



GUIDANCE DOCUMENT

16th Round of Call for Proposals for
Assessments by the Council of Canadian
Academies (CCA)

March 2020

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1. Introduction

The Council of Canadian Academies (CCA) is an independent, not-for-profit corporation that generates in-depth, evidence-based assessments, authored by panels of independent experts. The CCA's Board of Directors (the Board) includes nominees from the CCA's three founding member academies – the Royal Society of Canada; the Canadian Academy of Engineering; and the Canadian Academy of Health Sciences. The Board and staff are advised by a Scientific Advisory Committee (CCA-SAC) of eminent authorities in key disciplines of knowledge.

The CCA is independent of government, but benefits from a multi-year Contribution Agreement managed by ISED. This agreement provides the Government of Canada with a standing capacity to identify, analyze, and assess the evidence base surrounding key public policy issues with the objective of informing decision-making.

While the rest of this guide focuses on assessments funded by ISED's contribution agreement, departments and agencies also have the option of directly funding assessments that would be conducted on a cost recovery basis. Departments and agencies should contact the CCA directly to discuss this option.

2. What is a CCA Assessment and What Can It Do for my Department or Agency?

What is a CCA Assessment?

A CCA assessment is a multidisciplinary account of the state of existing evidence underlying an issue of public policy importance and can be undertaken in any subject area for which there is sufficient evidence to assess.

The focal point for each assessment is a question, or set of questions, asked by a Sponsor (e.g. federal department or agency). These questions are answered by an expert panel through a deliberative process that culminates in a final report. This report features an analytical review of evidence, a diagnostic presentation of findings, and, where possible, an expert judgement. CCA assessments can take many forms, and may include:

- an assessment of the state of knowledge;
- an identification of knowledge gaps;
- an evaluation of risk;
- an analysis of socio-economic impacts;
- a compilation of international best practices and trends; and
- a presentation of expert judgments,

The nature and scope of the CCA assessment process will vary with the complexity and breadth of the question(s). **Narrow questions** on subjects for which there is less complexity and less knowledge may be completed by a small panel with a few meetings and whose deliberations may be assisted by a workshop. Typically, these are completed in under a year. **Broad questions** on subjects with a high degree of complexity and for which there is considerable breadth of knowledge generally require a larger panel with several in-person meetings and a longer time to complete. Examples of past topic questions are provided in Section 3.

What is the CCA's Role?

The CCA is comprised of a professional staff, a Board of Directors, and a Scientific Advisory Committee (CCA-SAC). Once topics are referred to the CCA by the Minister of Innovation, Science, and Industry, the Board approves assessment topics, panel compositions, and the release of the final reports. The CCA-SAC provides advice on the question formulation, panel candidates, and oversees the integrity of the assessment process.

The role of CCA staff is to: provide advice on proposals; establish expert panels with advice from CCA-SAC and the Academies¹; support expert panels with research and writing; produce, release and disseminate assessment reports; contribute to mobilizing knowledge of assessment reports; and support the CCA-SAC and the Board.

Who Undertakes CCA Assessments?

Assessment reports are authored by independent expert panels comprised of distinguished individuals from Canada and abroad. Panel members have backgrounds in academia, industry, and other relevant sectors. They are selected for their expertise and experience – they are not expected to represent specific community views. All panel members serve on a voluntary basis, without remuneration.

What is my role as Sponsor of an assessment?

The Sponsor's role is to develop an assessment proposal in accordance with the CCA proposal templates with the aid of an Idea Generation Table. This proposal is to be modified based on feedback received during the proposal selection process. To protect assessment objectivity, Sponsors do not participate in the appointment of panellists nor in the conduct of an assessment. However, Sponsors are given an opportunity to interact with the panel at the beginning and end of the process. Early in the process, the lead Sponsor is expected to meet with the expert panel at their first in-person meeting to help provide critical context, respond to questions, and help ensure a clear understanding of the assessment question.

Once the assessment is published, the lead Sponsor shares responsibility with the CCA to identify opportunities for assessment dissemination. Sponsors will present their dissemination plan in the Proposal Longform Template, which is filled in following acceptance of the shortform proposal.

¹ The Academies of the CCA are the Royal Society of Canada, the Canadian Academy of Engineering, and the Canadian Academy of Health Sciences.

What Is the Value of a CCA Assessment?

To effectively address important issues, Canadians need access to credible, independent assessments of the available evidence. CCA assessments are unique in the value they provide in terms of:

- **Independence:** Assessments are authored by a panel of independent experts drawn from the academic, private, and public sectors.
- **Expert credibility, balance, and thoroughness:** Assessments are conducted by multidisciplinary panels of recognized experts from Canada and abroad, who are selected to ensure a comprehensive and balanced response to the question. As a quality measure, assessments are subject to a thorough peer review process while the report is in development. Assessment activity is overseen by a Board of Directors that is advised by a Scientific Advisory Committee.
- **Actionable findings:** CCA assessments provide expert interpretation of the evidence in the form of findings as opposed to recommendations, giving Sponsors the flexibility to decide how best to use the reports.
- **Public availability:** Final reports are widely available to the public in both English and French on the CCA [website](#) to allow both decision-makers and the people of Canada to benefit from this source of expert knowledge. To date, the CCA has completed over 45 assessments, the majority of which were funded through the ISED contribution agreement.

3. Examples of Questions and their Scope

The questions asked determine the size of the panel, the number of meetings, methods followed and the time to completion. The table below provides past examples of different types of assessment questions and the process followed:

Main Question	Nature of Question	Process & Methods
What is the available evidence on, and how does it inform our understanding of, medical assistance in dying (MAID) in the case of mature minors, advance requests, and where mental illness is the sole underlying medical condition, given the clinical, legal, cultural, ethical, and historical context in Canada?	Complex and broad; Multiple domains of knowledge; 10 sub-questions	43 person panel 6 in-person meetings; 3 working groups; Call for input
What is the current state of science and technology and industrial research and development in Canada?	Complex and broad; Multiple domains of knowledge; 5 sub-questions	13 person panel; 5 in-person meetings; Bibliometric analysis; International survey; Interim data report
What is the social and economic value of commercial marine shipping to Canada and its regions? How will global trends related to shipping affect future shipping activity in Canada?	Complex and specialized; 1 sub-question	10 person panel; 4 in person meetings; Economic modelling
What are Canada's strengths in regenerative medicine (and why are they strengths)?	Narrow and specialized; 1 sub-question	4 person panel; 2 in-person meetings; Bibliometric analysis; 18 additional experts engaged via workshop

4. Selection Process for Assessment Topics

The selection process for CCA assessment topics starts with a call for proposals issued by the ISED Secretariat. On the government side, proposals are reviewed at the ADM Committee on S&T (ADMCSST), at the DM Science Committee (DMSC), and by the Chief Science Advisor (CSA). Final approval rests with the Minister of Innovation, Science, and Industry.

On the CCA side, review is undertaken by the CCA's Scientific Advisory Committee. Assessment topic selection is an iterative process during which Sponsors have a chance to revise their proposals based on

feedback received from Government and CCA reviewers. Once topics have been referred by the Minister of Innovation, Science, and Industry, the CCA’s Board of Directors votes to commence the assessment. Steps of the selection process are outlined in the table below:

Key Dates	
Launch of Round 16 Call for Proposals	March 9, 2020
Deadline for Draft Shortform Proposals	March 30, 2020
Sponsors receive comments from ISED Secretariat	April 3, 2020
Check-in at DMSC of topics	April 2020
Deadline for 2 nd Draft Shortform Proposals	April 20, 2020
Eligible Sponsors receive comments from CSA on topic scientific merit and from the CCA-SAC on feasibility	1 st week of May 2020
Deadline for final shortform	June 5, 2020
ADM CST Topic Discussion	Early June 2020
DMSC Topic Approval / Topic Prioritization	Mid-June 2020
Ministerial Approval	Late June 2020
Planning Meeting	Fall 2020
CCA Board of Directors votes to approve assessment	Winter 2020 / Spring 2021
CCA convenes expert panel	Spring 2021
Assessment report published	Fall 2022 / Winter 2023
Dissemination of report	Follows report publication

1. Call Launched

2. 1st Draft Due

Departments and agencies can submit a complete draft shortform proposal for each proposed assessment topic by using the shortform template. Though the proposal summary is quite brief, proposed topics should receive internal approval from departmental senior management.

3. Topics Assessed for Eligibility by ISED Secretariat

4. Check-in with DMSC / Topic Consolidation

A list of assessed topics will be presented or circulated electronically to DMSC in **April 2020**, as a check-in for members and to explore opportunities for horizontal collaboration.

5. 2nd Draft Due

Sponsors will have the opportunity to submit a revised proposal that reflects the merging of topics and comments from the ISED Secretariat.

6. Topics Assessed Feasibility (CCA-SAC), and Scientific Merit (CSA)

ISED will assess the eligibility of topics according to criteria outlined and provide comments. Eligible topics will then be assessed by the Chief Science Advisor (CSA) for scientific merit and by CCA Scientific Advisory Committee (CCA-SAC). A description of assessment criteria is available in Section 5.

7. Topic Refinement and Final Shortform Proposal

The ISED Secretariat and CCA-SAC will provide eligible sponsors with ongoing feedback to further develop their topics into full assessment questions. Sponsors will be then invited to submit a final shortform proposal by **June 5, 2020**.

8. Approvals

All eligible proposals will be distributed to all members of ADMCST for recommendation to DMSC. Sponsoring ADMs will be responsible for briefing their DMs and Ministers. Referred proposals will then proceed to the DMSC meeting for prioritization and ranking of topics in mid-June 2020.

The Minister of Innovation, Science, and Industry determines whether a topic will be referred to the CCA and will be responsible for confirming continued support from sponsoring ministers. Where applicable, the Minister will submit a tasking letter to CCA's Board of Directors, on behalf of the Government of Canada, to formally request that the assessment be conducted.

9. Planning Meetings

The CCA will then convene a planning meeting for the topics referred by the Minister. Planning meeting attendees will include the topics Sponsors and supporting departments and agencies, members of the ISED Secretariat, the CCA-SAC and and/or subject matter experts, and if relevant, stakeholder groups from outside the government.

Each sponsor will present a brief introduction of their topic, receive feedback from attendees, and answer questions from meeting participants, including CCA. The meeting provides Sponsors the opportunity to formulate complete assessment questions and sub-questions.

10. Implementation and Launch of CCA Assessment

The CCA Board of Directors must approve the tasked assessment question before convening a multi-disciplinary panel of expert volunteers. The CCA will then hold an initial scoping meeting with Sponsors to determine expectations and to shape the development of the assessment.

Project duration as well as actual start and end dates are to be negotiated with the sponsor before assessment work begins.

To protect the independence of the assessment process, Sponsors do not participate in the assessment process nor review drafts of the report and propose any changes.

11. Assessment Publication and Dissemination

Both the CCA and the sponsoring department will be responsible for dissemination of the assessment report. Departments and agencies should track assessment impacts both within their organization and more broadly within the public service and academia.

5. Proposal Requirements and Criteria

ISED eligibility criteria

- The assessment topic is timely and relevant to the Government of Canada's priorities
- The assessment topic has the potential to inform decision-making and policy development
- The proposed timeframe of the assessment is achievable

CCA feasibility criteria

- There is sufficient publically available evidence to assess;
- The existing state of knowledge merits the assessment (jointly with CSA)
- The appropriate expertise can be assembled
- The question can be answered by way of CCA's expert panel process

CSA scientific merit criteria

Intellectual Merit: Encompasses the potential to advance knowledge

Broader Impacts: Outlines the potential to benefit society and contribute to the achievement of specific, desired societal outcomes

- The assessment topic has the potential to:
 - advance knowledge or inform policy-making and understanding within its own field or across different fields (Intellectual Merit); and
 - benefit society or advance desired societal outcomes (Broader Impacts)
- The assessment topic suggests and explores creative, original, or potentially transformative concepts
- The existing state of knowledge merits the assessment (jointly with CCA)

Asset criteria (optional)

- The assessment report is likely to be broadly disseminated (e.g. other levels of government and outside of the public service)
- The assessment topic is an international issue for which a Canadian perspective is important at this time
- Preference will be given to multi-sponsor assessment topics.

6. Contact Information

For further information on the selection process, please contact:

ISED Secretariat

Sean McGinnis

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Council of Canadian Academies

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Annex I: Sample Shortform

COUNCIL OF CANADIAN ACADEMIES (CCA)

CALL FOR PROPOSALS

SHORT-FORM

Managing Plant Health Risk in the Canadian Context;

[2019-05-17]

KEY INFORMATION

Lead Department / Agency	
Canadian Food Inspection Agency (CFIA)	
Sponsoring ADM	
Name	<i>Dr. Jaspinder Komal</i>
Title	<i>Vice-President, Science Branch, CFIA</i>
Contact Person 1	
Name	<i>Dr. Pierre Bilodeau</i>
Email	<i>pierre.bilodeau@canada.ca</i>
Phone Number	<i>613-773-6771</i>
Dpt./Agency	<i>Canadian Food Inspection Agency</i>
Contact Person 2 (optional)	
Name	<i>Dr. William Anderson</i>
Email	<i>william.anderson@canada.ca</i>

Phone Number	613) 773-7255
Dpt./Agency	Canadian Food Inspection Agency

Supporting Departments / Agencies

Name: Dr. Liz Foster, Director General Partnerships and Planning Directorate
 Email: Elizabeth.foster@canada.ca
 Phone number: 613-773-0135
 Dpt./Agency: Agriculture and Agri Food Canada (AAFC)

Name: Peter Fullarton, Director General, Atlantic Forestry Center
 Email: Peter.fullarton@canada.ca
 Phone number: 506-452-3508
 Dpt./Agency: Natural Resources Canada- Canadian Forest Service (NRCan-CFS)

Name: Dr. Gilles Seutin, Chief Ecosystem Scientist
 Email: Gilles.seutin@canada.ca
 Phone number: 819-420-9269
 Dpt./Agency: Parks Canada Agency

The following individuals were also contacted and consulted but were unable to formally commit to co-sponsor this proposal by the expected deadline. If the proposal moves forward in the selection process, it is likely that these additional federal departments/agencies may be willing to co-sponsor this proposal.

Name: Patrice Simon, Director General Wildlife and Landscape Science
 Email: Patrice.simon@canada.ca
 Phone number: 613- 998-0329
 Dpt./Agency: Environment and Climate Change Canada (ECCC)

Name: Margherita Conti, , Director General Value Assessment and Re-evaluation Management Directorate
 Email: Margherita.conti@canada.ca
 Phone number: 613-736-3485
 Dpt./Agency: Pest Management Regulatory Agency (PMRA)

PROPOSAL

ASSESSMENT TOPIC

Topic	<i>Risk associated with plant health in Canada</i>
Tentative topic question	<p><i>What are the top plant health risks and opportunities Canada faces, both current and emerging, including their relative significance?</i></p> <p><i>Potential sub questions:</i></p> <ul style="list-style-type: none"> <i>What are some promising and leading practices in plant health systems domestically and internationally that could be applied in Canada to address new risks?</i>

ASSESSMENT CRITERIA

ISED Secretariat eligibility criteria, CCA feasibility criteria, CSA scientific merit criteria, and asset criteria (optional)
<p>ISED eligibility – The Government of Canada’s current priorities include climate change, a healthy environment and a strong economy. Canada is home to globally important biodiversity, including one third of the world’s boreal forests, one fifth of its freshwater resources and the longest coastline on the planet, and a diverse range of ecosystems, including temperate rainforests, wetlands, prairies, tundra, and more. Plants are not only the first link in the food chain, they are vital to the wellbeing of Canadians, the environment, and the economy. For example, in the United States, loss of tree cover in urban milieu has been linked to higher levels of human deaths from cardiovascular and respiratory diseases. Invasive Alien Species (IAS) are the second greatest threat to biodiversity after habitat loss and can make communities more vulnerable to the impacts of climate change. The Federal Government has set an ambitious target to grow its agri-food exports to at least \$75 billion annually by 2025. The national crop industry generates over \$22 billion in exports alone. In 2017, the \$69-billion forest industry contributed \$24.6 billion (1.6%) to Canada’s gross domestic product and employed 209,940 people directly..</p> <p>CCA Feasibility – Authorities and stakeholders (public and private) are actively involved in assessing and managing plant health risks and plant production in Canada. As all these activities collect data, this information would represent an important body of evidence to support this assessment. In addition, other jurisdictions are also involved, and they all share knowledge and evidence through established International Organisations (e.g. International Plant Protection Convention – IPPC, Food and Agriculture Organisation, and United Nation Environment Program, etc.). Finally, the public sector (academia and government) has been heavily involved in researching and evaluating various aspects of plant health which can all be found in the publicly available literature.</p> <p>CSA Scientific merit – A comprehensive assessment of current and emerging risks to plant health associated with climate change, global trade, adoption of new crops and cultivation practices, as well as changes in land use patterns would help to inform gaps and strengths in Canada’s capacity to manage risks effectively and proactively. This information will be an important input into various</p>

public organisations to improve and adapt existing policies and regulatory frameworks and to identify important research priorities to be addressed in the near future to build a more systemic and resilient plant health system in Canada. More broadly, it could benefit society by highlighting opportunities to better implement the *Plant Protection Act* to help mitigate the adverse impacts of climate change and IAS. Society will also benefit from the economic effects of sustainable development, evidence-based international trade, and increased understanding of key risks associated with plant health.

Asset criteria – In addition to supporting the Government of Canada’s future actions on plant health, this assessment will inform provincial/territorial government organizations, post-secondary institutions, and many not for profit organisations as they develop approaches, partnerships and networks to address challenges related to plant health systems. The report is also likely to be of interest to other National Plant Protection Organisations that are parties to the IPPC, as many are grappling with similar questions on how to efficiently and effectively balance resource protection, crop production and international trade.

BRIEF RATIONALE

Rationale

Protecting the health of plants helps safeguard the food supply, the health of Canadians and the environment, and contributes to economic growth and prosperity. However, in a fast-moving, constantly evolving, and increasingly complex world, Canadian authorities and stakeholders are facing unprecedented challenges towards delivering on their respective responsibilities to safeguard and manage Canada’s plant resource base. Entire ecosystems, natural, urban, and intended for various crop productions, are increasingly at risk due to the incidence of pests, especially weeds, pathogens and insects. Crop losses due to these threats can be substantial.

Authorities and stakeholders in Canada including farmers, forest managers, and engaged citizens are actively involved in assessing/managing plant health impacts. The Canadian Plant Health Council was recently created with representatives from governments (federal and provincial), industry and academia. The Council will be focussing on key plant health aspects including plant pests (e.g., weeds, insects, and pathogens), inputs to the plant health sector (e.g., seed, fertilizer) and the ability of pests (endemic or emerging) to establish and spread. Through the Canadian Food Inspection Agency (CFIA), Canada’s representative to the International Plant Protection Convention (IPPC), Canada influences the establishment of common approaches to preventing the introduction and spread of plant pests, and promotes appropriate measures for their control. Other federal departments such as Agriculture and Agri-Food Canada, Canada Border Services Agency, and Natural Resources Canada provide inspections and research to facilitate management of risks to plant health.

Although the potential impacts of current and emerging trends on plant health have been acknowledged in recent federal government strategies, including the Plant and Animal Health Strategy for Canada, these concerns have not been translated systematically by Federal government departments and agencies into concrete policy or actions, in part due to the complexity of the issue.

As such, a comprehensive, systemic review of existing and emerging risks associated with plant health in Canada would help support the federal government mandate to protect Canada from plant pests and diseases, while promoting a healthy environment (including safeguarding biodiversity), economic growth, innovation, and competitiveness. This information will inform the Government of Canada’s existing instruments (e.g. legislation, policy, surveillance, programs, research funds, etc.)

and ensure that they are used in the most effective and efficient manner to protect plant health and the environment, and build a strong economy.

On December 20, 2018, the UN Food and Agriculture Organization and the IPPC Secretariat, welcome the UN General Assembly's adoption of a resolution proclaiming 2020 as the International Year of Plant Health (IYPH). Developing this assessment at this time would represent a tangible outcome to further the conversation during 2020.

EVIDENCE BASE

Evidence

- Significant peer reviewed scientific literature on plant health issues including pest & diseases, adaptation, genetic/breeding, crop improvement, environmental impact of climate changes, etc.
- Internal CFIA, NRCan-CFS, and AAFC documents and expertise related to risk assessment, risk management, history of prevention, emergency response, mitigation activities, and comparative risk model in plant health.
- Government investments, outputs and outcomes in research and innovation in plant health by departments/agencies (AAFC, ECCC, NRCan-CFS, Parks Canada, etc.) as well as federal and provincial granting agencies.
- International Sanitary and Phytosanitary Measures (ISPM) to manage and mitigate plant risk across the globe in an effort to facilitate trade.