on reducing carbon in multi-use residential buildings. He is passionate about fostering low-carbon development.

Tabitha Kennedy is a second-year student in the UBC Masters of Community and Regional Planning (MCRP) program. She currently holds an MSc in Forestry from UBC (2023), and a BSc Honors in Environmental Science from Carleton University (2020). Her planning interests are in sustainability, climate action and adaptation, parks and urban forestry, and urban green equity.

Ulziikham (Ulzii) Enkhbaatar is a PhD student at the Allard School of Law at UBC, researching the impact of mining Community Development Agreements in Mongolia. As a Sustainability Scholar, she investigated the shortage of skilled workers that is hindering the progress of retrofitting BC homes to increase energy efficiency. Her research proposed an action plan for the Home Performance Stakeholder Council (HPSC) to design a comprehensive workforce development strategy.

Viola (Zhujun) He is pursuing a Master of Engineering Leadership (MEL) in Urban Systems at UBC, enhancing her expertise in sustainable urban development. With over six years of international experience as a planner and designer in China and the Netherlands, she has led diverse planning and sustainability development consulting projects. Her work emphasizes equity and climate resilience, ensuring that urban planning addresses the diverse needs of all communities.

Yumna Jilani is a second-year MPPGA student specialising in resources, energy, and sustainability. She holds a Bachelor's degree in Environment and Development from McGill University and has a background in sustainable development work. Passionate about environmental policy, Yumna is thrilled to be able to contribute to the City of Richmond's efforts to reduce embodied carbon. She aspires to continue shaping policy for a more sustainable future.

Moderators & Speakers

Andrea Reimer has been a strong public voice in Vancouver and the metro region for almost two decades, with a focus on working with residents to build green, reconciled, engaged communities and making government easy for the public to access. Andrea started her public work as a community organizer on issues of social, economic and environmental justice. In 2002 she was elected to the Vancouver School Board, and went on to be elected to three terms on Vancouver City Council. During her decade on City Council, Andrea spearheaded the City's effort to be the Greenest City on Earth, championed Vancouver's nationally significant municipal framework for reconciliation with indigenous peoples, catalyzed the City's digital strategy, grew the largest municipal childcare program in Canada, and transformed public engagement and open government policies.

After retiring from municipal politics in 2018, Andrea was awarded a Loeb Fellowship at Harvard University's Graduate School of Design in recognition of her significant contribution to urban policy and civic leadership. She subsequently was appointed as the first policy practitioner fellow at UBC's School of Public Policy and Global Affairs.

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.

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 BC interior. A UBC graduate with a BA in English and an MA in Children's Literature focussing on ecocriticism, Karen has an extensive and varied background in program management, project management, marketing, and academic writing, editing and research.

Gavin Esdale has a Master's degree in Sustainability, which he earned from Brock University during the all-virtual period of the pandemic. Since 2022, he has been working with Sustainability & Engineering as UBC's Sustainable Travel Coordinator. His work centers around advancing UBC's Climate Action goal of reducing UBC's emissions from air travel to 50% below 2019 levels by 2030.

Megan Badri is the Research Manager at the UBC Sustainability Hub and a recent PhD graduate from the University of Calgary. She specializes in the trade-offs and optimization of embodied and operational carbon in buildings. At UBC, Megan leads a federally funded project from the Ministry of Environment and Climate Change Canada, focusing on identifying and addressing the challenges of integrating embodied carbon into policy across Western Canada while piloting practical solutions. Prior to her role at UBC, she worked as a Sustainability Analyst in the building industry sector.

Michelle Hak Hepburn (she/hers) is a Project Specialist on the Climate Emergency Team at the Sustainability Hub. She has years of experience working towards and raising awareness of environmental justice as an applied researcher and as an educator, including as a Sustainability Scholar! She holds an MA and a PhD in Anthropology from UBC; her research explored, in part, how environmental policies differentially impact people.

Nina Akhtar is the Green+Leaders Program Lead, directing staff engagement and sustainability initiatives across Fraser Health, Providence Health Care, PHSA, and Vancouver Coastal Health. Her role involves providing expert consultation, coaching staff at all levels, and leading the implementation of sustainability projects, all while fostering a culture of positive change within these organizations.

Pamela Zevit, is the Biodiversity Conservation Planner for the City of Surrey. She joined the Parks Division in 2019 and coordinates implementation of Surrey's [Biodiversity Conservation Strategy](#) (BCS), one of the first of its kind in Canada. Through various cross-departmental and external partnerships Pamela has been advancing the goals and objectives of the BCS which is celebrating its 10th year in 2024. This has included work on integrating biodiversity and green infrastructure planning and creating linkages between biodiversity conservation, climate change and urban forestry management across the City.

As the Community Climate and Energy Manager for the University of British Columbia, **Ralph Wells** 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 Simon Fraser University. A combination of research and work experience have provided Ralph with a strong background in climate action, energy management and sustainability practice.

Rebeka MacDonald is the Program Lead for Climate Resilience at the Fraser Basin Council where she leads and supports initiatives like the BC Climate Risk Network and CONEXT: Climate Preparedness Hub that strengthen communities' capacities in addressing climate hazards across BC. Since 2017, she has worked in the no-nprofit sector, focusing on engaging with communities and

amplifying voices that are often unheard. As a Métis woman, Rebeka is deeply committed to climate equity, advocating for Indigenous and locally led solutions to enhance community resilience to climate challenges.

Tara Ivanochko is a Professor of Teaching, Director of Environmental Science, Co-Director of The Certificate for Climate Studies and Action, and Academic Director of the UBC Sustainability Hub. She joined UBC's Department of Earth, Ocean and Atmospheric Sciences as an Assistant Teaching Professor in 2009, was appointed Director of Environmental Science in 2010 and Associate Head, Undergraduate Affairs in 2017. Dr. Ivanochko helped envision the UBC 20-year Sustainability Strategy and co-lead the 2022-2027 UBC Sustainability Hub Strategic Planning process. Dr. Ivanochko co-developed the Certificate for Climate Studies and Action, was PI of OCESE (Open-source Computing for Earth Science Education), developed seven environmental science and climate focussed courses, authored the textbook *Think, Do and Communicate Environmental Science* (Cambridge Press 2021), and has coordinated 99 (supervised 49) community-engaged undergraduate capstone projects.

Tanya Razlaff is the Senior Manager of Strategic Relations at the Home Performance Stakeholder Council (HPSC), an organization working to increase energy efficiency and climate resiliency in BC home retrofits. Tanya specializes in strategic oversight of programs, collaboration with program and funding partners, as well as communications and marketing for the HPSC. She holds a Master of Science degree in Climate Change and Development from SOAS University of London, and a Bachelor of Arts in environmental Studies from Trinity Western University. Previous to joining the HPSC, Tanya worked for local government as a sustainability specialist on a variety of climate action, energy, and waste management initiatives.

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

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