## **RETURN BIDS TO:** RETOURNER LES SOUMISSIONS Power Packs in Canada

Bid Receiving - Environment Canada / Réception des soumissions - Environnement Canada

#### **Electronic Copy:**

ec.soumissions-bids.ec@ec.gc.ca

#### **BID SOLICITATION DEMANDE DE SOUMISSONS**

#### PROPOSAL TO: ENVIRONMENT CANADA

We offer to perform or provide to Canada the services detailed in the document including any attachments and annexes, in accordance with the terms and conditions set out or referred to in the document, at the price(s) provided.

#### **SOUMISSION À: ENVIRONNEMENT CANADA**

Nous offrons d'effectuer ou de fournir au Canada, aux conditions énoncées ou incluses par référence dans le document incluant toutes pièces jointes et annexes, les services détaillés dans le document, au(x) prix indiqué(s).

#### Title - Titre

Review of Small Electricity Generators and Battery

EC Bid Solicitation No. /SAP No. - No de la demande de soumissions EC / No SAP 5000060779

Date of Bid solicitation - Date de la demande de soumissions November 15, 2021

**Bid Solicitation Closes - La** demande de soumissions prend fin

Time Zone – Fuseau horaire

at - à 2:00 P.M. on - le December 06, 2021 Eastern Daylight Time

#### F.O.B - F.A.B

Destination.

Address Enquiries to - Adresser toutes questions à Annie Emard

Annie.emard@canada.ca

Telephone No. – Nº de téléphone

Fax No. – Nº de Fax

#### Delivery Required - Livraison exigée

See Statement of Work herein.

**Destination of Services / Destination des services** See Statement of Work herein.

#### Security / Sécurité

There is no security requirement associated with this requirement.

Vendor/Firm Name and Address - Raison sociale et adresse du fournisseur/de l'entrepreneur

Telephone No. – N° de téléphone | Fax No. – N° de Fax

Name and title of person authorized to sign on behalf of Vendor/Firm: (type or print) /

Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie)

Signature

Date

#### **TABLE OF CONTENTS**

#### TITLE

#### **PART 1 - GENERAL INFORMATION**

- 1. Introduction
- 2. Summary
- 3. Debriefing

#### **PART 2 - BIDDER INSTRUCTIONS**

- 1. Standard Instructions, Clauses and Conditions
- 2. Submission of Bids
- 3. Former Public Servants Competitive Bid
- 4. Enquiries Bid Solicitation
- 5. Applicable Laws
- 6. Basis for Canada's Ownership of Intellectual Property

#### PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

# PART 4 - EVALUATION PROCEDURES, BID EVALUATION CRITERIA AND BASIS OF SELECTION

- 1. Evaluation Procedures
- 2. Technical Bid Evaluation Criteria, including Mandatory and Point-rated technical criteria
- 3. Basis of Selection

#### **PART 5 - CERTIFICATIONS**

Certifications Required Precedent to Contract Award

#### **PART 6 – SECURITY REQUIREMENTS**

1. Security Requirement

#### **List of Attachment:**

Attachment 1 to Part 3, Financial Bid Presentation Sheet

#### PART 7 - RESULTING CONTRACT CLAUSES

- 1. Statement of Work
- 2. Standard Clauses and Conditions
- 3. Security Requirement
- 4. Term of Contract



- 5. Authorities
- 6. Proactive Disclosure of Contracts with Former Public Servants
- 7. Payment
- 8. Invoicing Instructions
- 9. Certifications
- 10. Applicable Laws
- 11. Priority of Documents
- 12. Insurance

#### **List of Annexes:**

Annex B Statement of Work
Annex B Basis of Payment
Annex C Supplier list of names

Annex D Former Public Servant – Competitive Bid Form

# TITLE: PLASTIC WASTE MANAGEMENT IN THE CONSTRUCTION, RENOVATION, AND DEMOLITION INDUSTRY IN CANADA

#### **PART 1 - GENERAL INFORMATION**

#### 1. Introduction

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid:
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications: includes the certifications to be provided;
- Part 6 Security and Other Requirements: includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Attachment includes the Financial Bid Presentation Sheet.

The Annexes include the Statement of Work, the Basis of Payment, the Security Requirements Checklist, Supplier list of names, Former Public Servant – Competitive Bid Form.

#### 2. Summary

- 2.1 Environment and Climate Change Canada has a requirement to collect data and information in order to understand the possible paths for transitioning small generators to zero-emission technologies in Canada. as detailed in the Statement of Work, Annex A to the bid solicitation. The period of the contract is from contract award to March 31, 2022.
- 2.2 There is no security requirement associated with this requirement.
- 2.3 Bidders must provide a list of names, or other related information as needed, pursuant to section 01 Integrity Provisions of Standard Instructions 2003.
- 2.4 For services requirements, bidders in receipt of a pension or a lump sum payment must provide the required information as detailed in article 3 of Part 2 of the bid solicitation.

## 3. Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing will be in writing.

#### **PART 2 - BIDDER INSTRUCTIONS**

#### 1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the PWGSC Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

The standard instructions 2003 are modified as follows:

Under "Text" at 02:

Delete: "Procurement Business Number"

Insert: "Deleted"

#### **At Section 02 Procurement Business Number**

**Delete:** In its entirety **Insert:** "Deleted"

#### At Section 05 Submission of Bids, Subsection 05 (2d):

**Delete:** In its entirety

Insert: "send its bid only to Environment Canada (EC) as specified on page 1 of the bid

solicitation or to the address specified in the bid solicitation;"

#### At Section 06 Late Bids:

Delete: "PWGSC"

**Insert:** "Environment Canada"

#### At Section 07 Delayed Bids:

Delete: "PWGSC"

Insert: "Environment Canada"

#### At Section 08 Transmission by Facsimile, Subsection 08 (1):

**Delete:** In its entirety

Insert: "Bids may be submitted by facsimile if specified in the bid solicitation."

#### At Section 12 Rejection of Bid, Subsection 12 (1) a. and b.:

Delete: In their entirety

Insert: "Deleted"

#### At Section 17 Joint Venture, Subsection 17 (1) b.:

Delete: "the Procurement Business Number of each member of the joint venture,"

Insert: "Deleted"

#### At Section 20 Further Information, Subsection 20 (2):

**Delete:** In its entirety **Insert:** "Deleted"

#### At Section 05 Submission of Bids, Subsection 05 (4):

Delete: "sixty (60) days"

Insert: "one hundred and twenty (120) days"

#### 1.1 PWGSC SACC Manual Clauses

A7035T (2007-05-25), List of Proposed Subcontractors

#### 2. Submission of Bids

Bids must be submitted to Environment Canada (EC) at the address and by the date, time and place indicated on page 1 of the bid solicitation.

#### 3. Former Public Servant – Competitive Bid

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

#### **Definitions**

For the purposes of this clause, "former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members of Parliament Retiring Allowances Act*, R.S., 1985, c.M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c.C-8.

## Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? Yes () No ()

If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

#### **Work Force Adjustment Directive**

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes** () **No** ()

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

Environment Environnement Solicitation Number: 5000060779

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

#### 4. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than **five (5)** calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

#### 5. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the province of Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

#### 6. Basis for Canada's Ownership of Intellectual Property

Environment and Climate Change Canada has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, for the following reasons, as set out in the <u>Policy on Title to Intellectual Property Arising Under Crown Procurement Contracts:</u>

the main purpose of the contract, or of the deliverables contracted for, is to generate knowledge and information for public dissemination;

#### 7. Bid Challenge and Recourse Mechanisms

- a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's <u>Buy and Sell</u> website, under the heading <u>Bid Challenge and Recourse Mechanisms</u>" contains information on potential complaint bodies such as:

Office of the Procurement Ombudsman (OPO) Canadian International Trade Tribunal (CITT)

c) Suppliers should note that there are strict deadlines for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.

#### PART 3 - BID PREPARATION INSTRUCTIONS

#### 1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid

(1 electronic copy in PDF format by email to ec.soumissions-bids.ec@ec.gc.ca)

Section II: Financial Bid

(1 electronic copy in PDF format by email to ec.soumissions-bids.ec@ ec.gc.ca)

Section III: Certifications

(1 electronic copy in PDF format by email to ec.soumissions-bids.ec@ ec.gc.ca)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

#### Note for electronic submission of bids:

In order to be considered, bids must be received no later than 2:00 P.M. (Eastern Daylight Time) on the date and time indicated on the cover page to herein as the "Closing Date." Bids received after the Closing Date will be considered non-responsive and will not be considered for contract award. Bids submitted by email must be submitted ONLY to the following email address:

Email Address: ec.soumissions-bids.ec@ec.gc.ca

**Attention: Annie Emard** 

Solicitation Number: 5000060779

Bidders should ensure that their name, address, Closing Date of the solicitation and Solicitation Number are clearly indicated in the body of their email. Bids and supporting information may be submitted in either English or French.

The total size of the email, including all attachments, must be less than **15 megabytes (MB).** It is each Bidder's responsibility to ensure that the total size of the email does not exceed this limit.

Bids sent by fax will not be accepted.

It is important to note that emails systems can experience systematic delays and, at times, large attachments may cause systems to hold or delay transmission of emails. It is solely the Bidder's responsibility to ensure that the Contracting Authority receives a bid on time, in the mailbox that has been identified for bid receipt purposes. Date stamps for this form of transmission are not acceptable.

#### Section I: Technical Bid

In their technical bid, bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Part 4, Evaluation Procedures, contains additional instructions that bidders should consider when preparing their technical bid.

#### Section II: Financial Bid

- **1.1** Bidders must submit their financial bid in accordance with the Financial Bid Presentation Sheet in Attachment 1 to Part 3. The total amount of Applicable Taxes must be shown separately.
- **1.2** Bidders must submit their financial bid in Canadian funds and in accordance with the Financial Bid Presentation Sheet in Attachment 1 to Part 3. The total amount of Applicable Taxes must be shown separately.
- **1.3** Bidders must submit their prices and rates FOB destination; Canadian customs duties and excise taxes included, as applicable; and Applicable Taxes excluded.

#### 1.4 Price Breakdown

In their financial bid, the bidders are requested to provide a detailed breakdown of the price for the following elements for the performance of the Work, as applicable:

- (a) Professional fees: For each individual and (or) labour category to be assigned to the Work, the bidders should indicate: i) the firm hourly rate or the firm daily rate, inclusive of overhead and profit; and ii) the estimated number of hours or days, as applicable. The bidders should indicate the number of hours in one working day.
- (b) Equipment (if applicable): The bidders should specify each item required to complete the Work and provide the pricing basis of each one, Canadian customs duty and excise taxes included, as applicable.
- (c) Materials and Supplies (if applicable): The bidders should identify each category of materials and supplies required to complete the Work and provide the pricing basis. The Bidder should indicate, on a per category basis, whether the items are likely to be consumed during the performance of any resulting contract.

(d) Travel and Living Expenses (if applicable): The bidders should indicate the number of trips and the number of days for each trip, the cost, destination and purpose of each journey, together with the basis of these costs without exceeding the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the National Joint Council Travel Directive and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

- Subcontracts (if applicable): The bidders should identify all of the proposed (e) subcontractors and provide in their financial bid for each one a price breakdown.
- Other Direct Charges (if applicable): The bidders should identify all of the categories of (f) other direct charges anticipated, such as long distance communications and rentals, providing the pricing basis for each and explaining the relevance to the work described in Part 7 of the bid solicitation.
- Applicable Taxes: The bidders should indicate the Applicable Taxes separately. (g)
- 1.5 Bidders should include the following information in their financial bid:
- Their legal name; and (a)
- (b) The name of the contact person (including this person's mailing address, phone and facsimile numbers and email address) authorized by the Bidder to enter into communications with Canada with regards to their bid; and any contract that may result from their bid.

#### Section III: Certifications

Bidders must submit the certifications required under Part 5.

# ATTACHMENT 1 TO PART 3 FINANCIAL BID PRESENTATION SHEET

The Bidder must complete the Financial Bid Presentation Sheet and include it in its financial bid. Prices must appear only in the financial submission and nowhere else in the submission.

The price of the bid will be evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, FOB destination, Canadian customs duties and excise taxes included.

Goods and Services Tax (GST) or Harmonized Sales Tax (HST) amounts must appear separately, if applicable.

#### Price Breakdown of the Financial Bid Presentation Sheet

The Bidder must provide a detailed breakdown of the price for the following elements for the performance of the Work, as applicable:

Item	Milestone	Due Date	Unit price per Milestone
1	Kick Off Meeting	Within 5 working days of the Contract Award Date ( <b>CAD</b> )	a) \$
2	Progress Updates	Every 2 weeks after the CAD	·
3	Draft report Table of Content and Data Collection Template	4 weeks after the CAD	b) \$
4	Draft Report	12 weeks after the CAD	
5	Final Report	15 weeks after the CAD	c) \$
	Total	\$	

#### **Definition of a Day/Proration**

A day is defined as 7.5 hours exclusive of meal breaks. Payment will be for days actually worked with no provision for annual leave, statutory holidays and sick leave. Time worked which is more or less than a day will be prorated to reflect actual time worked in accordance with the following formula:

#### (Hours worked × applicable firm per diem rate) ÷ 7.5 hours.

- i. All proposed personnel must be available to work outside normal office hours during the duration of the Contract.
- ii. No overtime charges will be authorized under the Contract. All time worked will be compensated according to paragraph above.

#### PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

#### 1. Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### 1.1 Technical evaluation

Unless expressly stated otherwise, the experience described in the bid must be that of the bidder itself (with the experience of any company that has trained the bidder by way of merger, but without the experience gained from purchasing assets or awarding contracts). The experience of the companies related to the tenderer (parent company, subsidiary or sister), subcontractors and suppliers is not taken into consideration.

Listing experience without providing any supporting data to describe where and how such experience was obtained will result in the experience not being included for evaluation purposes.

#### 2. Basis of Selection

#### Highest combination of technical merit (70%) and Price (30%)

The selection will be based on the highest responsive combined rating of technical merit and Price. The ratio will be 70% for the technical merit and 30% for the price.

- (a) To be declared responsive, a bid must:
  - (i) comply with all the requirements of the bid solicitation;
  - (ii) meet all mandatory criteria;
  - (iii) meet mandatory financial criteria;

and

- (iv) obtain the following required minimum points in the technical evaluation criteria: (an overall minimum score of 65 points or higher out of 95)
- (b) Bids not meeting (i) or (ii) or (iii) or (iv) will be declared non-responsive.
- (c) The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 70% for the technical merit and 30% for the price.
- (d) To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained will be divided by maximum number of points available multiplied by the ratio of 70%.

- (e) To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 30%.
- (f) For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
- (g) Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The sum of the technical and financial scores is used to determine the final score. The contract will be awarded to the firm obtaining the highest overall score. Where several bids are equal, the one with the highest technical rating will be selected.

Technical Score = 
$$\underline{\text{Bidder's Points}}$$
 x 70% = XXX 100

Total Score = Technical Score + Financial Score

# ATTACHMENT 1 TO PART 4 MANDATORY AND RATED TECHNICAL CRITERIA

The proposal must describe in sufficient detail the skills and relevant experience of the proposed resources. Each proposal that meets the mandatory requirements will be evaluated and rated according to the criteria described below, and the weighting described in the table 2. All relevant information that would enable Environment and Climate Change Canada to properly rate the proposal against the criteria listed below must be included. Information not included in the proposal will not be considered.

**Table 1: Mandatory Criteria** 

Item	Mandatory Requirement	Compliant (Yes/No)	Reference page number
M1	Project Manager  The Project Manager must possess a post- graduate engineering, science or social sciences related degree such as mechanical engineering, electrical engineering, civil engineering, environmental science, environmental studies or public policy from a recognized university.  Proof of education must be provided upon request.(scanned copy of degree, letter, etc.)	☐ Yes ☐ No	
M2	The Project Manager must demonstrate having been one of the main contributors on two (2) projects relevant to the Statement of Work completed within the past 8 years since date of bids closing. Relevant projects are considered to be those that pertain to one or more of the target activities and at least one of the technical fields identified in this Evaluation criteria  Target Activities  a) data collection and analysis, or b) market research. c) technology assessments  Technical Fields i) zero-emission generators	☐ Yes ☐ No	

	<ul><li>ii) batteries or portable power packs (combination of battery and renewable sources such as fuel cell, small solar, etc.)</li></ul>		
	<ul><li>iii) small spark- and compression-ignition engines</li></ul>		
	iv) zero-emission technologies		
	<ul><li>v) vehicle-to-grid or power-to-home technologies</li></ul>		
	<ul> <li>For each project, the bidder must provide, at a minimum:</li> <li>a brief description of the project, including objectives,</li> <li>the duration of the project,</li> <li>the proposed resource's role, and</li> <li>The contact information (name, title, telephone number and address) for the organization for which the project was performed</li> </ul>		
M3	Project Team  The Bidder must describe the team that it proposes to complete the work. The description of the team must include:  a) a list of team members (including subcontractors, as applicable), b) their proposed roles and responsibilities on the project, and c) current CVs of all proposed team members.  Note that it is not required that the team has more than one member.		
M4	At least one proposed senior resource must demonstrate a minimum of 5 years of experience working in one or more of the target activities noted within this contract. (This may be the Project Manager.)  Target Activities  a) data collection and analysis, or	☐ Yes ☐ No	
	<ul><li>b) market research.</li></ul>		

	c) technology assessments		
	The Bidder must indicate how the resource's role will contribute to the Work to be performed.		
M5	Technical Proposal In the Technical Proposal section of its proposal, the Bidder must submit a technical proposal which must at minimum include:  a) objectives, scope and policy background, b) detailed work plan including milestones, timeline, and which tasks will be assigned to specific team members, and c) methodology for research and data collection.	☐ Yes ☐ No	

#### 2.2 **Point-Rated Technical Evaluation criteria**

Each bid will be rated by assigning a score to the rated requirements, which are identified in the bid solicitation by the word "rated" or by reference to a score. Bidders who fail to submit complete bids with all the information requested by this bid solicitation will be rated accordingly within the technical evaluation based on the following grid. Bids that obtain less than 65 points will be considered non-responsive.

PR1. Project Manager Qualifications			
Maximum score:	20 points		
demonstrate the Profession Manager. To get maximum	ction of its proposal, the Bidder should nal Qualifications of the proposed Project points, the Bidder should also demonstrate that ager has led projects taken together involved	(Max. 20)	
a) data collection and a	analysis, or		
b) market research.			
c) technology assessm	nents		

#### that involve these five technical fields:

- i. zero-emission generators
- ii. batteries or portable power packs (combination of battery and renewable sources such as fuel cell, small solar, etc.)
- iii. small spark- and compression-ignition engines
- iv. zero-emission technologies
- v. vehicle-to-grid or power-to-home technologies

The Bidder should demonstrate this leadership experience by providing a list of **no more than five projects** of contract value greater than or equal to \$30,000 CAD which the Project Manager has led. For each project in the list, the Bidder should provide a summary not exceeding one page in length that includes the following:

- a) a description of the project,
- b) the contract value of the project,
- c) a description of which of the three above target activities were met (i.e., data collection and analysis, market research or technology assessments) that was conducted during the project and in which of the five fields (zero-emission generators, batteries or portable power packs (combination of battery and renewable sources such as fuel cell, small solar, etc.), small spark- and compression-ignition engines, zero-emission technologies, vehicle-to-grid or power-tohome technologies) areas this work was conducted

Each of these project summaries will be evaluated to demonstrate the Project Manager's leadership experience in the target activities as well as in the technical fields. Points will be allocated as follows: **3 points** will be awarded per project summary on target activities, to a maximum of **15 points**, as follows:

- No leadership experience in any of the three target activities for any
  of the five technical fields demonstrated by the project manager for
  the identified project (0 Points)
- Leadership experience in one of the three target activities for any
  of the five technical fields demonstrated by the project manager for
  the identified project (1 Point)
- 3. Leadership experience in two of the three target activities for any of the five technical fields demonstrated by the project manager for the identified project (2 Points)
- Leadership experience in all three of the target activities for any of the five technical fields demonstrated by the project manager for the identified project (3 Points)

Using the same project descriptions, the Project Manager will also receive points for demonstrating leadership experience in the technical fields. **1 point** will be awarded for each one of the five technical fields, for a maximum of **5 points**, as follows:

- No leadership experience in any of the three target activities for any
  of the five technical fields demonstrated by the project manager for
  any of the identified projects (0 Points)
- 2. Leadership experience in any of the three target activities for one of the five technical fields demonstrated by the project manager for any of the identified projects (1 Point)
- 3. Leadership experience in any of the three target activities for two of the five technical fields demonstrated by the project manager for any of the identified projects (2 Points)
- 4. Leadership experience in any of the three target activities for three of the five technical fields demonstrated by the project manager for any of the identified projects (3 Points)
- 5. Leadership experience in any of the three target activities for four of the five technical fields demonstrated by the project manager for any of the identified projects (4 Points)
- 6. Leadership experience in any of the three target activities for all five of the technical fields demonstrated by the project manager for any of the identified projects (5 Points)

#### PR2. Qualification of Project Team

Maximum score: 30 points

In the *Project Team* section of its proposal, the Bidder should demonstrate the Professional Qualifications of the proposed Project Team and that the team members have significant (3 or more years) cumulative experience in research and data analysis in each the following **five subject areas**:

(Max. 30)

- Off-road small spark- and compression-ignition engines (5 points)
- Batteries or portable power packs (combination of battery and renewable sources such as fuel cell, small solar, etc.) (5 points)
- Generators (10 points)

- Zero-emission technologies (5 points)
- Vehicle-to-grid or power-to-home technologies (5 points)

The Bidder should demonstrate the research and data analysis experience of their proposed Project Team by providing one or more project summaries that sufficiently demonstrate the Project Team's experience working with the five subject areas above.

Each of these summaries should include the following:

- a description of the project
- the duration of the project
- the contract value of the project
- the list of proposed team members who were involved with the project
- a description of each team member's contribution to the project and how this contribution connects to the five target subject areas listed above

Each project summary should not exceed two pages in length and must not include projects with a contract value of less than \$15,000 CAD.

## PR3. Understanding of Objectives, Scope and Policy Background

#### Maximum score: 10 points

The Bidder should demonstrate a thorough understanding (see section I: Technical Bid) of the project objectives, scope and the relevant policy issues involved in the Objectives, Scope and Policy Background section in its proposal.

(Max. 10)

Points will be awarded for each of the following aspects included in the proposal (no partial points will be given):

- Clear understanding of the project background/policy background and objectives (4 points)
- Clear understanding of the scope of the project with respect to the:
  - issues/questions to be addressed (2 points)
  - timeframe to be addressed (2 points)
- Clear understanding of the expected results (2 points)

#### PR4. Work Plan

10 points Maximum score:

The Bidder should demonstrate a thorough understanding of the logistical requirements to conduct the project successfully. The Bidder should demonstrate this understanding by defining a work plan in the *Work Plan* section that is clear, detailed, reasonable and feasible.

(Max 10)

This work plan should outline how the Bidder will meet the overall objectives of the project, identify key milestones and timelines, and describe its specific approach to accomplish each of the individual tasks contained in the Statement of Work.

The work plan will be awarded points as follows:

- 0: Not addressed
- 2: Not evident: incorrect understanding of the logistical requirements needed to complete the project
- 4: Inadequate: poor understanding of the logistical requirements needed to complete the project. Incomplete, imprecise or lacking any evidence of understanding
- 6: Adequate: basic understanding of the logistical requirements needed to complete the project
- 8: Good: thorough understanding of the logistical requirements needed to complete the project
- 10: Excellent: detailed and compelling understanding of the logistical steps needed to complete the project

## **PR5 Research and Data Collection Methodology**

The Bidder should clearly indicate the methodology it will use to conduct research and collect data in the *Research and Data Collection Methodology* section.

Maximum Score: 25

## PR5.1 Methodological Approach

(Max 15)

In the *Methodology* of its proposal, the Bidder should outline its methodology in clear, logical steps for each of the three tasks (tasks 1 to 3) identified in in the Work Description section of the Statement of Work.

- 1. Market Research Supply (5 points)
- 2. Market Research Demand and Performance Needs (5 points)

## 3. Use and Maintenance of Zero-Emission Generators (5 points)

Points will be awarded as follows for each of the 3 tasks in the Work Description section of the Statement of Work up to a maximum of five points per task:

- 0: Not provided
- 1: Not evident: insufficient or incorrect information provided
- 2: Inadequate: incomplete, vague or lacking evidence of understanding
- 3: Adequate: complete, realistic and achievable within the available time and resources
- 4: Good: complete and realistic, logical and straightforward
- 5: Excellent: comprehensive strategy that provides a logical pathway from start to finish. Thoughtful consideration of details that will achieve all objectives

## PR5.2 Identifying and Mitigating Risks and Challenges

(Max 10)

In the Research and Data Collection Methodology of its proposal, the Bidder should address potential challenges that may arise during this phase of the project and articulate their associated risk levels to the project (ie: low, medium, high). The Bidder's strategy for mitigating these risks should be clearly described, demonstrating sound justification for the proposed measures.

Points will be awarded as follows

- 0: Not addressed
- 2: Not evident: little indication of recognition of risks and mitigation
- 4: Inadequate: vague or incomplete recognition of risks and mitigation
- 6: Adequate: complete and correct recognition of risks but with limited detail on mitigation
- 8: Good: complete and correct recognition of risks and mitigation, demonstrating a solid understanding of each issue
- 10: Excellent: comprehensive recognition of risks and mitigation, demonstrating thorough consideration of risks and mitigation measures as they relate to different aspects of the project

**Total maximum Score: 95 points** 

Minimum overall passing mark: 65 points (68%)

Section	Rated Criteria	Maximum Score (/95)
1. Project Manager	R1	/20
2. Project Team	R2	/30
3. Technical Proposal		
3.1 Objectives, Scope and Policy Background	R3	/10
3.2 Work Plan	R4	/10
3.3 Research and Data Collection Methodology	R5.1, R5.2	/25

#### 3. Financial Bid Evaluation

The maximum funding available for the contract resulting from the bid solicitation is \$60,000.00/per year in Canadian dollars, Applicable Taxes not included.

The bid must meet the mandatory financial criteria specified in the table inserted below. Any bid which fail to meet the mandatory financial criteria will be declared non-responsive. Disclosing the maximum funding available does not represent a commitment by Canada to pay this amount.

Item	Evaluation Criteria	Met	Not Met
MF1	The maximum budget allocated for this project must not exceed \$60,000.00, applicable taxes extra, including all labour, associated costs and subcontractors. Bids valued in excess of this amount will be considered non-responsive. This disclosure of project funds does not commit Environment and Climate Change to pay such an amount.		

Once the technical evaluation scores are established for all bids, the Financial Bid will be opened and evaluated by the Contracting Authority. The technical scores will not be changed once the financial bids are opened.

The price of the bid will be evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, FOB destination, Canadian customs duties and excise taxes included.

#### **PART 5 - CERTIFICATIONS**

Bidders must provide the required certifications and associated information to be awarded a contract.

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default in carrying out any of its obligations under the Contract, if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority may render the bid non-responsive or constitute a default under the Contract.

#### 1. Certifications Required Precedent to Contract Award

#### 1.1 Integrity Provisions - Associated Information

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Bid of Standard Instructions 2003. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

#### 1.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list (http://www.labour.gc.ca/eng/standards\_equity/eq/emp/fcp/list/inelig.shtml) available from Employment and Social Development Canada (ESDC) - Labour's website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid " list at the time of contract award.

#### 2. Additional Certifications Required Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the bid non-responsive.

#### 2.1 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

#### 2.2 Education and Experience

PWGSC SACC Manual clause A3010T (2010-08-16) Education and Experience

## PART 6 - SECURITY REQUIREMENT

**6.1.1** There is no security requirement applicable to the Contract.

#### **PART 7 - RESULTING CONTRACT CLAUSES**

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

#### 1. Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex A.

#### 2. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the PWGSC Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

#### 2.1 General Conditions

2010B (2020-05-28), General Conditions - Professional Services (Medium Complexity), as modified below, apply to and form part of the Contract.

General conditions 2010B is modified as follows:

#### **At Section 12 Transportation Costs**

**Delete:** In its entirety **Insert:** "Deleted"

#### At Section 13 Transportation Carriers" Liability

**Delete:** In its entirety. **Insert:** "Deleted"

#### At Section 18, Confidentiality:

**Delete:** In its entirety **Insert:** "Deleted"

#### Insert Subsection: "35 Liability"

"The Contractor is liable for any damage caused by the Contractor, its employees, subcontractors, or agents to Canada or any third party. Canada is liable for any damage caused by Canada, its employees or agents to the Contractor or any third party. The Parties agree that no limitation of liability or indemnity provision applies to the Contract unless it is specifically incorporated in full text in the Articles of Agreement. Damage includes any injury to persons (including injury resulting in death) or loss of or damage to property (including real property) caused as a result of or during the performance of the Contract."

#### 3. Term of Contract

#### 3.1 Period of the Contract

The period of the Contract is from contract award date to March 31, 2022 inclusive.

#### 4. Authorities

#### 4.1 Contracting Authority

The Contracting Authority for the Contract is:

#### **Annie Emard**

A/Team Manager – Procurement – Operations East, NCR Environment and Climate Change Canada 200 Boulevard Sacré-Coeur, Gatineau Email address: annie.emard@canada.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority

#### 4.2 Technical Authority

The Technical Authority for the Contract is
(It will be inserted at contract award.)
Name:
Title:
Organization:
Address:
Telephone:
Facsimile:
E-mail address:

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

#### 4.3 Contractor's Representative

The Contractor's Representative for the Contract is:
(It will be inserted at contract award.)
Name: Title:

E-mail	address:
5.	Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a *Public Service Superannuation Act* (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

#### 6. Payment

## 6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price of \$ \_\_\_\_\_ (the amount will be inserted at contract award). Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

### 6.2 Limitation of Expenditure

- (a) Canada's total liability to the Contractor under the Contract must not exceed \$\_\_\_\_\_ (the amount will be inserted at contract award). Customs duties are included and the Applicable Taxes are extra.
- (b) No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
  - (i) when it is 75 percent committed, or
  - (ii) four (4) months before the contract expiry date, or
  - (iii) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

whichever comes first.

(c) If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

#### 6.3 **Time Verification**

C0711C (2008-05-12) Time Verification

#### 7. **Invoicing Instructions**

#### 7.1 **Milestone Payments**

- Canada will make milestone payments in accordance with the Schedule of Milestones 7.1.1 detailed in Annex B of the Contract and the payment provisions of the Contract if:
- (a) an accurate and complete claim for payment and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- all such documents have been verified by Canada; (b)

#### 8. Certifications

#### 8.1 Compliance

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

#### 9. **Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the province of Ontario.

#### 10. **Priority of Documents**

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- the Articles of Agreement; (a)
- 2010B General Conditions Professional Services (Medium Complexity) (2020-05-28) (b) as modified:
- Annex A, Statement of Work; (c)
- (d) Annex B, Basis of Payment;
- Annex C, Supplier list of names: (e)

(f)	Annex D, Former Public Serva	nt - Competitive Bid Form;	
(g)	the Contractor's bid dated	, as clarified on	or as amended on
	(Will be inserted at cor	ntract award.)	

#### 11. Insurance

PWGSC SACC Manual clause G1005C (2016-01-28) Insurance

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

# ANNEX A STATEMENT OF WORK

#### Review of Small Electricity Generators and Battery Power Packs in Canada

#### **BACKGROUND**

Small fossil fuel powered generators (19 kW and under) are used in a variety of different situations in Canada. For example:

- Home owners and businesses may be using them to generate electricity during power outages and emergencies;
- They may be used in remote locations where access to the electricity grid is not readily available:
- They may be permanently installed in a house or building or may be portable and carried around;
- They may be installed on a vehicle, such as a recreational vehicle or a truck, and may be hooked up to the main fuel system of the vehicle or to an auxiliary fuel system (e.g. propane).

Air emissions from these generators are regulated under the Off-Road Small Spark-Ignition Engine Emission Regulations1 or the Off-road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations2

The Government of Canada is committed to leading the transformation towards a low-carbon economy. In its Forward Regulatory Agenda 2021-23, Environment and Climate Change Canada (ECCC) committed to introducing zero-emission requirements for small-spark ignition engines and equipment, including generators(19 kW and under).3

ECCC is therefore seeking to improve its knowledge of small zero-emission generators in Canada to better understand the impacts that more stringent emissions standards may have on other competing technologies and how the technologies may evolve as Canada endeavors to achieve net zero GHG emissions by 2050. To this end, ECCC would like more information on the current state of this equipment in Canada, the different ways it is being used, along with a characterization of available technologies, their cost, performance, benefits and limitations. ECCC will use the knowledge gained through this contract to inform policy development and enable evidence-based decisions.

#### **OBJECTIVES**

The objective of this project is to collect data and information in order to understand the possible paths for transitioning small generators to zero-emission technologies in Canada. This project would collect information in the following areas:

Market Supply

<sup>1</sup> https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?ld=61

<sup>2</sup> https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?ld=1160

<sup>3 &</sup>lt;a href="https://www.canada.ca/en/environment-climate-change/corporate/transparency/acts-regulations/forward-regulatory-plan/2021-2023/air-emissions-greenhouse-gases.html">https://www.canada.ca/en/environment-climate-change/corporate/transparency/acts-regulations/forward-regulatory-plan/2021-2023/air-emissions-greenhouse-gases.html</a>

 Develop a list of small generators that are available on the Canadian market (≤19 kW) of various fuel types (e.g diesel, gas, LNG, electric, hydrogen, etc...).

- Review the development and deployment of zero-emission technologies, their costs, performance, their technology readiness and any limitations when using the equipment in cold weather, in remote locations or during emergencies, s.
- What are the current and expected future options for zero-emission generators, such as battery packs? What are the advantages and disadvantages of each of these options? What are their upfront and operational costs, reliability and how efficient is their performance? Are alternatives to fossil fuel-powered generators suitable for use in emergency situations such as power outages?
- How can zero-emission generators work together with renewable technologies such as solar panels, methanol and hydrogen fuel cell, small wind turbines to expand their capabilities.

#### Market Demand and Performance Needs

- Research and characterize all applications and use of small generators. Typically, how often do people require the use of a generator and for what purpose, what power demands do they require from these generators and for what duration do people use these generators?
- How do small zero-emission generators perform when exposed to cold temperatures? Does indoor operation of these generators affect the degree to which cold temperature operation is a factor in all use cases?
- In the case of battery-electric generators, what is the expected lifespan of their batteries? How can these lifespans be extended? How often do they need to be charged under different usage scenarios? How many charging cycles do they have and how long does it take to charge them through the grid and via solar panels? What are their electrical losses in standby mode and what are the lifespans and degradation of their batteries under different usage scenarios?
- How do small zero-emission generators perform differently than fossil fuel-powered generators? For example, when in use, gasoline generators will often be left to idle during breaks while battery-electric generators only deliver power when needed. How does their operational differences affect the amount of useable energy delivered and consumed during operation?
- Note the contingencies a user could employ to overcome the existing limitations of current technology when using the equipment in cold weather, in remote locations or during emergencies. Comment on their appropriateness and feasibility of the contingencies.
- How will the transition towards zero-emission vehicles that use battery electric technology impact the demand and use of small generators as "vehicle to grid" and "power to home" capabilities of these vehicles become more accessible?

#### Barriers and gaps

 Organize in a table format the information collected to easily compare spark-ignition engine, compression-ignition engine and zero-emission generators and identify barriers and remaining knowledge gaps for further analysis.

#### WORK DESCRIPTION

The Contractor will complete the following three tasks to fulfill the objectives described above:

#### TASK 1 - MARKET RESEARCH - SUPPLY

#### The Contractor will:

- 1.1 Conduct a search and review of available information (literature, trusted Internet webpages, Original Equipment Manufacturers [OEMs] and other sources) looking into the small (≤ 19 kW) spark-ignition, compression-ignition and zero-emission generators available on the market.
- 1.2 Conduct a search and review of available information looking into the future of the small generator market and the deployment of zero-emission technologies. Contact OEMs to inquire into their future product plans.
- 1.3 Assess what would be the price and applications of zero-emission generators under a large-scale deployment scenario.
- 1.4 Examine the application of zero-emission generator technology into cold weather applications.

#### TASK 2 - MARKET RESEARCH - DEMAND and Performance Needs

#### The Contractor will:

- 2.1 Conduct a search and review of available information (some off-the-shelf market research may be available for purchase) looking into the typical requirements consumers require from small generators. How much power do they need, how long do they use it?
- 2.2 Conduct a search and review of available information (e.g. Canadian statistics on power outages, average and peak home energy demands, typical energy demand of common home appliances) looking into what consumers need from their generators during power outages. How long and how often do outages occur? What power needs do consumers have during a power outage situation?
- 2.3 Conduct a search and review of available information to identify how well small zeroemission generators perform in cold weather conditions (both seasonal cold weather and extreme weather conditions). Which zero-emission technologies can operate indoors and what implications would this have for their deployment into colder climates?
- 2.4 Assess the feasibility, taking into account cost, accessibility, and practicality of contingencies that can be implemented to overcome technology limitations when equipment is used under challenging circumstances such as in cold weather, in

remote locations or during emergencies (e.g. additional battery packs, using renewables).

2.5 Conduct a search and review of available information to assess how vehicle-to-grid or power-to-home capabilities of future electric cars might impact market demand for small generators in the future?

#### TASK 3 - USE AND MAINTENANCE OF ZERO-EMISSION GENERATORS

3.1. Conduct a search and review of available information to identify how zero-emission generators are used and maintained differently than small spark-ignition and compressorignition generators, with a focus on:

> How the operation of small zero-emission generators are different from sparkignition and compressor-ignition generators and how it impacts the amount of energy required for their operation and the duration for which zero-emission generators can delivery power?

In the case of battery-electric zero-emission generators, how are the batteries used and maintained. How often do they need to be charged under different usage scenarios? How many charging cycles do they have and how long does it take to charge them through the grid and via solar panels? What are their electrical losses in standby mode and what are the lifespans of their batteries under different usage scenarios? How much electricity is lost when the generators are not in operation and how long will the batteries maintain their capacity (i.e. expected battery degradation)?

#### TASK 4 - IDENTIFY KNOWLEDGE GAPS FOR FUTURE ANALYSIS

4.1. Identify a list of areas that need further analysis to fill knowledge gaps to provide a comprehensive comparison of the differences between small zero-emission, sparkignition and compression-ignition engine generators.

#### **DELIVERABLES AND SCHEDULE**

The Contractor shall deliver the result of their work in a report. The report shall include a table of contents, an executive summary, and a section that describes the approaches used to gather the information and the methodology used to assess the price and applications of zero-emission generators under a large-scale deployment scenario.

The report shall be in Microsoft Word format. All graphics and tables presented in the report shall also be provided in Microsoft Excel spreadsheets.

#	Milestones	Deliverable	Time
1	Kick Off Meeting	The Contractor must schedule a kick off meeting with the Technical Authority	A maximum of one (1) week after the contract is awarded
2	Progress Updates	The Contractor shall provide an update on progress made on all deliverables. This can be done through teleconference of Teams video call.	Every two (2) weeks after the contract is awarded
3	Draft report Table of Content and Data	The contractor shall provide a draft table of contents for the report and data	A maximum of four (4) weeks after the

	Collection Template	collection template.	contract is awarded
4	Draft Report	The Contractor shall provide a draft report to be reviewed by the Technical Authority. The Technical Authority shall be allotted at least 2 weeks to review.	A maximum of twelve (12) weeks after the contract is awarded
5	Final Report	The Contractor shall provide a final report for review and approval to the Technical Authority. The Technical Authority shall be allotted at least 1 week to review and make final comments.	A maximum of fifteen (15) weeks after the contract is awarded.

To assist with coordination of this project, the Contractor must communicate by email and teleconference, or videoconference, with the Technical Authority, providing updates on the project, at least once every two weeks. The Contractor must describe the status of tasks and any deviation from the work plan or the timelines in the proposal. Any changes to the schedule must be justified and accompanied with a solution that takes into account remaining timelines. Updates must include issues that the Contractor is facing that may delay the schedule or jeopardize the expected quality of the final product.

#### **OFFICIAL LANGUAGES**

The department is under the obligation to respect the spirit and the letter of the Official Languages Act R.S.1985,C.31 (4th Suppl.). It is therefore imperative that the Contractor when representing the Crown ensures that verbal communications are in the preferred official language of the participants. Written communications will be in the language(s) of the participants and must be submitted to the Department Representative before they are issued. If participants are required to communicate by telephone with the Contractor or his/her representatives, the Contractor must ensure that all persons, including receptionists and other contacts who will be receiving these calls, are bilingual.

#### **TRAVEL**

Travel is not required to perform the Work.

#### **WORK LOCATION**

The contractor will work from his own premises.

#### SUSTAINABLE PROCUREMENT CONSIDERATIONS

The Contractor should make an effort to ensure that their operations and performance of the Work align with the Treasury Board Policy on Green Procurement and Greening Government Strategy. Procurement documents will specify the green procurement criteria and standards to be met and provide guidelines for the evaluation of proposals with respect to those criteria and standards.

#### **ACCESSIBILITY CONSIDERATIONS**

The Government of Canada strives to ensure that the goods and services it procures are inclusive by design and accessible by default, in accordance with the **Accessible Canada Act**, its associated regulations and standards, and Treasury Board Contracting Policy. Procurement documents will specify the accessibility criteria and standards to be met and provide guidelines for the evaluation of proposals with respect to those criteria and standards.

# ANNEX B BASIS OF PAYMENT

(to be completed at contract award)

Item	Milestone	Due Date	Unit price per Milestone
1	Kick Off Meeting	Within 5 working days of the	
		Contract Award Date (CAD)	a) \$
2	Progress Updates	Every 2 weeks after the CAD	
	Draft report Table of Content		
3	and Data Collection	4 weeks after the CAD	b) \$
	Template		υ) φ
4	Draft Report	12 weeks after the CAD	
5	Final Report	15 weeks after the CAD	c) \$
	•		
	Total	\$	

# ANNEX C SUPPLIER LIST OF NAMES

Environment and Climate Change Canada has endorsed the Integrity Regime developed and implemented by Public Services and Procurement Canada. By submitting a quote, Contractors agree to comply with the provisions of the Integrity Regime and *Ineligibility and Suspension Policy* as well as the *Code of Conduct for Procurement*. / Environnement et Changement climatique Canada a adopté le régime d'intégrité développé et mis en place par Services publics et Approvisionnement Canada. Les fournisseurs acceptent, en soumettant une proposition, de se conformer aux dispositions du régime d'intégrité et la *Politique d'inadmissibilité et de suspension* ainsi que le *Code de conduite pour l'approvisionnement*.

In accordance with the PWGSC (now PSPC) <u>Ineligibility and Suspension Policy</u>, the following information is to be provided when bidding or contracting.<sup>4</sup> / Selon la <u>Politique d'inadmissibilité</u> <u>et de suspension</u> de TPSGC (maintenant SPAC), les renseignements suivants doivent être fournis lors d'une soumission ou de la passation d'un marché.<sup>4</sup>

\* Mandatory Information /Informations obligatoires

* Complete Legal Name of Company / Dénomination complète de l'entreprise					
* Operating Name / Nom commercial					
* Company's address / Adresse de l'entreprise	* Type of Ownership / Type d'entreprise				
	☐ Individual / Individuel				
	☐ Corporation / Corporation				
	☐ Joint-Venture / Coentreprise				
* Board of Directors <sup>5</sup> / Membres du conseil d'administration5					
(Or provide the list as an attachement / Ou mettre la liste en pièce-jointe)					
First name / Prénom Last Name / Nom	Position (if applicable) / Position (si applicable)				

<sup>1</sup> List of names: All suppliers, regardless of their status under the Policy, must submit the following information when participating in a procurement process:

- suppliers that are corporate entities, including those bidding as joint ventures, must provide a complete list of the names of all current directors or, for a privately owned corporation, the names of the owners of the corporation;
- suppliers bidding as sole proprietors, including sole proprietors bidding as joint ventures, must provide a complete list of the names of all owners; or
- suppliers that are a partnership do not need to provide a list of names.

<sup>2</sup> Board of Governors /Conseil des gouverneurs; Board of Managers /Conseil de direction; Board of Regents /Conseil de régents; Board of Trustees / Conseil de fiducie; Board of Visitors /Comité de réception

**Liste des noms:** Tous les fournisseurs, peu importe leur situation au titre de la Politique, doivent présenter les renseignements ci-dessous au moment de prendre part à un processus d'approvisionnement:

- les fournisseurs constitués en personne morale, y compris ceux qui présentent une soumission à titre de coentreprise, doivent fournir la liste complète des noms de tous les administrateurs actuels ou, dans le cas d'une entreprise privée, des propriétaires de la société;
- les fournisseurs soumissionnant à titre d'entreprise à propriétaire unique, y compris ceux soumissionnant en tant que coentreprise, doivent fournir la liste complète des noms de tous les propriétaires;
- les fournisseurs soumissionnant à titre de société en nom collectif n'ont pas à soumettre une liste de noms.

# ANNEX D FORMER PUBLIC SERVANT – COMPETITIVE BID FORM

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

#### **Definitions**

For the purposes of this clause, "former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members of Parliament Retiring Allowances Act*, R.S., 1985, c.M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c.C-8.

#### Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? Yes () No ()

If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

a. name of former public servant;

b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

#### **Work Force Adjustment Directive**

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? Yes ( ) No ( )  $\,$ 

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000 including Applicable Taxes.

Name and Signature	
Date	