



Canadian Network of Asset Managers  
**APPLIED CLIMATE ACTION COHORT**



2022

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*This initiative is offered through the Municipal Asset Management Program, which is delivered by the Federation of Canadian Municipalities and funded by the Government of Canada.*

# SESSION 1: INTRODUCTION TO THE APPLIED CLIMATE ACTION COHORT

## MODULE A: Introduction – Building the Cohort

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### LEARNING GOALS

After completing this module, you will be able to:

1. Navigate the workshop materials
2. Communicate the benefits of the cohort approach
3. Be familiar with your cohort, where they're from, and where they're at with asset management and climate change
4. Clarify expectations for the next year

### USING THIS WORKBOOK



#### LEARNING GOAL

Specific learning outcome to be achieved.



#### ACTIVITY

Individual or group exercises that provide practical learning opportunities.



#### GLOSSARY

Definitions of words and phrases used throughout the course.



#### RESOURCES

Additional helpful materials related to the topic.



## Welcome to the Applied Climate Action Cohort!

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The Applied Climate Action Cohort is designed to support your organization in advancing climate change and asset management objectives in an integrated and thoughtful way. This program is put on by the Canadian Network of Asset Managers and is designed to be highly adaptive, collaborative, and relevant. Upon completion of the program, you will be equipped with the tools needed to address diverse challenges.

Asset management is a process for making more informed decisions as we plan for an uncertain future – making it an excellent candidate for preparing for the impacts of climate change and acting on adaptation and mitigation as part of broader service delivery goals. As climate change introduces new risks to service delivery, finding solutions is going to require experimentation and iterative learning. Participants will come out of the Applied Climate Action Cohort equipped with knowledge about best practices for operationalizing climate change and deliverables customized to their organizational context.

## The Benefits of Building a Cohort

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This training may be a little different from other workshops you've completed. Over the next year, your team will collaborate and work with other organizations at varying levels of asset management and climate change maturity.

These workshops will be an opportunity to learn from each other throughout this process and compare what's worked and what's hasn't for other communities in different contexts.

The goal of building a cohort is to empower participants to structure their learning so that content and delivery works for them. Both the content and the way your cohort evolves will be unique to your organization, as different groups will play different roles and have different outcomes. Each community will provide different perspectives and experiences that all can learn from. The path forward is winding and it's up to you which direction it takes. Our role is to be your guide and to help structure these workshops to reflect what you need and want out of your asset management and climate change journey.

### LET'S GET TO KNOW ONE ANOTHER

1. Which community do you work for and what is your role there?
2. Which impacts of climate change have you seen in your community so far?
3. What does asset management mean to you?
4. Do you incorporate asset management and climate change into your work?
  - e. If yes, do you integrate them or address them separately?  
(There is no wrong answer!)





**DISCUSS:** Your facilitators will divide you into separate breakout groups to discuss the “Let’s Get to Know One Another” questions together.



A large, empty rectangular box with rounded corners and a thin green border, intended for participants to take notes or discuss during the breakout session.



# Workshop Expectations

The cohort approach and process is meant to facilitate adaptive learning. This means that each workshop will be tailored to what will be most valuable for your community. Since the purpose is also to learn from each other, a substantial amount of each workshop will focus on activities you will work through as a large group or in smaller breakout room groups.

As facilitators, our role is to challenge you and create situations where you can have discussions and complete work with your peers. While we are your guides, we are not necessarily your teachers. As participants, your role is to be actively engaged in your learning, both with the facilitators and with the other participants.

Over the next year, we will all work together to chart your path in operationalizing climate change in asset management in ways that work for your community’s context. It is also our hope that you are able to foster relationships with teams from other municipalities. Climate change is a global problem, and we all need to work together to ensure our communities are prepared for future impacts.

We will each play unique roles in how these workshops will be structured:

<b>Our Role as Facilitators</b>	<b>Your Role as Participants</b>
<ul style="list-style-type: none"><li>. Provide facilitation tailored to the needs of the group</li><li>. Act as subject matter experts in the areas of climate change and asset management</li><li>. Provide resources and tools to assist you with the operationalization of climate change in asset management</li><li>. Guide you through FCM’s Asset Management Readiness Scale (AMRS)</li><li>. Provide dedicated time and space for your cohort to evolve and grow together</li><li>. Bring multiple teams from different municipalities together in one space</li><li>. Provide tailored check-in support specific to each participating organization</li></ul>	<ul style="list-style-type: none"><li>. Provide feedback on what information is useful or not useful to you</li><li>. Learn how to use the resources and tools in these workshops and in your work</li><li>. Actively assess yourself and your team using the AMRS</li><li>. Collaborate with other teams, learn from each other, and be open to the cohort process</li><li>. Share learnings from your own experience in asset management and climate action implementation</li><li>. Be open to perspectives and contexts different from your own and be prepared to challenge ways of thinking and doing things</li><li>. Get to know teams from other municipalities, engage in learning together and from one another, and create relationships that can last beyond this training</li><li>. Play an active role in determining the best use of tailored check-in support</li></ul>

# SESSION 1: INTRODUCTION TO THE CLIMATE ACTION COHORT

## MODULE B: Core Terms and Principles of Asset Management and Climate Change

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### LEARNING GOALS

After completing this module, you will be able to:

1. Identify resources, core principles, and terms that will be used in the course.
2. Communicate the connection and benefits of integrating of AM and CC to different audiences.

### USING THIS WORKBOOK



#### **LEARNING GOAL**

Specific learning outcome to be achieved.



#### **ACTIVITY**

Individual or group exercises that provide practical learning opportunities.



#### **GLOSSARY**

Definitions of words and phrases used throughout the course.



#### **RESOURCES**

Additional helpful materials related to the topic.



## COMPANION DOCUMENTS



Throughout this cohort, we will be referencing best practice frameworks and resources that are always available for you to refer to:

<a href="#"><u>Guide to Integrating Climate Change Considerations into Municipal Asset Management</u></a>	This is a roadmap geared towards municipal staff to build climate resiliency into asset management policies, plans and practices. It is focused on integration of climate change within levels of service and risk management frameworks.
<a href="#"><u>Operations and Maintenance for Climate Resilience: Six Strategies for Your Municipality</u></a>	This handbook provides further information on specific strategies and actions that can help you build climate resilience through operations, maintenance, and asset renewal practices. These stages represent the majority of total lifecycle cost and impact the day-to-day delivery of services to the community.
<a href="#"><u>The BC Framework Primer on Climate Change and Asset Management: A Sustainable Service Delivery Primer</u></a>	This primer introduces an approach for integrating climate change considerations throughout the asset management process. It includes key concepts, why to integrate climate change response with asset management, and how to integrate climate change response throughout the AM process.



## CORE PRINCIPLES AND TERMS

Sometimes in asset management and in climate change work, people can use the same word but mean different things. It's helpful to understand some basic terms that you'll be using throughout the cohort so that we have common language to use with each other. These terms are also important in establishing a common language for your organization when talking about and making decisions regarding climate change and asset management.

<b>Climate Change</b>	<p>A change in global or regional weather patterns that persists for an extended period, usually decades or longer.</p> <p>In the context of mitigation and adaptation planning, climate change typically refers to changes that are attributed to human activity that are in addition to natural climate variability observed over comparable periods of time.</p> <p>These changes create the conditions for increased drought, flooding, and forest fires, among other challenges.</p>
<b>Greenhouse Gas Emissions</b>	<p>Greenhouse gases (GHGs) are both natural and human-caused and exist in our atmosphere. They emit radiation which causes the Greenhouse gas effect. Climate change is caused by the increase in concentrations of GHGs in our atmosphere, which are primarily from human activities.</p> <p>GHG emissions are a main indicator of human-caused climate change.</p>

## Climate Change Response

Climate change responses are how an organization/group/individual reacts towards climate change. Different responses are appropriate for different situations and different organizational goals:

**Recovery strategies** wait for the impacts of climate change to happen, and then react to the impacts. These actions typically involve remediation of damages or moving towards lower levels of service.

An example of a recovery strategy would be repairing a road that was flooded.

**Mitigation strategies** are focused on human interventions that reduce the magnitude and rate of climate change, typically by reducing greenhouse gas emissions. This can occur through reducing the sources of greenhouse gas emissions or finding strategies to absorb greenhouse gas emissions rather than have them go into our atmosphere.

An example of a mitigation strategy is reducing the emissions from vehicle travel through encouraging more cycling and walking in your community.

**Adaptation strategies** focus on increasing a community's ability to experience the impacts of climate change without a significant interruption to services. Adaptation helps a community to cope with changing climate conditions.

An example of an adaptation strategy is to plant more trees in your community to provide shade and reduce the effects of higher temperatures on your population.

**Low Carbon Resilience (LCR)** combines both adaptation and mitigation strategies. As climate change needs to be both prevented and planned for, strategies that consider both mitigation and adaptation can have a bigger impact. LCR strategies bring into focus multiple considerations and trade-offs to help organizations embed climate preparedness and sustainability in the decision-making processes.

It may not be possible to integrate LCR strategies in your community, at least not right away if you are just starting your climate change and asset management journey. And that's okay! Considering one type of strategy at the start is still a step forward.





<b>Resilience</b>	<p>Resilience is the capacity to recover quickly from disruptions and return to a state of normal functioning and service delivery. Resilience may even mean returning to a state that is better than you were in before.</p> <p>A resilient community can adapt quickly and effectively when faced with chronic stresses or acute shocks such as climate change impacts (e.g., severe storms, flooding, or thawing permafrost). To achieve resiliency, it is necessary to have a holistic understanding about community vulnerabilities as well as how systems are dependent on each other.</p> <p>You can learn more about resilience <a href="#">here</a>.</p>
<b>Vulnerability</b>	<p>Vulnerability refers to a weakness in the ability of a person, structure or natural system to respond to a hazard (e.g., flooding). Vulnerability occurs when infrastructure and natural assets are exposed to climate change and is the product of both the sensitivity and the adaptive capacity of a system.</p> <ul style="list-style-type: none"><li>• <b>Exposure</b> refers to the state of being in a place or situation where there is little to no protection from something harmful or unpleasant. In the context of this cohort, it refers to whether infrastructure systems will be impacted in some way by a climatic change. For example, a higher likelihood of flooding in a community due to higher glacial melt caused by increasing average temperatures.</li><li>• <b>Sensitivity</b> is the degree to which a system is affected, either negatively or positively, by climate change.</li><li>• <b>Adaptive capacity</b> is the ability of a system/community to respond and adjust to the impacts of the climatic change. Adaptive capacity includes human and financial resources as well as the infrastructure systems in your community.</li></ul>
<b>Risk</b>	<p>Risk is the potential for undesirable outcomes resulting from an incident, event, or occurrence. This is made up of the likelihood of an impact occurring (related to the vulnerability of a system) and the consequence of that impact on service delivery.</p>
<b>Levels of Service</b>	<p>Levels of service are specific parameters that describe the quantity and quality of services that the organization provides to users.</p> <p>This dictates the need for infrastructure, resources (e.g., staff time, funding, or materials), and ultimately the costs of providing these services.</p>

## Communicating the Benefits of Integrating of Asset Management and Climate Change to Different Audiences

### Reasons for integrating climate action into asset management practices.

The key reasons to integrate asset management and climate resilience are that:

1. Climate change impacts all the major 'levers' of asset management: service, risk, and cost.
2. Decisions about infrastructure and service delivery will impact climate change.
3. Asset management is a process that supports making decisions and delivering services while managing uncertainty – and there are many uncertainties when it comes to climate change.
4. Asset management processes and systems support improved planning and response to weather-related emergencies.

**Climate change impacts asset service, risk, and cost.** Asset management is all about managing service, cost, and risk, so by definition, asset management needs to consider climate change. This isn't just about catastrophic failure; climate change also changes operating conditions over time. If you're not considering climate change in asset management, you're not effectively managing services, risks, or cost.



### Did you know? The Economic Costs of Climate Change<sup>1</sup>

The estimated economic impacts of climate change for Canada is \$21 billion to \$43 billion annually by 2050, assuming a global warming scenario of slightly under 2°C.

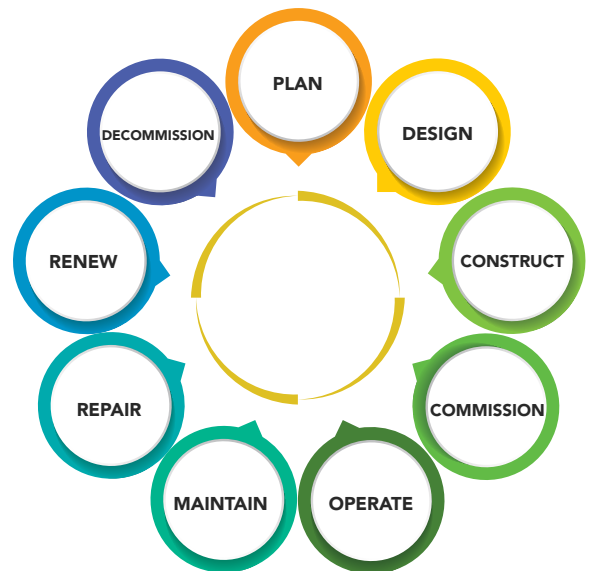
Insurance payouts as a result of natural disasters between 2010-2019 have exceeded \$1 billion per year. However, these only account for a portion of the full costs attributed to weather-related events.

**Decisions about infrastructure and service delivery will impact climate change.** Decisions about what we build and what we don't build have a direct impact on our GHG emissions. In 2019, 25% of our emissions in Canada were generated from transportation, 12% from buildings, 8.4% from electricity generation. Getting to net-zero emissions by 2050 will require changes to how we deliver services, and therefore will lead to changes in the management of cost and risk.

There are opportunities to reduce energy and emissions throughout the asset lifecycle. Consider the following examples of potential actions to reduce energy and emissions:

- . **Plan** – identifying opportunities to integrate natural assets into solutions, opportunities to manage risks to natural assets
- . **Construct** – selecting low emissions materials
- . **Operating** – low energy operating systems
- . **Renewing** – deep energy retrofits rather than building new
- . **Decommission** – recycling or reusing parts, not demolishing

Even more opportunities exist to reduce energy and emissions by understanding the role of natural assets in service delivery, maintaining the health and resilience of natural assets, and choosing nature-based solutions where possible.



<sup>1</sup> IBC/FCM Report: The Cost of Climate Adaptation

**Asset management is a process that supports making decisions and delivering services while managing uncertainty – and there are many uncertainties when it comes to climate change.** Asset management is a systematic process of building resilience by managing service, risk, and cost. A new process for building climate resilience is not needed; asset management is fit for purpose in building infrastructure resilience. This doesn't mean that all climate action can take place within asset management – there are many elements to a resilient community that extend beyond resilient infrastructure and service delivery (like social resilience). But asset management is a great fit for building the resilience of infrastructure and services.

We face some challenges when implementing climate action. Many of these are challenges that asset management is already suited to deal with:

a. **Asset Management: A Process for Managing Overwhelming Challenges**

The cost of adaptation measures alone in Canadian municipalities is estimated at \$5.3 billion annually, not including a low-carbon resilience lens. In national terms, the cost of the actions that need to be taken by municipalities at the local level represents an annual expenditure of 0.26% of GDP. The problem can feel insurmountable, leading to paralysis.

Like the infrastructure deficit, we can't address this with any single program. Rather, we need to take systematic steps to managing service, risk, and cost over time. Asset management helps us to make decisions on what to do next in the face of overwhelming challenges and constrained resources.

b. **Asset Management: A Process for Making Decisions With Imperfect Data**


Organizations are not only dealing with constrained resources, but also with constrained data. We will never have perfect information on our infrastructure or service delivery, and we will never have perfect data on climatic conditions – especially when we're planning for long-life infrastructure and we're projecting climate far into the future. Asset management is a process for making informed decisions with the best information available.

It is not about getting everything perfect the first time. It is about continuous improvement for both asset and climate data. Asset management helps you to take the next step.

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1 IBC/FCM Report: The Cost of Climate Adaptation





c. **Asset Management: A Process for Managing the Combination of Climate and Other Factors**

Asset management is a holistic process, involving many perspectives. It helps us to think about climate impacts together with other impacts. How asset decisions (planning, construction, operations, and maintenance) can combine with climate impacts can have a compounding effect – exacerbating vulnerability.

Management or maintenance practices can intensify the impacts of climate change. For instance, infrequent culvert clearing can exacerbate the flooding caused by severe rain by creating blockages. Similarly, the change of land use can intensify impacts. Urbanization can cause changes in drainage regime causing increased drainage flow.

d. **Asset Management: A Process for Managing Liability**

There are jurisdictional nuances about what public infrastructure owners are liable for, but the landscape is changing with climate change. In general, having an asset management system in place with appropriate documentation and communication, that considers climate change and accounts for its impacts, is likely to be helpful in protection against claims of negligence.

e. **Asset Management: A Process for Building Resilience**

Resilience isn't just about climate resilience; it's about withstanding other kinds of impacts. Asset management is an ongoing process of building capacity for resilient, sustainable service delivery. Asset management is an effective process for implementation of actions to improve low-carbon climate resilience in the face of limited resources.

Many communities are at the climate action planning stage, there are fewer who are well into implementation. Developing a standalone climate adaptation plan can help to identify the priorities from a climate resilience perspective, but we need to plan, fund, and implement projects from an integrated perspective.

This means: considering climate resilient actions across the asset lifecycle; applying a holistic, integrated process involving a team with diverse perspectives; and considering the compounding effects of asset condition, growth, and climate change together.



**Asset management helps effective emergency planning and response.**

Asset management processes and systems support improved planning and response to weather-related emergencies. Asset management appears on the surface to be a long-term planning tool, but it is critical to improving response times during emergencies. In particular, an accurate inventory and value of assets is critical to properly respond to a disaster situation and is core to an organization's asset management system.



## What Are the Benefits of Integrating Climate Change in Asset Management to Your Context?

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Specific benefits of building resilience will depend on how climate is changing in your community, the vulnerabilities of your assets and services, and how they relate to your community's vision and priorities.



**DISCUSS:** Reflect on the benefits of integrating climate change in asset management in your context:

- . Which of the benefits are most relevant to your community?
- . What challenges is your community facing?
- . What questions and priorities are there in your community?

## Considerations for building the Case

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Improving the resilience of your assets and services through integrating asset management and climate change response will require building the case with different audiences over time. Building buy-in within your organization can help increase motivation towards action and help your team and leadership to exert influence appropriate to their role and reach. Finding an approach that works for your organization will depend on your audience as well as key considerations that can help you make the case for integrating asset management and climate response:


**Who is your audience and what matters to them?** Different audiences care about different outcomes. Identify specific benefits of integrating asset management and climate change response to your community that will matter to your target audience.

**What actions or decisions are you asking your audience to make?** Identify the call to action or the key decisions that you are asking your intended audience to participate in.

**What is the most effective way to build your case?** Why now? What is the best format for delivering your message? How will you grab the attention of your audience and build their understanding over time?

**How will you follow up to share successes and lessons learned?** If your audience accepts your call to action, they are invested in success.

**ACTIVITY:** Select an audience. Using the “Building the Case” considerations, develop and deliver a 5-minute verbal presentation to make the case for integrating climate action into AM practices. .



# SESSION 1: INTRODUCTION TO THE APPLIED CLIMATE ACTION COHORT

## MODULE C: Establishing Goals, Baseline, and a Plan for the Cohort Program

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### LEARNING GOALS

After completing this module, you will be able to:

1. Identify your current asset management and climate change maturity and communicate with other participants
2. Establish learning goals and identify conditions for success

### USING THIS WORKBOOK



#### **LEARNING GOAL**

Specific learning outcome to be achieved.



#### **ACTIVITY**

Individual or group exercises that provide practical learning opportunities.



#### **GLOSSARY**

Definitions of words and phrases used throughout the course.



#### **RESOURCES**

Additional helpful materials related to the topic.

## WHERE ARE YOU AT ON YOUR ASSET MANAGEMENT AND CLIMATE CHANGE JOURNEYS?

Identify your current asset management and climate change maturity and communicate with other participants.

There are many assessment tools and scales for evaluating asset management or climate change practices out there. This cohort will use three of these to evaluate current maturity in asset management, climate adaptation, and climate mitigation practices.



### Asset Management Readiness Scale

Complete the AMRS as teams. Guidance is included with FCM's Asset Management Readiness Scale (AMRS) ([here](#)), along with the self assessment tool. The assessment is to be completed in excel ([here](#)). Record the summary of your results in the table below for easy reference.

#### POLICY AND GOVERNANCE



By developing this competency, your organization is putting in place policies and objectives related to asset management (AM), bringing those policies to life through a strategy and roadmap, and then measuring progress and monitoring implementation over time.

Readiness Level	<input type="checkbox"/> Working on Level 1	<input type="checkbox"/> Completed Level 1	<input type="checkbox"/> Completed Level 2	<input type="checkbox"/> Completed Level 3	<input type="checkbox"/> Completed Level 4	<input type="checkbox"/> Completed Level 5
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#### PEOPLE AND LEADERSHIP



By developing this competency, your organization is setting up cross-functional teams with clear accountability and ensuring adequate resourcing and commitment from senior management and elected officials to advance asset management.

Readiness Level	<input type="checkbox"/> Working on Level 1	<input type="checkbox"/> Completed Level 1	<input type="checkbox"/> Completed Level 2	<input type="checkbox"/> Completed Level 3	<input type="checkbox"/> Completed Level 4	<input type="checkbox"/> Completed Level 5
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### DATA AND INFORMATION

By developing this competency, your organization is collecting and using asset data, performance data, and financial information to support effective asset management planning and decision-making.

Readiness Level	<input type="checkbox"/> Working on Level 1	<input type="checkbox"/> Completed Level 1	<input type="checkbox"/> Completed Level 2	<input type="checkbox"/> Completed Level 3	<input type="checkbox"/> Completed Level 4	<input type="checkbox"/> Completed Level 5
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### PLANNING AND DECISION-MAKING

By developing this competency, your organization is documenting and standardizing how the organization sets asset management priorities, conducts capital and operations and maintenance (O&M) planning, and decides on budgets.

Readiness Level	<input type="checkbox"/> Working on Level 1	<input type="checkbox"/> Completed Level 1	<input type="checkbox"/> Completed Level 2	<input type="checkbox"/> Completed Level 3	<input type="checkbox"/> Completed Level 4	<input type="checkbox"/> Completed Level 5
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### CONTRIBUTION TO ASSET MANAGEMENT PRACTICE

By developing this competency, your organization is supporting staff in asset management training, sharing knowledge internally to communicate the benefits of asset management, and participating in external knowledge sharing.

Readiness Level	<input type="checkbox"/> Working on Level 1	<input type="checkbox"/> Completed Level 1	<input type="checkbox"/> Completed Level 2	<input type="checkbox"/> Completed Level 3	<input type="checkbox"/> Completed Level 4	<input type="checkbox"/> Completed Level 5
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**DISCUSS:** Reflect on your asset management progress in the past few years. Where have you made progress? Where have you stalled? Why?

A large, empty rectangular box with a thin green border, intended for participants to write their reflections on asset management progress.



If you're trying to learn more about what it looks like to include climate change in different stages of Asset Management, look at the Climate Change and Asset Management Primer [here](#).



## Climate Adaptation Maturity Scale

Complete the Climate Adaptation Maturity Scale ([here](#)).



### COMPETENCY: POLICY

Putting in place policy and objectives related to the development of an environment and vision that supports local climate adaptation.

Maturity Level	1		2		3		4		5	
	Concept Level		Preliminary Level		Implementation Level		Operational Level		Continuous Improvement Level	
	Working on Level 1	Completed Level 1	Working on Level 2	Completed Level 2	Working on Level 3	Completed Level 3	Working on Level 4	Completed Level 4	Working on Level 5	Completed Level 5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### COMPETENCY: HUMAN RESOURCES AND GOVERNANCE

Ensuring staff and council are equipped with the mandate, understanding, skills, and knowledge needed to support local climate adaptation.

Maturity Level	1		2		3		4		5	
	Concept Level		Preliminary Level		Implementation Level		Operational Level		Continuous Improvement Level	
	Working on Level 1	Completed Level 1	Working on Level 2	Completed Level 2	Working on Level 3	Completed Level 3	Working on Level 4	Completed Level 4	Working on Level 5	Completed Level 5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### COMPETENCY: TECHNICAL AND RISK MANAGEMENT CAPACITY

Preparing the tools needed to deliver adaptation initiatives and manage operations in a way that minimizes climate risk (e.g. software, hardware, maps, models, etc.).

Maturity Level	1		2		3		4		5	
	Concept Level		Preliminary Level		Implementation Level		Operational Level		Continuous Improvement Level	
	Working on Level 1	Completed Level 1	Working on Level 2	Completed Level 2	Working on Level 3	Completed Level 3	Working on Level 4	Completed Level 4	Working on Level 5	Completed Level 5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## Greenhouse Gas (GHG) Emissions Reduction Maturity Scale



Complete FCM's Maturity Scale for Municipal GHG Emissions Reduction ([here](#)).

### COMPETENCY: POLICY

Putting in place context-specific policies that support the implementation of a vision to reduce local GHG emissions.

Maturity Level	Concept Level		Milestone 1		Milestone 2		Milestone 3		Milestone 4		Milestone 5	
	Working on Concept Level	Completed Concept Level	Working on Milestone 1	Completed Milestone 1	Working on Milestone 2	Completed Milestone 2	Working on Milestone 3	Completed Milestone 3	Working on Milestone 4	Completed Milestone 4	Working on Milestone 5	Completed Milestone 5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### COMPETENCY: HUMAN RESOURCES AND GOVERNANCE

Ensuring staff and council are equipped with the mandate, understanding, skills, and knowledge needed to increase capacity for reducing municipal GHG emissions.

Maturity Level	Concept Level		Milestone 1		Milestone 2		Milestone 3		Milestone 4		Milestone 5	
	Working on Concept Level	Completed Concept Level	Working on Milestone 1	Completed Milestone 1	Working on Milestone 2	Completed Milestone 2	Working on Milestone 3	Completed Milestone 3	Working on Milestone 4	Completed Milestone 4	Working on Milestone 5	Completed Milestone 5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### COMPETENCY: TECHNICAL CAPACITY

Preparing the tools needed to reduce GHG emissions and track progress.

Maturity Level	Concept Level		Milestone 1		Milestone 2		Milestone 3		Milestone 4		Milestone 5	
	Working on Concept Level	Completed Concept Level	Working on Milestone 1	Completed Milestone 1	Working on Milestone 2	Completed Milestone 2	Working on Milestone 3	Completed Milestone 3	Working on Milestone 4	Completed Milestone 4	Working on Milestone 5	Completed Milestone 5
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





**DISCUSS:** Reflect on your climate action progress in the past few years. Where have you made progress? Where have you stalled? Why?





**DISCUSS:** In what ways are your asset management and climate action practices integrated? In what ways are they separate?

A large, empty rectangular box with a thin green border, intended for participants to write their responses to the discussion question.



## LEARNING GOALS



You've evaluated your current level of maturity in asset management and climate change. Now what?

The objectives of this program are to support you in advancing asset management and climate change practices and outcomes in a way that is tailored to your context. What we learn together will be determined by the goals that each participant has, and the experience and challenges you each bring to share with your peers.

We are going to take some time to define goals, to set the direction for our learning together.

**DISCUSS:** What are your goals and objectives for asset management and climate change in your organization (as a team / individually)?

Consider:

1. How are you hoping to advance asset management and climate change practices and outcomes through this program? How will this benefit your community?
2. What learning will be most beneficial for your next steps in asset management and climate action?
3. What does success in this program look like for you and your team? What indicators will you use to determine if you have been successful?
4. Based on your answers to the previous questions, identify one to three goals for your organization that can be supported by your learning in this program.
5. What might you need to do in between group sessions to support your success?
6. How do you want to learn from or interact with your peers between sessions?

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What you're able to achieve can depend on the team you have. Take a few moments with your team to think through who your core team members are for achieving the goals you've set out and how everyone will contribute.



**SMALL GROUP ACTIVITY:**

1. Who are your core team for achieving the goals you've identified?
2. What role will each teammate play in supporting your goals, during and outside of workshops?
3. What external support will you need to be successful? From facilitators? From workshops? From other cohort participants?
4. What roles you can each play in shared learning in this cohort (learning from, or sharing with others)?



REFLECTION:

1. What did you learn today that surprised you? What would you like to know more about?

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# SESSION 1: INTRODUCTION TO THE APPLIED CLIMATE ACTION COHORT

## MODULE D: Session Wrap-Up

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### LEARNING GOALS

After completing this module, you will be able to:

1. Recap what you learned and reflect on how it relates back to your workshop intentions
2. Evaluate the workshop, what went well, and what could have gone better
3. Articulate if anything was missing for you, and what you would like to see next workshop

### USING THIS WORKBOOK



#### **LEARNING GOAL**

Specific learning outcome to be achieved.



#### **ACTIVITY**

Individual or group exercises that provide practical learning opportunities.



#### **GLOSSARY**

Definitions of words and phrases used throughout the course.



#### **RESOURCES**

Additional helpful materials related to the topic.



# WORKSHOP 1 REFLECTIONS

Thank you for your hard work today. Please take a few minutes to reflect on:

The names, roles, and communities of 3 people you met today:



How you feel about your progress in asset management:





What's one impact of climate change that surprised you?



What are you most looking forward to at the next workshop?