**Royal Architectural Institute of Canada** 

# Climate Action Plan -A Framework for Engagement and Enablement

### RAIC | IRAC

### Title: Royal Architectural Institute of Canada: Climate Action Plan - A Framework for Engagement and Enablement

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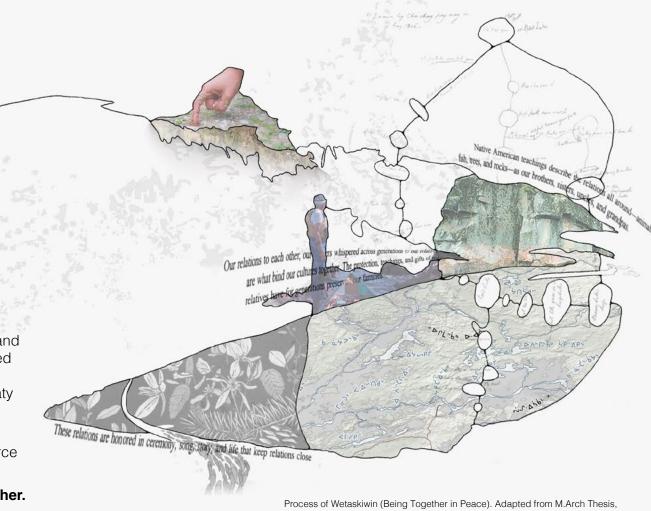
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### Land Acknowledgement

We acknowledge that the national office of the RAIC is located within the traditional unceded, unsurrendered, and occupied territory of the Algonquin Anishinaabe people. The RAIC honours the peoples and land of the Algonquin Anishinaabe Nation and all First Nations, Inuit, and Métis peoples and their valuable past, present, and future contributions to this land. The RAIC acknowledges the historical oppression of lands, cultures, and the original Peoples of Turtle Island (what is colonially-known as North America) as well as the role architecture and architects played and continue to play in systems and structures perpetuating that oppression. As the national advocacy body for architecture in Canada, the RAIC respects and affirms the inherent and Treaty Rights of all Indigenous Peoples across this land as well as those outlined in the United Nations Declaration on the Rights of Indigenous People as the minimum framework for reconciliation...

The RAIC honours the generosity of the members of the RAIC Truth and Reconciliation Task Force and Indigenous Task Force.

The RAIC is committed to listening, un/learning and taking action along this journey together.



by R. Merasty (McKay), 2021. Copyright [2021] by Reanna Merasty. Reprinted with permission.

### POSITIONALITY AND COMMITMENT TO RECONCILIATION

As a non-Indigenous, Western-oriented organization committed to advancing truth, reconciliation, and justice, we acknowledge the complex historical and ongoing impacts of colonialism on Indigenous Peoples across Turtle Island (colonially known as Canada). Grounded in the Truth and Reconciliation Commission of Canada's (TRC, 2015) Calls to Action, the United Nations Declaration on the Rights of Indigenous Peoples (United Nations [UN], 2007) and the Calls to Justice of the Reclaiming Place and Power Report (National Inquiry into Missing and Murdered Indigenous Women and Girls, 2019, Calls to Justice), we recognize that our institutional frameworks, practices, and perspectives have historically been shaped by colonial paradigms that perpetuated harm. We affirm that reconciliation is not a passive endeavor but requires active, ongoing engagement to dismantle systemic inequities and center Indigenous sovereignty, knowledge systems, and self-determination. In alignment with the TRC's (2015) Call to Action #92, which urges non-Indigenous institutions to adopt decolonizing approaches, we commit to listening deeply, partnering meaningfully with Indigenous communities, and redistributing power and resources in ways that honor Indigenous leadership and agency. This work begins with humility, accountability, and a dedication to continuous learning and unlearning-challenging colonial assumptions while amplifying Indigenous voices and priorities. We acknowledge the privilege inherent in our positionality and accept the responsibility to transform it into purposeful, evidence-informed action (TRC, 2015; UN, 2007).

This document is a living framework, subject to evolution as we grow in relationship and understanding. We welcome feedback, guidance, and accountability from Indigenous partners and communities as we navigate this shared path forward.

At its core, the climate crisis is a human problem.

The need for climate action and the necessary technology have long been identified and available.

What then is needed to accelerate the scale and pace of progress?

 Joanne Perdue (Co-Chair, RAIC Committee on Regenerative Environments personal communication, February 2024

Photo credit: Alberto Masnovo, n.c

# Message from the President and Chief Executive Officer



Jonathan Bisson, FIRAC, President



Mike Brennan, Hon. MRAIC, Hon. RAIA, Allied Member, AIA, Chief Executive Officer

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For 118 years, the RAIC has focused on promoting design excellence, celebrating the work of professionals across the country who have created spaces that have transformed communities, and most importantly, created a better world for all. We recognize architects as servants of the public good, and that the profession has an obligation to help Canadians face one of the greatest challenges of our time: the climate crisis.

Seasoned architects, practice owners, students, and all those in the industry must incorporate climate action into our growing Canadian culture of design, putting sustainability at the forefront of our efforts while utilizing diverse viewpoints to give back to the next generation.

The Climate Action Plan reflects the extraordinary times we are facing and is the result of contributions from hundreds of extraordinary people. We'd like to thank all those who took the time to engage in this process to help us lay the groundwork for the RAIC's actions to best support low-carbon, resilient, and regenerative development and design for all. We would also like to give our heartfelt thanks to Climate Action Engagement and Enablement Plan Steering Committee (CAEEP-SC) Co-Chairs, Mona Lemoine and Joanne Perdue, who led this work with a dedicated group of volunteers and RAIC staff..

Together, we will rise to the challenges of the climate and biodiversity crises, and we, along with the RAIC Board of Directors, are fully committed to this Climate Action Plan. We envision it as a dynamic document that will evolve and adapt as we learn and grow together in our efforts to create a regenerative future.

Thank you for your dedication and support in this crucial endeavour.

## **Message from the Co-Chairs**



**Mona Lemoine,** Architect AIBC, FRAIC, RAIC CORE Co-Chair (DIALOG)



**Joanne Perdue,** Architect AAA, FRAIC, RAIC CORE Co-Chair

On behalf of all members of the Climate Action Engagement and Enablement Plan Steering Committee (CAEEP-SC), we are pleased to present the RAIC's Climate Action Plan (CAP). The CAP is a roadmap to facilitate the transition to resilient, low-carbon, resilient, and regenerative development and design through approaches that concurrently strengthen ecosystem and human health for present and future generations. This work directly responds to the RAIC's Resolution for Urgent and Sustained Action on Climate and Ecological Health that was adopted by the RAIC Board of Directors on October 26, 2019 (Royal Architectural Institute of Canada [RAIC], 2019).

It has been a privilege to work with the many volunteers who have contributed to this important work. We would like to thank members of the CAEEP-SC and the supporting working groups for generously sharing their time and expertise. The CAEEP-SC members include:

- Jennifer Cutbill FRAIC, Committee on Regenerative Environments Liaison (Lateral Agency)
- Olivia Keung MRAIC, Promoting Equity and Justice Working Group Liaison (Moriyama Teshima Architects)
- Reanna McKay (née Merasty) MRAIC, Indigenous Task Force Liaison (Number TEN Architectural Group)
- John Peterson FRAIC, Practice, Working Group Chair (mcCallumSather)
- Keith Roberston FRAIC, Education, Working Group Chair (Solterre Design)
- Giovanna Boniface, Advocacy, Working Group Chair (RAIC)

Additionally, we would like to thank the many contributors who helped shape this plan over the past two years through their participation in the RAIC's latest Congress on Architecture and Climate Change, "Climate Jams" hosted across the country, podcasts, surveys, and more. Over 800 participants and dozens of community partners contributed expertise and challenged our collective thinking about prospective pathways forward. We are inspired by the dedication and commitment across the country to fostering an environmentally and socially conscious culture of design.

Finally, we are grateful for the guidance and support of the Indigenous Task Force, and the Promoting Equity and Justice Working Group in helping us to move forward in a good way.

It was an honour to serve as co-chairs for this important work. We invite you to read the CAP, share your feedback, and join us on this journey. By accelerating individual and collective action through practice, partnerships, education, and advocacy, together we can create positive change.

Comments and feedback can be sent to CORE@raic.org.



## **Executive Summary**

The RAIC Climate Action Plan (CAP) is a strategic framework to support Canadian architects in addressing the urgent challenges posed by the current scale and pace of climate change and biodiversity loss. Recognizing the severe impacts already affecting communities across Canada, the CAP promotes a profession-wide transition to low-carbon, resilient, and regenerative development and design. It emphasizes holistic approaches that concurrently enhance ecosystem and human health for current and future generations.

The CAP was developed from the findings of a nationwide engagement initiative, scientific evidence encompassing Indigenous and Western knowledge, and a review of global best practices in climate action planning. The plan is organized around four focus areas to enable architects to embed low-carbon, resilient, and regenerative design principles into their work: 1) Accelerating the transformation of practice, 2) Advocating boldly to create pathways to change, 3) Mobilizing partnerships and collaborative action, and 4) Investing in education and research.

Accelerating the transformation of architectural practice is central to the CAP's vision. As the architectural community faces the urgent need for action on climate change and biodiversity loss, engagement across all practice scales—from local firms to international studios—is essential. We must develop resources that empower architects to deliver resilient and low-carbon projects that regenerate health and help society reach sciencebased climate and biodiversity targets. Involving the next generation of architects in this work will ensure innovative ideas shape programs and reflect youth values. We will inspire society and industry on effective paths forward by showcasing innovative success stories and their real-world benefits. Together, we can redefine our role as architects of a regenerative future.

The second area of focus is to advocate boldly to create pathways to change through needed policies, regulations, resources and incentives. The RAIC will elevate the value of architects in shaping climate and biodiversity-related policies and regulations at all levels of government and industry. Importantly, the plan also advocates for mandatory climaterelated professional development as a core part of architectural licensure, ensuring that architects have the expertise needed to effectively address the complexities of climate change and biodiversity loss in the built environment.

The third focus area of the CAP is mobilizing partnerships and collaborative action. Addressing climate change and biodiversity loss requires collective action across various sectors and disciplines. The RAIC's plan highlights the importance of architects working alongside other professionals and communities. To help achieve this, the RAIC will organize a national roundtable and develop strong networks for knowledge sharing, resource exchange, and the advancement of multi-scalar thinking and action. This integrated approach to action on climate change and biodiversity loss will align with regional needs and global best practices. Through partnerships, we aim to accelerate progress and inspire bold action throughout the Canadian design and construction ecosystem.

Finally, the RAIC will invest in education and research required to realize climate action and a regenerative future. Through partnerships and program offerings, the RAIC aims to expand professional development opportunities to strengthen core competencies for climate action, planetary health, and regenerative design and development. In this work, the RAIC will bring Indigenous knowledge to the forefront to help equip architects with critical insights to support the transition to a thriving future. Additionally, this focus area includes engaging with architecture schools and research institutions to ensure future architects are well-prepared to address the complex challenges before society and our profession.

The RAIC Climate Action Plan is both a roadmap and a call to action. It invites architects across Canada to commit to regenerative and equitable practices rooted in reconciliation and responsibility to future generations. Through active member engagement, ongoing improvements to our approach, and annual reporting, the RAIC will fulfill the goals of the Climate Action Plan and uphold its Resolution for Urgent and Sustained Action on Climate Change and Biodiversity Loss (Royal Architectural Institute of Canada [RAIC], 2019).



#### Collage of extreme weather events in Canada. Left to right:

# The Urgency for Accelerated Action

Our climate system is changing. Communities across Canada are facing the severe impacts of climate change, including destructive wildfires, heat waves, floods, severe storms, droughts, and more. These impacts affect nearly every sector of the economy, slowing economic growth, increasing costs, and reducing household income. (Environment and Climate Change Canada, 2023). Climate change will increasingly magnify direct and indirect health risks to all Canadians. It will also exacerbate health inequities, particularly for the elderly, those with underlying health conditions, and those who face barriers to affordable housing, food security, and healthcare (Clark et al., 2021). Further, water quality and security, food safety and security, and air quality are all threatened by climate change with uneven impacts across Canadian communities. Amid increasing disruptions to ecological, social, and economic systems, climate change presents a multifaceted crisis that amplifies biodiversity loss, social injustice, health inequity, economic disparity, and geopolitical instability.

In all regions of Canada, First Nations, Inuit, and Métis peoples are being impacted by the increasing severity of climate change. In Canada's north, inadequate and failing infrastructure, combined with unique hazards like thawing permafrost and changing sea ice conditions, are having devastating impacts, particularly for Inuit Peoples (Clark et al., 2022). The impacts of climate change degrade housing safety and security, health and well-being, livelihoods and affordability, and fundamentally alter relationships between people, place, livelihoods, and culture (Clark et al., 2022; NCCIH, 2022).

As noted by Jason Clark (2025), National Director of Climate Change Advocacy at the Insurance Bureau of Canada "Housing isn't affordable if it isn't resilient." He explains, "As Canada experiences more frequent severe weather, we can't afford to keep building for yesterday's climate..." and adds, "The most expensive house is the one you have to build twice."

### DID YOU KN W

The healthcare costs related to wildfire smoke in Ontario from June 4 to 8, 2023, were estimated at \$1.28 billion.

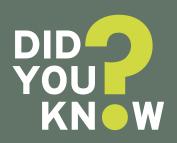
(Climate Institute, 2023)

Research suggests that under a low GHG emissions growth pathway, the annual costs of heat-related hospitalization and deaths in Canada will range from \$3 billion to \$3.9 billion.

Climate Institute, n.d.)

Short-term exposure to wildfire smoke or wildfire particulate has been strongly associated with all-cause mortality, acute bronchitis, exacerbation of chronic respiratory conditions such as asthma and chronic obstructive pulmonary disease, as well as increases in respiratory emergency room visits and hospitalizations.

(Public Health Agency of Canada, 2023)



In the past 50 years, the average global temperature has increased by 0.8 °Celsius. In that time, Canada's average temperature has risen 1.7 °Celsius – and the North has warmed by 2.4 °Celsius, roughly triple the rate of the global average.

(Bush & Lemmen, 2019)

Early adaptation investments in rebuilding foundations of homes and buildings in the Northwest Territories could reduce damages five-fold over the course of the century.

(Clark et al., 2022)

Estimates show that First Nations communities account for 42% of wildfire evacuations while only being about 5% of the Canadian population. (Public Health Agency of Canada, 2023)

During the 2021 heat dome, 619% died in British Columbia, of which 90% were inside buildings. (Government of Canada, n.d.) Indigenous Peoples are most disproportionately impacted by climate change; however, they are also "the root of success for the develop[ment] of effective solutions and practices for biodiversity conservation and climate change adaptation and mitigation" (Reed et al., 2024). Indigenous knowledge systems reflect the "local and culturally specific knowledge Indigenous Peoples gain through generations of respective social, physical and spiritual understandings of the world and associated practical experiences" (Firelight Group, n.d.). "Indigenous knowledge systems are nature-based and honor the complex interdependence of all life forms" (Indigenous Peoples Forum on Climate Change and Indigenous Peoples Major Groups 2019, in Reed et al., 2024). They are essential for understanding and implementing effective pathways forward.

Since time immemorial, First Nations have emphasized the importance of living in balance with Mother Earth."

- Assembly of First Nations, n.d.

Science has been and can be defined many different ways depending on who is doing the defining. But one thing that is certain is that "science" is culturally relative. In other words, what is considered science is dependent on the culture/worldview/paradigm of the definer."

- Leroy Little Bear, as cited in Cajete, 2000



WATCH THESE VIDEOS TO UNCOVER MORE KEY INSIGHTS:



(6:02 mins) Elder Joanasie Speaks to Youth About Climate Change

(Climate Atlas of Canada, 2020)



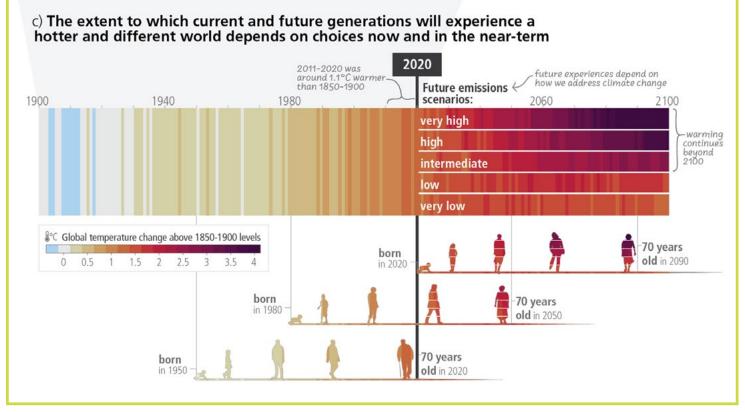
(2:46 mins) François Paulette -Indigenous Knowledge Science and Climate Change in the North

(Climate Atlas of Canada, 2022)



(4:14 mins) Quebec & Climate Change: Collaborating to confront climate change

(Climate Atlas of Canada, 2019)



"An adaptation of that presented by the Secretariat of the Convention on Biological Diversity's report "Global Biodiversity Outlook 5" (2020) and the Nature article "Bending the curve of terrestrial biodiversity needs an integrated approach" (2020). Image credit - Ellen MacArthur Foundation, 2021.



(2:48 mins) One Degree and its impacts: What does climate change mean for Canada?

(Climate Atlas of Canada, 2018)



(3:21 mins) Modelling the Climate: using data to make smart climate change decisions.

(Climate Atlas of Canada, 2019)



The last time the global surface temperature was sustained at or above 2.5° Celsius was over 3 million years ago. (Snyder, 2016) Weather refers to short-term changes in the atmosphere; climate refers to longterm overall patterns and averages over 30 years or more. (National Centers for Environmental Information, n.d.)

2023 was the warmest year on record and 2024 is ontrack to break that record.

(World Meteorological Organization, 2024)

The Western scientific community has unequivocally confirmed that between 2011 and 2020, human activities have led to global warming of 1.1 °Celsius above pre-industrial levels (IPCC, 2023). The primary cause is the release of greenhouse gas (GHG) from fossil fuel combustion for energy use, land-use changes, lifestyles, and production and consumption patterns.

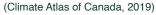
### The choices we make now and in the near term will determine the future of all of life on Earth.

A low emissions pathway with a rapid reduction in GHG emissions has the potential to limit warming to 1.5 ° to 2 ° Celsius, whereas a high emissions pathway is projected to result in a 4 ° Celsius or more increase. Achieving a 1.5 ° C pathway requires over a 40% drop in emissions by 2030 from 2019 levels (UN, 2024).

### Every fraction of a degree matters. What choice will we make?

# **Climate Change, Built Environments, and Architects**

(3:00 mins) Greening Montreal: combatting Urban Heat Islands



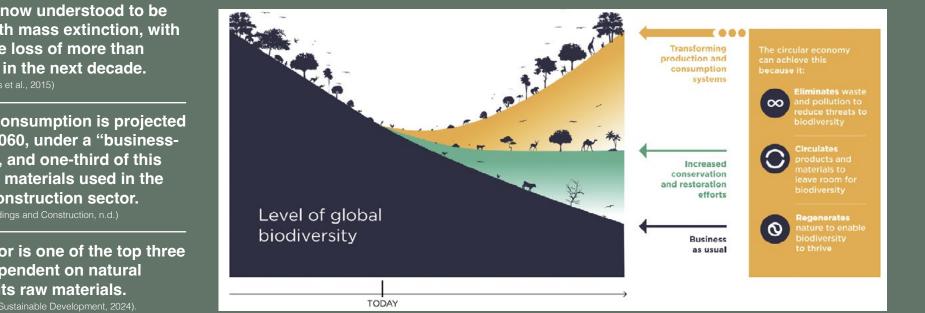
(7:49 mins) Toronto and **Climate Change: Building Resilience and Cutting Emissions** (Climate Atlas of Canada, 2018)



Cities are global carbon hotspots, contributing approximately 70% of global carbon emissions based on energy consumption (World Economic Forum, 2021), with building construction and operations estimated to contribute 37% of global energy-related carbon emissions in 2021 (UNEP, 2022).

The extraction and processing of natural resources globally - a larger proportion of which goes into built environments - account for more than 90% of biodiversity loss and water stress (IRP. 2020) and additional cumulative harms to the health of people, places, and planet. These harms include (but are not limited to): bioaccumulative toxins, unethical labor practices, cumulative impacts of industrial "sacrifice zones" (Lerner and Berg, 2015; Alhus, 2018), and the ongoing violation of Indigenous rights, stewardship practices and legal orders--knowledges and practices that Western sciences increasingly realize are essential for resilience and regeneration (IPBES, 2024). Climate change is rapidly increasing these interconnected harms, with the built environment sector impacting 29% of threatened or near-threatened species (Ellen MacArthur Foundation, 2021); the costs of which hurt us all (Lenton, Rockström et al, 2021; McGhee, 2021; Newman & Noy, 2023; Teshome, 2024).

Architects play a crucial role in shaping the built environment; how then will we respond, and what are our ethical and professional obligations to do so?



#### THE CIRCULAR ECONOMY PLAYS A CRUCIAL ROLE IN BENDING THE CURVE ON BIODIVERSITY LOSS

Biodiversity loss is now understood to be at the scale of the sixth mass extinction, with projections of the loss of more than a million species in the next decade.

Global raw materials consumption is projected to nearly double by 2060, under a "businessas-usual" scenario, and one-third of this growth will be from materials used in the buildings and construction sector. (Global Alliance for Buildings and Construction, n.d.)

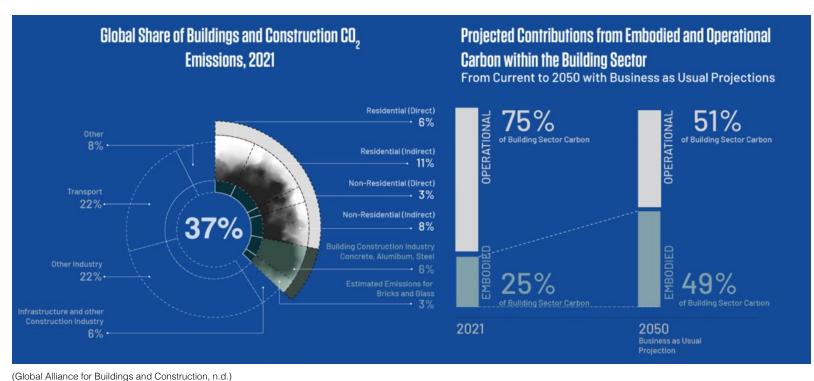
The construction sector is one of the top three sectors most dependent on natural resources for its raw materials. (World Business Council for Sustainable Development, 2024)

KNOW

As a strong national voice for design excellence in Canada's built environment, the RAIC is dedicated to providing the Canadian architectural community with the tools, resources, and education necessary to elevate their practice. **Given the clear science on climate change and biodiversity loss, architects face new responsibilities in safeguarding public health, safety, and welfare.** Addressing the increasing severity of risks posed by climate change presents both challenges and opportunities in professional practice. Architects are closely connected to the conceptual, material, and energy flows that contribute to both the causes and solutions of climate change. As such, they can directly help built environments to reach net zero carbon emissions and become more resilient to the impacts of climate change. This includes aiding the transformation of material flows and practices to reverse the degradation of natural environments.

To achieve the goals of the Paris Agreement and maintain a 1.5-2 °C pathway, by 2030, we must half emissions through the construction of only net-zero carbon buildings and broad-scale deep decarbonization of existing buildings - this includes at least a 40% reduction in embodied carbon. By 2050, we must reach a net zero carbon-built environment, including embodied carbon, which will require a focus on adaptive reuse, and circular material flows. As we deploy built environment decarbonization, we must also concurrently increase "the ability to adapt to the adverse impacts of climate change and foster climate resilience" (Paris Agreement, 2015). Failure to design for resilience endangers lives and livelihoods, and will ultimately lead to increased carbon emissions from rebuilding and retrofitting unfit or damaged built environments. Further, to reach the goals of the Global Biodiversity Framework, we must embed ecosystem regeneration outcomes in every project (Secretariat of the Convention on Biological Diversity, 2022).

The RAIC is the only national voice for design excellence in Canada's built environment dedicated to providing the Canadian architectural community with the tools, resources, and education necessary to elevate their practice. The RAIC is committed to showcasing how design enhances the quality of life while advocating for important issues of society through responsible architecture. In 2018, the RAIC adopted the *Resolution for Urgent and Sustained Action on Climate Change and Biodiversity Loss.* Since then, it has convened members, allied professionals, and diverse thought leaders including--Indigenous Knowledge Holders--to advance discourse, learning, and action.





Nelms (2021) captured an image of individuals in a cooling center during a heat wave in Vancouver, BC.

## **The Future We Envision**

A rapid scaling of the transition to low-carbon, resilient, and regenerative development and design that strengthens ecosystem and human health for present and future generations.

### **OUR GUIDING PRINCIPLES**

Embed Reconciliation and uphold the principles of UNDRIP in our work

Uphold the principles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and embed the concept of Etuaptmumk, or "Two-Eyed Seeing," as shared by Mi'kmaq Elders Albert and Murdena Marshall of the Eskasoni community in Unama'ki (Cape Breton), Nova Scotia. Two-Eyed Seeing refers to "learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing, and using both of these eyes together, for the benefit of all" (Bartlett, Marshall, & Marshall, 2012).

### Embed social justice and intergenerational equity in all we do

Youth and equity-deserving groups are at once least responsible for contributing to climate crises and are often the most negatively impacted by it. Climate change will affect all Canadians, but the distribution of these impacts and related health risks are not equal.

"First Nations, Inuit, and Métis peoples are uniquely sensitive to the impacts of climate change because of their: close relationships with and dependence on land, waters, animals, plants, and natural resources for their sustenance, livelihoods, cultures, identities, health and well-being; [and their] tendency to live in geographic areas already experiencing rapid climate change" (NCCIH, 2022).

### Foster holistic health and a regenerative future

Holistic, solutions-oriented, transdisciplinary concepts like Planetary Health (Planetary Health Alliance, n.d.) recognize human health and civilisation as dependent on healthy, flourishing natural systems and their wise stewardship (Whitmee et al., 2015).

Though recent in Western science, nurturing the reciprocal well-being of living systems has been core to Indigenous knowledge systems across the globe since time immemorial - each distinct, land-based, highly sophisticated and embodied through relational responsibilities and care (Redvers et al., 2022). While collective loss of this awareness is recognized as a pre-eminent cause of current crises (ibid, p.e160); as Gitanmaax and Gitxsan scholars describe: "for its sophistication in practice, the concept is stunningly simple: take care of the land, and the land takes care of us" (Wale & Huson, 2024, p13).

# **Four Priority Focus Areas for Action**

The RAIC's Climate Action Plan includes four priority focus areas that shape how we will take action.

These reflect what we heard from over 800 members, allied professionals, and inter-sectoral contributors as well as our review of global best practices in climate action planning.

Importantly, they also reflect what we learned along the way from Indigenous Knowledge Holders who participated in various events.





### The RAIC will develop resources to support Canadian architects in transforming practice to advance climate action, regenerate ecological health, and evaluate their progress towards science-based targets.

- 1.1 In collaboration with the RAIC Indigenous Task Force, the Truth and Reconciliation Task Force, and the Promoting Equity and Justice Committee, increase understanding of the interconnected nature of the climate and biodiversity crises, Indigenous rights and reconciliation, and social justice including affordable housing and health inequities
- 1.2 Align RAIC programs and services (e.g. honours and awards, publications, Canadian Handbook of Practice for Architects), with our commitment to resilient, low-carbon, resilient, and regenerative development and design
- 1.3 Engage with all scales of practice to identify specific barriers and supports needed to accelerate action
- 1.4 Include the next generation of architects in decision-making for the development of programs and pathways for climate action
- 1.5 Develop resources to support architects in: designing low-carbon, climate-resilient projects that promote ecosystem and human health and achieve necessary science-based targets (including a focus on reuse and circular material flows); track and showcase their progress to support continuous improvement
- 1.6 Highlight case studies, success stories, and inspiring precedents that spotlight design innovation and demonstrate how to take action

Personal transformation can and does have global effects. As we go, so goes the world, for the world is us. The revolution that will save the world is ultimately a personal one. It will happen at the speed of empathy and the speed of trust."

> — Sheila Watt-Cloutier, personal communication, October 4, 2021

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The logic of the familiar is repeated in the solutions that we prefer to the crisis and maybe that is why we are here."

(Akómoláfé, 2022)



The RAIC recognizes that architects play a vital role within a diverse ecosystem of actors that shape our built environment. With their ability to work with complex problems, blending creativity and technical knowledge, architects can facilitate the development of innovative design solutions that address the interconnected challenges before us. The RAIC will advocate for increased representation of architects across policy, planning, and practice forums at local, national, and international levels.

- 2.1 Strengthen the presence and voice of the RAIC and architects at local, national and international forums for the built environment, climate action, and biodiversity health
- 2.2 Advocate for necessary changes in policy, regulation, legislation, contractual tools, and resources to accelerate and scale action
- 2.3 Advocate for enabling infrastructures i.e., incentives and supports for resilience, low-carbon, resilient, regenerative development and design with an emphasis on reuse and renewal
- 2.4 Advocate for differentiated insurance rates for low-carbon, resilient, and regenerative projects and for architects and firms engaged in delivering them
- 2.5 Advocate for mandatory professional development in licensure and professional practice to increase knowledge and competencies for effective climate and biodiversity action
- 2.6 Advocate for recognition and compensation for new scopes of work necessary to achieve climate-responsive built environments



### Recognizing that the intersectional climate crisis cannot be solved by any one discipline or sector alone, the RAIC will mobilize partnerships and collaborative action among allied professionals and others in the built environment ecosystem.

- 3.1 Identify key rightsholders, interest-holders and other partners to advance resilient, low-carbon, resilient, and regenerative design and development including multi-sectoral and multi-scalar action on climate change and biodiversity loss
- 3.2 Catalyze a multi-sectoral, interprofessional, approach that is regionally informed and aligned with international goals and science-based targets
- 3.3 Convene a national roundtable for the advancement of low-carbon, resilient, and regenerative development and design
- 3.4 Engage in partnerships at regional, national and international levels to share resources and knowledge, and advance collective action
- 3.5 Broaden and deepen engagement on climate action among the ecosystems supporting education and regulation of the architectural community
- 3.6 Strengthen the RAIC's communications platforms and practices to share success stories, support knowledge sharing, partnership development, and collaborative capacities

There is no one policy, stakeholder group or any other single issue holding up the sustainability transition. It depends on everyone within a system, pulling every lever, to make change happen."

"

— Cristina Gamboa, CEO World Green Building Council (2024)

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We are definitely in a crisis in a sense of a human crisis: a crisis of identity, a crisis of perception, a crisis of belonging, a crisis of fear... it is not a climate crisis. The climate crisis is the manifestation of where we have come to."

(Hawken, 2022)



# 4. INVEST in education and research for climate action

Through education and research, the RAIC will invest in knowledge development and mobilization to support the transition to healthy, low-carbon, resilient, and regenerative development and design. This includes core competencies that will enhance architects' abilities to foster transformative change.

- 4.1 Rapidly scale the knowledge and competencies of licensed architects for effective climate action through increased professional development pathways for low-carbon, resilient, and regenerative development and design
- 4.2 In collaboration with the RAIC Indigenous Task Force and the Truth and Reconciliation Task Force, uplift Indigenous knowledge systems and land-based learning across RAIC professional development
- 4.3 Support greater collaboration, mentoring and transformative learning between and across architectural firms to scale the capacity of firms and architects to take action
- 4.4 Develop and or partner with education and research organizations in the development and delivery of high-quality education to accelerate the transition to low-carbon, resilient, and regenerative development and design (e.g. microcredentials, certificates, etc.)
- 4.5 Develop resources for the general public and prospective clients on investing in low-carbon, resilient, regenerative development and design i.e., what it means, why it matters, and how architects can help
- 4.6 Help develop and access scholarships, grants, fellowships etc. to support practitioner-scholar and scholarpractitioner efforts to continuously advance resources to accelerate practice transformation
- 4.7 Collaborate with schools of architecture and professional education groups to fast-track the development of a new generation of graduates for a regenerative future through mentorship and continuous improvement



# **Monitoring and Evaluation**

The RAIC is committed to urgent action on climate change and biodiversity loss by supporting the transition to low-carbon, resilient, and regenerative development and design. We aim to empower the Canadian architectural community to take leadership roles in this essential work of our time. Our Climate Action Plan is our roadmap for building toward a regenerative future, and monitoring and evaluating our progress is central to our success.

#### Here's how we will make sure we stay on track:

- → Set clear metrics and targets within each of our four priority focus areas
- → Report annually on our progress, including qualitative and quantitative data
- > Engage the RAIC membership and key partners for feedback to help us continuously improve our implementation approach

### Our reporting approach will be informed by our commitment to:

- → Science-based targets and approaches, incorporating both Western and Indigenous knowledge systems
- → Regular and transparent disclosure of our progress
- Ongoing improvements in reporting and implementation approaches
- Demonstrating our commitment through the RAIC's own operations

We recognize that **climate action is a journey, not a destination**. Therefore, we will review and update our Climate Action Plan regularly to reflect the latest science, best practices, feedback, and other (un)learnings. This approach ensures we continually move forward, make necessary adjustments, take effective action, and set new goals to inspire and challenge ourselves.

Together, these steps represent RAIC's dedication to meaningful, accountable action on climate change and biodiversity loss. We are proud to share this journey with our community.

# **Next Steps and Call to Action**

The RAIC's Climate Action Plan (CAP) reflects the results of a nationwide engagement initiative, science-based evidence (including Indigenous and Western ways of knowing), and a review of global best practices in climate action planning. The RAIC Committee on Regenerative Environments (CORE) will lead the implementation of the CAP supported by working groups enabling broad participation and accelerating impact. The RAIC Board of Directors will commit resources to support climate action and monitor progress.

A rolling implementation plan will be developed to identify the supporting actions to advance our priorities. We will continue to engage membership and others in the built environment ecosystem to continuously improve our approach and ensure we remain effective in this work.

The CAP is a **call to action** for all Canadian architects to commit to transforming practice and participating in a national effort to realize climate-positive communities that are regenerative, resilient, and equitable and to ground this work in reconciliation. **Key to the success of these efforts is learning from Indigenous Knowledge Holders and rightsholders** and respectfully integrating their insights to evolve practice norms alongside Western science approaches.

The RAIC's CAP presents a starting point for co-developing knowledge and actions, one that will evolve over time.

The RAIC recognizes that the intersectional climate crisis cannot be solved by any one discipline alone, and we invite our allied professionals and others in the built environment ecosystem to partner with us. Together, we will rise to the complex challenge before us, drawing on creativity, innovation, love for our one precious planet and our responsibilities to future generations.





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**RAIC Climate Action Plan** A Framework for Engagement and Enablement

# **13 Climate Jam Events**

2 EDUCATION 3. PRACTICE

PLANNG

FIELD

# **5 Community Presentations**

# **800+ Participants**

I ducation

# **Glossary of Terms**

#### **Biodiversity**

Biodiversity or biological diversity means the variability among living organisms from all sources including, among other things, terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems (IPCC, 2023a).

### Climate

Weather refers to atmospheric conditions that occur locally over short periods of time from minutes to hours or days. Familiar examples include rain, snow, clouds, winds, floods, or thunderstorms. Climate, on the other hand, refers to the long-term (usually at least 30 years) regional or even global average of temperature, humidity, and rainfall patterns over seasons, years, or decades (NASA, n.d.).

### **Climate Action Plan**

A climate action plan is a strategic framework developed by governments, organizations, or communities to reduce greenhouse gas emissions, mitigate the impacts of climate change, and promote sustainability through a set of targeted actions. Climate action plans are dynamic documents that evolve over time, with periodic updates to reflect new scientific knowledge, technological advancements, and shifting socio-economic conditions.

### **Climate Change**

Climate change refers to long-term shifts in temperatures and weather patterns. Such shifts can be natural, due to changes in the sun's activity or large volcanic eruptions. But since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas (IPCC, 2021).

Burning fossil fuels generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures. The main greenhouse gases that are causing climate change include carbon dioxide and methane. These come from using gasoline for driving a car or coal for heating a building, for example. Clearing land and cutting down forests can also release carbon dioxide. Agriculture, oil and gas operations are major sources of methane emissions. Energy, industry, transport, buildings, agriculture and land use are among the main sectors causing greenhouse gases" (United Nations, n.d.)

### **Climate Change Impacts**

The consequences of realized risks on natural and human systems, where risks result from the interactions of climate-related hazards (including extreme weather/climate events), exposure, and vulnerability. Impacts generally refer to effects on lives, livelihoods, health and well-being, ecosystems and species, economic, social and cultural assets, services (including ecosystem services), and infrastructure (IPCC, 2023a).

### **Climate System**

The global system consisting of five major components: the atmosphere, the hydrosphere, the cryosphere, the lithosphere and the biosphere, and the interactions between them. The climate system changes in time under the influence of its own internal dynamics and because of external forcings such as volcanic eruptions, solar variations, orbital forcing, and anthropogenic forcings such as the changing composition of the atmosphere and land-use change (IPCC, 2023a).

### **Emission Pathways**

Modelled trajectories of global anthropogenic emissions over the 21st century are termed emission pathways. In general, a very low emissions pathway refers to limiting warming to 1.5°C, a low emissions pathways limits warming to 2°C, a high pathway limits warming to 4°C, a very high pathway exceeds warming of 4°C (IPCC, 2023b). Emissions pathways can be articulated in Representative Concentration Pathways (RCPs) and/or Shared Socio-economic Pathways (SPPS).

### **Regenerative Development and Design**

Regenerative design "relates to approaches that support the co-evolution of human and natural systems in a partnered relationship. It is not the building that is 'regenerated' in the same sense as the self-healing and self-organizing attributes of a living system, but by the ways that the act of building can be a catalyst for positive change within the unique 'place' in which it is situated. Within regenerative development, built projects, interest-holders and rightsholders processes and inhabitation are collectively focused on enhancing life in all its manifestations – human, other species, ecological systems – through an enduring responsibility of stewardship" (Cole, 2011).

#### Regenerative design

A system of technologies and strategies based on an understanding of the inner working of ecosystems that generates designs to regenerate rather than deplete underlying life support systems and resources within socioecological wholes (Mang & Reed, 2012).

#### Regenerative development

A system of technologies and strategies for generating the patterned whole-system understanding of a place, and developing the strategic systemic thinking capacities and the self-organizing and self-evolving interest-holder and rightsholder engagement/ commitment required to ensure regenerative design processes achieve maximum systemic leverage and support (Mang & Reed, 2012).

### **Representative Concentration Pathways (RCPs):**

Developed by climate scientists from around the world, the RCPs are standard scenarios that are used in climate modeling to simulate how the climate might change in response to different levels of human activity. In effect, they represent possible trajectories of greenhouse gas concentrations. Four RCP scenarios were initially developed to guide climate research, each leading to a different degree of radiative forcing (indicated by the number given to each RCP). RCP8.5 leads to the most warming and describes a possible future resulting from ongoing increases in greenhouse gas emissions ("High Carbon Scenario"), RCP 6, RCP 4.5 and RCP2.6 leads to the least warming, and reflects a future shaped by aggressive and immediate efforts to drastically reduce greenhouse gas emissions. More recently, RCP 1.9 (very low scenario aligned with the Paris Agreement), and RCP 3.4 (intermediate scenario) were added (Prairie Climate Centre, n.d.).

#### Resilience

Resilience is an evolving concept that encompasses varied, important, and interrelated concepts. "Resilience is the ability of people, communities, societies, and cultures to live and develop with change, with ever-changing environments. It is about cultivating the capacity to sustain development in the face of change, incremental and abrupt, expected and surprising" (Folke, 2016, p. 3). It can be further understood as a society's "capacity to learn from and adapt to the dynamics of ecosystems in ways that avoid preventable harms, promote the flourishing of all human and nonhuman lives, and generate wisdom to sustain future generations" (Whyte, 2018, p. 136). The IPCC notes that resilience is the

capacity of systems to maintain essential function and identity, as well as their capacity to adapt, learn, and transform in the face of disturbances (IPCC, 2018, p. 557). In urban planning and architecture, resilience also connects to the right to the city, social justice, and empowerment. This includes equitable distribution of resources and capacities (the means to resilience) and more just processes and inclusivity in citizen participation (Trogal et al., 2019).

### Shared Socio-economic Pathways (SSPs)

The SSPs represent alternative storylines about how the world might develop over the coming century in the absence of climate policy. The SSPs describe plausible narratives of global societal developments in the future without considering climate change, or mitigation or adaptation responses. Five SSPs were created, with varying assumptions about human developments including: population, education, urbanization, gross domestic product (GDP), economic growth, rate of technological developments, greenhouse gas (GHG) and aerosol emissions, energy supply and demand, land-use changes, etc. The SSPs were designed to work in combination with an updated version of the RCPs (Government of Canada, n.d.).

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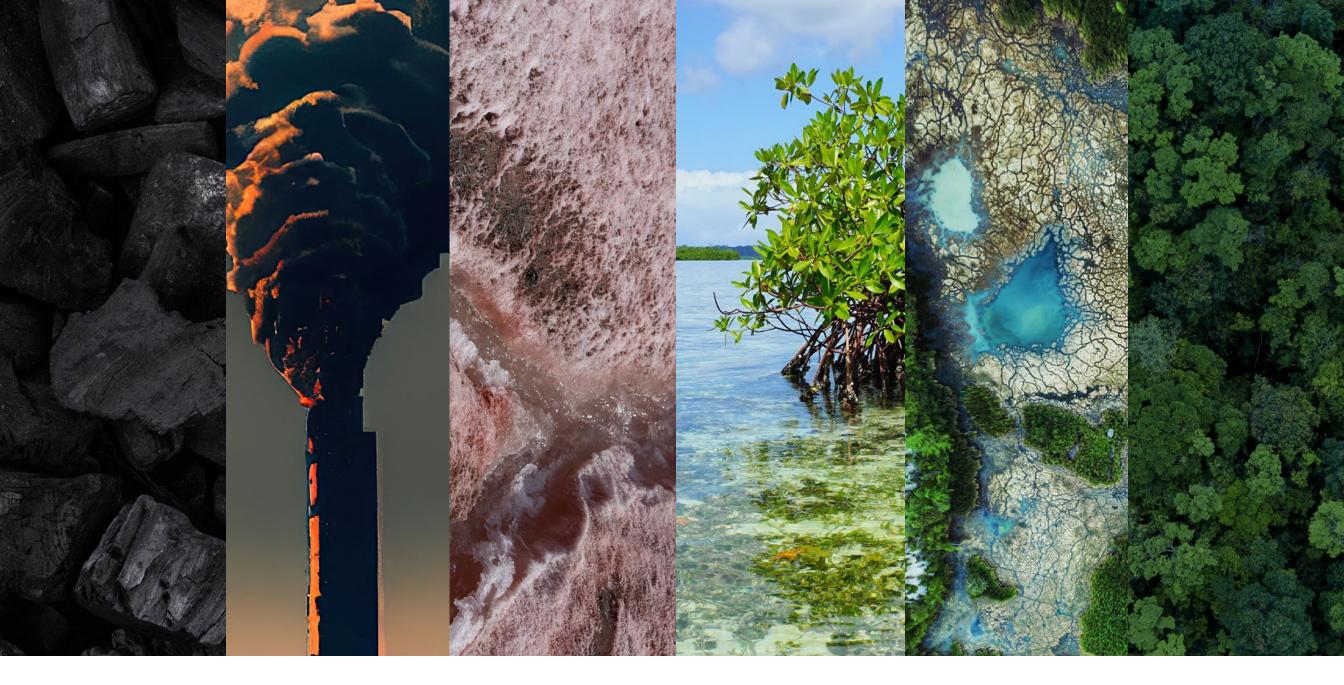
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