



# ESAC • ACÉE

Environmental Studies Association of Canada  
*l'Association canadienne d'études environnementales*

## 2024 ANNUAL CONFERENCE 2024 CONFÉRENCE ANNUELLE

12 - 14, 06, 2024

Congress / Congrès 2024 #259  
Université McGill University

Program and schedule / Programmation et horaire

environmental &  
urban change



FEDERATION FOR THE  
HUMANITIES AND  
SOCIAL SCIENCES

FÉDÉRATION  
DES SCIENCES  
HUMAINES

## Program at a glance:

15 panel sessions, including one panel in French  
 3 keynote presentations  
 2 recorded talks with leaders in climate change and sustainability  
 A hybrid climate circle  
 A bilingual Digital Collage workshop  
 A networking event  
 Our Annual General Meeting (online only)

## Le programme en un clin d'œil:

15 panels de présentations, incluant un panel en français  
 3 plénières  
 2 conférences enregistrées avec des leaders en durabilité  
 Un cercle climatique hybride  
 Un atelier bilingue de Fresque du Numérique  
 Un événement de réseautage  
 Notre assemblée générale annuelle (uniquement en ligne)

## Schedule at a glance | L'horaire en un clin d'œil

	Day 1   Jour 1 June 12   12 juin		Day 2   Jour 2 June 13   13 juin		Day 3   Jour 3 June 14   14 juin
Room Salle	Birks 203	Birks 205	Birks 203	Birks 205	Birks 203 and 205
9:00 am- 10:30 am	<b>Birks 203 Keynote Ryan Katz-Rosene: The Growth-Environment Debate: An Introduction</b>		<b>Birks 203 Gary Belkin from COP<sup>2</sup>: Psychological Resilience &amp; Climate Resilience (Recording)</b>		<b>Birks 203 Keynote Nate Hagens: Sustaining Shared Futures (Recording)</b>
10:30 am- 11:00 am	COFFEE BREAK   PAUSE CAFÉ				
11:00 am- 12:00 pm	Panel Francophone	Arts and Sustainability I	Sustainability in Agriculture and Food Systems	Responsibility and Equity for Sustainable Futures	Birks 203 Justice in Sustainability Transitions
12:00 pm- 1:00 pm	LUNCH   DÎNER				
1:00 pm- 2:00 pm	<b>Birks 203 Climate Circle with Autumn Trainer from One Resilient Earth (Hybrid)</b>		What to do with Waste	Addressing Climate Change	<b>Birks 203 Sarah Patterson from Common Earth: The Climate Crisis: A New Story (Recording)</b>
2:00 pm- 2:15 pm	BREAK   PAUSE				
2:15 pm- 3:15 pm	Taking Action to Imagine Shared Futures	Arts and Sustainability II	<b>Birks 203 2:15 pm - 3:45 pm Keynote Panel: Settler Colonial Capitalism and Indigenous Dispossession in Canada</b>		<b>Birks 205 2:15 pm-5:15 pm Fresque du Numérique/ Digital Collage*</b>
3:15 pm- 3:30 pm	BREAK   PAUSE		BREAK   PAUSE 3:45 pm - 4:00 pm		
3:30 pm- 4:30 pm	Rethinking Environmental Studies	Climate Change, Mental Health, and Youth	4:00 pm-5:00 pm Methodology for Environmental Studies	4:00 pm-5:00 pm Sustainability in Urban Settings	<i>All breaks in Birks Lobby Toutes les pauses au Birks Lobby</i>  <b>Bold = Open Events Gras=Évènements Ouverts</b>  * = Requires registration * = Inscription requise
4:30 pm- 5:30 pm	Mobilizing Data for Sustainable Futures	Sustainability in the Energy Sector	BREAK   PAUSE		
5:30 pm- 7:30 pm	Cafferour Sherbrooke 2 <sup>nd</sup> floor Ballroom Networking Event Évènement de réseautage		6:00 pm to 7:15 pm Virtual only/En ligne Annual General Meeting* Assemblée générale annuelle*		

**Day 1 June 12 – 9am | Jour 1 12 juin – 9h**

**Birks 203**

**Keynote: Ryan Katz-Rosene: The Growth-Environment Debate: An Introduction (English only)**

For over half a Century the true relationship between growth and environmental sustainability has been hotly contested. Today we are far from any sort of scientific consensus on how the growth-environment relationship works, or ought to work. In this talk, Professor Katz-Rosene explains how this debate has evolved since the early 1970s, offering perspective on the implications of the debate for contemporary sustainable transition. Drawing upon research conducted for his forthcoming book “The Growth-Environment Debate: An Introduction”, Katz-Rosene argues the debate is no longer merely between ‘neo-Malthusian’ and ‘neo-classical’ economic understandings of scarcity; but rather today it comprises multiple discourse coalitions and numerous side debates. As we navigate the rest of the Century, understanding these dynamics becomes imperative, with the growth-environment debate set to intensify in the face of pressing global challenges.

**Day 2 June 13 – 2:15pm | Jour 2 13 juin – 14h15**

**Birks 203**

**Keynote Panel: Settler Colonial Capitalism and Indigenous Dispossession in Canada (English only)**

In this discussion, panelists examine settler colonial strategies of land dispossession, drawing connections between settler colonialism, capitalism and extractivism across space and time. We will discuss ongoing land dispossession taking place across Canada for the settler capitalist economy, from urban development to forestry, conservation and agriculture, while emphasizing their shared tenets of extractivism. We highlight Indigenous futures, land relations, and resistance to old and new colonial strategies of dispossession.

Panelists:

**Julie Tomiak** is an associate professor of Indigenous Studies at Carleton University. She is an interdisciplinary researcher of mixed Anishinaabe and European descent who studies the political economy of Indigenous-settler relations, with a focus on the histories and geographies of colonial and capitalist dispossession and Indigenous resistance, resurgence, restitution, and cities.

**Shady Hafez** is Algonquin Anishinabe from Kitigan Zibi Anishinabeg and Syrian. He is a passionate advocate for the liberation of Indigenous nations through the revitalization of Indigenous ways of knowing and being. Beyond his current position at the National Association of Friendship Centres, Shady is also an instructor in the Indigenous Wellness and Addictions Program at Canadore College and a Yellowhead Research Fellow. In his spare time Shady is an avid writer, commentator, dancer and learner/practitioner of Anishinabe arts, culture and land-based practice which he hopes to pass on to his amazing daughter, Ayah.

**Sarah Rotz** is an assistant professor in the Faculty of Environmental and Urban Change at York University. Her research focuses on land and food systems and situates political economic processes, such as agri-food industrialization and financialization, within a lens of settler colonial patriarchy and racial capitalism. She is a community engaged scholar of white settler ancestry whose interdisciplinary and collaborative work is seeking to build care and justice-oriented research methodologies, processes, and pedagogies.

**Day 3 June 14 – 9am | Jour 3 14 juin – 9h**

**Birks 203**

**Keynote Nate Hagens: Sustaining Shared Futures (Recording; English only)**

The Environmental Studies Association of Canada and York University’s Faculty of Environmental and Urban Change are proud to welcome Dr. Nate Hagens, Director of the Institute for the Study of Energy & Our Future (ISEOF) and host of the Great Simplification Podcast. Please join us for an engaging discussion on the coming cultural transition!

**Day 1 June 12 – 1pm | Jour 1 12 juin – 13h Birks 203 /Zoom (Hybrid)**

### **Climate Circle with Autumn Trainor from One Resilient Earth (English only)**

Join us for our Climate Circle Event! Featuring Autumn Trainor from One Resilient Earth, the Climate Circle session will serve as an opportunity to share 'openly about injustice, exhaustion, frustration, grief, but also joy, hope and critical experiences, within a supportive community of purpose.' For more information on the Circle, visit the [One Resilient Earth website](#).

**Autumn Trainor** (they/she) is a mental wellbeing and climate justice advocate, researcher, activist from Mi'kma'ki and residing in Tiohtià:ke (Montreal, Canada). They have been active in the climate and social justice movements for over a decade. They have taken the knowledge they have gained from their studies and activism, and are working to raise awareness of the effects of the climate crisis on mental wellbeing. They hope to help foster a better understanding and expression of our emotions and enable a healthy progression to regenerative cultures through art-making and care. Autumn supports One Resilient Earth with the Youth Climate Circle, and with research on mental health and climate change.

**Day 1 June 12 – 5 :30pm | Jour 1 12 juin – 17h30**

**Birks 203**

### **Évènement de réseautage (Bilingue) | Networking event (Bilingual)**

Unwind and connect at our Networking Event, where attendees can mingle and network in a relaxed atmosphere. Come engage in meaningful conversations with fellow conference participants. Whether you're a seasoned professional or a newcomer to environmental studies, this event offers the perfect opportunity to build new connections and foster collaborations.

*Vegetarian food served.*

Venez vous détendre et établir de nouvelles connexions lors de notre événement de réseautage, où les participants pourront se mêler et réseauter dans une ambiance informelle. Participez à des conversations stimulantes avec d'autres participants de la conférence. Que vous soyez un professionnel aguerri ou un novice dans les études environnementales, cet événement offre l'occasion idéale de tisser de nouveaux liens et de favoriser des collaborations.

*Nourriture végétarienne servie.*

**Day 3 June 14 – 2:15 to 5 :15pm | Jour 3 14 juin – 14h15 à 17h15 Birks 205**

### **Atelier Fresque du Numérique (Bilingue) | Digital Collage workshop (Bilingual)\***

Join us for a unique opportunity to participate in a Digital Collage at Congress! A maximum of 14 participants can participate in this 3-hour workshop. Depending on participants, there will be one table in French and one in English. Facilitated by Christine Beaudoin, trained facilitator of the Digital Collage.



Pictures courtesy: [www.fresquedunumerique.org](http://www.fresquedunumerique.org)

**Registration is required and participation is limited.** Please register only if you can attend, and please let us know if you register and can no longer attend as we will give your spot to someone else: <https://www.esac.ca/events-1/digital-collage>

Official description from <https://www.fresquedunumerique.org/>: “The Digital Collage is a fun and collaborative half-day workshop with a similar educational method as the Climate Fresk. The workshop also aims to lay down the key solutions to build a more sustainable digital sector. It then encourages participants to discuss the topic for fruitful debate. This workshop is a real team-building tool, allowing participants to come together and discover how to achieve sustainability in the digital sector.”

This event is supported by the Federation for the Humanities and Social Sciences Open Programming Fund.

Soyez des nôtres pour une opportunité unique de participer à la Fresque du Numérique dans le cadre du Congrès! Un maximum de 14 participants peuvent participer à cet atelier de 3 heures. Selon les participants, nous aurons une table en français et une table en anglais. L'atelier sera animé par Christine Beaudoin, animatrice formée à la Fresque du Numérique.

**L'inscription est obligatoire et les places sont limitées.** Merci de vous inscrire seulement si vous pouvez participer, et priez de nous informer si vous vous inscrivez et ne pouvez plus participer, car nous donnerons votre place à quelqu'un d'autre : <https://www.esac.ca/events-1/digital-collage>

Description officielle du site web <https://www.fresquedunumerique.org/>: « La Fresque du Numérique est un atelier ludique et collaboratif d'une demi-journée avec une pédagogie similaire à celle de La Fresque du Climat. Le but de ce "serious game" est de sensibiliser et former les participant·es aux enjeux environnementaux du numérique. L'atelier vise aussi à expliquer les grandes lignes des actions à mettre en place pour évoluer vers un numérique plus soutenable, puis à ouvrir des discussions entre les participant·es sur le sujet. Véritable outil de team building, cet atelier permet de se rassembler pour apprendre ensemble. »

Cet événement est supporté par les Fonds de Programmation Ouverte de la Fédération des Sciences Humaines.

## Special events | Évènements spéciaux

**Day 2 June 13 – 9am | Jour 2 13 juin – 9h**

**Birks 203**

**Gary Belkin from COP<sup>2</sup>: Psychological Resilience & Climate Resilience  
(Recording; English only)**

Join us for a talk by Gary Belkin about psychological resilience and climate change. Gary is Director, Billion Minds Institute, and Chair, COP<sup>2</sup> (cop2.org)

**Gary Belkin** is a psychiatrist who approaches mental health as a building block of social policy and progress, he recently founded Billion Minds as a “think-action tank.” The intention of Billion Minds is to link mental health to problems of great scale, specifically to the climate crisis, and to safeguarding sustainable societies through a humane social climate. COP2 was one outcome of that work—a global network aligned about converging growing activity and learning on climate-psychological resilience connections and putting them to global scale. An initial effort from that was to produce an implementation Roadmap in collaboration with the UNFCCC Race to Resilience and aligned partners to incorporate the goal of building capacity to promote psychological resilience within the global goal of promoting climate resilience to 4 billion people by 2030. Gary is also the former Executive Deputy Commissioner in the New York City Department of Health and Mental. Before joining city government, he was Medical Director for Behavioral Health across the Health and Hospitals Corporation of the City of New York, and served as Founding Editor in Chief of the open access journal Global Mental Health.

**Day 3 June 14 – 1pm | Jour 3 14 juin – 13h**

**Birks 203**

**Sarah Patterson from Common Earth: The Climate Crisis: A New Story**

**(Recording; English only)**

Join Sarah Patterson, President of Common Earth, as she outlines a more holistic explanation of the climate crisis. Often understood as an energy crisis, the issues we are currently facing are in fact more existential than anything else. And seen from this perspective, climate change can be reimagined as an opportunity for us to shift our narrative and tell a more hopeful story of who we are and how we can once again live in reciprocity with the rest of our amazing planet.

For the first almost 20 years of her career, Sarah worked in the finance industry in various Operational, Learning & Development, and Human Resources roles. In 2016 Sarah returned to her first love of summer camps when she assumed a role managing the operations of 5 summer camps. In 2020 Sarah joined forces with David Patterson to create a space where people can grapple with how we can move toward a post-carbon caring society. She was so moved by her own experience, as well as the impact she witnessed it having on others, that she quit her job to focus entirely on helping to grow the Common Earth community. When not working on Common Earth efforts, you can find her reading or hosting people at her home.

## **Annual General Meeting | Assemblée générale annuelle**

**Day 2 June 13 – 6pm | Jour 2 13 juin – 18h**

**Virtual only | En ligne seulement**

### **Annual General Meeting (Bilingual)\***

ESAC Members are invited to attend this year's Annual General Meeting, June 13th at 5:30pm EST. The AGM will be held fully virtually. We will report on ESAC's activities in the past year and look forward to hearing from members!

You must be an active ESAC member to attend the AGM. Registration is mandatory to receive the Zoom link: <https://www.esac.ca/events-1/esac-2024-annual-general-meeting>

### **Assemblée générale annuelle (Bilingue)\***

Les membres de l'ACÉE sont invités à participer à l'assemblée générale annuelle de cette année, le 13 juin à 17h30 (heure de l'Est). L'AGA se déroulera de manière entièrement virtuelle. Nous présenterons un rapport sur les activités de l'ESAC au cours de l'année écoulée et nous attendons avec impatience les commentaires des membres !

Vous devez être un membre actif de l'ACÉE pour assister à l'AGA. L'inscription est obligatoire pour recevoir le lien Zoom : <https://www.esac.ca/events-1/esac-2024-annual-general-meeting>

## Panel sessions | Panels de présentations

Except when otherwise stated, panel sessions are in English.

Sauf exception, les panels de présentations sont en anglais.

### Panel Francophone

**Jour 1 12 juin, 11am – Birks 203**

Présidence : À déterminer.

<b>Ali Romdhani et Charmain Levy</b>	Comprendre l'effervescence en transition socioécologique au Québec
<b>Marie-Ève Chartrand et Giuliano Reis</b>	La pédagogie multiculturaliste en nature: Une étude des pratiques pédagogiques inclusives en Ontario
<b>Agathe Mulezi Kanyole</b>	Femmes et agriculture biologique
<b>Saja Farhat</b>	Les Cinq faces de l'Oppression Environnementale : Une Application de la Théorie d' Iris Marion Young

### Comprendre l'effervescence en transition socioécologique au Québec

Ali Romdhani (Université du Québec à Montréal) et Charmain Levy (Université du Québec en Outaouais)

Depuis les cinq dernières années, le Québec connaît une effervescence autour du concept de transition qui permet de renouveler le discours environnemental, avec son lot de nouvelles organisations, collaborations et interférences. Les ressources allouées à la transition se sont aussi multipliées, notamment de par l'intérêt accru des organisations philanthropiques (Graziani-Taugeron et Audet, 2019). Cette communication vise à restituer les résultats d'une recherche avec des organisations de la transition, plus spécifiquement dans sa forme socioécologique, c'est-à-dire alliant soutenabilité environnementale et justice sociale. Nous analysons ces acteurs selon trois aspects : les caractéristiques organisationnelles qui les définissent (composition, champ d'action, ressources), leurs collaborations et interférences avec les autres acteurs de la société et dernièrement, leurs postures vis-à-vis de la transition. Pour ce faire, nous avons administré un questionnaire à plus de 200 organisations œuvrant directement ou indirectement pour la transition au Québec. Les aspects centraux ont ensuite été abordés lors de six ateliers avec chacun 10 participants en moyenne. Les résultats préliminaires montrent une grande diversité d'approche à la transition, mais avec certaines régularités, comme le rôle central de la justice sociale. Les collaborations et interférences sont schématisées dans un diagramme de réseau.

### La pédagogie multiculturaliste en nature: Une étude des pratiques pédagogiques inclusives en Ontario

Marie-Ève Chartrand (Université d'Ottawa) et Giuliano Reis (Université d'Ottawa)

1) Objectif de la Recherche: Cette étude examine l'adaptation des programmes de maternelle et jardin en plein air au contexte multiculturel canadien, en intégrant les perspectives autochtones. Elle explore comment les enseignants ajustent leurs pratiques, identifiant les éléments favorables et les obstacles. 2) Questions de recherche et méthode: Comment est-ce que les enseignantes et enseignants des classes nature adaptent leurs pratiques pédagogiques au contexte multiculturel (et autochtone) du Canada? Quels sont les éléments favorables et les obstacles qui influencent ce processus? L'étude de cas multiple (Yin, 2017) explorera en profondeur trois programmes éducatifs. Des visites sur le terrain, saisonnières, comprendront observations et entretiens semi-dirigés. Les données qualitatives seront analysées selon les principes clés de l'éducation environnementale multiculturelle de Running Grass (1994). 3) Principales conclusions: Ce projet éclairera les pratiques

pédagogiques des enseignants des classes nature au Canada, remettant en question les approches traditionnelles. Il identifiera les éléments favorisant l'adaptation multiculturelle, offrant des informations utiles pour promouvoir l'inclusivité culturelle dans l'éducation environnementale. En explorant les obstacles, il contribuera à une meilleure compréhension des défis rencontrés par les enseignants.

## **Femmes et agriculture biologique**

Agathe Mulezi Kanyole (Association canadienne d'études environnementales)

L'agriculture biologique implique des techniques et des méthodes de culture qui visent à protéger l'environnement, les humains et les animaux, grâce à une agriculture durable. Soucieux d'approvisionner la ville en denrées alimentaires saines, Nous, Femmes et Agriculture Biologique avons pris l'initiative de promouvoir et pratiquer une agriculture économiquement durable et saine pour l'environnement et socialement équitable. Objectif : produire des légumes bios en vue de contribuer à la sécurité alimentaire. Les travaux à réaliser partiront de l'aménagement du terrain et s'achèveront à la production et vente des produits finis. Il s'agira pratiquement de : la délimitation du terrain dans le but de déterminer les espaces à emblaver pour chaque culture ; l'acquisition des matériels et équipement ; la préparation du terrain, l'acquisition des intrants bio certifiées (semences, engrais et pesticides) ; l'emblavement des terrains ; le suivi et entretien des cultures ; la récolte et la vente. Superficie et nombre total de plate bandes : 6 ares dont 48 plates-bandes : Aubergine 2.64 a, Gombo 1.6 a, Poivron 1.6 a. Rendement escomptés : Aubergine 789 kg, Gombo 112 kg, Poivrons 160kg. La réalisation de ce projet permet de fournir annuellement 1 tonne des légumes.

## **Les Cinq faces de l'Oppression Environnementale : Une Application de la Théorie d' Iris Marion Young** Saja Farhat (Université de Montréal)

Cette étude vise à interpréter et à appliquer la théorie philosophique des cinq formes d'oppression d'Iris Marion Young au cadre des injustices environnementales au Canada. L'accent est mis sur une exploration philosophique de la manière dont ces formes d'oppression se reflètent et se perpétuent à travers les politiques et pratiques environnementales, et leur impact sur les communautés et les individus. Dans un contexte marqué par des enjeux environnementaux critiques, cette recherche explore les dimensions philosophiques des injustices environnementales. Les questions de recherche se concentrent sur la manière dont les concepts d'exploitation, de marginalisation, d'impuissance, de violence culturelle et d'injustice, tels que définis par Young, se manifestent dans le contexte environnemental canadien. L'approche méthodologique est principalement théorique et conceptuelle, s'appuyant sur une analyse critique des textes philosophiques, des politiques environnementales, et des études de cas pertinentes. L'étude révèle que les formes d'oppression décrites par Young sont intrinsèquement liées aux pratiques et politiques environnementales actuelles au Canada. L'exploitation se traduit par une utilisation inéquitable des ressources naturelles, la marginalisation se manifeste dans le manque de considération des besoins et droits des communautés vulnérables, notamment les peuples autochtones, dans les politiques environnementales. L'impuissance est perceptible dans le sentiment d'inefficacité face aux défis environnementaux, tandis que la violence culturelle se reflète dans le mépris des pratiques environnementales traditionnelles. Enfin, l'injustice est illustrée par le déséquilibre entre développement économique et préservation de l'environnement. Ces conclusions suggèrent l'importance d'une réflexion philosophique approfondie sur les politiques environnementales, soulignant la nécessité d'intégrer des considérations éthiques et de justice sociale dans la gouvernance environnementale.



# Arts and Sustainability I

## Day 1 June 12, 11am – Birks 205

Chair : To be determined.

<b>Lauren Judge</b>	Findings of More-than-human World Making: Visual Co-Creation on the Saugeen (Bruce) Peninsula
<b>Geo Takach</b>	Dialoguing Environmental, Indigenous and Arts-Based Approaches to Sustain Shared Futures
<b>Laurence Butet-Roch</b>	Remediating Toxic Images: Moving Towards Representational Justice in Environmental Reporting

### **Findings of More-than-human World Making: Visual Co-Creation on the Saugeen (Bruce) Peninsula** Lauren Judge (Wilfrid Laurier University)

This paper argues that visual artists who live and work on the Saugeen (Bruce) Peninsula, in Ontario, Canada, are co-creating artworks with non-humans, which is evidence of more-than-human world-making. After reviewing interdisciplinary literature, I designed my research to include a combination of ethnography, autoethnography and research-creation methodologies to investigate fourteen visual artists, plus myself, as a culture sharing group. Evidence was collected through semi-structured interviews, studio visits, visual analyses of artworks, and reflections on my own artistic practice and experimental research methods with dolostone in St. Jean Point Nature Preserve on the peninsula. Using the pluriverse as a critical framework of entanglement and heterogeneous worlding practices inclusive of humans and nonhumans, I sought answers to my research questions. I found that contemporary visual culture on the peninsula is not strictly a human construct, but it is a form of co-creation, an artistic materialization of a relationship between a human and non-human that can effectively tell a new environmental story about the peninsula.

### **Dialoguing Environmental, Indigenous and Arts-Based Approaches to Sustain Shared Futures** Geo Takach (Royal Roads University)

This research connects urgent, societal priorities of environmental protection and ‘Indigenous reconciliation’ in Canada. At their core, both aim to overcome abuses to sustain a healthy planet and a just society for present and future generations. Recognizing that we need augmented communication tools to help achieve these goals, this project explores and brings into dialogue environmentalist, Indigenist and arts-based epistemologies, to appeal to the heart and the spirit as well as the mind in a society dominated by extractive, colonialist imperatives. (Indigenist research as described by Opaskwayak Cree scholar Shawn Wilson follows Indigenous guiding principles potentially compatible with environmentalist thought—e.g., relationality, respect, reciprocity, etc.—and can be adopted by anyone.) This work seeks to interweave these three approaches creatively and respectfully, with each maintaining its identity while creating something strong together, and without continuing colonialist practices. Building a theoretical foundation for this link and drawing on interviews with scholars and knowledge-keepers, this sharing of a multi-year study (including a film) investigates how these three perspectives can be interwoven to create evocative communications about the essential need to protect our environment—while hopefully also building and maintaining more respectful relationships with Indigenous Peoples and their knowledge.

### **Remediating Toxic Images: Moving Towards Representational Justice in Environmental Reporting** Laurence Butet-Roch (York University)

Aamjiwnaang First Nation appears in the news intermittently when concerns for the health and environmental consequences of industrial contamination (re)surface. In these instances, media interest amounts to a secondary form of exposure. Bodies, natural and human, are first exposed to the toxins released by extractive industries. News reporting exposes them once again, this time to the scrutinizing gazes of journalists, which shape how they are then seen, understood, and engaged with by the wider public. In such circumstances, achieving

representational justice —whereby communities feel like they are aptly depicted— implies moving beyond traditional modes of visual discourse analysis, which tend to be conducted by academics who, while deeply invested in understanding the sociocultural and material ramifications of photographic tropes, seldom experience their embodied repercussions. In this paper, I attend to both the potential of participatory approaches to visual discourse analysis, providing an introduction to methods such as elaborated images, which asks participants to annotate photographs, and share the practical visual recommendations that emerged during the workshops held in Aamjiwnaang First Nation in the summer of 2023, which in the words of elder Mike Plain, asks that we resist “half-truths,” to find an equilibrium between showing the negative reality of industrial pollution and emphasizing the beauty and strength of the community.

## **Taking Action to Imagine Shared Futures** **Day 1 June 12, 2:15pm – Birks 203**

Chair : To be determined.

<b>Robert Case</b>	The Potentialities of Local Activism for Sustaining Shared Futures
<b>Roger Picton</b>	Adaptive Reuse, Zoning, and Sustainability in Canadian Craft Beer Scene
<b>Najiha Afnan</b>	Potential Mitigation and Adaptation Strategies against Future Flooding in Thunder Bay, Ontario

### **The Potentialities of Local Activism for Sustaining Shared Futures**

Robert Case (Renison University College)

The “Nestle Waters/Blue Triton Tracker Project” is a SSHRC-funded comparative study of community-based opposition to corporate water bottling in three communities in the United States and one in Canada. Based on interviews with key actors, the purpose of the study is to generate insights regarding community mobilization around perceived local socio-environmental threats and the exercise of governmental and corporate power in response to community opposition. Preliminary results suggest that while the contexts differ considerably, activism in all study communities is rooted in similar concerns regarding local water supply, but also in a common yearning for greater direct community input into policy decisions and governance processes that shape our social and environmental futures. As a concrete point of intersection between community, government, big business, and the environment, battles over groundwater bottling are bringing divergent communities into conversation with each other to resist corporate power, assert socio-ecological values, and imagine what a sustainable shared future might look like. This presentation will share highlights from the research and engage session participants in discussion of the limits and potentialities of local activism as a means of building the skills, analyses, relationships, and political imaginations upon which a sustainable shared future may be built.

### **Adaptive Reuse, Zoning, and Sustainability in Canadian Craft Beer Scene**

Roger Picton (Trent University)

A growing body of research espouses the benefits of reusing existing buildings as part of a sustainability framework (Kahvecioğlu & Selçuk, 2023; Lynch, 2022; Foster, 2020; Jones & Franck, 2019; Love & Bullen, 2009). With a national adaptive reuse rate of 86%, the craft beer sector reflects an important opportunity to encourage and expand the repurposing of existing buildings within specific locations (Picton & Mathews, 2023). Despite the popularity of adaptive reuse in the sector, there is a dearth of research examining the motivational factors behind adaptive reuse in the craft sector. This paper draws on extensive study of craft breweries and adaptive reuse across Canada to probe how individual lot characteristic, building type preferences, and municipal zoning by-laws influence the micro-geographies of craft brewing. This deeper understanding of the motivations of craft breweries contributes to a larger debate on how adaptive reuse can contribute to sustainable practices at the municipal level.

# Potential Mitigation and Adaptation Strategies against Future Flooding in Thunder Bay, Ontario

Najiha Afnan (Lakehead University)

The city of Thunder Bay, Ontario, has been periodically subject to flooding, which caused significant damage to the city. With the pace of climate change, the city might experience major flood events in the future as well. To protect the city from anticipated future flooding, it is necessary to consider an organized and methodical approach to prevention and long-term adaptation. This study assesses the future flood risk in Thunder Bay and identifies potential mitigation and adaptation strategies. To evaluate the potential for flooding, historical (2008-2017) and future (2041-2050 and 2091-2100) hydrologic and climatic data have been analyzed. Future hydrologic data have been simulated using the Soil and Water Assessment Tool (SWAT). Future climatic data have been derived from CMIP6 model outputs. Future projections for Thunder Bay show a significant trend towards increasing temperature and precipitation. The SWAT model results predict remarkably elevated stream discharge patterns and thus increased potential for flooding. To minimize the potential damage from future flood events, this study recommends several non-structural, structural, and hybrid flood control strategies for Thunder Bay based on expert opinion and an extensive literature review. The outcomes of this study are expected to contribute to Thunder Bay's future flood management and guide policy decisions intended to reduce flood damages.

## Arts and Sustainability II

### Day 1 June 12, 2:15pm – Birks 205

Chair : To be determined.

<b>Jasmine Sihra</b>	Projecting Climate Futures Across The Arts in Canada
<b>Cynthia Wing Nga Lam</b>	Nature in Verse and Print: Ecocritical Discourses in Japanese Art Forms
<b>Kathryn Last and Mark Allwood-Portillo</b>	Confronting Waste: Consciousness and Art Making in the age of excess

## Projecting Climate Futures Across The Arts in Canada

Jasmine Sihra (Concordia University)

Working from my own perspective as a woman of colour scholar, this presentation explores how artistic practices are significant in imagining new kinds of climate futures because of how they focus on relationships with/ between human and non- human life. As noted by Potawatomi scholar Kyle Whyte, sustainability initiatives, policies, or future planning often neglect to consider how Black, Indigenous, and other racialized communities are the most affected by climate change and environmental degradation. My research seeks to disrupt this disregard for marginalised communities' experiences of climate change by highlighting selected artworks that work from Indigenous, Black, or racialized experiences. Selected works from artists include those of Christina Battle (Black), Tsēma Igharas (Tahltan), and Rajni Perera (Sri Lankan). To that end, my guiding research question in this work is "How do artists, curators, and other arts professionals demonstrate that sustaining communities is part of sustainability work overall?" Drawing on research by Black futurist/activist adrienne maree brown, and Indigenous feminist scholars Dine scholar Melanie K. Yazzie and Hupa/Yurok/Karuk scholar Cutcha Risling Baldy, I conclude that the Arts is key in imagining and envisioning new kinds of climate futures that are rooted in the well-being of all.

## Nature in Verse and Print: Ecocritical Discourses in Japanese Art Forms

Cynthia Wing Nga Lam (Western University)

This paper contributes towards a developing area in Japanese Ecocriticism by analyzing traditional Japanese arts – haiku and ukiyo-e. Haiku is one of the most common forms of poetry in and outside Japan. Its simplistic design makes it approachable to anyone, yet the power and sentiment it can convey far exceeds its form. Many haiku are ecologically or seasonally themed, making it the perfect artistic medium for ecocritical discussion. Likewise, the nature theme is also commonly illustrated in ukiyo-e. The term ukiyo signifies the “floating world” to the Japanese people, and therefore encompasses everything in nature. Relying on the shared notions in these two art forms, I shall examine how we can understand, connect, and feel “nature” with the concept of mono-no-aware (the “pathos of things”) and the affect theory. While this paper does not aim to conduct a sufficiently thorough analysis of haiku or ukiyo-e, it can serve as an inception point for introducing these Japanese art forms in a new paradigm of ecocriticism, offering perspectives that might enrich the currently Western-dominated discourse. By revisiting different forms of traditional Japanese art, I hope to demonstrate a potential way to reconnect to and appreciate nature in the era of ecological crises.

## Confronting Waste: Consciousness and Art Making in the age of excess

Kathryn Last (Trent University) and Mark Allwood-Portillo (Trent University)

The Anthropocene faces human beings with one of the most profound existential realizations. Our very presence in the planet is bacterial, cancerous, and transformational of its very skin. Our contemporary modes of production have reached a point of no return and we are too late to the party. Or so it may seem. By acknowledging this existential point of no return and naming it as such, we can start to formulate a way out or at least a cathartic escape from the inevitable destruction of the earth. In this paper we will offer two remedies that both confront and address the warming climate in theory and practice. The first remedy provides a new materialist framework that centres around an inclusive account of matter. Through this account, we can start to deconstruct the psychic response to the climate crisis and examine collective wounds found in art making and the landscape. The second remedy is grounded in artmaking as a response to the warming climate. We include the film ‘Waste Land’ which documents multidisciplinary artist Vik Muniz as he collaborates with the Catadores of Rio de Janeiro and the world’s biggest landfill to create vibrant works of art out of garbage.

## Rethinking Environmental Studies

Day 1 June 12, 3:30pm – Birks 203

Chair : To be determined.

<b>Elaine Howarth</b>	Revolutionizing the imaginary: Visions for a degrowth future
<b>James Wilkes</b>	Unsettling Environmental Studies
<b>Eric Miller</b>	Engaging interdisciplinary students in sustainability informatics
<b>Irène Svoronos</b>	The Imagination of Real Skies. Thinking, Dreaming and Politicizing Endangered Nights

## Revolutionizing the imaginary: Visions for a degrowth future

Elaine Howarth (York University)

My research tries to answer the question, can imagining a degrowth future contribute to unlearning capitalist realism? The basis of my research topic comes from a quote attributed to philosophers Fredric Jameson and Slavoj Žižek. It goes, ‘It’s easier to imagine the end of the world than the end of capitalism’ and I’ve heard it

quoted directly, or the sentiment reproduced, by both capitalists and anti-capitalists alike. Capitalist realism has diminished our ability to imagine viable alternatives, let alone dream of better futures. Degrowth is one such alternative that is gaining some traction among academics and environmentalists, although it remains outside the mainstream. It stems from the recognition that earth's resources are finite, and that maintaining economic growth, even if it's presented as 'green growth' or 'green capitalism', will (continue to) have disastrous consequences. Beyond the equitable downsizing of production and consumption, degrowth also challenges the narrative of growth as progress, and/or the necessary path to development and wellbeing. Instead, it relies on concepts of 'voluntary simplicity', or living a life of minimal energy/material consumption. Yet, one of the biggest challenges faced by degrowth as a movement, is how to capture the public's imagination and gain broader acceptance. One very powerful way to do this is through speculative fiction. Speculative fiction has often been used by authors as a tool to explore imaginary futures, both utopian, dystopian or somewhere in between. By synthesizing degrowth's goals and visions and exploring non-Western perspectives on relational collectivity, pluriversity, and inter-species reciprocity, I use the process of writing speculative fiction, as a thought experiment in unlearning capitalist ideologies, allowing me to reimagine market/state systems through a degrowth lens.

## **Unsettling Environmental Studies**

James Wilkes (Trent University, Queen's University)

What do we wish to sustain, and what are we willing to let go? Environmental studies as a discipline, and as a post-secondary education field of study, has largely ignored the impacts of settler colonialism and systemic colonial ideology in Canada. As a doctoral student and a university instructor in environmental studies, my research seeks to understand how environmental studies educators are thinking and teaching about colonialism in their courses, and what are the implications for post-secondary environmental studies education in Canada? This research is helping to identify future directions of environmental studies teaching at post-secondary institutions, as well as strategies for discussing colonialism in university classrooms. Do we wish to sustain colonial ideology, or are we willing to see colonialism as a threat to life on Earth?

## **Engaging interdisciplinary students in sustainability informatics**

Eric Miller (York University)

This presentation identifies transferable lessons learned from developing a curriculum to engage environmental studies students in "sustainability informatics". Sustainability informatics involves the use of computational tools and methodologies to engage with information relevant to understanding and transforming humanity's metabolic relationships with nature. Interdisciplinary environmental studies programs often lack the capacity to offer courses and experiential opportunities related to informatics. Furthermore, environmental studies students often presume themselves to be unable to succeed in informatics. These challenges can be overcome, and were overcome, through the development of a curriculum built around the concept and measurement of Ecological Footprint and Biocapacity.

## **The Imagination of Real Skies. Thinking, Dreaming and Politicizing Endangered Nights**

Irène Svoronos (McGill University)

Today, the Milky Way has become invisible to the naked eye for more than a third of humanity. In 2023, over 99% of the populations of North America are no longer able to see the stars after dark. Light pollution affects both humans (disruption of sleep patterns, loss of cultural and scientific heritage, climate change), and nocturnal animals who depend on darkness for their survival. Nighttime lighting, both public and private, is to blame, but recently astronomers, both amateur and professional, have also been hindered in their observations by the increasing presence of private satellites in near space, such as Starlink (SpaceX) or Kuiper (Amazon). Even as numerous communities of Western and Indigenous astronomers, as well as local non-scientific residents, raise alarms about the disappearance of dark skies and fight for environmental justice, we are witnessing an annexation of near space that threatens the very idea of the sky as a common good and ancestral heritage. To what perception of our environment do we gain access through the embodied experience of the night sky? Relying on the history of the annexation of the sky and of public lighting, and on primary fieldwork done in Mont Mégantic, I suggest ideas to increase dialogue between Western scientific astronomy, folk astronomy, and Indigenous astronomy but also to create a common front for new politics of dwelling in the night.

# Climate Change, Mental Health, and Youth

Day 1 June 12, 3:30pm – Birks 205

Chair : To be determined.

<b>Kelly Gingrich</b>	Perceptions of wellbeing in climate-just futures among youth climate activists
<b>Breanne Aylward et al.</b>	Assessing the emotional toll of climate change on young people in Canada: A national cross-sectional survey
<b>Sabrina Guzman Skotnitsky</b>	Creating Climate Resilience: Arts-based Approaches for Helping Youth Process Climate Anxiety and Generate Active Hope
<b>Pamela Courtenay-Hall</b>	Ecological Identity and Ecological Grief

## Perceptions of wellbeing in climate-just futures among youth climate activists

Kelly Gingrich (York University)

This study merges the two fields of degrowth and climate education through reconsidering narratives of wellbeing and what constitutes these ideas of wellbeing in the capitalist present and in envisioned climate-just futures. Wellbeing is a key aspect of 'degrowth', an academic field and emerging social movement that advocates reduced production and consumption while shifting ideas of 'progress' from economic growth towards wellbeing for all within ecological limits. Yet, climate education skirts around challenging limits to economic growth, despite the clear necessity of decreasing overconsumption in the Global North to meet the required climate targets. Formal and non-formal education are key areas for shifting cultural common senses and practices towards those that are both compatible with ecological limits and ensure that basic needs are met for all people. This study uses participatory visual research methods, namely 'cellphilm', to explore youth climate activists' perceptions of wellbeing in the context of the climate emergency and in visions of climate-just futures. This research compares ideas of wellbeing between youth climate activists and degrowth to identify potential interventions into non-formal and popular climate education, as well as strategies for the degrowth movement to form alliances with the climate movement.

## Assessing the emotional toll of climate change on young people in Canada: A national cross-sectional survey

Breanne Aylward (University of Alberta), Ashlee Cunsolo (Memorial University), Susan Clayton (College of Wooster), Kelton Minor (Columbia University), Madison Cooper (University of Alberta), Susan Chatwood (University of Alberta) and Sherilee Harper (University of Alberta)

Climate change poses a significant threat to young people's emotional wellbeing. Population-level research is needed to inform policies and interventions that can prevent long-term mental health impacts from climate change in young people. We aimed to determine the prevalence, distribution, and predictors of climate-related mental and emotional health outcomes among young people (13-34 years old) in Canada. As part of a larger cross-sectional survey (n=2477), a multi-stage, multi-stratified random probability sampling procedure was used to recruit and interview participants between April 2022 and March 2023. Young people's data (n=410) were weighted by age and province using population estimates from Statistics Canada and analysed using descriptive statistics, factor analyses, and multivariable regression analyses. Preliminary results indicate that over 70% of respondents reported at least mild levels of sadness, anger, worry, anxiety, concern, helplessness, hopelessness, and/or powerlessness related to climate change. Severity of emotional responses differed by gender: non-binary respondents and cisgender women reported higher average levels of distress than cisgender men. Regional differences also emerged, with Northern and urban locations reporting more severe reactions. This study builds understanding of the burden of climate change on young people's mental health; left unaddressed, this burden could have long-lasting adverse public health consequences.

## **Creating Climate Resilience: Arts-based Approaches for Helping Youth Process Climate Anxiety and Generate Active Hope**

Sabrina Guzman Skotnitsky (University of Victoria)

Sabrina's creative practice and her lived experience as a young climate justice advocate have inspired her to pursue the following research questions through her MA thesis: can, and if so how does visual artmaking and dialoguing help young people cope with climate anxiety and related eco-emotions? Furthermore, in what ways can these arts-based approaches help youth generate active hope? Employing methods from Youth Participatory Action Research (YPAR) and arts-based research (ABR) her project invited youth ages 16 - 25 in so-called Victoria to engage in a series of artmaking sessions between November and December 2023. Participants were provided the space and materials to discuss and create artworks about climate emotions, particularly climate anxiety and their visions for what a climate resilient and socially just future could look like. Her findings support existing evidence from psychology, social work, art therapy and related fields of the power of arts-based approaches for healing, resilience-building and fostering community among people who share similar mental health challenges. Furthermore, her participants share additional insights as to how artmaking and dialoguing can contribute not only to individual emotional resilience in the face of the climate crisis, but also to larger scale collective awareness-building and climate action.

## **Ecological Identity and Ecological Grief**

Pamela Courtenay-Hall (University of Prince Edward Island)

Helping students articulate their ecological identity is important work because it can provide them with a resilient platform for facing the changes that climate change and environmental degradation may bring to their world. It can also help students understand the grief these changes can bring, and provide a strong basis for greater empathy with the losses that others experience ... including other animals. Yet early models of ecological identity (e.g., Lei Lei 2021, Young, Carsten Conner & Pettit 2020, Walton and Jones 2018, S. Clayton 2003, Mitchell Thomashow 1996) are often built around a privileging of a particular set of environmental values or a particular specification of "pro-environmental behaviours." Students can find this prescriptive and alienating. I will present a model of ecological identity that departs from this pre-selected value orientation and instead enables students to articulate their experiences, and explore the values implicit in them, on their own, with a clear commitment to being true to their experiences and cognizant of environmental impacts. I have been developing this framework over the past 30 plus years of teaching environmental education and philosophy at UBC and UPEI. I share both the conceptual development involved and student response from the past 10 years.

# Mobilizing Data for Sustainable Futures

Day 1 June 12, 4:30 – Birks 203

Chair : To be determined.

<b>Peri Dworatzek, Danielle Letang and Yogesh Mandal</b>	Ecological Footprint and Biocapacity Accounts for Rural Communities in Ontario
<b>Karl Petschke</b>	Wayside Ecologies: Life at the Margins of Infrastructure
<b>Christine Beaudoin et al.</b>	Expert elicitation to support the implementation of the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada

## Ecological Footprint and Biocapacity Accounts for Rural Communities in

**Ontario** Peri Dworatzek (York University), Danielle Letang (Rural Ontario Institute) and Yogesh Mandal (Rural Ontario Institute)

The purpose of this research partnership, with the Ecological Footprint Institute at York University and the Rural Ontario Institute, was to conduct down-scaled community level Ecological Footprint and Biocapacity accounts (EFBAs) for communities in rural Ontario. First a pilot project was conducted to create eight community EFBAs were created, for four census divisions and four census sub-divisions in Ontario. A top-down methodology was employed, by downscaling Ontario's Ecological Footprint Report and applying scaling metrics derived from statistical data on the communities. The project has now been automated and expanded for all census divisions and sub-divisions in Ontario. The main data sources utilized were Statistics Canada, Southern Ontario Land Resource Information System, and Ontario Land Cover Compilation. The Statistics Canada data was applied to the Ontario Consumption Land-Use Matrix (CLUM) to scale down the CLUM from the provincial level to the community level. SOLRIS and OLCC data were used to identify the area for various land classifications, which were then converted into global hectares and biocapacity classifications. These EFBAs provide environmental data that can be used by municipal stakeholders to inform decision-making on achieving climate and net-zero goals.

## Wayside Ecologies: Life at the Margins of Infrastructure

Karl Petschke (York University)

Research into wayside ecologies investigates road sides and rail verges past and present in hopes of better understanding those landscapes and communities that have been bypassed or left behind in the course of transport development -- all those that have fallen by the wayside in the modern transport landscape. Though they are continually being reshaped through development projects, maintenance regimes, and travel experiences, waysides nonetheless display a life all their own, repeatedly emerging as lively social and cultural spaces, unlikely environmental refugia, and even sites of transgression and resistance. Presenting the historic railway linking Montreal and Toronto as a paradigmatic case study, this study considers how changing trackside environments can offer new perspectives into the history and geography of transport infrastructure development in Canada. This interdisciplinary research integrates insights from across the environmental humanities, ecological sciences, and critical planning and design, employing a mix of archival, fieldwork, and GIS methods. Beyond providing a basis for critical inquiry into transport development's social and ecological costs, this study also helps to uncover alternate lines of connectivity and continuity winding through regional landscapes. In doing so, it opens opportunities for combatting entrenched tendencies towards infrastructural inertia, advancing new strategies for more-than-human mobility planning.



## Expert elicitation to support the implementation of the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada

Christine Beaudoin (Université de l'Ontario français), Hsien-Yung Lin (Environment and Climate Change Canada), Calla Raymond (Environment and Climate Change Canada) and Alaine Camfield (Environment and Climate Change Canada)

The Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada (2018) aims to enable better outcomes for Species at Risk. Cost-Effectiveness Analyses (CEA) can help to fulfill commitments to implement evidence-based decision-making and support prioritization of strategies and actions for conservation that will maximize return on investment for species at risk. However, a lack of key information (e.g., cost of strategies, expected benefits, chances of uptake) hinders CEA. Expert Elicitation (EE) is increasingly used to provide missing data to support evidence-based decision-making in conservation while minimizing potential biases (Camus et al. 2023). We present results of an expert elicitation (IDEA protocol; Hemming et al. 2017) to guide conservation action in the Long Point Walsingham Forest (LPWF) Priority Place in Ontario. The EE focused on working with experts to estimate the value of costs, feasibility, and benefits of implementing conservation strategies to reduce threats and reach targets in the LPWF Priority Place. The EE results will enable a full CEA of the conservation implementation plan and will help the initiative to prioritize effective strategies and actions to conserve species at risk. This study also serves as a pilot to implement EE and CEA in other Priority Places across Canada.

## Sustainability in the Energy Sector

Day 1 June 12, 4:30pm – Birks 205

Chair : To be determined.

<b>Kiona Lo and Eric Miller</b>	Accounting for a University's greenhouse gas emissions and its Ecological Footprint and Biocapacity
<b>Isaac Bell</b>	Exploring the perspectives of Canadian oil and gas workers on a just transition
<b>Louis Frank</b>	Theorizing Indigenous governance major transport and energy Infrastructure in Canada's changing North

### Accounting for a University's greenhouse gas emissions and its Ecological Footprint and Biocapacity

Kiona Lo (York University) and Eric Miller (York University)

Universities face a growing demand to report on the full scope of greenhouse gas emissions, extending beyond operations to include emissions embodied within areas like procurement and commutes. While conceptually straightforward, this is methodologically difficult because it requires integrating a broad set of physical and monetary data with coefficients that tend to be unavailable at the relevant scale. This presentation will showcase innovative approaches used to estimate greenhouse gas emissions, Ecological Footprint, and Biocapacity, attributable to York University over a five-year period. The GHG Protocol was used to specify emissions according to international conventions (scope 1-3), relating to aspects of control and ease of measurement or estimation. Ecological Footprint Standards were applied to estimate the six footprint components, including cropland and forest-carbon-uptake lands. Results reveal the absolute and relative significance of emissions from buildings and combustion equipment such as the university's power plant and vehicles, and indirectly attributed to all purchases and reimbursement of expenses, commuting, and from commerce on campuses and university investments. Recommendations were made to enhance the precision of results, and ease of generating them and attributing them to the university's missions. Insights from this project are transferable to other universities, and comparable to average Canadian university emissions.

## **Exploring the perspectives of Canadian oil and gas workers on a just transition**

Isaac Bell (University of Ottawa)

Canada is a major producer of oil and gas, and serious efforts to address the contributions of this industry to the climate crisis will have an impact on the workers therein. The movement for a just transition aims to support these workers, but despite an increasing scholarly focus on just transitions, there is a lack of research which directly engages with workers themselves. In response to this literary gap, through semi-structured interviews with Canadian oil and gas workers I assess myriad perspectives and priorities related to a just transition, including worker's views on 'environmentalists', or those pushing for a decrease in fossil fuel production. As of February 2024, my research is ongoing, but I will present results from a narrative analysis which highlights 4 distinct discourse coalitions practiced by (most) workers, as well as specific 'common ground items' which could inform more widely supported just transition advocacy. Responding to the concerns of workers, while simultaneously minimizing opposition and political pushback, is of heightened importance as the Federal Government seeks to advance just transition legislation with profound implications for Canada's climate commitments and global efforts to transition away from fossil fuels.

## **Theorizing Indigenous governance major transport and energy infrastructure in Canada's changing North** Louis Frank (University of Ottawa)

As global warming drives ecological change in the Circumpolar North, Canada must respond to global interest in shipping and resource extraction within Arctic waters. Thus, transportation between Southern and Northern Canada is gaining strategic importance, with both environmental and economic implications. This session will draw from the preliminary stages of my MA thesis research, which focusses on the case of Arctic Gateway Group LP's – owned by a consortium of First Nations and other northern communities – recent purchase of the Port of Churchill and Hudson Bay Railway. This study will consider analogous cases of and academic approaches to Indigenous governance of major infrastructure to situate future qualitative field work. As geopolitics are increasingly driven by both global and regional environmental change, this research will highlight the importance of understanding the complex relations between economic and environmental objectives.

# Sustainability in Agriculture and Food Systems

Day 2 June 13, 11am – Birks 203

Chair : To be determined.

<b>Stewart Fast</b>	Tracing the rise and absence of a prosumer in energy and food systems
<b>Kim Burnett</b>	Why Climate Action Could Lay Waste to This Planet : A case study of Climate Smart Agriculture
<b>Ann Levesque</b>	Participants experiences and reflections from agroecosystem living labs in Canada

## Tracing the rise and absence of a prosumer in energy and food systems

Stewart Fast (Carleton University and University Canada West)

Energy transition advocates and observers often employ the term “prosumer” to describe households or individuals that both consume and produce electricity. Prosumption is portrayed as a key economic and social relationship to advance energy transition. On the face of it, food systems also feature prosumption. Many households and individuals both consume and produce food, yet prosumption is not a concept used in the food system literature. This paper traces the emergence of the prosumer in energy transition literature and explores its increasing use in wider public and policy energy circles as well as its potential for application in a sustainable food system discussion. Prosumption is shown to be a concept and term that crosses boundaries between academia, electricity system planners, policy makers and other economic actors. It is both a metaphor and a catchphrase that denotes novelty and innovation in ways that have appeared to open a policy window. It is less likely to resonate in the food sector for historical and structural reasons. The paper also draws on the broader sociological literature of prosumer capitalism as well as a real-world electricity system failure to critique the prosumer concept as used in energy literature.

## Why Climate Action Could Lay Waste to This Planet : A case study of Climate Smart Agriculture

Kim Burnett (St Francis Xavier University)

We are in the throws of a climate crisis that places human societies, the human species, and the planet at great risk. But in the face of this crisis, we appear to be neglecting, and even exacerbating, an equally pressing ecological concern: biodiversity loss. As scientists debate whether we are in or on the threshold of the sixth mass extinction, we increasingly see the climate crisis as the ecological crisis of our times. In doing so, we often address climate change in ways that neglect, and even exacerbate, the biodiversity crisis. Climate Smart Agriculture (CSA) is a glaring example of this, and this paper seeks to highlight how climate strategies can not only fail the planet, but can obfuscate its wounds. This paper highlight the ways CSA discursively excludes broader environmental concerns in the service of climate indicators, enabling agricultural “business as usual”. It then evaluates some primary practices attributed to CSA and how they fail to enhance, and even enhance, the biodiversity and habitat loss from industrial agriculture. Finally, it inverts these priorities to highlight how prioritizing biodiversity restoration in agricultural systems not only benefits species and habitats, but proves to be smarter from a climate perspective as well.

## Participants experiences and reflections from agroecosystem living labs in Canada

Ann Levesque (Agriculture Agri-Food Canada)

As Canada strives to increase the environmental sustainability of its agricultural sector, agroecosystem living labs (LL) provide a promising approach to stimulate action by focusing on co-creating innovation with farmers

to address urgent environmental issues. Agroecosystem LLs are characterized by a high level of scientific research, a long and unpredictable innovation cycle reliant on ecological processes outside of human control, an active engagement of diverse partners, and are embedded in the socio-economic context of producers. In 2018, Agriculture and Agri-Food Canada (AAFC) launched the Living Laboratories Initiative, a network of four LLs (Quebec, Ontario, Atlantic and Eastern Prairies) aimed to accelerate the adoption of agri-environmental practices by Canadian farmers. The Initiative sunset in 2023. To inform AAFC's new nationwide network of 14 LLs, under the Agricultural Climate Solutions – LLs program, this presentation will draw on the results of a broader qualitative study which looked at all four living labs in the Initiative, shedding light on the experiences of participants to provide insight to facilitate the scaling up of the LL approach across Canada. Using results from semi-structured interviews in the study, this presentation will highlight specific challenges and opportunities of these LLs more broadly by showcasing lessons learned from participants' experiences, focusing on strengthening collaborative, communicative, and organizational capacities of the LL approach.

## **Responsibility and Equity for Sustainable Futures**

**Day 2 June 13, 11am – Birks 205**

Chair : To be determined.

<b>Sampson Adese</b>	Forging a Sustainable Future: Addressing the Intersectionality of Socio-economic Inequality and Environmental Crises in the Global South
<b>Lucas Arantes-Garcia</b>	Towards a More Sustainable Forest Sector: Exploring Pathways to Improve its Workforce Gender Balance
<b>Jen Kostuchuk</b>	Can't Stand the Heat? Get Out of the Kitchen: How Extreme Weather Impacts Food Service Workers in British Columbia

### **Forging a Sustainable Future: Addressing the Intersectionality of Socio-economic Inequality and Environmental Crises in the Global South**

Sampson Adese (York University)

Socio-economic inequality and environmental crises, amplified by the Global North's unsustainable practices, demand prompt action. Regrettably, there is little indication of a shift towards addressing these issues inclusively. Sustainability discussions often overlook these disparities, despite their crucial influence on the developing world's future. Despite the widespread notion linking sustainability to long-term continuation, many Global South communities face intensified intersectional struggles due to socio-economic inequality and environmental degradation from resource extraction without compensatory economic benefit. These intersectional issues reflect the contradictions in sustainable discourse, shaped by the harm inflicted by colonial extractivism on both humans and the environment. Unfairly, the Global South is burdened with combating climate change, with 'green extractivism' promoted as a solution to environmental crises (Sultana, 2022). This harmful extraction process ignores true sustainability, which requires resource allocation, technology transfer, and a forward-focused vision, and shifts the discourse from harmful colonial-extractive capitalism to solving the crises rather than preserving capital. Capitalism's competitiveness and continuous accumulation hence undermines sustainability discourse. Using Nigeria's Niger Delta as a case study, this presentation will explore sustainability discourse's contradictions. Emphasizing how the growing North-South disparity distorts the discourse into an unrealistic and contradictory narrative dominated by capitalism's competitive dynamics and continuous accumulation cycle.

## **Towards a More Sustainable Forest Sector: Exploring Pathways to Improve its Workforce Gender Balance** Lucas Arantes-Garcia (Memorial University)

The Canadian forest sector (CFS) has immense potential to thrive in the ongoing sustainability transition. Nevertheless, the CFS faces important challenges, including staff shortages and a low-diversity workforce. For instance, women are severely underrepresented, concentrated in roles with low decision power, and under a wage gap. This study aims to contribute to the sustainability and resilience of the CFS with proposals to address the staff shortages and improve its gender balance. Preliminary proposals are based on 32 confidential interviews with key players from various organizations in North America. Participants attributed its workforce challenges to synergistic factors such as demography, negative public perception, and poor retention rates. While some decision-makers recognize the need for recruitment and public engagement adjustments, they struggle to implement them to attract and retain underrepresented groups. They partially attribute this struggle to staff shortages for “non-core roles” – a Catch-22 issue. However, some decision-makers display certain resistance to significant changes, particularly in workplace culture. Greater involvement by Industry Associations and long-term partnerships with societal organizations were indicated as potential solutions. Addressing the sector’s lack of workforce diversity can be turned into an opportunity to bring new values and management approaches to make it more resilient and future-proof.

## **Can’t Stand the Heat? Get Out of the Kitchen: How Extreme Weather Impacts Food Service Workers in British Columbia** Jen Kostuchuk (University of Victoria)

British Columbia (B.C.) has experienced record-breaking temperatures, destructive flooding, and devastating wildfire activity. In my recent community-engaged research with a non-profit worker advocacy group, food industry workers described these conditions as “abusive”, “dehumanizing”, and “purgatory”. Food service work is highly gendered, racialized, and largely unprotected in that workers experience job insecurity through low unionization rates, poor wages, and fear of retaliation for speaking up against labour violations. Between cooking in front of hot grills during heatwaves, serving on outdoor patios during wildfires, and cycling to deliver takeout orders during floods, food service workers are hit hard by climate change. During last year’s deadly heat dome, WorkSafeBC received a 180 per cent increase in worker claims; over one-third of these were related to the dangers of high temperatures experienced by workers indoors (WorkSafeBC, 2022). Existing research underscores the significant impact of extreme weather on outdoor workers. But less is understood about the impact of events such as extreme heat on indoor workers. The guiding research questions for this project included: how do extreme weather events impact those in food service work and what are the key changes needed to secure the health and safety of low-wage, precarious workers? Data was collected from 31 food service workers across B.C. through a survey and in-depth, semi-structured interviews. These workers fulfilled barista, cook, dishwasher, hostess, server, and fast-food positions. The findings suggest that employment conditions and working conditions worsen during extreme weather events but building worker solidarity is essential to living through the climate crisis. Participants have identified nine specific policy recommendations ranging from maximum temperature to climate-paid leave as critical solutions to ensuring health and safety during extreme weather. In this presentation, I will reflect on the current prospects for food service workers and the labour movement at large to engage in the kind of collective action required to push governments to adopt these kinds of policies.

# What to do with Waste

## Day 2 June 13, 1pm – Birks 203

Chair : To be determined.

<b>Anderson Assuah</b>	Barriers and Challenges to Waste Diversion in Northern Manitoba Municipalities
<b>Hillary Predko and Myra J. Hird</b>	Extracting Reconciliation: Waste, Indigenous Lands, and Colonial Reckoning
<b>Salmata Diallo et al.</b>	Developing a hydrometallurgical process for recycling critical and strategic metals from urban mines

### **Barriers and Challenges to Waste Diversion in Northern Manitoba Municipalities**

Anderson Assuah (University College of the North)

Understanding municipal solid waste (MSW) management systems, programs, and services are important to finding appropriate management strategies and solutions. Generally, in Canada, MSW management services in rural communities are poor compared to their urban counterparts. Research is also often skewed towards urban settings. Consequently, this research examined MSW management among northern Manitoba (North of 53rd Parallel) municipalities, to understand barriers and challenges they face, and solutions being pursued to overcome them. Semi-structured interviews were conducted with MSW managers involved with waste diversion in their communities. The results revealed that availability and retention of staff is a major challenge in municipalities. Additionally, identifying and working with stewardship organizations or businesses poses challenges to waste diversion. Distance away from recycling facilities, funding for programs, and attitudes and behaviours of inhabitants are other challenges identified by participants. These factors and others negatively impact effective management of programs. To deal with these challenges/barriers and continue to provide services to residents, participants indicated that they are being creative with the limited resources they have, utilize a variety of education and awareness creation methods, and reorganize work schedules of their staff. The research recommends regionalization of MSW management for northern Manitoba communities.

### **Extracting Reconciliation: Waste, Indigenous Lands, and Colonial Reckoning**

Hillary Predko (Queen's University) and Myra J. Hird (Queen's University)

This presentation is concerned with the intersection of resource extraction, Crown/Inuit relations, and waste legacies in Nunavut, Canada and illuminates the mechanisms of colonial and neoliberal governance globally that promise reconciliation while delivering the status quo. We argue that the Canadian settler colonial system is purposefully deploying reconciliation as an ideological, structural and procedural tool to secure increased resource extraction from Indigenous lands, and that a similar trend within posthuman and Anthropocene studies and other cognate fields is extracting ideas, concepts, and knowledge from Indigenous peoples. The presentation concludes by arguing for the socio-ethical social justice dimensions, political possibilities, and environmental implications of a much more challenging and accountable reckoning between settler colonialism and Indigenous land rights.

### **Developing a hydrometallurgical process for recycling critical and strategic metals from urban mines**

Salmata Diallo (Institut National de la Recherche Scientifique), Lan-Huong Tran (Institut National de la Recherche Scientifique), Dominic Larivière (Université Laval) et Jean-François Blais (Institut National de la Recherche Scientifique)

The energy transition and the decarbonisation of the economy have created significant demand for critical and strategic metals (CSMs). CSM are essential for the production, storage and transport of electricity, as well as for the manufacture of battery-powered vehicles and telecommunications equipment. However, extraction from primary mines is not enough to guarantee a secure supply of these various metals, given their low concentration and the uneven distribution of some of them. At the same time, the digitalisation of societies has led to a plethora of electronic waste (e-waste), including 100 million obsolete telephones discarded each year worldwide, with an estimated 938 million units by 2025. E-waste has therefore become an alternative source of CSMs. Aligned with a sustaining shared futures, the aim of this project is to develop, on a laboratory and then industrial scale, a hydro-metallurgical process for extracting the CSMs present in used mobile phones. The results obtained enabled the recovery, in three successive and selective stages, of rare earth elements in the form of oxides, copper and nickel, as well as gold and silver in the form of metal. Recovery efficiency and metal purity are above 80%.

# Addressing Climate Change

Day 2 June 13, 1pm – Birks 205

Chair : To be determined.

<b>Peri Dworatzek</b>	Ecosystem Service Payments as a Climate Solution: an examination into Successful Aspects of Ecosystem Service Payment Policy Programs
<b>Julia Salomon</b>	The impact of sustainability apps in addressing climate change
<b>Devon Cantwell-Chavez</b>	Imagining Futurity in Global Cities: Analyzing Imagery of Climate Change and Sustainability in Cities
<b>Breanne Aylward et al.</b>	Headlining mental health in a changing climate: A systematic analysis of climate change and mental health news coverage from Canada and the United States

## **Ecosystem Service Payments as a Climate Solution: an examination into Successful Aspects of Ecosystem Service Payment Policy Programs**

Peri Dworatzek (York University)

The purpose of this research was to examine ecosystem service payment policy programs that take the form of tax incentives. Various Canadian programs were examined to gain insights into program successes and/or challenges. A great deal of academic literature looks at the ecosystem service payment policy of individual programs, yet few compare multiple programs. This research addresses this gap, as it compares multiple programs across regions. A qualitative methodological approach was used, whereby professionals with expertise in ecosystem service payment programs were interviewed. Programs were evaluated based on the following criteria: some measurable indicators of success, impacts on broader public policy and the political context, and recognition of social-power relations. The ecosystem service payment policy programs examined through this research study included: the Canadian Ecological Gifts Program; the Manitoba Riparian Tax Credit Program; the Ontario Conservation Land Tax Incentive Program; and the Ontario Managed Forest Tax Incentive Program. An Ecological Economics approach was applied by examining improved ways of increasing conservation lands through regulatory market-based public policy programs. Overall, the examination of social-power relations in these programs provided an original and thoughtful approach. The final analysis and evaluation found that the programs typically had some measurable indicator of success and a broader impact on public policy and the political context. Yet, the programs did not always acknowledge social power relational issues. Taking the evaluation and analysis of these programs, I provided four recommendations for future PES policy programs in Canada. First, to provide a standardized form of measurement for the programs, to increase transparency, to include Indigenous consultation in the policy-making process, and to provide avenues for knowledge sharing about ecosystem services and payment for ecosystem service programs.

## **The impact of sustainability apps in addressing climate change**

Julia Salomon (Simon Fraser University)

This study addresses the insufficient scholarly attention given to sustainability apps, despite their widespread usage and endorsement. It explores two key research questions: How do digital apps not only encourage individual consumer behavior change but also foster civic behavior change and community participation? The study also evaluates how apps balance crisis and fear with hope and imagination, emphasizing the importance of positive emotions in overcoming obstacles to environmentally friendly actions. Through a dual methodology of literature review and empirical app evaluation, this paper contributes to bridging the theoretical-empirical gap in action-oriented climate communication. AWorld and Ecosia, selected as potential best practice cases, undergo a direct analysis of their application of suggested methods. The in-depth evaluation situates the apps within the discourse of technology optimism, degrowth movement, and green growth, with a specific focus on how they

communicate the climate connection—an essential criterion for high-quality climate journalism. The study highlights the potential of sustainability apps to create a counterpublic for more engaging climate communication, motivating a broader audience for daily climate crisis engagement. However, it also underscores the need for a critical examination of gamification in sustainability apps, exploring potential associated risks.

## **Imagining Futurity in Global Cities: Analyzing Imagery of Climate Change and Sustainability in Cities** Devon Cantwell-Chavez (University of Ottawa)

Images and aesthetic representation tell powerful stories about the ways international actors see themselves and want to be seen by their peers. In the case of climate change, we often see dystopian images of the threats and urgency facing our global community. However, when we look to the governance documents, particularly climate plans offered by cities globally, we see a radically different and almost hopeful narrative presented through stories and images. How do cities see the future of climate change and communicate those narratives to their residents and the global community at large? To understand the narratives cities construct about their own futurity in the face of climate, I engage in two interpretive content analysis methods – patterning (Fujii 2018) and narrative text analysis (Shenhav 2015)—to analyze the images and narratives presented by C40 member cities (n=95) through their Climate Action Plans (CAPs) (n=87). I discuss the implications of how cities construct climate futures, considering issues of who is included (and excluded) through these narratives, how these narratives align or diverge from reality, and how these narratives and images of futurity impact global city engagement on climate governance around issues including environmental justice, equity, and urgency.

## **Headlining mental health in a changing climate: A systematic analysis of climate change and mental health news coverage from Canada and the United States**

Breanne Aylward (University of Alberta), Ashlee Cunsolo (Memorial University), Rachael Vriezen (University of Waterloo), Hannah L. Bayne (University of Alberta), Nia King (University of Ottawa) and Sherilee Harper (University of Alberta)

Climate change has profound implications for mental health, resulting in mental illness, diminished wellbeing, and strained social relations, with the severity of these impacts anticipated to intensify under future climate change. Public perception and response to climate-mental health issues can be influenced by news coverage, emphasizing the importance of understanding and analyzing this coverage for effective risk reduction strategies. We systematically examined the extent, nature, and range of English and French news articles published between 2016 and 2020 in Canada and the United States that covered climate-mental health impacts. A total of 1,085 articles met the inclusion criteria and underwent data extraction and analysis using descriptive statistics and thematic analysis. Over 450 different news outlets published at least one story on the topic; however, repeat coverage by any one news outlet was infrequent. Roughly half of the stories identified vulnerable populations, particularly children and young people, and about half of the stories identified potential interventions, most often involving changes to individual lifestyles or behaviour. This study underscores the need for sustained coverage that focuses on protective factors, interventions, and coping strategies to enhance public understanding and drive action to reduce climate-mental health risks.



# Methodology for Environmental Studies

Day 2 June 13, 4pm – Birks 203

Chair : To be determined.

<b>Elson Ian Nyl Galang</b> et al.	Assessing social learning outcomes of participatory approaches for environmental research: Methodologies from a Participatory Scenario Planning Project
<b>Sayeh Dastgheib-Beheshti</b>	Design Thinking and the Erosion of the Commons
<b>Cecilia Pérez Plancarte</b> et al.	Photovoice as a tool for community building among social and environmental movements

## **Assessing social learning outcomes of participatory approaches for environmental research: Methodologies from a Participatory Scenario Planning Project**

Elson Ian Nyl Galang (McGill University), Elena Bennett (McGill University), Gordon Hickey (McGill University), Julia Baird (Brock University), Blane Harvey (McGill University), Kate Sherren (Dalhousie University)

Participatory approaches for environmental research are recognized to generate answers to research questions that are deemed more holistic and legitimate. There is also value to the process of engagement itself as participatory approaches enable “social learning outcomes” or change participants’ knowledge and values through knowledge exchange. However, this is still a gap that requires further exploration. We took the case of a Participatory Scenario Planning (PSP) Project in Nova Scotia to empirically assess social learning outcomes among its participants. The PSP was a collaborative process that engaged 18 actors from different organizations in the province to co-imagine what can plausibly happen to the tidal wetlands-dykelands ecosystems of the Bay of Fundy by 2072. We operationalized a conceptual framework that looks at how the PSP enables social learning that changes systems thinking, rational trust, and environmental goals among its participants. We combined both quantitative (i.e., ex-ante-ex-post surveys) and qualitative (e.g., “critical friend”) data collection and analysis. In this presentation, we will (1) discuss our conceptual framework and (2) present our analytical approach. Our approach can be a practical guide for researchers and practitioners to understand how their participatory process can have short and long-term influence on their participants’ knowledge and values.

## **Design Thinking and the Erosion of the Commons**

Sayeh Dastgheib-Beheshti (York University)

Design thinking (DT), originally developed to streamline the product design development process, is increasingly being used to develop innovative commercial and social solutions and facilitate management decisions. Far from being objective and value-free, it is a flawed problem solution methodology which advances neo-colonialism, erodes the commons and limits pathways to sustainable futures. As I elaborate the many fundamental reasoning flaws of the DT methodology, I illustrate where, when and how it is used to depoliticize processes through biases inherent in its reductive approaches. I will argue that DT uses humanist worldviews based on individualism that colonize other cultures, reinforce vested power structures, and erode the commons to render the design process into an instrument for the accumulation of power and capital.

## Photovoice as a tool for community building among social and environmental movements

Cecilia Pérez Plancarte (Université de Moncton), Céline Surette (Université de Moncton), Jean-Philippe Sapinski (Université de Moncton), Maïna Béland-Rahm (Food for All New Brunswick), Annika Chiasson (New Brunswick Environmental Network), Natalie Comeau (Regroupement féministe du Nouveau Brunswick), Natalie Goguen (New Brunswick Environmental Network), Janelle LeBlanc (New Brunswick Common Front for Social Justice), Paryse Suddith (Old River Productions and Consultation Services Inc.), Renée Turcotte (Canadian Association of Physicians for the Environment)

It is well understood that environmental threats ultimately stem from social dynamics. There is a need for social and environmental movements to work together to build a more just place for every living being. We invited cis-women and gender-diverse activists to participate in a Photovoice project, in which participants took photographs of what motivates them to engage in the environmental, feminist, and social justice movements they support. We found that this participatory research contributes to community building among these movements by bringing together voices of women and gender-diverse people. We held four group meetings, and conducted a thematic analysis of the conversations from which we co-created a thematic tree through participatory analysis. From the initial prompt question “What does it mean to be an activist”, we discern four main categories: (1) being conscious of society’s injustices, (2) acting collectively to build the world we want, (3) believing in values and (re)learning others, and (4) nourishing your fire and spirit. The collaboration during the research resulted in the creation and reinforcement of connexions among activists. Our findings suggest that photovoice projects are a useful tool to increase community building between groups, and thus strengthen social and environmental movements’ cohesion and societal impact.

## Sustainability in Urban Settings

Day 2 June 13, 4pm – Birks 205

Chair : To be determined.

<b>Julie Hagan</b>	Challenging the post-political concept of urban environmental governance
<b>Robyn Lee</b>	Warning Towers: Thermal Safety in Multi-unit Residential Buildings in the City of Burnaby
<b>Andrew Bateman</b>	Southern Offices of an Arctic Mine: Locating Extraction in a Toronto Suburb

## Challenging the post-political concept of urban environmental governance

Julie Hagan (Université Laval)

Cities have been called upon to take action in favour of the environment, first through sustainable development, then through their local responses to climate issues. The purpose of our study is to examine this increased involvement of Canadian cities in environmental governance. Proponents of urban political ecology have criticized the urban discourses on sustainability and climate (Swyngedouw, 2011). In their view, these discourses are part of a post-political trend, evacuating dissensus and contestation in favor of an apolitical consensus, dominated by techno-managerial and neoliberal interests. We sought to better understand the political effects of environmental discourses by testing post-political critiques against empirical evidence provided by discourse analysis of policy documents and interviews with municipal policymakers. While it’s true that sustainability and climate discourses are often aligned with the neoliberal agenda that affects all spheres of urban governance, nuances can be made. Both discourses can be divided in two subtypes, one focusing on economic implications and technical aspects and one putting more emphasis on social concerns. As many cities move from climate action stressing GHG reduction to issues of adaptation and social resilience, we are witnessing a re-politicization of climate discourse marked by an openness to knowledge pluralism and inclusive participation.

## **Warning Towers: Thermal Safety in Multi-unit Residential Buildings in the City of Burnaby** Robyn Lee (Simon Fraser University)

This paper explores the housing-climate change nexus and asks how residents of community housing apartments are protected during extreme heat events. Based on desktop research, informant interviews, and resident interviews, this project situates personal weather experiences within the broader context of local heat governance in Metro Vancouver. Findings present an overview of how heat planning—particularly for vulnerable populations—has evolved in the region from the perspective of actors in the energy, housing, health, and emergency management sectors. Detailed resident interviews illustrate the sociomaterial context of their homes that shapes their vulnerability to heat, which in turn affects the household cooling practices employed to stay safe or cope in hotter temperatures. Drawing on critical heat studies and political ecology, this research highlights how understandings of vulnerability drive different approaches for protecting heat vulnerable communities at the local and resident scale. I argue that focusing on household cooling practices makes way for more detailed and nuanced understandings of the means and capacity with which residents act upon unsafe levels of heat in their homes. This project calls for sustained interest in the varying cooling practices of apartment dwellers in order to recognize opportunities and gaps in extreme heat response.

## **Southern Offices of an Arctic Mine: Locating Extraction in a Toronto Suburb**

Andrew Bateman (Toronto Metropolitan University)

Baffinland Iron Mines Corporation extracts some the world's highest concentration of iron ore from Baffin Island in the Canadian Arctic Archipelago. Some of the ore is destined for German steel manufacturers developing low carbon steel in a hydrogen-based steel manufacturing process that requires high grade iron ore. Indeed, the iron ore extracted on Baffin Island is touted as key in global efforts to transition to a carbon-free steel manufacturing process, which currently accounts for 25 percent of global industrial emissions. This multimodal project is comprised of photo and video documentary images and a critical paper. The images look at Baffinland's corporate HQ to locate Arctic mining activities in the southern suburbs of Toronto while the paper critically examines global efforts to create "green" steel. The images specifically look at the corporation's departments, such as sales, marketing, engineering, and communications, as the location of extractive activity while the paper unpacks the colonial dynamics at play in which resources continue to be extracted from the periphery for the benefit of a core and to the detriment of local communities, regardless of its green qualities. This project is part of a dissertation that takes Toronto, a southern city in Canada, as an Arctic landscape, given its outsized influence over Arctic issues.

## **Justice in Sustainability Transitions**

**Day 3 June 14, 11am – Birks 203**

Chair : To be determined.

<b>Alex Wellington</b>	Litigating for Visions of Climate Justice in Contexts of Governance Gaps
<b>Sarah El Halwany</b> and Kristen Schaffer	Storying environmental encounters through a politics of care: Possibilities and Challenges for Socioecological Justice
<b>Shalen Chen</b>	Mobilizing justice in Just Transition: Learning intersectional solidarity practices from migrant justice organizing

## **Litigating for Visions of Climate Justice in Contexts of Governance Gaps**

Alex Wellington (Toronto Metropolitan University)

In the wake of increasingly dire prospects of meaningful change, youth across the country have joined together to initiate litigation against governments in Canada. Another contemporary legal strategy builds on class action litigation targeting oil and gas producing companies with legal actions for climate-related harms. Animating and motivating activists to turn to courts has been their shared sense of frustration at failings of governments, companies and other powerful actors to take effective action against climate change, and the need for greater public awareness of dire prospects arising from the worsening climate crisis. The broader context precipitating the resort to litigation includes crucial governance gaps, and constitutional deficits, preventing realization of visions of climate justice. A larger, deeper message being delivered by activists resorting to lawsuits against their governments is that law must not continue to shield and perpetuate the failings of present generations to fulfil obligations to future generations to come. Instead, law needs to be turned around and made to work in service of climate justice goals, not just in theory but in practice. The conceptual framework offered in this work aspires to integration of ecological and environmental justice concerns into human rights analysis of ongoing legal developments.

## **Storying environmental encounters through a politics of care: Possibilities and Challenges for Socioecological Justice**

Sarah El Halwany (Université de l'Ontario français) and Kristen Schaffer (Mount Royal University)

This is a conceptual paper that merges collaborative acts of storying everyday encounters with theoretical contributions from literature around politics of care (Tronto, 1993; Martin et al., 2015) and the 'affective turn' (Clough, 2008) to illustrate ways by which mainstream forms of environmentalism (Klein, 2015) tend to be inscribed in caring politics for being and feeling with 'environments' while neglecting/policing others. Methodologically, we draw on our personal and collective storying-while-walking (Springgay & Truman, 2019). We consider how our encounters with/in nature are often disciplined by popular discourses of environmental care (e.g., recycling, greening, contaminating). In our walking/storying, we stage more-than-human and material agents as "matters of care" (Puig de la Bellacasa, 2011) that intensify normative ways of 'feeling' and caring about nature/others and that simultaneously gesture at pedagogical possibilities for caring differently with each other/nature. We end by offering new questions and implications from those acts of collaborative storying to collectively re-envision teaching and learning practices in relation to science and environmental education.

## **Mobilizing justice in Just Transition: Learning intersectional solidarity practices from migrant justice organizing**

Shalen Chen (University of Toronto)

As a movement originated through a coalition between labour and environmental justice groups, Just Transition aims to include workers and marginalized communities in a transition towards a low-carbon economy (Stevis & Felli, 2015). However, in Canada, dominant Just Transition policies and calls-to-action tend to focus on distributive justice concerns (Mertins-Kirkwood & Deshpande, 2019), instead of focusing on the deeper socio-economic transformations needed for labour and environmental justice (Dobrusin, 2021; Ciplet, 2022). As suggested by Dobrusin (2021), Just Transition can potentially drive these transformations, particularly through efforts that "mobilize through the margins". To explore this concept, this study examines migrant justice organizing in Toronto, a migrant-led movement that empowers workers in precarious positions to lead and define advocacy efforts (Migrant Justice Network, n.d.). Semi-structured interviews with staff and organizers from grassroots and service-based migrant organizations reveal common approaches to service community needs, and how they form coalitions with other causes and groups in mutual aid and collective advocacy. This study aims to inform how Just Transition may enact more plural solidarity practices, by emphasizing the importance of centering marginalized workers and communities to lead and define actions that challenge colonial systems and industries, ultimately advancing labour and environmental justice.