



ACE PROJECT NATIONAL FORUM: “DESIGNING CLIMATE-READY EDUCATION FOR THE NEXT GENERATION OF PROFESSIONALS” hosted by the Waterloo Climate Institute, February 2-5, 2025

## OPENING PLENARY SESSION: KEY TAKEAWAYS

*Held on Monday, February 2<sup>nd</sup> from 11:30am to 1pm EST*

### SESSION DESCRIPTION:

The Opening Plenary kicked off the national forum by providing participants with an overview of the program over the four days and included a panel discussion on how professional programs can evolve to equip tomorrow’s leaders with the skills needed for a climate-ready world. The session was hosted by Professor Sarah Burch, Executive Director of the Waterloo Climate Institute and opened by Dr. Elder Myeengun Henry. Presentations began with Dr. Michèle Martin (Waterloo Climate Institute) giving an update on the ACE project, followed by Professor Robin Cox of Royal Roads University, who introduced the Climate Action Competency Framework—a tool developed by RRU’s Resilience by Design Lab to guide the creation of meaningful, future-ready learning outcomes in professional education. Finally, Stephanie Gagnon from the Climate Risk Institute shared insights on climate action competency gaps among engineers, accountants, planners, and landscape architects that could help inform curriculum. Professor Burch guided panelists through a discussion.

The session was set up as a Zoom “webinar” and was attended by 129 participants from across Canada as well as international attendees.

[Session recording available here.](#)

### KEY TAKEAWAYS:

#### From speakers:

- Elder Myeengun Henry emphasized the importance of maintaining a respectful, intergenerational relationship with Mother Earth—honouring her as a living, sustaining female spirit—while navigating an increasingly technological world and consciously choosing connection to the land and to one another over a purely technical path.
- Michele provided an overview of the ACE project, findings, and activities.
- The Climate Action Competency Framework (Version 2) is a bilingual, profession-agnostic tool that supports the development of climate adaptation and mitigation competencies over time, emphasizing systems thinking, collaboration, ethics,

leadership, and implementation across six domains—from working together and risk assessment to solution design and affecting change—each with progressive levels. The CACFv2 reflects a shift from treating climate change as specialized content to embedding climate-informed capabilities across all professional fields.

- Stephanie Gagnon’s Professionals Advancing Adaptation Competencies project—led by CRI in partnership with RRU—assessed climate adaptation competencies across accounting, engineering, landscape architecture, and planning practitioners. They found strong recognition of climate relevance but only moderate confidence overall, with strengths in collaboration and very low comfort in technical climate risk assessment, underscoring that adaptation is both a professional obligation embedded in codes of conduct and a mindset requiring stronger applied capacity across all six competency areas by 2027.

**From panel discussion with the speakers, moderated by Sarah Burch:**

- **Core competencies needed:** Professionals need strategic, integrative, and collaborative competencies—including the ability to interpret organizational strategy, understand financial and built environment interconnections, make trade-offs in complex contexts, and apply climate change considerations while recognizing when to engage specialists.
- **Key gaps:** include limited understanding of climate-related risks across disciplines, weak systems thinking and risk management skills, insufficient knowledge of financial and policy implications, challenges with implementation and evaluation, and a significant gap between climate awareness and practical application—reflected in low confidence levels, with only about 40% of planners feeling confident compared to the 70% target for 2027.
- **Current state of professional standards:** Climate competencies are largely implicit rather than explicit in professional standards, with fragmented guidance across areas and a need to clearly integrate climate considerations into ethics, codes of conduct, and baseline regulatory expectations.
- **Strategies for acceleration:** Accelerating climate competency integration requires sharing curricula and resources across disciplines, strengthening regulations and professional standards to mandate climate consideration, empowering professionals to advocate for adaptation as a core business priority, and fostering institutional and cultural shifts in education and practice so climate integration becomes standard rather than optional.
- **Expanding this work beyond core disciplines:** Climate education efforts must expand beyond core professions to include educators, students, trades, and diverse sectors, ensuring broad climate literacy, efforts to boost instructor confidence, and recognition of climate relevance across all areas supporting resilient infrastructure and society.
- **Emphasis on application over knowledge:** The key priority is shifting from climate knowledge to practical application by using shared case studies, building confidence across professional levels, and ensuring climate considerations inform real-world decisions in day-to-day work.

- **Transformational Goals:** Keep in mind the deeper challenge of addressing underlying drivers of vulnerability and high emissions, deeper questions about resilient communities and quality of life, and building a sustainable community of practice for sharing and learning.

## RESOURCES SHARED IN THIS SESSION:

- [Australian Architects Accreditation Council \(AACA\) – National Standard of Competency for Architects](#)
- [Canada’s National Adaptation Strategy - Building Resilient Communities and a Strong Economy](#)
- [Climate Action Competency Framework \(Resilience by Design\)](#)
- [Resilience by Design - Climate Preparedness](#)
- [Resilience by Design - Competencies Self Evaluation](#)
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- [FRA Canada – Sustainability projects](#)
- [ICLEI Canada – Climate Insight \(teaching resources\)](#)
- [Learning for a Sustainable Future \(LSF\)](#)
- [OSFI – Guidance library](#)
- [RIBA – Mandatory competences](#)
- Waterloo Climate Institute: [The status of climate change education in Canadian accounting, architecture, planning and engineering programs \(2025\)](#)
- Waterloo Climate Institute: [Climate Change Curriculum Briefs](#)
- Waterloo Climate Institute: Accelerating Climate Education - [ACE Project website](#)
- [ACE Project infographics](#)

**For more information, please contact the Waterloo Climate Institute:  
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