

BRIEF #3

How Chartered Professional Accountants Can Help Organizations Adapt to Climate Change

MARCH 2016

As organizations of all types and sizes plan for climate change's real and inevitable effects, the skills of Chartered Professional Accountants (CPAs) will take on a whole new importance.

This brief is one in a series.

- Brief 1 describes two ways that organizations address climate change: through mitigation and adaptation.
- Brief 2 describes how climate change will impact organizations.
- **Brief 3 highlights the role of CPAs in adaptation.**

These briefs are intended for CPAs, other professionals and executives.

All briefs are available at cpacanada.ca/climatechange.

Climate change is a business issue. Increased extreme weather events and shifting rainfall patterns have clear impacts on operations and markets.

Just as with any other business issue, CPA skills can be used to help organizations adjust and even thrive.

Most organizations will move through a set of stages as they adapt to a changing climate. At each stage, CPAs have a role to play.



Natural Resources Canada
Ressources naturelles Canada

Canada



Network for
Business Sustainability

Climate Change Adaptation Stages and CPA Roles

Table 1 shows CPA roles by climate change adaptation stage. These skills illustrate some of the ways CPAs can support organizations as they adapt to a changing climate.

TABLE 1: ROLES FOR CPAs IN CLIMATE CHANGE ADAPTATION

Roles for CPAs	Climate Change Adaptation Stage				
	Motivate Action	Plan Action	Implement Action	Assess Performance	Respond to Market and Stakeholders
Roles for CPAs in leadership positions	Examples: <ul style="list-style-type: none"> • Integrate climate change considerations into organizational strategy • Establish accountability structures • Embed adaptation into business functions and processes 				
Roles for CPAs at all levels	Examples: <ul style="list-style-type: none"> • Support identification of risks / opportunities of future climate change • Support a business case by showing financial vulnerability to current climate change 	Examples: <ul style="list-style-type: none"> • Estimate the costs and benefits of alternative solutions • Advise on budget-planning and opportunities for cost savings and revenue generation 	Examples: <ul style="list-style-type: none"> • Support project management • Support creation of new products and services 	Examples: <ul style="list-style-type: none"> • Develop new metrics / indicators to measure performance • Establish appropriate systems and internal controls to measure the metrics • Set targets and goals • Measure effects on assets, liabilities, profits and losses • Perform internal audit (e.g. of systems and data) • Perform independent assurance 	Examples: <ul style="list-style-type: none"> • Consider climate change issues in the application of accounting standards • Meet regulatory disclosure requirements (if listed public company) • Contribute to voluntary sustainability or corporate responsibility reports and climate change disclosures

Roles for CPAs in Leadership Positions

CPAs in **leadership positions** have responsibilities stretching across an organization and across stages of adaptation. Usually working collaboratively with the management team and experts, the chief financial officer (CFO) may build climate change considerations into strategy and establish accountability: e.g. by establishing a structure for overseeing climate change risks and adaptation strategies. Leaders will also work to embed adaptation into business functions and processes. Organizational areas of particular relevance include infrastructure asset planning, supply chain management systems and procurement policies, and business continuity planning.

Cathy Cobey, CPA, CA, partner, Advisory Services, EY

“Controllers and CFOs have an expansive view of an organization’s operations. They add value by embedding their understanding of the organization’s strategy, risk profile and operational imperatives into their decision making. In other words, they’re not just focused on numbers. They have a key role to play in determining an organization’s risk to a changing climate and evaluating the cost-benefit of different strategic options for climate change adaptation. Audit partners also need to consider the risks of climate change adaptation, and consider whether organizations are meeting disclosure guidance under financial reporting standards.”

Roles for CPAs at All Levels

Here, we expand on the other roles described in Table 1, tied to each adaptation stage.

Motivate action: Most organizations will begin by identifying how the impacts of climate change affect them and why action is necessary. CPAs can help identify risks and opportunities and make a business case for action. CPAs who act as board directors can also pose critical questions to their senior management team. See CPA Canada resources such as *Sustainability: Environmental and Social Issues Briefing—Questions for Directors to Ask*.¹

Peter Vallieres, CPA, CA, director, Financial Reporting and Accounting, Horizon Utilities Corporation

“Our company implemented a formal and comprehensive Enterprise Risk Management system. All identified risks are prioritized on the basis of a detailed matrix that considers both their likelihood and impact to the company. ‘Major disruptions due to weather’ is categorized as a hazard risk; it has been assessed as a ‘major’ risk.”

¹ Julie Desjardins and Alan Willis, *Sustainability: Environmental and Social Issues Briefing—Questions for Directors to Ask* (Toronto, Chartered Professional Accountants of Canada (CPA Canada), www.cpacanada.ca/en/business-and-accounting-resources/financial-and-non-financial-reporting/sustainability-environmental-and-social-reporting/publications/sustainability-business-implications-and-governance-challenges, 2011)

Plan action: After identifying the risks and opportunities, businesses must identify and evaluate possible responses. CPAs can estimate the costs and benefits of alternative approaches and identify how best to pay for them. CPAs should incorporate climate change considerations into budgeting for property, plants and equipment, which may be affected by a changing climate.

Cathy McLay, CPA, CMA, acting chief executive officer, chief financial officer and executive vice president of Finance and Corporate Services, TransLink

“We work closely with our engineering group, planning group and the operations, to figure out ‘what does this region want in the next 30 years? What are we going to look like?’ It is with that vision that we as accountants start the financial analysis to determine which ways are best to deliver the vision. The numbers help explain the story.”

Implement action: Organizations will implement the recommended actions. Technical experts in other disciplines, such as engineers or biologists, likely take the lead here, but CPAs may be involved in project management and financing. In some industries, such as insurance, accountants may even support the creation of new products.

George Hardy, CPA, CA, vice president, Personal Lines and Underwriting, The Co-operators

“As part of our adaptation efforts, we attempt to respond with products, underwriting and claims practices that are relevant in today’s environment and that provide our clients with clear and meaningful coverage options.”

Assess performance: As implementation moves forward, organizations will need to assess progress and performance. CPAs play a critical role in developing metrics and in designing and implementing efficient data management systems, processes and internal controls for the metrics. They help set targets and evaluate the results. CPAs can measure performance against targets and key performance indicators, analyze variances and determine opportunities for continuous improvement. They also measure the impact of climate change on assets (such as infrastructure) and related liabilities. As internal auditors, CPAs can ensure the integrity of information systems and performance data related to key organizational risks. This information can be used for internal reporting purposes (e.g. for decision making) and for external reporting to stakeholders (see next stage). As external auditors, CPAs can provide independent assurance on metrics and internal controls over financial and / or other (regulatory or voluntary) reporting.

Bill Murphy, CPA, FCA, national leader, Climate Change and Sustainability Services, KPMG

“In addition to traditional financial reporting, accountants are increasingly involved in generating or assuring a wide array of key performance and key risk indicators. Such indicators are increasingly needed to identify emerging climate change trends and risks on a timely basis, and to ensure that the organization’s stakeholders (e.g. investors, management, employees, customers and suppliers) adjust their decision making to better mitigate these risks.”

Respond to market and stakeholders: CPAs can report on the organization’s material climate change risks, actions to address those risks and the results of such actions. Reporting occurs through voluntary channels — e.g. to the CDP (formerly known as the Carbon Disclosure Project) or in sustainability reports — and, for public companies, mandatory requirements such as the Management Discussion and Analysis (MD&A). The MD&A is an appropriate place to discuss climate change-related risks, strategies, opportunities and financial impacts that are not reported in financial statements. If climate change-related items are material, they must be disclosed in the MD&A; see CPA Canada resources such as *Building a Better MD&A — Climate Change Disclosures*.² CPAs should also consider climate change issues in the application of accounting standards, such as asset impairment or the useful life of assets.

Andrew Yorke, CPA, CA, vice president, Corporate Finance Services, The Co-operators

“With reporting, accountants definitely add value. We are stewards of internal controls, measurement policies and disclosure standards, and can provide rigour and auditing to the process.”

2 CPA Canada, *Building a Better MD&A — Climate Change Disclosures* (Toronto: CPA Canada, www.cpacanada.ca/en/business-and-accounting-resources/financial-and-non-financial-reporting/mdanda-and-other-financial-reporting/publications/climate-change-disclosures-in-the-md-a, 2008)

No Need to Go It Alone

Not all accounting competencies translate directly to climate adaptation competencies. Look to CPA Canada for emerging resources. It's also helpful to develop a basic understanding of climate change and an increased ability to work across functions. Organizational responses to climate change require diverse skills: CPAs will engage as necessary with engineers, sustainability professionals, climate scientists and others.

Doug Wong, CPA, CGA, director of Finance and Administration, MEC

“Accountants need to leverage our training but also be open to complementary approaches in other disciplines that can be beneficial to our work.”

To find out more about how your organization can adapt to climate change, visit cpacanada.ca/climatechange.

The material in this brief is based primarily on research by Jimena Eyzaguirre, senior climate change specialist, ESSA Technologies; Furqan Asif, PhD candidate, University of Ottawa; Esther Speck, Speck Consulting; and Susan Todd, CPA, CA, Solstice Sustainability Works. Additional quotes come from case studies conducted by S. Jeff Birchall, assistant professor, University of Alberta; and Sakis Kotsantonis, managing partner, KKS Advisors. The material was adapted by Elin Williams and Maya Fischhoff. For a complete list of references, contact Davinder Valeri at DValeri@cpacanada.ca.

Thank you to the reviewers for the brief: Bob Elton, CPA, CA, chief risk officer, VanCity; Mike Garvey, FCPA, FCA, executive chairman, Kelvin Storage Inc.; Francois Goyette, CPA, CA; Ben Miller, CPA (Oregon), CGMA, senior manager, Climate Change and Sustainability Services, EY; Jamal Nazari, CPA, CMA, CGA, assistant professor, Simon Fraser University; Michelle Rodrigue, CPA, CA, associate professor, Université Laval; Jody Salomon, CPA, CA, associate vice president, Operational Finance and Accounting, TJX Canada; Norman T. Sheehan, FCPA, FCMA, CGA, associate professor, University of Saskatchewan; Chris Sturby, CPA, CA, lecturer, Ivey Business School; Mark Walsh, FCPA, FCA; Alan Willis, CPA, CA; Elaine Wong, CPA, CA, treasurer, David Suzuki Foundation; and Andrew Yorke, CPA, CA, vice president, Corporate Finance Services, The Co-operators.

DISCLAIMER

This paper was prepared by the Chartered Professional Accountants of Canada (CPA Canada) as non-authoritative guidance. CPA Canada and the authors do not accept any responsibility or liability that might occur directly or indirectly as a consequence of the use, application or reliance on this material.