

**SUMMER 2021**

# **ENVIROLAB**

**CLIMATE ADAPTATION**



envirolab

**FINAL REPORT**



**AN INNOVATION LAB EMPOWERING YOUTH TO ADDRESS ENVIRONMENTAL  
& SUSTAINABILITY OPPORTUNITIES IN METRO VANCOUVER**



**CityHive**

Skwxwú7mesh-ulh  
Temíxw (Squamish)

# LAND ACKNOWLEDGEMENT

CityHive would like to recognize the traditional, ancestral, and unceded territories of the xʷməθkʷəy̓əm (Musqueam), the Skwxwú7mesh Úxwumixw (Squamish), and the sə́lilwətaʔt (Tseil-Waututh) Nations on whose land we live, learn and engage with youth.

We thank our host nations for being stewards of their lands and for leading the conversations about environmental movements and relationship to land for settlers and newcomers to Turtle Island. CityHive recognizes that the civic institutions and decision making processes we seek to influence through our Envirolab program are colonial, and have actively perpetuated harm to Indigenous peoples. It is through understanding our own unique relationship to this place, host nations, and Indigenous youth working to make change that we are able to reflect and act on decolonial practices.

Hul'qumínum  
Treaty Group

(Tsawwassen)



CityHive

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# EXECUTIVE SUMMARY



The Envirolab is a knowledge and capacity-building think-and-do-tank for youth ages 18-30 from across Metro Vancouver. The program aims to enable youth to learn about urban sustainability and climate challenges from local government, sustainability leaders and organizations and to act on their learnings by collaboratively creating projects that address those challenges. Each Envirolab cohort focuses on a different issue, which is chosen based on insight from partners and youth. The theme for this cohort was Climate Adaptation. The Envirolab is made possible through funding from the Lawson Foundation and Vancity Credit Union and developed with insight from our Steering Committee and Youth Serving Organizations.

This report is a celebration of the fourth Envirolab cohort! This cohort took place over 13 sessions between May - July 2021 and wrapped up with two final community presentations to the broader Metro Vancouver community. The cohort included youth ages 18-30 from all over Metro Vancouver and represents a strong diversity of identities, positionalities, knowledge and lived experiences.

This cohort was bold. Participants brought with them a level of awareness that enabled them to reflect on their own positionalities and their role in climate action. Together, we thought critically about the systemic shifts required to develop climate adaptation plans that are responsive to ecological, social and economic needs. This cohort produced six project-driven solutions to address challenges and opportunities they identified through this process.

This report documents the program design, overviews of the projects that emerged and key learnings and insights. We look forward to future iterations of the program and upcoming cohorts. We are thankful to have had the opportunity to learn with and from this dynamic and engaged group of youth, the project mentors, and guest speakers who joined us.

# OVERVIEW

## WHO IS CITYHIVE

CityHive is a Metro Vancouver-based non-profit organization on a mission to transform the way that young people are engaged in shaping their cities: in city planning, decision-making processes and urban sustainability issues. As a youth-led and youth-run nonprofit, we harness the energy, experiences, and perspectives of youth to create projects and solutions to make our cities more sustainable, equitable and resilient. We work with civic institutions to transform the way that they engage youth to be more meaningful and inclusive.



## OUR PROGRAM AREAS:

### YOUTH ENGAGEMENT CONSULTING

Youth engagement consulting and implementation, including fee-for-service work for municipal governments and other organizations or institutions looking to design or carry out youth engagement.



### CIVIC EDUCATION

Building and creating experiential, knowledge-to-action civic education programs for youth (13-30 years old), in partnership with municipalities.



### INNOVATION LABS

Planning, convening and facilitating Innovation Labs for youth to collaborate with municipal leaders on addressing urban and sustainability issues, including programs such as the 30Network and Envirolab.



In only five years, CityHive has run dozens of youth-centred programs and projects that have shifted youth engagement practices and offered opportunities for youth to become more civically engaged. CityHive partners with many organizations and institutions across Metro Vancouver to make our programming meaningful. Our work centres around building youth's capacity, connections and skills to tackle complex, systemic challenges from climate change to housing to civic engagement to the energy transition.

# WHAT IS THE ENVIROLAB?

The Envirolab is a series of think-and-do-tanks that blend creativity, community-based partnerships and innovation to engage youth from a variety of backgrounds - cultural, academic, professional and lived experiences - to dive deep into pressing urban sustainability challenges and create projects that address them. Using human-centred design thinking, the labs are facilitated in a process that empowers participants to learn about and identify current challenges and opportunities alongside local governments and community organizations. The Envirolab places youth at the intersection of learning, relationship building and solutions design. Where often youth are at the helm of climate action, the Envirolab aims to create a co-creative space for institutions to also learn from and work with youth, while centering youth's learnings and experiences.

## WHAT HAS HAPPENED TO DATE IN THE LAB?

**4 COHORTS**

**23 UNIQUE PROJECTS**

**113 YOUTH PARTICIPANTS**

# MEET THE FACILITATION TEAM



**KATHRYN TRNAVSKY**  
(SHE/HER)



**AARTI KAMAT**  
(SHE/HER)



**JASMINE CHAUHAN**  
(SHE/HER)



**DINA SADEGHI**  
(SHE/HER)



**ALICE HENRY**  
(SHE/THEY)

## DEVELOPING THE FACILITATION TEAM & PROCESS DESIGN

After the initial program planning was complete, 5 youth leaders - including one Envirolab alumni - were brought together and tasked with leading, facilitating and delivering the program to the cohort participants. This program was co-led by Kathryn Trnavsky (CityHive) and Aarti Kamat (CityHive), and joined by three support facilitators; Jasmine Chauhan, Alice Henry and Dina Sadeghi. Together, this team designed and facilitated the Envirolab sessions and supported the cohort participants for the duration of this lab.

# GOALS OF ENVIROLAB

The key objective of the Envirolab is to support youth from Metro Vancouver to create solutions-driven projects that address local sustainability and climate challenges. There are three key goals that work towards achieving this primary objective

1

**BUILD YOUTH'S CAPACITY, KNOWLEDGE AND SKILLS ON IMPORTANT CLIMATE ISSUES WHILE PROBLEM SOLVING AND TAKING ACTION WITHIN THEIR SPHERE OF INFLUENCE.**

2

**BUILD RELATIONSHIPS AMONG YOUTH AS WELL AS BETWEEN YOUTH, THEIR CIVIC INSTITUTIONS AND ORGANIZATIONS ACROSS METRO VANCOUVER**

3

**CO-CREATE CLIMATE ACTION PROJECTS WITH COMMUNITY PARTNERS THAT ADDRESS URBAN SUSTAINABILITY CHALLENGES WITH A JUST AND EQUITABLE LENS**

By learning with and from experts and community leaders, youth feel equipped to design projects and take actions to impact the ever changing landscape of climate adaptation work happening across Metro Vancouver, all while learning and building relationships with peers and leaders.

The fourth cohort of the Envirolab was hosted virtually over 13 learning sessions between May - July 2021. The virtual program delivery model enables new opportunities for the Envirolab team to be creative in building an online community of engaged youth.



# CLIMATE ADAPTATION



Climate impacts are becoming an increasingly urgent reality and this is an especially intensive period of climate anxiety and climate grief. Wildfires throughout BC (and around the globe) are happening more frequently and are becoming more extreme. The risk of flooding and sea level rise is of concern in low-lying coastal areas throughout Metro Vancouver. The social implications of climate change are more prevalent and visible than before, and the impacts of climate change are not felt evenly across our society and have to be examined with a lens on race, class and gender. And as former UN Chief Ban Ki-moon once said,

**“We are the last generation that can change the course of climate change, and we are the first generation that then has to live with the consequences.”**

# CLIMATE ADAPTATION

Climate adaptation measures look to reduce the vulnerability to the effects of climate change. To adapt to climate change is to acknowledge that there is no going back, only forward. We must seek to find a balance in our relationship to the earth that centres health, equity and resilience at the forefront of these conversations. Climate adaptation happens in cycles, we will

## PLAN - ACT - OBSERVE & LEARN

while simultaneously adjusting along the way.

Metro Vancouver's ability to adapt to the changing climate requires projections of future extreme weather events in the region, and requires deep connection to community to understand how these events will impact the Host Nations who have been the stewards of these lands since time immemorial, the people who call this place home and those who will become disproportionately impacted by climate change.

## COMMUNITY COLLABORATION

# PROGRAM OVERVIEW

This cohort worked to create 5 unique projects that tackle pressing and urgent climate adaptation challenges across Metro Vancouver. Each with its own distinct problem statement and community of people who benefit from each project



**EDUCATION**



**PUBLIC SPACE**



**SEA LEVEL RISE**



**STORY TELLING**



**BIPOC FOOD SYSTEMS**

# CLIMATE ADAPTATION

Creating projects and collaborating on big ideas requires critical thought.

- **Who is missing from conversations around climate adaptation and how do we embed a strong equity lens within this work?**
- **How can we centre those who are most impacted as we design solutions?**
- **What opportunities are there for environmental, economic and social interventions when we think about climate adaptation?**
- **How can youth voice their concerns and meaningfully engage with local governments to put forth innovations that create change at the local level?**
- **What opportunities are there to develop climate adaptation plans that are responsive to ecological, social and economic needs in realms like health and food systems?**

These questions were at the forefront of conversation about climate adaptation as this cohort considered the challenges and opportunities for cities across Metro Vancouver to proactively work with youth to think creatively about ways we adapt our ecological, social and economic systems. Through deep learning with local knowledge keepers and from experts in the fields of food systems, local governance, economics, sea-level rise, community engagement, landscape and ecological restoration, this group was able to feel equipped to design projects, actions, and/or products that address the urgency of our community to rethink and refocus what it means to develop climate adaptation initiatives.

# DESIGN PROCESS

The Envirolab program process makes sure that youth with different levels of knowledge and experience in the sustainability field can participate and bring in their lived experience and expertise. The framework we have developed from the program is rooted in community based learning, relationship building, and partner supported action planning. This framework builds a learning arc that enables youth to come to the Envirolab with any level of understanding or knowledge about this topic and develop bold actions to address these challenges.

*“Envirolab definitely impacted my personal growth. I loved being part of a group that is passionate about making a change.”*

## LEARN

Conversations with industry leaders to level up knowledge to consider where we are at and where we want to be as we drive learning forward

## EXPLORE & IDEATION

Identifying problem statements and developing solutions that enable the cohort to create together and consider how to develop projects

## APPLY

Developing a plan to bring ideas to life and consider how to best deliver these projects

# MEET THE COHORT



Ramneek



Sam



Ella



Mahroo



Miku



Priyadharshini



Emily



Arden



Tania



Peter



Srishti



Maggie



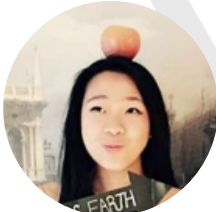
Isabel



Disha



Nathaniel



Tiffany



Shruti



Rebecca



Maya



Jasmine K



Joshua



Will



Valeria



Aaron



Sherry



Jasmine H



Archita



Tim



Cathy

# SPEAKERS AND PRESENTERS

The Envirolab is composed of youth aged 18-30 who live, work, and learn throughout any of the 21 municipalities across Metro Vancouver. Overwhelmingly, the 4th cohort of Envirolab saw over 70 applications, of which 30 youth were selected to join this cohort. This cohort was curated to represent youth from a range of diverse backgrounds from across Metro Vancouver, who each brought their unique and personal lived experiences into the conversations around climate adaptation.

In order to root our experiences in deep learning, CityHive constantly seeks to develop new relationships with knowledge holders, thought leaders and local governments. This network helps to ground the learning experience of the cohort in relevant projects and ideas. We share thanks and acknowledge a wonderful panel of guest speakers and project mentors who have supported each of the project teams.

**Deb Harford - ADAPT at ACT SFU**  
**Erin Desautels - City of Coquitlam**  
**Julie Kanya - City of Coquitlam**  
**Katia Tynan - City of Vancouver**  
**Tamsin Mills - City of Vancouver**  
**George Benson - Climate Displacement Planning Initiative**  
**Jaylene Bastos**  
**Dr. Stephen Sheppard - CALP**  
**Cheryl Ng - CALP**  
**Robin Cox - Resilience by Design Lab Royal Rhodes**  
**Tessa Vanderkop - Burnaby Board of Trade (Envirolab Steering Committee)**  
**Svend Anderson - GHG Accounting**  
**Erica Lotelli - GHG Accounting**  
**Robin Hawker - Integral Group**  
**Rob Fisher - Scale Collective**  
**Anna Zhuo - Climate Displacement Planning Initiative**  
**Alice Henry - Senior Project Coordinator at Share.Reuse.Repair Initiative (resident content mentor for the Envirolab)**  
**Adriana Laurent - UBC Climate Hub**

**COHORT WELCOME +  
COMMUNITY BUILDING**

SESSION 1: WELCOME NIGHT

**EXPLORE & IDEATE**

SESSION 4: ADDRESSING THE PROBLEM SPACE

SESSION 5: BUILDING YOUR VISION  
+ SOLUTION BUILDING

SESSION 6: IDEATING

SESSION 7: WHAT'S YOUR IMPACT

SESSION 8: WORLD CAFÉ & MENTOR NIGHT

SESSION 9: PROJECT FRAMEWORK

# PROGRAM ARC

**COMMUNITY  
PRESENTATIONS**

**LEARN**

SESSION 2: DEEP DIVE PT.1

SESSION 3: DEEP DIVE PT.2

**APPLY**

SESSION 10: DEFINING YOUR SUCCESS

SESSION 11: PITCHING YOUR WORK

SESSION 12: MENTOR NIGHT ROUND 2

SESSION 13: PEER FEEDBACK NIGHT



# THE PROCESS



The Envirolab program process makes sure that youth with different levels of knowledge and experience in the sustainability field can participate and bring in their lived experience and expertise. The framework we have developed from the program is rooted in community-based learning, relationship building, and partner-supported action planning. This framework builds a learning arc that enables youth to come to the Envirolab with any level of understanding or knowledge about this topic and develop bold actions to address these challenges.

## LEARN

Opportunities for youth to learn with industry leaders and decision makers to level up their knowledge while assessing skills gaps required to drive learning forward. These are equally important opportunities for decision makers to learn from youth.

## EXPLORE and IDEATE

Work with partners to explore a specific predetermined challenge or policy window, complete learning and research, and begin to ideate collaborative projects and solutions.

## APPLY

Apply these skills and knowledge by delivering projects to the community that have a direct connection to local policy windows and climate plans and work to create a lasting impact in their communities.



# THE NUMBERS

**8.5/10**

Average rating of the lab

**90%**

Overall experience of the Envirolab Climate Adaptation Cohort

**80%**

Understanding and knowledge of opportunities, resources and initiatives increased to 80% after participating in the Envirolab

**80%**

feel confident in the process of developing and implementing community projects

**80%**

participants would recommend the Envirolab to their networks and community



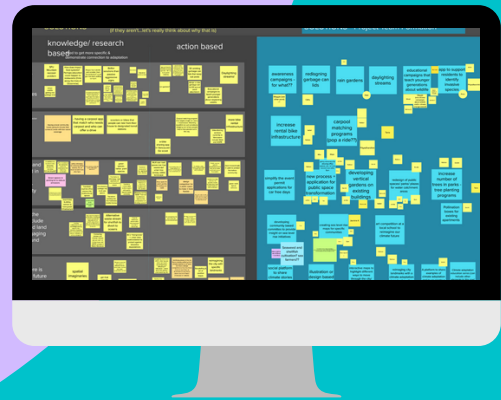
*"The Envirolab met all of my expectations and more. The two months spent with the cohort completely flew by because each session was better than the last. The knowledge and experiences that I have gained have been invaluable and I feel very empowered to fulfill the vision we have for our team!"*

- Cohort Participant

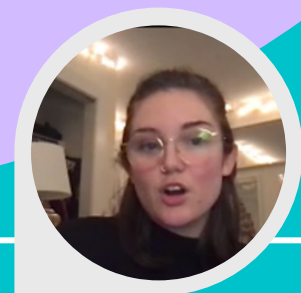
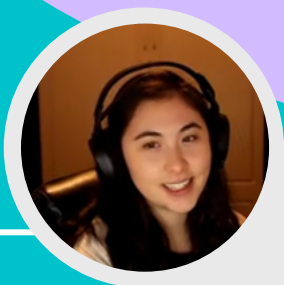


# OUR LEARNINGS

Over the summer, this cohort worked collaboratively through deep learning to create action driven projects what would have an impact in their community. We've learned the following with this passionate group of youth:



- Youth had some understanding of the climate adaptation initiatives happening in Metro Vancouver, but lacked the knowledge to connect that to real policy gaps and action already happening in the region.
- Each of us are deeply connected within our unique communities and spheres of influence. It is through understanding the needs of these communities that we are able to create impactful projects that can elevate and amplify the voices of that group.
- Youth crave opportunities to have their voices heard in order to take meaningful climate action, by creating opportunities to connect with local government, climate experts and youth led climate initiatives.
- Youth hold knowledge and skills on issues they care about but are looking for additional supports to design projects and continue working on them after the Envirolab.
- Youth are craving opportunities to connect with their peers offline and in person to enhance their connections, grow their networks and be able to build meaningful friendships with other climate nerds.



# THE PROJECTS



## ADAPTALES

Broadening understanding of climate adaptation through sharing stories of initiatives from around the world.

Archita B, Jasmine K, Maya K,  
Miku Y, Rebecca Y



## ECO CONNECT BC

Online platform that makes navigating environmental education options easy.

Maggie J, Isabel SZ, Shruti W,  
Mahroo S, Jasmine H,  
Ramneek D



## BUZZSTOP

Adapting public spaces to make commutes more comfortable as climate change effects are exacerbated.

Aaron L, Nathan T,  
Priyadharshini, Sam T,  
Srishti K, Tania A



## SURGE

A community engagement solution to help at-risk cities adapt to shoreline degradation.

Tim B, Will C, Sherry D, Tiffany H,  
Peter D



## Grow with the Flow

A series of workshops that spotlight BIPOC food knowledge.

Arden R, Cathy Y, Disha D,  
Ella KM, Emily B,  
Valeria GR

# WITH THANKS

## FUNDING PARTNERS

The Envirolab is made possible with generous support from the Lawson Foundation and Vancity Credit Union.




## STEERING COMMITTEE

The Envirolab is made possible with generous support from the Lawson Foundation and Vancity Credit Union. We are proud to work alongside an amazing set of partners who make up our Steering Committee to provide guidance and support to the development of this program and the cohort projects. We extend this thanks and gratitude to Vancity Credit Union, Vancouver Economic Commission, Burnaby Board of Trade, OneEarth, The Share.Reuse.Repair. Initiative, and the City of Vancouver.



*"I would join Envirolab again because you gain in-dept knowledge about a certain topic through guest speakers, research, reaching out to the community, and resources shared to the cohort."*

# WHAT'S NEXT?



"The solution to climate change is not a one-way path and it requires thinking out of the box. Thus, the opportunity to engage in an interdisciplinary collaboration helps participants to see from different points of view."

– cohort participant

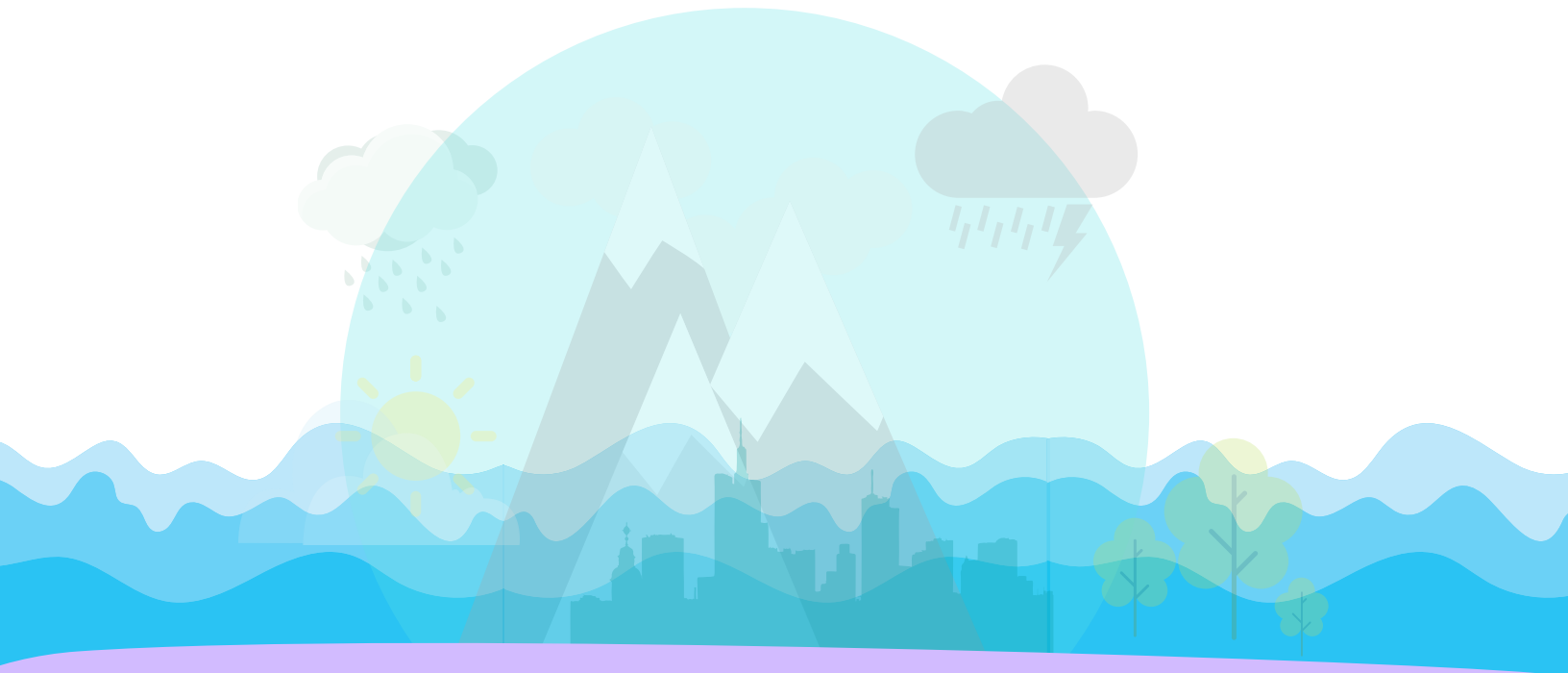
The Envirolab is looking to deepen its impact across Metro Vancouver.

We are looking for organizations, municipalities, businesses and individuals who want to help CityHive better meet the needs of youth and see more youth leaders in the climate space while working to support climate targets across Metro Vancouver to co-create climate action.

**Please reach out to [envirolab@cityhive.ca](mailto:envirolab@cityhive.ca) to connect and collaborate with us.**

With your support, we can create lasting relationships between youth and decision makers to support ideas that will have meaningful impacts in communities across Metro Vancouver.

# THANK YOU!



*“Envirolab has **revealed how powerful youth can be** with a **strong support system and platform to share their experiences** and ideas. With support from City Hive, the climate adaptation cohort, and my group members, **I know I can positively impact the Metro Vancouver community** with my project. I see it as my responsibility because I want to **make this a better place to live and inspire others around me to create change.**”*

*- cohort participant*