

A photograph of a massive glacier, likely Perito Moreno, with a green text box overlay. The glacier is a deep blue color, showing signs of melting and cracking. In the background, dark, rugged mountains rise above a layer of mist or low clouds. The foreground shows the dark blue water of a lake or fjord, with several small icebergs floating on the surface.

2017/2022 Strategic Plan

Pacific
Institute
for Climate
Solutions



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Message from the Executive Director



I am honoured to lead the Pacific Institute for Climate Solutions (PICS) during a time of organizational change. Since joining in November 2015, I have been impressed with what PICS has accomplished since beginning operations in 2008.

Our four-university collaboration model allows us to engage a diversity of expertise to develop new knowledge on climate change mitigation and adaptation. Engagement with government, industry and other key stakeholders keeps our research relevant.

There has been significant change in the climate policy arena in recent years, from the Paris Agreement to the City of Vancouver's Renewable City Strategy. Hundreds of municipal and regional governments around the world, and some of the world's largest businesses, have committed to major reductions in greenhouse gas (GHG) emissions and to developing adaptation plans.

This progression highlights the increased need for knowledge about effective and viable approaches to meet GHG reduction targets and to prepare for the changes in our climate system and consequent impacts that cannot be avoided.

Since its founding, PICS has supported research and built human resources capacity in British Columbia (BC) to develop new knowledge about a wide range of climate solutions. We've communicated to stakeholders and the public. But new circumstances at all levels are changing what is required of us. We are stepping up our game. Our Strategic Plan explains how we will do so.

A handwritten signature in black ink that reads "Sybil Seitzinger". The script is fluid and cursive.

Sybil Seitzinger

Executive Director, Pacific Institute for Climate Solutions

Introducing PICS

British Columbia (BC) is home to the Pacific Institute for Climate Solutions (PICS), which brings together leading domestic and international researchers to assess, develop and promote innovative climate change mitigation and adaptation options.

PICS is hosted and led by the University of Victoria (UVic) in collaboration with BC's three other research-intensive universities: Simon Fraser University (SFU), the University of British Columbia (UBC) and the University of Northern British Columbia (UNBC). PICS, which was created by a BC government endowment in 2008, is an independent knowledge network.

This four-university collaboration is the foundation upon which PICS builds networks of wider partnerships, with governments, the private sector, First Nations, other research organizations and wider society. The institute maintains a focus on climate solution options for BC, but the horizon of its remit extends to its neighbouring provinces, the Pacific Northwest, Canada, and beyond.

PICS Community

The four-university collaboration allows PICS to draw on a deep, multi-disciplinary pool of experts to address climate solutions.



What sets PICS apart?

PICS is unique globally because of its combination of policy- and technology-neutral climate solutions focus, cross-university research collaboration, interdisciplinary approach, strong and independent financial underpinning, and commitment to partner with industry, government, leading researchers, and other key sectors of society.



University
of Victoria



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA



SIMON FRASER UNIVERSITY
ENGAGING THE WORLD



UNIVERSITY OF
NORTHERN BRITISH COLUMBIA

PICS Background

PICS – the first nine years

Everyone associated with PICS can be proud of the organization's contribution to meeting one of the greatest challenges facing humankind and the natural environment—anthropogenic climate change.

Since its founding, PICS has supported over 180 solutions-focused research projects across the four universities, funded 96 internships, 125 post-graduate fellowships, 19 post-doctoral fellowships, produced 29 white papers with policy recommendations, 43 briefing notes, and hosted or supported more than 40 events annually for both general audiences and technical briefings for policymakers and industry. A snapshot of some highlights from PICS research and activities is in “Key Accomplishments” on page 18.

PICS has a growing reputation for research excellence on climate change solutions, unbiased and evidence-based information.

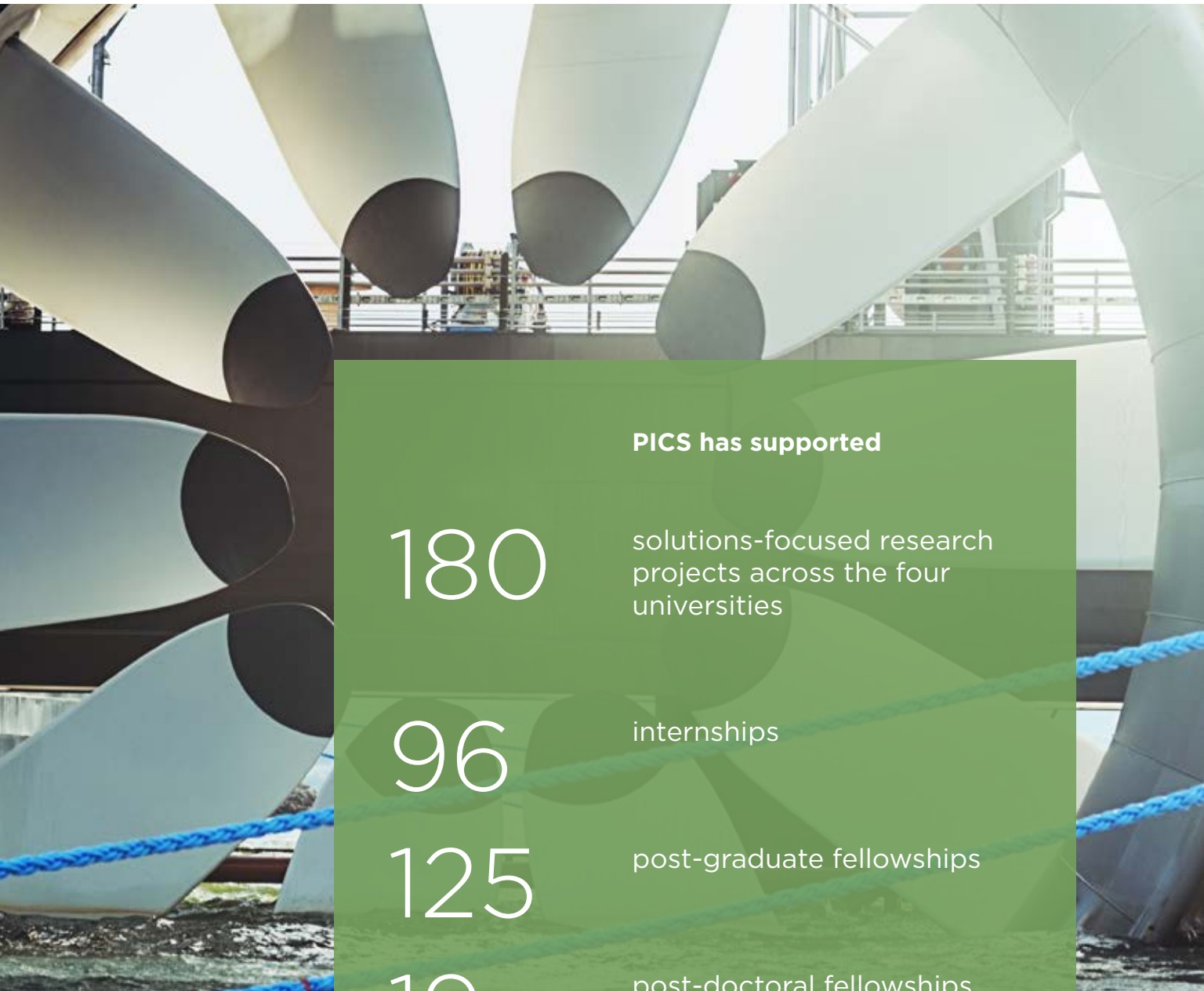
Moving forward

Leading up to its 10-year anniversary, PICS in October 2016 initiated a comprehensive review of its operational structures, processes and outcomes, to identify not only its successes and limitations, but how it can be more impactful in the future. The review involved over 100 individuals from the four PICS universities, staff members, and representatives of the wider PICS community.

Then, in the spring of 2017, an independent task force comprising representatives from the four PICS universities, BC government Climate Action Secretariat, Vancouver city council, BC Hydro, Fraser Basin Council, First Nations Fisheries Council of BC, clean tech industry, and the Pacific Climate Impacts Consortium was asked to advise on the development of a Strategic Plan.

We discovered that PICS has a growing reputation for research excellence on climate change solutions, unbiased and evidence-based information, collaboration with government and the private sector, and community engagement. Moving forward, many partners have expressed a desire for PICS to become more innovative, for its research and activities to have more impact on shaping climate solution policies and decisions, and to engage more fully the wide range of stakeholders in society.

In particular, the emissions reductions targets, and clean energy and adaptation goals set by our cities, province, country and international agreements go beyond what current technology and research can deliver. Whether in government or the private sector, decision-makers need help getting where they want to be, and have requested that PICS be better able to offer that help.



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19

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white papers with policy
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The PICS Strategic Plan

The PICS Strategic Plan was developed based on input from wide consultations. This five-year plan (2017-2022) builds on the institute's core competencies and sets the strategic research approach and governance direction for PICS.

It describes its future communication and engagement approach, and articulates PICS' vision for how it can best assist decision-makers and society as they seek solutions for adaptation to a changing climate and developing a low-carbon economy.

The plan focuses on three strategic areas:

- Conducting Collaborative Research
- Communicating Climate Change Solutions
- Enhancing Organizational Development

A key aspect of this new strategic partnership-based approach is in the collaborative identification, production and support for addressing the highest priority research gaps. Backing this process will be a streamlined governance structure and the creation of new advisory teams to offer ongoing support to ensure high-impact results. Advance communication and outreach planning will play an increasing role in reaching target audiences.

Vision

PICS shares a global vision of net-zero greenhouse gas emissions by mid-century alongside all communities adapting to a changing climate.

Our contribution to this vision is stated in our mandate:

Mandate

To produce leading climate solutions research that is actively used by decision-makers to develop effective mitigation and adaptation policies and actions. PICS has a global remit, but a focus on BC.

Objectives

- Advance the global knowledge base on climate change solutions.
- Develop effective climate mitigation and adaptation solution options that are actively used by policy and decision-makers.
- Foster partnerships and networks that build capacity in addressing climate change.
- Promote an interdisciplinary approach to climate solutions.
- Communicate and inspire engagement on climate solution options by government, business and the general public.

Principles

To achieve this global vision and mandate, PICS will be:

Solutions-Oriented—by contributing to the development of scalable technologies, policies and behaviours that help solve the challenges posed by climate change.

Partner-Focused—by collaborating with a variety of sectors, and use our mutual knowledge and expertise to inform climate solutions.

Objective—by offering evidence-based research that is impartial and independent.

Transformational—by acknowledging the urgency of addressing climate change and applying innovative and collaborative research to climate adaptation and mitigation solutions.

Transparent—by disseminating research results widely and to a variety of audiences.

Striving for Excellence—in all research to ensure value added contributions in all activities.

A Wellbeing Workplace—by supporting a positive and cohesive staff team within a diversified and enabling workplace environment.

PICS Strategic Area 1:

Conducting Collaborative Research

Goal 1

PICS contributes groundbreaking knowledge that is actively used by a diverse and wide range of constituents to develop mitigation and adaptation solutions.

Objectives (2017-2022)

- | | |
|-----|--|
| 1.1 | Implement a strategic partnership research model. |
| 1.2 | Conduct timely and relevant research that is innovative and has an impact on decisions and actions. |
| 1.3 | Implement a funding approach that is responsive and flexible. |
| 1.4 | Become the “go-to place” in BC, Canada and beyond for information and tools to address climate change mitigation and adaptation solutions. |



From project outset, research teams will define key objectives and expected outputs, identify target audiences, bring resources to the table, and stay connected.

Rationale and context:

PICS aims to have an even greater impact on informing and improving mitigation and adaptation decisions through its research programmes and activities. Part of achieving that goal requires more direct and sustained engagement with research end-users.

As a result, PICS will develop and implement a new strategic partnership research model.

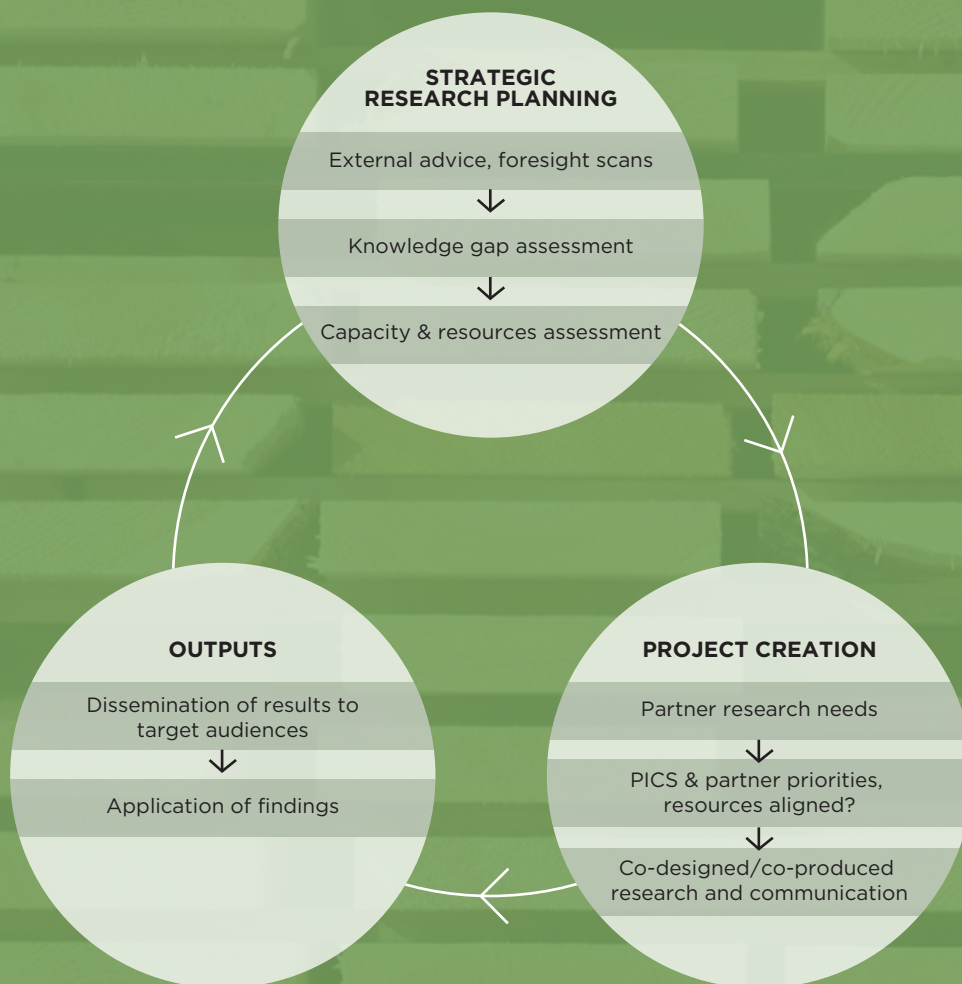
From project outset, research teams – including researchers, end-users, and communication specialists – will define key objectives and expected outputs, identify target audiences, bring resources to the table, and stay connected making contributions towards the success of the project throughout the research process (See “Collaborative Research Model” on page 10).

Research projects will be better targeted to fulfill specific climate solutions knowledge gaps, having met the criteria of being timely and groundbreaking, with a focus on BC but impactful, nationally and internationally, well beyond BC’s borders.

Benefits of the new collaborative approach include a higher level of upfront project evaluation and planning, information sharing, monitoring, support, and leveraging of resources and expertise from our team members, who may come from academia, government, business, industry, First Nations, and other sectors (See “PICS Network” on page 11). Information and tools from projects will be widely available, supporting PICS’ ambition of being the “go-to place” for climate change solutions.

Delivering on such innovative research requires a certain dexterity, responsiveness and flexibility in how we approach funding, the sort of projects we fund, and the form of partnerships we engage in, particularly given how suddenly technology, economics, and policy can change in the climate solutions space.

Collaborative Research Model



PICS Network



PICS and partners conduct collaborative research that contributes new knowledge on mitigation and adaptation solutions for a diverse and wide range of constituents in BC, Canada and internationally.

PICS Strategic Area 2:

Communicating Climate Change Solutions

Goal 2

PICS mobilizes engagement and action on a diverse range of climate change solutions.

Objectives (2017-2022)

- 2.1 Design and implement a communication and engagement strategy that effectively connects with target audiences, and is an integral part of all PICS projects and activities.
- 2.2 Raise the profile of PICS provincially, nationally and internationally.



Communication will be front and centre of our research planning to maximize the impact of our project outcomes.

Rationale and context:

Clear lines of communication are the bedrock of successful partnerships. As a result, PICS is changing the structure of its internal and external communication to be in line with the new PICS collaborative research model. The closer working relationship between stakeholders, researchers and communication experts will, from the outset, support a new strategic communication process, which draws upon their collective expertise to identify and reach target audiences for project outcomes.

Communication will be front and centre of our research planning, rather than just following results, to maximize the impact of our project outcomes, and to raise the profile of PICS provincially, nationally and internationally.

Effectively connecting with target audiences is a key challenge. Communicators face the double-edged sword of having an unprecedented arsenal of communication tools to choose from, but also audience dilution. This trend is accelerating as traditional media

outlets face increasing competition from the growing array of online platforms and communication methods.

PICS wants to embrace innovative and engaging new formats for knowledge mobilization, while avoiding pitfalls of fashion or fad. Infographics, social media, data visualization, podcasts, motion graphics and videos are amongst the options, as well as more traditional formats such as well written and designed reports, face-to-face briefings, seminars, symposia, public talks and educational material.

PICS will be drawing on internal and external expertise in an ongoing pursuit of innovative but above all *effective ways* for researchers, stakeholders and the public to engage with each other and the institute.

PICS Strategic Area 3:

Enhancing Organizational Development

Goal 3

PICS streamlines and improves the efficiency of its organizational structure, while strengthening its resource base and capacity, and expanding its research networks.

Objectives (2017-2022)

- | | |
|-----|---|
| 3.1 | Implement and maintain an effective new governance model. |
| 3.2 | Grow and strengthen the PICS network of researchers and partners. |
| 3.3 | Strengthen in-house knowledge, skills and capacity. |



Underpinning the PICS collaborative research model will be an expanded network of researchers and partners with diverse expertise in climate solutions.



Rationale and context:

An effective governance structure that oversees and advises on PICS' performance is paramount to ensuring the institute successfully delivers on its new strategic direction and agenda.

PICS will bring together currently disjointed elements of its tripartite governing structure through the creation of a single overarching governing body comprised of representatives from the four universities, government, and experts within climate relevant fields or industries. This new streamlined approach will ensure more efficient and responsive feedback and support for PICS management and researchers, plus better track progress and accountability.

Assisting the PICS executive director and the governing body will be another new initiative – a PICS international advisor team on climate solutions – that will share information on emerging trends and identify research opportunities. It will also assist with the creation of ad hoc review panels to

help ensure PICS research can deliver breakthrough climate solution knowledge.

Underpinning the PICS collaborative research model will be an expanded network of researchers and partners with diverse expertise in climate solutions. This network will include academia, government, First Nations, business, industry, and organizations within British Columbia, as well as from across Canada and internationally. We envision a network with clear channels of communication, information pipelines, and increased opportunities for collaboration.

The capacity within the PICS staff will be strengthened to implement and carry out our ambitious new Strategic Plan.

Measuring Success

PICS is committed to measurable results from our work. A combination of quantitative and qualitative measures will be used to evaluate success.

For individual research projects or activities, key objectives, expected outputs, and specific evaluation criteria will be developed by the team of researchers, partners and communication experts at the outset, and tracked as the project progresses.

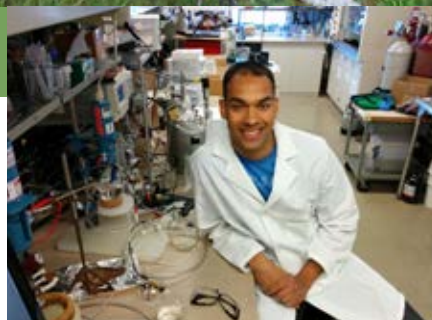
On a yearly basis, PICS performance will be evaluated based on an Annual Operating Plan. That plan will include targets to be achieved for the objectives listed under the three strategic areas and goals in this Strategic Plan 2017-2022.

Annual progress reports presented to the PICS governing body will summarize the achieved results against the targets. At the end of this five-year Strategic Plan, the cumulative results and outcomes will be summarized to evaluate overall success.





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Key Accomplishments

Since 2008, PICS has initiated and supported a broad range of climate solution research, outreach, and engagement.

Climate solutions research

PICS support of climate solutions research has developed new knowledge that is actively being used to shape policy and decisions on how GHG emissions can be decreased and communities can plan for a changing climate including:

Climate positive behaviour—what works, and what doesn't, for engaging people on climate action.

Sea level rise adaptation—developing community-based solutions for shoreline resilience to sea level rise.

Maximizing forest carbon uptake—modelling reveals the potential of BC forests to help meet climate targets through regionalized management, conservation, bioenergy investment and longlived wood products.

Solutions in the built environment—pathways are being developed for built environments to be net positive energy and with zero GHG emissions.

Low emissions transportation—integrated social, economic and technical analysis of the transportation market and public policy to inform low emissions pathways for BC's air, land and marine transport networks.

Greening electricity grids—the mitigation potential for low carbon energy options for BC and Alberta grids, and beyond.

Technical innovations

PICS supported research has produced a variety of new climate solutions technologies including:

Waste water conversion—developing a process to convert oil and gas industry CO₂ and wastewater into value-added chemicals and reusable water.

LED lights for greenhouse agriculture—developing smart spectrum LED lighting to increase efficiency in greenhouses.

Offshore wind energy—improving support structure and turbine designs for floating offshore wind turbines.

Energy efficient cooling systems—developing new adsorbent composites for efficient cooling systems.

ishments

Informing policy and decision-makers

PICS has informed policy and climate decision-making in government, industry and business including:

BC agriculture adaptation guides—development of the first adaptation guides for BC agriculture, which have led to further engagement by farmers on climate action.

Greening the fleet—a lifecycle modelling tool for procurement decisions to better understand GHG emissions effects and lifecycle costs of fleet vehicles. The tool helped provide insights to the City of Surrey in meeting its environmental goals.

Thermal imaging for home retrofits—this research contributed to the launch of new community-led thermal imaging home energy upgrades in Vancouver.

Climate risk financial tools—identifying finance tools to assist municipalities with reducing climate change risks from aging infrastructure.

Analysis of existing policy—energy-economic modelling analysis of Vancouver's Renewable City Strategy, BC's Climate Leadership Plan and carbon tax.

PICS' Big 5 Projects:

- Forest Carbon Management
- Energy Efficiency in the Built Environment
- BC Natural Gas Development
- Low-Carbon Pathways to 2060
- Transportation Futures

Building networks and capacity

PICS activities help build climate solutions capacity and strengthen networks between researchers, industry, government and other partners. Some examples include:

PICS fellowship and internship programs—contribute to expanding the next generation of climate policy leaders. Fellows and interns work directly with partners and stakeholders in academia, business, government, industry, First Nations and communities. Many former PICS fellows and interns now hold climate solutions oriented positions in government and the private sector.

PICS' Big 5 projects—multi-university collaborations, with partners and stakeholders in government and industry.

PICS annual forum and fellowship events—build cohesion in our PICS community.

Outreach and Education

PICS engages in a wide variety of outreach and education initiatives:

Workshops, seminars and public events—PICS hosts a wide variety of public events targeted towards technical and lay audiences; video recordings of many events are available online.

Online climate courses—PICS has produced an online series on climate science, mitigation and adaptation, with users in over 160 countries.

The Climate Examiner—PICS produces a fortnightly climate news analysis, The Climate Examiner, which has over 2,000 subscribers and explains global climate news with a BC perspective.

PICS research in the media—PICS research receives widespread coverage in print, online and broadcast media, especially within BC.



Conducting
Collaborative Research

Communicating Climate
Change Solutions

Enhancing
Organizational
Development

pics.uvic.ca



**Pacific Institute
for Climate Solutions**
Knowledge. Insight. Action.

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