



Position: Alternative Fuels Expert, Aviation Emissions
Reference #: 0093
Department: Transport Canada
Security Clearance: N/A
Location: National Capital Region
Pay rate is negotiable
Contract Length: 1 year + Two 1-year options (Part time work)
Language: English

Statement Of Work

1.1 Title

Technical Expert Consultant for the Committee on Aviation Environmental Protection (CAEP) Fuels Task Group (FTG) in the International Civil Aviation Organization (ICAO)

1.2 Introduction

The purpose of this Statement of Work (SOW) is to procure the services of a subject matter expert (SME) Contractor to provide technical expertise to Transport Canada Civil Aviation (TCCA) on sustainable aviation fuels (SAF) and lower carbon aviation fuels (LCAF), supporting Canada's participation in the FTG and participating in the review/preparation of reports to CAEP, to reflect Canada's position on key issues.

1.3 Objectives of the Requirement

TCCA is seeking a suitably qualified contractor to support Canada's participation in the FTG and in the review/preparation of reports to ICAO, to reflect Canada's position on key issues.

1.4 Background, Assumptions and Specific Scope of the Requirement

SAF are an important element of ICAO's basket of measures to reduce aviation emissions. In its [Resolution A40-18 \(2019\)](#), the ICAO Assembly acknowledged the need for SAF to be developed and deployed in an economically feasible as well as a socially and environmentally acceptable manner. ICAO requested Member States to identify existing approaches to assess the

sustainability of all general alternative fuels, including those for use in aviation. These assessments should consider the following factors:

- greenhouse gas emissions (GHG) reduction on a life cycle basis;
- respecting the areas of high importance for biodiversity, conservation and benefits for people from ecosystems, in accordance with international and national regulations; and
- contributing to local social and economic development, and competition with food and water should be avoided.

The Assembly also requested States to adopt measures to ensure the sustainability of alternative fuels for aviation, building on existing approaches or by combining various approaches, and to monitor, at a national level, the sustainability of the production of alternative fuels for aviation.

CAEP, through its FTG, has been working on the development of processes and methodologies for consideration of SAF under CORSIA, including globally accepted sustainability criteria and life cycle methodologies. An integral part of this assessment is to determine life cycle GHG emissions, including induced land-use change (ILUC) impacts, for a variety of feedstocks and production pathways.

Canada is supporting the FTG and the development of a SAF industry in Canada. Canada needs to ensure that proposals developed at ICAO CAEP's FTG can work in Canada and reflect Canadian realities for SAF production, wherever a Canadian context is applicable.

2.0 Requirements

2.1 Tasks, Activities, Deliverables and Milestones

Tasks

1. Participation in virtual and in-person ICAO CAEP FTG working group meetings as required. These meetings are typically held at least three times in a calendar year. Participation may also include travel to in-person meetings, as required. The contractor is expected to provide expert technical advice to the FTG to move the FTG working group activities forward, and to advise TCCA on any relevant Canadian positions and opportunities to contribute in the FTG tasks.
2. Virtual participation as a subject matter expert in various sub-task groups (e.g., Core Life Cycle Assessment (CLCA), Induced Land Use Change (ILUC), Emissions Reduction Accounting (ERA), Technology, Production, and Policy (TPP) via video/teleconference calls, typically every other month or as called upon by the sub-task groups. The contractor is expected to provide expert technical advice to the FTG sub-task groups to move the subtask groups' activities forward.

3. Provide a report reviewing the FTG and sub-task groups' discussions via video/teleconference calls and emails. The contractor will provide a written analysis of the technical issues under discussion and/or upon consensus by the working groups. The contractor will provide this report to TCCA, expected within five (5) business days of the last meeting in a fiscal year.
4. Virtual participation in video/tele conference calls with other sub-task group experts to discuss scenarios and results.
5. Provide advice and analysis to TCCA through regular video/teleconferences and email updates with a turnaround time of five (5) business days after each FTG meeting and its subgroups, or as designated by the technical authority to return or report to TCCA. Advice and analysis cover the technical advice on the contractor's area of expertise, as it relates to the Canadian context of the FTG working group and sub-task group work items.
6. Contribute to TCCA review/preparation of reports to ICAO, to reflect Canada's position on key issues.
7. Provide assessment of key results and their impacts to Canada, including identification of potential opportunities and risks for Canadian production of SAF.
8. Support ICAO CAEP Steering Group meetings by providing technical advice on the contractor's area of expertise, including as it relates to the Canadian context of the steering group meetings.

Deliverables

1. Status reports and emails on discussions at FTG, analysis of implications for Canada, and recommended actions.
2. Review of FTG papers and reports, and then providing written recommendations on responses and Canadian positions.
3. Develop or assist in the preparation of Canadian position papers to ICAO and CAEP as it relates to FTG discussions.

2.2 Technical, Operational and Organizational Environment

The consultant will work from their office.

2.3 Method and Source of Acceptance

TCCA will approve each report or status update via email confirmation.

2.4 Reporting Requirements

Deliverables	Final Due Date
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<p>1. Status reports and emails on discussion and analysis of FTG work items, implications for Canada, and recommended actions.</p>	<p>Five (5) business days after each FTG meeting and its sub-task groups, or as designated by the technical authority</p>
<p>2. Status report summarizing FTG tasks completed (if any) and highlights from ongoing FTG tasks, including issues and any applicable Canadian context from April 2022 to March 2023.</p>	<p>20 March 2023</p>
<p>3. Status report summarizing FTG tasks completed (if any) and highlights from ongoing FTG tasks, including issues and any applicable Canadian context from April 2023 to March 2024.</p>	<p>20 March 2024</p>
<p>4. Status report summarizing FTG tasks completed (if any) and highlights from ongoing FTG tasks, including issues and any applicable Canadian context from April 2024 to March 2025.</p>	<p>20 March 2025</p>

3.0 Project Schedule

3.1 Expected Start and Completion Dates

CAEP operates in a triennial cycle. The 13th cycle of CAEP began after the conclusion of its 12th meeting in February 2022. CAEP's FTG held a plenary meeting on March 24, 2022, which included a tentative schedule for FTG meetings throughout the 13th cycle of CAEP, concluding with the 13th CAEP meeting in February 2025. The services of the Contractor is aligned with the Government of Canada's fiscal year (April 1, 2022 to March 31, 2023). The contractor will have completed the requirements for the fiscal year by submitting the deliverables required five (5) days after the last FTG meeting in the Government of Canada's fiscal year and at the latest, by March 24, 2023.

3.2 Schedule and Estimated Level of Effort (Work Breakdown Structure)

In addition to the analyses and discussions provided five (5) after each meeting or as designated by the technical authority, there will be one final report that includes the contractor's contribution for that year which should be submitted by March 24, 2023.

4.0 Applicable Documents and Glossary

- Committee on Aviation Environmental Protection (CAEP)
- Fuels Task Group (FTG)
- Statement of Work (SOW)
- Subject Matter Expert (SME)
- Transport Canada Civil Aviation (TCCA)
- Sustainable Aviation Fuels (SAF)
- Lower Carbon Aviation Fuels (LCAF)
- International Civil Aviation Organization (ICAO)
- Greenhouse Gas (GHG)
- Life Cycle Assessment (LCA)
- Emissions Reduction Accounting (ERA)
- Technology, Production, and Policy (TPP)
- Induced Land Use Change (ILUC)
- Curriculum Vitae (CV)

Mandatory Criteria

Number	Mandatory Criterion	Referenced Section/Page in Bidder's proposal	Met/Not met?
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M1	The bidder must provide a provide a current Curriculum Vitae (CV).		
M2	The bidder must demonstrate using project descriptions that they have experience working as an expert in international organizations (e.g., ICAO, IEA) for at least three (3) cumulative		
	years in the last five (5) years.		
M3	The bidder must demonstrate using their CV and/or publications (e.g., research reports to government, research articles with a national/international scope) that they are an internationally recognized SME in the techno-economic analysis, life cycle assessment, and analysis of ILUC from SAF, including expertise in the Canadian SAF context.		

Point Rated Criteria

Number	Rated Criterion	Scoring Instructions	Referenc ed Section/P age in Bidder’s proposal and/or CV	Max Points	Bidder Score

R1	The bidder should demonstrate using project descriptions and publications that he/she has expertise in a broad array of current and emerging feedstock to SAF pathways, including relevant context applicable to Canada.	<p>Points awarded based on quantity and quality of evidence provided.</p> <p>Points awarded based on years of relevant experience. Rating: ≥3 yrs. and <6 yrs.= 5pts, ≥6 yrs. and <8 yrs.= 10pts, ≥8 yrs. = 15 pts</p>		15	
R2	The bidder should demonstrate using project descriptions and publications that he/she has expertise in GHG emissions calculations and LCA, including domestic and foreign/international approaches.	<p>Points awarded based on quantity and quality of evidence provided.</p> <p>Points awarded based on years of relevant experience. Rating: ≥5 yrs. and <8 yrs.= 5pts, ≥8 yrs. and <10 yrs.= 10pts, ≥10 yrs. = 15 pts</p>		15	
R3	The bidder should demonstrate using project descriptions and publications that he/she has expertise in financial analyses, market analyses, and technoeconomic assessment pertaining to SAF production.	<p>Points awarded based on quantity and quality of evidence provided.</p> <p>Points awarded based on years of relevant experience. Rating: ≥3 yrs. and <6 yrs.= 5pts, ≥6 yrs. and <8 yrs.= 10pts, ≥8 yrs. = 15 pts</p>		15	
R4	The bidder should demonstrate using project descriptions, participation, membership, and publications of having knowledge of ASTM and CGSB standards pertaining to aviation fuels, SAF qualification process, and SAF specifications.	<p>Points awarded based on quantity and quality of evidence provided.</p> <p>Points awarded based on years of relevant experience. Rating: ≥5 yrs. and <8 yrs.= 5pts, ≥8 yrs. and <10 yrs.= 10pts, ≥10 yrs. = 15 pts</p>		15	

R5	The bidder should demonstrate using project descriptions and publications of having knowledge of land use impacts and carbon accounting, particularly ILUC and direct land use change.	1 project = 5 points 2 projects = 10 points 3 projects = 15 points		15	
R6	The bidder should demonstrate using project descriptions, participation, and publications of having experience in carbon capture and storage.	1 project = 5 points 2 projects = 10 points 3 projects = 15 points		15	
R7	The bidder should demonstrate using project descriptions, participation, and publications of experience in SAF sustainability criteria and requirements.	1 project = 5 points 2 projects = 10 points 3 projects = 15 points		15	
R8	The bidder should demonstrate using project descriptions, participation, and publications of having experience in emissions reduction permanence and double counting issues.	1 project = 5 points 2 projects = 10 points 3 projects = 15 points		15	
		Max points		120	

Maximum available points	120
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