

Intro to Climate Policy for Climate Adaptation Professionals

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Welcome to the ‘**Introduction to Climate Policy for Climate Adaptation Professionals**’ course, which is part of the *Adaptation Learning Network* initiative. The overall initiative is focused on building the capacity of professionals in a number of fields to address climate adaptation issues, by offering courses through our network of BC post-secondary institutions. This particular course is focused on climate adaptation policy.

CLIMATE ADAPTATION can be defined as: “Anticipating the adverse effects of climate change, taking appropriate action to prevent or minimize the damage they cause to human and natural systems, and taking advantage of opportunities that may arise”. (Adapted from Intergovernmental Panel on Climate Change and European Commission definitions)

LEARNING OUTCOMES:

Upon successful completion of this course you will be able to:

1. **DIAGNOSE** why different climate change adaptation policies are needed in different circumstances (Module 1,2)

2. **INTERPRET** climate change policy in terms of its role in mitigation or adaptation (Module 1)
3. Use climate change scenarios to **PREDICT** future changes that suggest the need for new or better climate change adaptation policy tools (Module 1,2)
4. **RECOMMEND** appropriate climate change adaptation policy tools for a variety of professional and planning needs (Module 2,3)
5. Critically **EVALUATE** whether existing climate change adaptation policy is sufficient for professionals and planners in BC (Module 2,3)
6. **APPLY** climate change policy knowledge to real life examples in professional and planning contexts (Module 4)

COURSE LAYOUT:

There are FOUR content modules in this course. Each contains a variety of learning activities, discussions, and reading material. This course is asynchronous, meaning you can complete it on your own time.

Modules 1 and 2 focus on what climate change adaptation policy is, why we need it, available tools, and and important actors. Module 3 offers opportunities to learn and apply policy in specific settings, depending on your role. Module 4 is a capstone learning activity for the whole class, in which you can think about how you will use this information in the future.



Image source: "How Do You Think We Should Tackle Climate Change?" by americaspower is licensed under [CC BY 2.0](#).

Relevant Twitter Links

Here are a few climate adaptation related Twitter feeds that may be useful to follow during the course (and after).

[Tweets by IPCC_CH](#)

[Tweets by environmentca](#)

[Tweets by PICSCanada](#)

[Tweets by ALNClimateActn](#)

About Adaptation Learning Network

Welcome to the Adaptation Learning Network (ALN). This course is one of [ten courses](#) developed for working professionals. These courses are designed for people who are addressing climate adaptation risks and impacts in their communities and jobs.



WHY DOES THIS MATTER?

Climate change adaptation requires expertise from many perspectives. The ALN is committed to connecting people, professional interests, and regions to advance skills, knowledge and solutions.

JOIN THE NETWORK

To join the network, [sign up for our monthly newsletter here](#), and follow us on social media ([Twitter](#), [LinkedIn](#)) to get adaptation news and hear about our latest course offerings and events.

LEARN MORE

To learn more about the Adaptation Learning Network read [this 5-minute introduction](#).

Module 1: Foundations of Climate Change Policy



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<https://pressbooks.bccampus.ca/climatepolicy/?p=5>

Video: Global Commission on Adaptation (gca.org)

Adapting to climate change is important in order: to protect people, communities and livelihoods on a day-to-day basis, to reduce vulnerability, and to build resilience. This allows all of us to thrive amidst the consequences of a changing climate.

In your sector, (whether as engineers, hydrologists, agrologists or in another profession), your day-to-day activities largely take place within a policy framework of some kind, whether legislative, regulatory, or in the form of guidelines.

Whether you are aware of it yet or not, you are also working within the climate change policy space. This policy space can include frameworks as high level and voluntary as, for example agreements made by Canada to participate as a member country in the international *Intergovernmental Panel on Climate Change* (ipcc.ch), or as locally based as a Climate Adaptation chapter in a BC municipality's Official Community Plan (OCP).

This course will provide information about the range of climate policy frameworks that act as context, and/or act as the 'rulebook' for your work as industry professionals. It will also offer discussions and activities that allow you to consider how to apply this knowledge in your own function and role.

This module (Module 1) covers topics like: the role of public policy, what is climate adaptation policy, why do we need climate adaptation policy, and the connection between higher level policy and your work as professionals.

So what will you be doing in this module? You will watch some lecture video content, hear interviews with relevant experts in short videos, read some materials and respond to a few questions about them, and finally, contribute to some class discussions. You can work through the material in any order you like. Welcome to Module 1!

Discussion #1 – Climate Change Adaptation Impacts and Issues

This first discussion space will set the stage for your learning in this course, by thinking first about climate change impacts. It will also allow you to share your ideas and knowledge with other learners.

Please click on the link above to start a new thread, and share your thoughts on the following topic:

WHAT ARE SOME EXAMPLES OF CLIMATE CHANGE IMPACTS AND ISSUES THAT YOU SEE ON A DAY-TO-DAY BASIS IN YOUR JOB?

Respond to at least two other people's posts (or as many as you like), in order for us to generate a conversation about this topic amongst our class. I will also respond to as many as I can.

Let me start with an example from my own day-to-day experience, so you can see the kind of thing I am hoping you can also share.

Every year at Vancouver Island University, we have a number of 'snow days' where school is cancelled to reduce risks to faculty, staff and students from travelling to and from, and also reduce risk from being on our hilly campus with its own cooler microclimate. As climate change advances, we expect to see more extreme weather, including more winter precipitation, meaning more 'snow days' where VIU may be closed. If students have to miss more classes, this may have an impact on how we teach, leading us to consider developing more fully online, or blended (partially online) classes than we have had in the past; so that extra cancelled days of school doesn't mean

students have to stop learning. (We have, of course, already had to do this because of COVID-19).

What is an example you can share?

Next is a short video interview with Dr. Jeff Lewis that will provide some basic scientific information about what kinds of climate change impacts we might see in the future. Dr. Lewis will also highlight how scientists think about the connection between climate change mitigation and climate change adaptation. This is an important distinction in climate change policy.



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Lectures

Lecture #1 What is Public Policy? (8 minutes)

[Lecture #1 PowerPoint slides](#)



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Lecture #2 What is Climate Adaptation Policy? (16 minutes)

[Lecture #2 PowerPoint Slides](#)



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Interviews with Experts

These three, short pre-recorded videos offer you a chance to hear from some experts about climate adaptation policy. There is a place following these videos, where we can have a bit of a discussion about anything here that particularly interested you.

First Nations Lens: Dallas Smith, Board President, Nanwakolas Council, Campbell River, BC



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view it online here: <https://pressbooks.bccampus.ca/climatepolicy/?p=5>

Video attribution: “First Nations Lens: Dallas Smith, Board President, Nanwakolas Council, Campbell River, BC” by [Michele Patterson](#), Introduction to Climate Policy for Climate Adaptation Professionals, [Adaptation Learning Network](#) is licensed under [CC BY-NC-ND 4.0](#).

Key Takeaways

Please watch the video above to see Dallas’ response to the following two questions:

1. As President of Nanwakolas Council, you support your member First Nations with information services, technical support, coordination and advice to assist them in their decision-making and work. How is Nanwakolas Council supporting its member nations in preparing to adapt to the realities of climate change?
2. What does Nanwakolas Council still need from other governments and agencies in terms of policy guidance or other supports in order to ensure your

member nations are prepared to adapt to climate change?

Federal Lens: Craig Stewart, VP Federal Affairs, Insurance Bureau of Canada, Ottawa, Ontario



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Video attribution: “Federal Lens: Craig Stewart, VP Federal Affairs, Insurance Bureau of Canada, Ottawa, Ontario” by [Michele Patterson](#), Introduction to Climate Policy for Climate Adaptation Professionals, [Adaptation Learning Network](#) is licensed under [CC BY 4.0](#).

Key Takeaways

Please watch the video above, for Craig's response to the following two questions:

1. Your job as VP, Federal Affairs, for the Insurance Bureau of Canada involves leading their work on disaster resilience and climate change. You have also been part of a Federal Expert Panel on climate change adaptation. How would you characterize the Federal Government's work on climate change adaptation policy?
2. What are the financial risks for Canada in not addressing climate adaptation right? (for people, for assets, for economy, etc.)

Organizational Lens: Robert Okashimo,
Director, Enterprise Risk Management,
Vancouver Island University, Nanaimo, BC



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Video attribution: "Organizational Lens: Robert Okashimo, Director, Enterprise Risk Management, Vancouver Island University, Nanaimo, BC" by [Michele](#)

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Key Takeaways

Please watch the video above for Robert's response to the following two questions:

1. Your job as Director, Enterprise Risk Management at Vancouver Island University means that, among other risks, you would be the person who would be in charge of planning for climate change risks to VIU assets and people. How would you describe some of the climate change risks that you might have to consider?
2. What policy frameworks or other guidance do risk management experts work within, and what are some examples of how these would be used in thinking about adapting to the impacts of climate change?

Discussion: Module 1 Interviews with Experts

Was there something in one of these three videos

that stood out to you? Do you have a question about anything you heard here? Share it with us, by starting a new thread and we can discuss it as a class.

Module 2: Climate Change Adaptation Policy: A Deep Dive

In this module (Module 2) you will become more familiar with the overall policy landscape for climate adaptation. While Modules 3 and 4 will narrow down and look more closely at policy in your own professional disciplinary areas, or work you manage in your government role, it is important to first know something about where those more specific policies came from – which is from the public policy space. This space includes: International, Federal, Provincial, Local and First Nations policy areas.

We will look at these policy spaces through three lenses: a) policy gaps due to climate uncertainty (*International*), b) stakeholder involvement in policy development (*Federal*), and c) policy innovation (*Local*).

So what will you be doing in this module? You will review lecture material, contribute to discussions based on some readings, and watch videos with expert interviews:

TOPIC #1: Climate Adaptation, Uncertainty, and Policy Gaps (International policy example)

TOPIC #2: Climate Adaptation Policy and Stakeholder Involvement (Federal policy example)

TOPIC #3: Climate Adaptation Policy Innovation (Local policy example)

Note: There are also sections in this module for both Provincial and First Nations policy, but for these, there are readings only.

Topic #1 Reading

The complete 2014 International Panel on Climate Change (IPCC) AR5 *Climate Change 2014: Impacts, Adaptation, and Vulnerability* report is almost 1800 pages long. In that document, the word uncertainty appears 588 times! **How on earth do we make decisions in the face of so much uncertainty!**

Scientists deal with uncertainty by being extremely conservative in their communications. We can see this in the cropped image below: “*Observed Impacts Attributed to Climate Change*” from this same report. Full image is here (Summary for Policymakers/Graphics/Figure SPM2): <https://www.ipcc.ch/report/ar5/wg2/>

On the left hand side of the legend below, you can see a box labelled “*Confidence in Attribution*”. The number of stacked bars here indicates a measure of how confident IPCC scientists are about whether the specific impacts seen on the map are related to climate change. You can see they are very confident in some areas, and less confident in others. Being transparent about uncertainty is an important part of communication about science. **So, how do policy makers deal with climate change adaptation uncertainty? Let’s talk about that in the Topic #1 Discussion next.**

Please review Section A of this Summary, which includes both A2-Adaptation Experience and A3-The Decision-making Context. This reading is about 7 pages in total:

IPCC Climate Change Fifth Assessment Report / Impacts, Adaptation and Vulnerability. Summary for Policy Makers (2014) https://www.ipcc.ch/site/assets/uploads/2018/02/ar5_wgII_spm_en.pdf

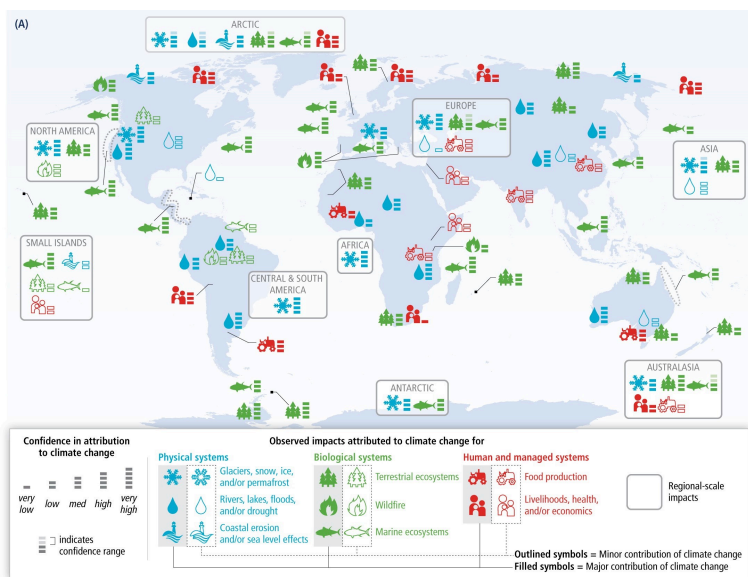


Fig. SPM2. IPCC AR5 Summary for Policymakers. Found in: IPCC, 2014: Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.

Topic #1: Discussion

Designing and implementing climate change adaptation policy is not easy, including in the face of uncertainty about severity and timing of impacts. *How much flooding will we see? How hot will our summers be next year, or five years from now?*

As you read in the IPCC Summary for Policy Makers above, the decision-making context for addressing these issues is complicated and challenging. Based on what you learned in the reading of Section A2 and A3 (in particular), please click on the link above to start a new thread and respond to the following question, through the lens of your own discipline:

How should policymakers deal with climate change adaptation uncertainty in making economic, social, or other kinds of decisions?

Please respond to posts from others as well, so we can have a conversation on this topic.

Topic #2: Reading

In general, public policy is implemented by government bodies. So, a citizen, and as a professional in your particular field, how do you see your role as an actor in the climate change adaptation policy space? **Are you a policy 'taker', or are you also a policy 'maker'?**

The figure below (28.2) from the 2014 *US National Climate Assessment Report* (full report here): <https://nca2014.globalchange.gov/report/response-strategies/adaptation> shows a variety of areas in which

stakeholders may be involved in helping develop government led climate adaptation policy. These may include: identification of risks; planning, implementing and monitoring options; or revising and communicating options as needed. Do you see a role for yourself, or for your profession here?

In Canada, our main climate change policy document is the Federal Government's *Pan-Canadian Framework on Clean Growth and Climate Change (2016)*. Please review pages 27 to 35 of it (Adaptation and Climate Resilience), in order to participate in the Topic #2 discussion coming next below: http://publications.gc.ca/site/archievee-archived.html?url=http://publications.gc.ca/collections/collection_2017/eccc/En4-294-2016-eng.pdf

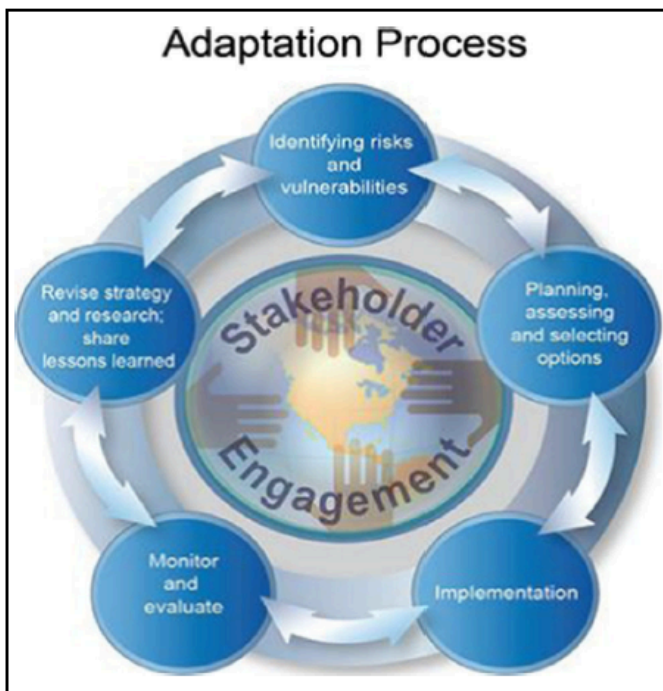


Fig. 2 Adaptation process from the National Climate Assessment Report. Source: National Climate Assessment 2013

Topic #2: Discussion

Were you personally, or professionally involved in developing Canada's national climate plan? (Does that seem like a funny question?) We would like to think that as stakeholders, the policy positions and documents put forward by our elected governments documents (mostly) reflect our aspirations, needs and expertise. So let's take a look and see.

In the reading above of the Pan-Canadian Framework, you looked at the adaptation section of Canada's 2016 climate plan.

In thinking about yourself and your discipline, are your aspirations, needs and expertise reflected here? If not, what is missing?

It would be great if you could also respond to other people's posts so we can have a bit of a conversation on this topic.

Topic #3: Reading

Local and regional governments shoulder a lot of the burden of ensuring communities and citizens are prepared to adapt to the impacts of climate change. They are often on the front line of implementing policies (developed there or at other levels), that affect people most directly. In many ways they end up being innovators as they have to plan and implement policies

in order to solve problems that affect communities here and now.

Here are three examples of innovative planning and implementation from local governments, one in Ucluelet, and in North Vancouver. There is also a video posted here below, where the City of Nanaimo’s Community and Environmental Planners discuss issues they deal with in implementing climate change adaptation policy in this coastal city. Following this section is a discussion you can participation in about policy innovation in your own communities.

A) UCLUELET, BC: INNOVATION IN COMMUNICATION

This document (linked here) highlights information about a video series on municipal and regional climate adaptation initiatives: https://ucluelet.ca/images/Adapting_to_Climate_Change_on_the_BC_Coast.pdf

One video in the series mentioned is on the ‘Green Shores’ approaches to erosion control. Here it is:



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of the text. You can view it online here:

<https://pressbooks.bccampus.ca/climatepolicy/?p=43>

B) THE DISTRICT OF NORTH VANCOUVER, BC: AWARD WINNING INNOVATION IN PROCESS

In 2017, the District of North Vancouver developed a comprehensive climate adaptation strategy. They won awards from the international association: *ICLEI Local Governments for Sustainability* organization (iclei.org) <https://www.dnv.org/sites/default/files/edocs/CCAS-presentation-24072017.pdf>

C. CITY OF NANAIMO: INNOVATION IN INTERGOVERNMENTAL RELATIONS: Lisa Bhopalsingh & Rob Lawrance

Note: there are two speakers in this video. They are both from the city of Nanaimo:

- *Lisa Bhopalsingh, Manager of Community and Cultural Planning*
- *Rob Lawrance, Environmental Planner (Environmental Services)*



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view it online here: <https://pressbooks.bccampus.ca/climatepolicy/?p=43>

Video attribution: “CITY OF NANAIMO: INNOVATION IN INTERGOVERNMENTAL RELATIONS: Lisa Bhopalsingh

& Rob Lawrance” by [Michele Patterson](#), *Introduction to Climate Policy for Climate Adaptation Professionals*, [Adaptation Learning Network](#) is licensed under [CC BY 4.0](#).

Key Takeaways

Please watch the video below, for Lisa and Rob’s responses to the following two questions:

1. Planning for the City of Nanaimo involves ensuring a resilient and adaptive community in terms of climate change impacts. What policy tools and frameworks guide your efforts?
2. What are some of the practical realities of trying to apply policy tools and frameworks that you face in your role?

BC Government Adaptation Policy and Frameworks

Climate adaptation policy development also takes place at the provincial government level. The BC Government recently launched their new Climate Preparedness and Adaptation Strategy website, where they are seeking input on the strategy until mid August 2021: <https://engage.gov.bc.ca/climatereadybc/>

The 50 page strategy document itself can be found

here: <https://engage.gov.bc.ca/app/uploads/sites/568/2021/06/Climate-Preparedness-and-Adaptation-Strategy-2021.pdf>

The summary of the strategy document can be found at: <https://engage.gov.bc.ca/app/uploads/sites/568/2021/06/Climate-Preparedness-and-Adaptation-Strategy-Summary.pdf>

You will note in the summary document just how many of the proposed actions are actually policy related (eg: new policies needed, or reviewing previous policies)

Finally, there is also a video below featuring a former Provincial Deputy Minister of the BC Ministry of Environment (Jon O’Riordan).

NOTE: There is no specific course activity related to this report, or to the video other than for you to review them.

Provincial Lens EXPERT VIDEO: Jon O’Riordan, Research Assoc., UVic POLIS Project; Former Dep. Minister, Govt of BC, Victoria, BC



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Video attribution: “Provincial Lens EXPERT VIDEO: Jon O’Riordan, Research Assoc., UVic POLIS Project; Former Dep. Minister, Govt of BC, Victoria, BC” by [Michele Patterson](#), Introduction to Climate Policy for Climate Adaptation Professionals, [Adaptation Learning Network](#) is licensed under [CC BY 4.0](#).

Key Takeaways

Please watch the video above, for Jon’s response to the following two questions:

1. Freshwater availability is an important issue in terms of climate change adaptation. Based on your past work with the Government of BC, and current work with the Polis project, how would you describe the policy agenda needed to ensure healthy watersheds in BC by the mid 21st century?
2. How might a water security fund be one part of BC’s climate adaptation policy framework in order to ensure healthy watersheds and sustain clean water?

First Nations Adaptation Policy and Frameworks

First Nations in BC have done also some recent policy development work related to climate change adaptation. The BC Assembly of First Nations surveyed members in 2019, and

are now developing a climate change strategy based on what they heard from their members: [First Nations Leadership Council Climate Emergency Survey](#)

The report that came from this survey is here: https://www.bcafn.ca/sites/default/files/docs/reports-presentations/2020.27.05%20FNLC%20CE%20Survey%20Findings_Executive%20Summary%20.pdf

There is also an Expert Video posted in this section, which is an interview with the Chief of the Wei-Wai-Kum First Nation in Campbell River about climate change adaptation and his community.

NOTE: There is no specific course activity related to this material, or to the video. They are here for you to review on your own.

First Nations Community Lens: Chris Roberts, Chief, Wei Wai Kum First Nation, Campbell River, BC



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Key Takeaways

Please watch the video above to see Chris' response to the following two questions:

1. As Chief of Wei-Wai Kum First Nation in Campbell River, you have responsibility for members who may be impacted by advancing climate change. What are some of the potential impacts of climate change that your community, and the broader Nanwakolas Nation may need to adapt to in the future?
2. What does Wei-Wai Kum need from other governments and agencies in terms of policy guidance or other supports in order to ensure the community is prepared for dealing with climate change impacts?

Module 3: Applications and Practice: Industry Specific Professionals or Govt Staff



Photo: Michele Patterson

Welcome to Module 3.

In this module you will be learning about climate adaptation policy relevant to your specific discipline.

The *BC Adaptation Learning Network* (ALN) project, through which this professional development course and others were developed (<https://alnportal.ca/all-courses/>) involves both

partners from BC universities and many of BC's disciplinary-based professional organizations/regulatory bodies whose members may need to know about climate change adaptation. These organizations are:

- *Applied Science Technologists & Technicians of BC*
- *BC Society of Landscape Architects*
- *Engineers and Geoscientists BC*
- *BC Institute of Agrologists*
- *College of Applied Biology*
- *Planning Institute of BC*
- *Association of BC Forest Professionals*

Some professional organizations have more specific climate change policy resources than others. However, all have professional practice guidelines, bylaw, ethical statements, and other kinds of documents that provide a policy foundation for any kind of professional activity. Many of these are also based in provincial legislation. In BC, the new Professional Governance Act (BC) (discussed below in Overview), also provides new regulation and policy guidance for many of these self-regulating professional groups.

So what will you be doing in this module? You will:

1. Complete a short survey about climate change policy and your professional organization (regulatory body). I will share results of this information with the class in Module 4. [Survey link here: Climate Change Policy Professional Association Survey](#)
2. Everyone taking the course will review the sub-module called "Overview." (There is a Part 1 and a Part 2 of this Overview section).
3. Find the ONE other sub-module below most relevant to your discipline and complete the readings and activities in there. There is also a short quiz associated with each sub-

module, but you only have to do one.

If you are not based in BC, and/or you are not part of one of these professional associations (ie: you work for government or some other body), please pick one of these disciplinary areas that is the most interesting to you, or most relevant to your day to day function. Alternatively, there is a module below, specific to government employees.

Welcome to Module 3!

Overview: For All Industry Professionals (Part 1 & Part 2)

OVERVIEW: PART 1 (Quiz)

[please note the quiz is omitted for the Creative Commons licensed version of this course]

This overview section is focused on the British Columbia context, however, even if you are not based in BC (or not working in one of the disciplinary areas noted above), please work through this section. The information here reflects that dealing with climate change adaptation in resource management professions is an overall issue of ethics, standards and professionalism. Additionally, other jurisdictions (and disciplines) are also considering issues of industry self-regulation so this may be an issue that comes your way in the future.

A new policy document (legislation) now guides many of BC's professional associations in their activities – the *Professional Governance Act (PGA)*. This piece of legislation came into force in 2021. Here is a description of what “professional governance” is all about.

“Professional governance relates to the oversight of a profession and its designated professionals by a governing body. This includes professional self-regulation which is an

agreement between an occupational group or profession and the government to regulate the activities of its registrants. Self-regulation is a privilege granted to a profession through legislation to protect the public interest. **In this arrangement, government trusts professionals to set aside their self-interest in favour of professional standards set in the public interest, and relies on an ethos of professionalism that includes a commitment to public service.** This system is used by government to reduce the risks of incompetent and unethical practice. It allows government some control over the practice of the profession while enabling professionals to use their expertise to set and enforce appropriate requirements.” (Retrieved from: <https://professionalgovernancebc.ca/about/professional-governance/>)

It is important to note that the relationship between the PGA and climate adaptation policy is not explicit in this new legislation, however the PGA provides for industry self-governance, ensuring competent, ethical, and accountable professional practice in the activities of all its regulatory bodies. (This might include things like, for example, ensuring the public interest is protected by the requirement to report situations where potential climate change impacts are not being considered, but need to be.)

For this Overview section, please complete the short quiz [note: omitted from CC licensed course] on professional governance (below) after reviewing information from the following resources:

1. Professional Governance Act: <https://www.leg.bc.ca/parliamentary-business/legislation-debates-proceedings/41st-parliament/3rd-session/bills/third-reading/gov49-3>
2. Office of the Superintendent of Professional Governance website: <https://professionalgovernancebc.ca/>
3. PGA-Overview video (below...watch 1:00 to 3:00 for an

overview and then 10:00 to 23:00 approx. for more details)



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Overview: Part 2 Discussion

PART 2: Five of the seven regulatory bodies covered under the PGA have also developed a joint statement on climate change: <https://www.cab-bc.org/file-download/joint-statement-climate-change>.

In looking at Section 1 of this joint statement: “Commitment of Professional Organizations”, pick one bullet point and expand on it in terms of what it means to you and your own discipline. How might it be applied? What are some examples of this?

Geoscience & Engineering

[EGBC Sustainability Guidelines](#)

[EGBC Climate Change Resources](#)

Engineering/Geoscience Expert Interview: Kyle Hasenkox, Principal, Rocky Point Engineering, Victoria, BC



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Please watch the video above to see Kyle’s response to the following two questions:

1. As Principal, and Sr. Project Manager at Rocky Point Engineering in Victoria, and as a member of the Vancouver Island chapter of the *American Society of Heating, Refrigeration and Air Conditioning Engineers* (ASHRAE), you play an important role in designing sustainable and high efficiency building systems. What climate change factors do you see affecting your sector, and how would you characterize your industry’s role in helping society better adapt to climate change?
2. One of the challenges faced by your sector involves designing buildings with life spans of up to 100 years. How do we design climate ready buildings with this very long

term in mind; in some ways designing for an uncertain or unknown future?

Agrologists

[Code of Ethics](#)

[Authority, Values, Mission, Vision](#)

Agrologist Lens: Pierre Iachetti, PAg., Resilience Environmental Solutions, Victoria, BC



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Please watch the video above for Pierre’s responses to the following two questions:

1. Your current work as an agricultural consultant for the District of Saanich has involved implementing some new

food security planning. In particular you have drafted some bylaws that are climate adaptation focused as they are aimed at building resilience into the food supply. Could you describe a bit more about this work?

2. Indigenous people in BC have been adapting to changes in environmental conditions affecting food supplies for thousands of years. As an agrologist who works with indigenous communities, can you give us some examples of indigenous approaches to adaptation in agriculture that would be smart to weave into BC's agricultural policy frameworks?

Applied Biologists

[Code of Ethics](#)

[Principles of Stewardship](#)

Applied Science Technologists & Technicians

[ASTTBC Technology Professionals Mission Statement](#)

[ASTTBC Code of Ethics](#)

Foresters

[ABCFP Code of Ethics](#)

[ABCFP Standards of Professional Practice](#)

[ABCFP Principles of Forest Stewardship](#)

Forestry Lens: Dr. Bill Beese, RPF, Forestry Professor, Vancouver Island University



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Please watch video above to see Bill’s answers to the following two questions:

1. Adapting to climate change in a forestry context means adapting how we manage forests. What are some of the policy challenges foresters and the sector face in dealing with climate change?
2. A few years ago you created a climate change strategy for one of BC’s forest companies. What were some of the aspects of that policy framework as they related to climate adaptation?

Landscape Architecture

[BC Society of Landscape Architects Bylaws \(2017\)](#)

[Canadian Society of Landscape Architects – Your Response to Climate Change](#)
[Living with Water project](#)

Professional Planners

[PIBC: Climate – A Call to Action](#)
[Legal Implications of Climate Change Plan Canada Magazine](#)
[Fall 2018 Edition \(page 46/47 of issue\)](#)

Professional Planner Lens: Christine Callihoo, Climate Change Advisor, and Sr. Planner, Vancouver, BC



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Please watch video above to see Christine's answers to the following three questions:

1. It would seem to me that climate change adaptation is really fundamental in terms of municipal planning. How would you characterize, in general, the planning community's perspective and knowledge about climate change, and climate change adaptation in particular?
2. Planning for climate change impacts to municipal infrastructure (eg: road networks, sewer systems, buildings, and other assets) should be a part of climate change adaptation planning. Can you talk about the benefits of ensuring this kind of asset management planning is a focal point of municipal climate change policy frameworks?
3. You have been working with a First Nation in the Yukon as they develop a community plan for their traditional territory that includes the climate lens (including bringing in climate projections for the region to inform all relevant aspects of the plan). How will adapting to climate change impacts figure into this community plan?

Public Health Professionals

[Canadian Public Health Association: Climate Change and Human Health](#)

[PHABC Constitution and Bylaws](#)

Johns Hopkins Public Health on Call Podcast Episode 218: The Health Impacts of Climate Change (14 min)



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Video: Public Health Lens: Shannon Turner, Executive Director, Public Health Association of BC, Victoria, BC



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Please watch the video above to see Shannon’s answers to the following two questions:

1. As Executive Director for the Public Health Association of BC you lead an organization that focuses on promoting health, wellbeing and social equity. PHABC provides

resources to public health professionals to increase professional competency; and also advocates on issues relevant to public health, including climate change. Can you tell us a bit about what PHABC has done in terms of providing policy guidance about climate change to your members?

2. Climate change will impact some people and communities much more negatively than others. What are some adaptation strategies in public health that can reduce the impacts of climate change on marginalized people and communities? Any examples you could share from your experience?

Government Employees

If you work as a government employee in resource management or other fields, you may be the one charged with developing policy to guide the actions of people who work in professional organizations like planners, or foresters or hydrologists, etc. The three links below provide examples of how government agencies are planning for climate change adaptation through policy development in different areas of professional practice.

Please review one or all, and then complete the quiz below based on the reading you did. [Note: Quiz removed from Creative Commons licensed version of this course]

1. The City of Copenhagen – Cloudburst Management Plan 2012
 - https://en.klimatilpasning.dk/media/665626/cph_-_cloudburst_management_plan.pdf

2. National Park Service, US Department of the Interior
– Resist-Accept-Direct (RAD) – A Framework for the
21st-century Natural Resource Manager. Natural Resource
Report NPS/NRSS/CCRP/NRR—2020/ 2213. Dec 2020
 - <https://irma.nps.gov/DataStore/DownloadFile/654543>
3. (Two short related articles)
 1. Planning and Planting Future Forests with Climate
Change in Mind: <https://eos.org/articles/planning-and-planting-future-forests-with-climate-change-in-mind>
 2. Assisted Migration: What it Means to Nursery
Managers and Tree Planters: https://www.fs.fed.us/rm/pubs_other/rmrs_2014_williams_m002.pdf

Module 4: Capstone Activity



[“Victoria BC Marriott Green Roof”](#) by [pnwra](#) is licensed under [CC BY 2.0](#)

In this final module, you will have a chance to do one of two things (*or two things if you want!*), that will get you thinking about how you can take what you learned in this course, and continue to use it in your work life. You can either:

1. Share and discuss with colleagues **in a different discipline** how you might better share and use knowledge to

collaborate, and make decisions across your separate disciplinary policy areas for greater overall integration in climate change adaptation. You might be interested in this because, for example, you are a planner who works with agrologists, or you are a forester who works with applied biologists. **If you are interested in this kind of exchange, please start a new thread in Discussion #1.**

2. Share and discuss with colleagues **in your own discipline** how you might work together to further collaborate in increasing information and knowledge about the climate adaptation policy space with others. You might be interested in this because, for example, you are a public health professional who now has new knowledge you now want to use to inform your your colleagues in a local Nurses association; or you are a civil engineer who has new knowledge you might like to present at an upcoming meeting of your Association. **If you are interested in this kind of exchange, please start a new thread in Discussion #2.**

And as mentioned, you can contribute to both of these discussions as well.

If you are not a member of one of these disciplines, please pick whichever discussion would be most relevant to your own function.

This is where you can add appendices or other back matter.