

Climate Action Roadmap

October 2013



Ministry of
Forests, Lands and
Natural Resource Operations

FLNR 'Climate Action Roadmap'

Contents

Background	1
Purpose of the Roadmap	2
Four Pillars of Climate Action	3
Taking Action: Planning and Implementation	5
Assess	6
Engage	6
Manage	7
The Road Ahead – Achieving Our Goals	9
Summary	9
Contacts	10
Climate Action Plan Outline	11

Background

The Ministry of Forests, Land and Natural Resource Operations' (FLNR) Climate Change Steering Committee was formed in July 2013 to provide strategic direction, coordinated action and accountability in the ministry on climate change adaptation and mitigation work. The committee is made up of the ADM chair, Director and Executive Director level representatives for each division including other agencies where appropriate, and the Committee Coordinator.

This executive level committee focuses on implementing the [FLNR Climate Change Strategy \(2013-2018\)](#) across policy and operations for all natural and heritage resource areas in the ministry as well as a liaison role with other governments, jurisdictions, agencies, non-governmental organizations, professional associations, and public interest groups.

The Climate Change Strategy for 2013-2018 is action-oriented towards adaptation and mitigation at the provincial level. The strategy outlines three goals and nine objectives for effectively responding to the impacts of climate change over the next five years and beyond.

The three goals are:

- I. Climate change is integrated in ministry core business.

- II. Climate-relevant science, data and knowledge guide and inform the identification of the ministry's environmental, social and economic risks, opportunities, and priorities for climate change action.
- III. Climate change action is undertaken through collaboration, partnerships, communication and outreach with BC's First Nations, communities and natural resource sector.

A first step towards coordinated action on climate change across the natural resource sector, is the requirement that all FLNR regions and branches (including BCTS) develop climate action plans to address the goals and objectives of the Climate Action Strategy by March 31, 2015. To facilitate action, the Climate Change Steering Committee (CCSC) will work with high priority/early adopting regions and branches to develop draft climate action plans by March 31, 2014. The committee will oversee the process and the Climate Solutions Team within the Competitiveness and Innovation Branch will provide advice, guidance, and tools to assist in the process.

This work is paramount to the current and future prosperity of natural resources upon which many British Columbians rely. Given the widely accepted understanding that climate change is the greatest challenge of our time and the Ministry's responsibility as natural resource stewards for current and future generations, organized and coordinated action on climate change is essential.

Purpose of the Roadmap

The purpose of the roadmap is to provide the context for creating climate action plans and outline the key steps in the process. There are many planning methods available to help guide the development of a climate action plan. The roadmap borrows from a model used by the United States Department of Agriculture and United States Forest Service and is adapted to the BC setting. It is intended to provide a simple process and framework for FLNR work units to consider as they work to meet the Ministry's climate change strategy. The roadmap provides a process based on some past experiences in developing climate action plans within the agency and also provides some existing tools and resources to help chart the path forward in taking action on climate change in our business or program area. The intent of the roadmap is to help build climate change into our day to day business, not as an add-on, but more as an integral part of what we already do - consider program priorities and projects, then apply a climate change lens.

The Competitiveness and Innovation Branch's Climate Solutions team is a connection point for FLNR staff regarding topics related to climate change. Climate Solutions is aware and connected to ongoing work regarding climate change adaptation and mitigation in BC both

inside and outside of government. Climate Solutions is a great resource for government staff that require information and resources regarding climate change adaptation and mitigation.

It is essential to consider both the adaptation and mitigation lenses when considering climate action plans as the two are inexorably linked.

Some program areas may not be responsible to produce a climate action plan, but it is expected that all branches/ regions and divisions will support the initiative as appropriate.

Four Pillars of Climate Action

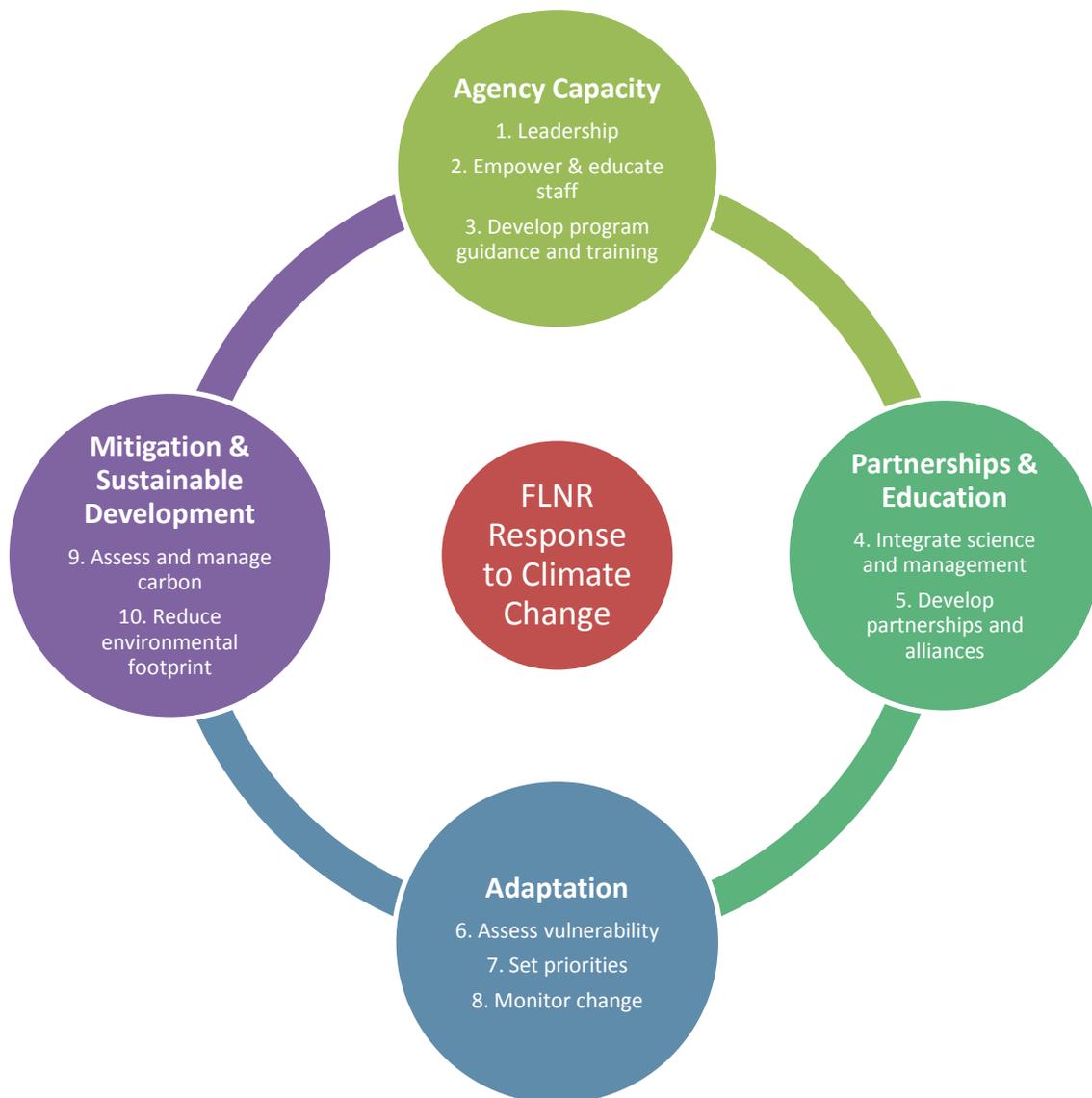


Figure 1: The Four Pillars of Climate Action

The Four Pillars of Climate Action figure identifies the four key components or pillars on which effective climate action plans are built on.

- I. Agency Capacity** - refers to the inward looking component of developing a climate action plan. It looks at an organization, branch or regional team's existing resources and the readiness of those resources to incorporate climate change practices. It looks at existing systems, business programs and/ or initiatives that are aligned with climate change objectives or that could be adjusted or enhanced to deliver on climate change objectives in addition to pre-existing goals or objectives. With limited resources, it is important to look at incorporating climate change planning and implementation within existing programs and/ or systems as much as possible to eliminate duplicative processes and to mainstream practices in order to achieve results.
- II. Partnerships & Education** - refers to the outward looking component of developing a climate action plan, or looking beyond one's agency or business unit to identify common goals and work cooperatively with a group to achieve those goals. This may include collaboration and partnership opportunities with branches or regions within FLNR or with outside stakeholders such as industry groups, academia, and community and / or First Nations groups. Recognizing that a team or business unit may not have all the answers or expertise to take advantage of an opportunity or address a risk it is critical to build partnerships and leverage resources and expertise. Education and sharing information or best practices through partnerships is another example.
- III. Adaptation** – essentially refers to the ability of an organization, infrastructure and/ or biological system to respond to the impacts from climate change. In terms of natural and heritage resource management this basically means identifying risks or vulnerabilities of biological systems and infrastructure to climate change impacts and making a concerted effort to reduce those risks and vulnerabilities. Climate change is already having significant impacts on our natural resources and it will continue to do so. We need to be able to adapt our management practices and improve our systems and infrastructure to be better able to deal with those impacts and maintain the social, economic and environmental benefits of our natural resource base.
- IV. Mitigation & Sustainable Development** – climate change mitigation is the ability to reduce greenhouse gas (GHG) emissions to the atmosphere and/ or enhance the ability of systems (biological or otherwise) to remove greenhouse gases from the atmosphere. Anthropogenic GHG emissions are largely derived from industrial development and market demands for natural resources, products and services we rely on in our everyday lives. Effective climate action planning needs to consider the demand we place on our natural systems to provide the products and services we need and our ability to reduce our carbon footprint as well as our environmental footprint when delivering those products and/ or services. We may not be able to influence global markets and demand for resources, but we can ensure that our natural resource practices have the least

impact to climate change possible and we can inform consumers of our climate/ carbon friendly products and services.

Taking Action: Planning and Implementation



Figure 2: The Climate Action Process

A key concept inherent within the outlined process is the ability to apply it in an iterative and/ or modular fashion – perhaps applying it at a high level at first then drilling down to finer detail and/ or information as the process unfolds, agency capacity is built and new data and information becomes available. Other options include, potentially focusing on one area or resource value at first and then building in modules or components for other resource values as we go and re-assessing the interrelationships between resource values and/ or successive modules. This flexibility in approach is a key component for integrating climate change into our core business and practices.

Planning and implementing climate change action is an ongoing and interconnected process. For example, assessment is essential at the outset of the planning phase in order to identify risks and opportunities as well as to determine priorities for the implementation phase and again at the end of project or program delivery to determine results and achievements.

Forming Climate Action Teams should be a requirement for developing Climate Action Plans. The process is flexible and teams can be incorporated at any point during the process, as appropriate. In some instances it may be appropriate to establish teams at the outset to undertake assessment work; however it is important to keep in mind that during engagement and management processes new team members may be required and/ or offer collaboration and resource extension opportunities.

Assess

Identify:

- Risks & Opportunities
- Stakeholders
- Resources & readiness
- Gaps & Barriers

The first step in taking action on climate change is assessing the risk and vulnerabilities of the ecosystem, infrastructure and/ or business program. This also includes assessing where key opportunities may lie in terms of aligning climate change objectives with natural resource management

objectives. Identifying risks and opportunities will help formulate a preliminary set of objectives or desired outcomes to consider when developing our plans. There will never be enough resources available to address all risks and opportunities at the outset.

However going through the planning and implementation process will help determine where we want to focus our initial efforts in order to establish near term priorities. The process will also help identify stakeholders and where there may be opportunities for leveraging resources, or potentially where common objectives can be met by programs in other business units.

The assessment process also includes identifying a work unit's readiness to take action on climate change. Identifying strengths and gaps in expertise or available data and information will help determine which partners we may want to engage with to leverage knowledge and expertise and/ or to seek out new information, skills and/ or training opportunities. This process is inclusive of our policy and administrative requirements – do we have the necessary requirements, guidance and/ or flexibility in our policy, IT systems and decision support systems?

Assess: Climate Action Toolkit

Sample assessment tools

- [PCIC Tools and Data](#)
- [Plan2Adapt](#)
- [Future Forest Ecosystem Scientific Council Output](#)
- [Climate Change Vulnerability Assessment for British Columbia's Managed Forests](#)

Engage

- Develop partnerships
- Leverage resources
- Communication, education & outreach

Once we have determined where our climate adaptation and/ or mitigation risks and opportunities are and have identified the strengths and gaps of our business or program area the next step is looking across organizational boundaries to see where

common goals and/ or complementary programs or initiatives are underway. Many branches and units of government already collaborate on a number of files; successful climate action will require partnerships within our agency and with external stakeholders as well. Engagement will also help put a finer point on our initial assessment findings. In talking with stakeholders and potential partners we will get a better sense or perhaps perspective on the level of risk or potential for opportunity.

The Climate Solutions team in the Competitiveness and Innovation Branch serves as the Ministry's central coordinator on climate change initiatives. There is an existing network of professionals plugged into climate change planning and practices that this team can help our work units plug into and help develop new partnerships. Partnerships can help build awareness and education across organizational boundaries, leverage resources and also prioritize goals and objectives. The more our work units know what each other are doing, the easier it becomes to identify key focus areas for our climate action work. Tools such as the NRS learning series have been effective ways to communicate climate change programs and information across our agency and these types of tools can also be effective in terms of mass collaboration to find new innovative approaches and solutions to our climate change challenges.

Engagement also extends to communication and education outreach. In some cases, taking action on climate change may require a departure from a 'business as usual' process in terms of managing a resource or utilizing infrastructure or even IT systems. It is important to be able to educate and inform stakeholders to the challenges ahead as well as the potential risks, opportunities and solutions we can develop. It will also be important to be open to feedback from stakeholder groups in order to get buy in and advance workable climate actions. Identifying and getting to know these stakeholders is a key component to ensuring success in the delivery of our climate action plan. Communication and education outreach can be an extensive process and beyond the resource means of work units; however building partnerships and working with the Climate Solutions team within FLNR can help address the communication and outreach challenge.

Engage: Climate Action Toolkit

Sample engagement tools

- [FLNR Climate Action Plan Workspace on LiveSmart Leaders](#) (to join contact katharine.mccallion@gov.bc.ca)
- [NR Learning Series](#) (internal to FLNRO)
- [ClimateNews](#)
- [Pacific Institute for Climate Solutions Webinars and News](#)
- [Retooling.ca Getting Ready Webinars](#)
- [Climate Solutions Network](#)

Manage

- **Prioritization & goal setting**
- **Implementation**
- **Monitoring & reporting**

The management phase of the process is where we synthesize the information from the assess and engagement phases to determine

near and medium to long term objectives, prioritize our set of actions and start charting out a course of action (drafting an action plan through to implementation). The availability of resources and partnership opportunities will help guide our decisions on where and what to focus on in the near term remembering that we will not be able to address all risks or opportunities at the outset. As noted, linking climate change objectives to existing natural resource management objectives will help facilitate communication and engagement across the agency while at the same time ensure climate change is engrained into our core business.

To complement the one-land manager model in the agency it will also be important to utilize and build on existing infrastructure within the agency – IT systems, monitoring programs, tenure tools and the like. This will be important in order to streamline processes and business functions for the long term and minimize any duplicative efforts or processes. Some business units or program areas may not be the lead on the supporting infrastructure or policy realm; however both the CCSC and Climate Solutions team are resources available to help manage these barriers.

Project or action plan teams will likely be required to coordinate the work feeding into climate action plans. Determining a regional or executive champion for the effort can enhance the development, delivery and likelihood of success of action plans. The *Forest Stewardship Climate Action Team* is comprised of colleagues around the agency from regions to policy shops in Victoria. It has been an instrumental resource in developing the FSAP and also supports the CCSC. This team has been collaborating for a number of years and is another potential resource to help provide some insight and lessons learned in developing climate action plans for our program area. Developing climate action teams and linking to existing teams can help establish a community of practice on climate change within the agency and lead to many collaboration and innovation opportunities.

When drafting climate action plans and transitioning to implementation it's always important reflect upon the targets and goals we have set and the feedback loop in the process to the assessment phase. Monitoring and reporting is a key link between management and assessment phases of the process in terms of tracking success and identifying gaps and areas in need of improvement.

Manage: Climate Action Toolkit

Sample management tools

- [FLNR Climate Change Forest Policy and Guidance](#)
- [6 Step Adaptation Planning Process](#)
- [CBT rapid action planning](#)
- [FAO Climate Change Guidelines for Forest Managers](#)
- [FLNRO Tree Species Selection Tool](#)

The Road Ahead – Achieving Our Goals

Moving forward on climate action planning in our business unit or program area, it's important to see how it all fits into the bigger picture of climate change across the agency and natural resource management more generally. To help provide this level of oversight and coordination the Climate Solutions Team and CCSC will be engaging with regions and program areas across the agency.

Effective climate change planning requires a solid understanding of the goals and targets we want to achieve and a realistic time frame for achieving those results. Additionally, program areas will need to relate to how other program areas are moving forward on climate action in order to support a continual evolution within the initiative and build best practices. As part of the climate change challenge for FLNR, the ministry will be compiling a climate change performance report every 3 years to track the progress and manage both new and existing climate change risks and opportunities across the entire ministry. This report will provide a synthesis of climate action across the agency and ensure coordination and linkages are maintained with parallel or complementary ministry processes and objectives.

Working with the CCSC, the Climate Solutions team in FLNR will be responsible for supporting communication efforts across the agency and for rolling up information from business units into the climate change performance report. As a compendium to this roadmap, there is an example performance report listing key objectives for the Forests sector (based on the *Forest Stewardship Action Plan (FSAP) for climate change adaptation*), some key actions identified and the status of those actions. The example performance report is essentially the performance report 'chapter' on forests based on current mitigation and adaptation work and is intended to help give business units an idea of the scope and level of information that will need to be considered in climate action plans and what will be expected in the climate action performance report. It will help business units or program areas establish target and/ or performance measures. The CCSC is a valuable resource to consult in terms of developing and setting climate action performance measures.

Summary

This Roadmap identifies a process we can follow to help us determine what our climate action plan should focus on and how we can take on that challenge. An outline is also attached to help guide the drafting of climate action plans.

As a compendium to this Roadmap, an FLNR Climate Action Plan Toolkit Wiki, a living user-supported resource, provides tools to support this initiative. Some tools and resources featured in the toolkit are identified here in this Roadmap. As the Climate Action initiative unfolds across the Ministry, more tools and resources will be identified and added to the Toolkit currently housed within the FLNR Climate Action Planning Workspace explained below.

Tools and resources are consolidated in the FLNR Climate Action Planning Workspace on [British Columbia's LiveSmart Leaders website](#), an online community for climate action in B.C. FLNR colleagues and climate action team members register to become a member of the LiveSmart Leaders community and are then added by an administrator to the private FLNR Climate Action Planning Workspace.

The Workspace is both informational and collaborative. The Toolkit Wiki provides links to tools and resources available to aid climate action planning efforts. Other workspace functions allow members to collaborate with each other on documents, participate in forum discussions, ask questions and make additions and edits to the FLNR Climate Action Plan Toolkit Wiki. The Workspace supports a Climate Action Community of Practice within the agency and potentially across the NR Sector¹. It further enhances collaboration and knowledge transfer across program areas and regional boundaries.

Contacts

Climate Change Steering Committee:

Paul Knowles – Director, Competitiveness & Innovation Branch
CCSC Member
E-Mail: Paul.S.Knowles@gov.bc.ca
Phone: 250 953-3988

Leslie McAuley - Decision Support Officer
Tree Improvement Branch
CCSC Secretariat
E-Mail: Leslie.Mcauley@gov.bc.ca
Phone: 250 356-6208

Climate Solutions Team

James Sandland – Mgr, Climate Change & Bioeconomy
E-Mail: James.Sandland@gov.bc.ca
Phone: 250 356-6230

Katharine McCallion – Policy Analyst,
Competitiveness & Innovation Branch
E-Mail: Katharine.McCallion@gov.bc.ca
Phone: 250 387-0157

¹ Any potential users outside government would require account and user name to access to ensure info is credible etc.

Climate Action Plan Outline

Program Area or Region or District	<ul style="list-style-type: none">• Division or branch²• Region or district• Regional/ area based team
Background	<ul style="list-style-type: none">• Provides context to the Climate Action Plan• Provides link to complementary planning or strategy development efforts• Briefly describes applicable socio-economic information to provide context to the major risks and/ or opportunities within the region and/ or related to the resource value(s) considered³• Briefly describes biophysical information of region and/ or resource value related to climate change⁴
Scope	<ul style="list-style-type: none">• Provides geographic scale of the action plan• Provides resource value(s) considered• References any modular approach (i.e. if one specific area is considered as phase one or alternately a specific resource value(s) is considered as phase one• Provide indication of focus area(s) (policy/ operational, managing under current policy/ legislative framework or a review/ pilot to test a new approach)
Timeline	<ul style="list-style-type: none">• Temporal context of plan• Phased approaches identified• Identify timelines for overarching milestones (reporting periods etc.)
Goals/ objectives	<ul style="list-style-type: none">• Clearly articulated goals that can be measured qualitatively or quantitatively• Complementary objectives can be used to provide refined detail to overarching provincial scale goals or goals appropriate to the region or program area
Near term actions	<ul style="list-style-type: none">• 1-2 year priority actions• Clear link to supporting goals/ objectives in plan and or provincial scale climate change strategies/ plans• Priority setting is inherent to the process and could be reflected in the action plan. A 'parking lot' of additional

² Indicate if the plan is a combined effort between regions/ districts/ branches and who partners are

³ Socio-economic assessments from regional timber supply documents and planning documents are good sources of information

⁴ Regional climate summaries and other resources in the Climate Action Toolkit can help provide this information; Climate Solutions Team can also support

actions could be appended and addressed as resources become available and/ or priority actions are delivered

Medium to long term actions

- 2-5 year priority actions
- Clear link to supporting goals/ objectives in plan and or provincial scale climate change strategies/ plans
- Link to supporting near term actions (if complementary and/ or phased approach considered)

Implementation

- An elaborate implementation plan is not a requirement of climate action plans; implementation can be expressed in terms of information listed with the identified actions and related to timelines
- Phased or incremental actions should be identified as appropriate

Performance measures and monitoring

- Link to performance targets/measures, where appropriate
- Performance measures should directly relate to actions and give a quantitative and/ or qualitative indication of achieving the identified goals/ objectives
- Review/ revision of timelines and actions and updates to reflect new/ emerging information and/ or actions
- Consider integration components with other natural resource management initiatives and potentially other Climate Action Plans

Reporting

- Progress on actions, gaps in information, policy and otherwise should be reported to CCSC on an annual basis (i.e. progress, status, condition – what is needed)
- Reporting will help identify funding/ resource pressures, opportunities to leverage resources and collaborate across the agency
- A roll-up of reporting measures will be coordinated by CCSC on a three year basis and summarized in the Progress to Targets report communicated by the Climate Solutions Team. This will be reported out across the agency.

Lead Contact (and/ or Team)

Works Consulted

USFS Roadmap - charts course based on three interrelated modes of action (assessing, engaging, and managing) and three sets of activities for each (ongoing, immediate, and longer term).

<http://www.fs.fed.us/climatechange/pdf/Roadmapfinal.pdf>

USFS - Office of the Climate Change Advisor <http://www.fs.fed.us/climatechange/advisor/>; CC Resource Centre <http://www.fs.fed.us/ccrc/>