COMPETENCY PROFILE:

CLIMATE CHANGE PLANNER

ROLE OVERVIEW

Climate change planners help prepare Canadians and Canadian infrastructure against the predicted impacts of climate change. As our climate continues to warm, adaptation solutions will become increasingly necessary to prepare for more frequent, severe, and unpredictable climate-related disasters.

Climate change presents a multitude of risks across various sectors of Canadian society, from the integrity of physical infrastructure to the well-being of coastal and northern communities and even the overall economic health. Effective adaptation planning necessitates the expertise and training to anticipate and respond to climate change's actions. These adaptation measures will bolster Canada's resilience, enhancing our capacity to prepare for, respond to, and recover from impacts and disruptions.

Many jobs in this sphere are centred around policy planning and implementation.

ALSO KNOWN AS:

- Climate Adaptation Planner
- Ecosystem Project Manager
- Climate Change Policy Analyst
- Climate Policy and Planning Specialist
- Climate Action Specialist

NATIONAL OCCUPATIONAL CLASSIFICATION:

- 21202 – Urban and land use planners
- 41400 – Natural and applied science policy researchers, consultants, and program officers

EDUCATION AND EXPERIENCE

- A bachelor's degree in climate change, such as environmental sciences, engineering, urban planning, or geography, is essential to understanding climate complexities and impacts.
- A master's degree may be required for roles needing advanced analysis or leadership, providing specialized knowledge in climate change strategies.
- Professional designations are beneficial for demonstrating expertise and commitment to environmental planning or sustainability, and often come from recognized organizations and require adherence to professional standards and continuous learning.
- Focus on disciplines that offer insights into climate change mitigation, adaptation, and integration into planning processes.
- A combination of education and certification prepares individuals for effective climate change planning, essential for devising strategies to combat climate change challenges and promote sustainable, resilient development.

TECHNICAL

Budget and Cost Management

Develops comprehensive plans to monitor and evaluate operational budgets and costs to account for all climate adaptation activities and spending to sustain operations.

- Monitors the operating cost and budget metrics of site processes, procedures, and performance to ensure operations remain viable.
- Provides senior leadership with input in developing a cost management plan to manage project costs, possibilities, and limitations.
- Documents all resource and financial costs to ensure accurate accounting of project stages.
- Documents and reports on the site operations costs and budget metrics to communicate potential profits and losses to external stakeholders and internal decision-makers.
- Leads the development of a cost management plan to establish procedures and documentation to manage project costs throughout the project lifecycle.

Data Analysis

Uses established statistical methods to analyze and interpret data, identifying trends, patterns, and opportunities to inform strategic decisions.

- Confirm that climate data is sufficient and valid before analysis to ensure data collection within the current legislation requirements, survey plans, and specifications.
- Uses appropriate methodologies and techniques to analyze field survey data to produce accurate, reliable, and unbiased results.
- Applies mathematical and scientific models to analyze and derive solutions to specific problems.

- Seeks feedback from other technical specialists to confirm interpretations and ensure all conclusions are aligned with the project plan.
- Analyzes and distills climate-related research findings to summarize and prioritize the results of the findings.
- Prepares technical and research reports on observations, findings, and impacts to communicate results to stakeholders, industry, government, or the public.

Planning and Policy Support

Developing, implementing, and evaluating strategic plans and policies within various organizational contexts to support decision-making processes.

- Accesses existing policies and procedures to make recommendations for including climate change and sustainability considerations.
- Research climate change adaptation and mitigation plans to make informed recommendations for actions to be implemented.
- Provides policy and planning support to community-based partners to create a unified approach to climate resilience.
- Analyzes relevant regulations, legislations, and standards to ensure programs comply with laws, regulations, and standards on sustainability.
- Applies a working knowledge of regulatory requirements governing licensing or zoning to ensure an organization's compliance, regardless of which location or site.
- Generates solutions aligned with organizational goals and government regulations to create lasting and effective fixes.

Program Coordination and Delivery

Coordinates components of program activities to improve the day-to-day functions within an organization's environmental programs.

- Consult and engage with expert, multidisciplinary technical team members to incorporate all relevant knowledge, data, and findings into the project.
- Confers with other technical staff to disseminate field survey results to implement project activities.
- Contributes to a multidisciplinary team to plan, implement and execute survey work to facilitate further project activities.
- Meet with clients to discuss technical specifications or operational problems and coordinate customized solutions and project activities.

Program Planning and Integration

Develops a comprehensive project management plan to define how climate analysis and adaptation projects are executed, monitored, and controlled, integrating any subsidiary plans to perform the necessary actions and processes required to complete the project.

- Defines the scope, strategy, and objectives for the technical aspects of projects and programs to establish parameters and deliverables.
- Develops a work breakdown structure to provide the project team and relevant stakeholders with a detailed overview of the deliverables.
- Monitors the progress of operational plans to adjust and evaluate the success of strategic objectives and lessons learned and recognize contributions.
- Identifies and differentiates immediate and deferred adaption strategies and actions to create an approach responsive to relevant policies and policy limitations.

PERSONAL & PROFESSIONAL

Communication

Positively directs outcomes by delivering communication (both written and verbal) that results in a better understanding of goals and objectives captures interest, and gains support for immediate action.

- Interprets and presents data results to stakeholders and senior management to facilitate decision-making.
- Presents information about climate change, scientific findings, and hazard risks to diverse stakeholders and the public to build awareness of what is involved (and necessary for) climate change adaptation and resilience.
- Asks questions when assigned unfamiliar tasks to ensure understanding and accuracy.
- Prepares documentation for existing and upcoming products to describe functionality and composition and communicate technical specifications in plain language to a broad audience.
- Uses non-technical language to communicate with team members, stakeholders, and the public.

Collaboration

Engages in professional collaborative efforts with other team members, including sharing information and expertise, utilizing input from others, and recognizing others' contributions to work towards a common goal.

- Works with an interdisciplinary team of experts to incorporate diverse opinions into climate change adaptation and resiliency planning.
- Promotes climate change preparedness across disciplines (flood protection, stormwater, wastewater, transportation, environment, and urban planning) to ensure that resiliency to different consequences of climate change is established.
- Participates in community outreach events, including formal presentations and meetings with stakeholders to incorporate targeted solutions for different communities and keep everyone informed.

Problem-Solving

Identifies problems and uses logic, judgment, and evidence to evaluate alternative scenarios and recommend solutions to achieve a desired goal.

- Considers the impact on the organization and environment when analyzing specific project objectives and goals.
- Analyzes meteorological data to understand trends and potential areas of concern to take appropriate actions where required.
- Applies mathematical models and techniques to perform analysis and create solutions to specific problems.
- Approaches problems with a balance of logic and creativity to develop innovative solutions.
- Takes an unbiased stance on interpreting new information to solve a problem objectively.

LEGAL, POLICY, AND REGULATORY

Environmental Policies

Develops and/or supports creating environmental policies and practices based on available data to alter human behaviours and slow climate change.

- Applies evidence-based decision processes and synthesizes relevant data to generate defensible policy recommendations supporting sustainable climate adaptation strategies/initiatives.
- Generates solutions aligning with short—and long-term goals and current knowledge about climate risks to create feasible and actionable options.
- Applies an analysis of risk patterns in climate change to propose solutions that mitigate future risks.
- Builds from and leverages existing sustainability, climate adaption, energy, biodiversity, and emissions reduction theories to create the most robust possible responses.
- Simplifies observations to essential variables to create strategies for environmental remediation.

Environmental Policy Evaluation

Evaluate the sustainability of an organization's policy(s) to develop suitable alternatives to support mitigating climate change effects.

- Identifies sustainability policies that align with organizational values to support the development of sustainable practices.
- Recommends valid policy alternatives from an organization's standard to improve internal policies and adapt to climate change.
- Combines research on organizational best practices with stakeholder feedback to assess the effectiveness of current policies.

ENVIRONMENTAL

Climate Adaptation Science

Identifies interactions between humans and the environment to monitor changes in the climate and develop adaptation plans that are informed by scientific understanding.

- Identifies the complex interactions between climate and other systems to capture that complexity in climate change analysis.
- Interprets global and local climate trends, impacts, challenges, and concerns to inform policies and practices.
- Studies aspects of climate change to understand the potential effects of activities on the natural and human environments and generate solutions to insulate humans from future climate disasters.
- Incorporates Indigenous knowledge and learning into climate adaptation plans to inform a holistic, well-rounded approach.

This profile is a living document. If you have any feedback or would like to help us improve the profile, please reach out to research@eco.ca.

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