



**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**
*Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada*

11 Laurier St. / 11, rue Laurier
Place du Portage, Phase III
Core 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5

**REQUEST FOR STANDING
OFFER /
DEMANDE D'OFFRE À
COMMANDE**

**Regional Individual Standing Offer
(RISO) /
Offre à commandes individuelle et
régionale (OCIR)**

Canada, as represented by the Minister of Public
Works and Government Services Canada,
hereby requests a Standing Offer on behalf of
the Identified Users herein.
Le Canada, représenté par le ministre des
Travaux Publics et Services Gouvernementaux
Canada, autorise par la présente, une offre à
commandes au nom des utilisateurs identifiés
énumérés ci-après.

Comments - Commentaires

Issuing Office - Bureau de distribution
Direction des achats innovateurs (DAI)/
Innovation Procurement Directorate (IPD)
Les Terrasses de la Chaudière
10, rue Wellington
Gatineau, Québec K1A 0S5

Title-Sujet Services d'expertise résidentielle pour des immeubles/ Residential Expertise for the Sustainable Building Environment	
Solicitation No. - N° de l'invitation 23229-129462/C	Date 2019-05-08
Client Reference No. - N° de référence du client 23229-129462	
GETS Reference No. - N° de référence de SEAG PW-19-00874273	
File No. - N° de dossier 009sl.23229-129462	
Solicitation Closes - L'invitation prend fin at - à 14:00 on - le 2019-06-18	Time Zone Fuseau horaire Eastern Daylight Time (EDT) - Heure avancée de l'est (HAE)
F.O.B. - F.A.B Plant-Usine : <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to/ Adresser toutes questions à: Laura Duffy	Buyer Id - Id de l'acheteur 009sl
Telephone No. - N° de téléphone 613-859-0469	Laura.Duffy@tpsgc-pwgsc.gc.ca
Destination of Goods, Services and Construction: Destinations des biens, services et construction : Specified Herein Précisé aux présentes	

Instructions : See Herein/ voir aux présentes

Delivery Required - Livraison exigée See Herein - voir aux présentes	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur Telephone No. - N° de telephone Facsimile No. - N° de télécopieur	
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

PART 1 - GENERAL INFORMATION	3
1.1 INTRODUCTION	3
1.2 SUMMARY	3
1.3 ESTIMATED UTILIZATION.....	4
1.4 DEBRIEFINGS.....	5
1.5 ANTICIPATED MIGRATION TO AN E-PROCUREMENT SOLUTION (EPS).....	5
PART 2 - OFFEROR INSTRUCTIONS	6
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS.....	6
2.2 SUBMISSION OF OFFERS	6
2.3 FORMER PUBLIC SERVANT	6
2.4 ENQUIRIES - REQUEST FOR STANDING OFFERS.....	8
2.5 APPLICABLE LAWS.....	8
2.6 BASIS FOR CANADA'S OWNERSHIP OF INTELLECTUAL PROPERTY.....	8
2.7 LIST OF PROPOSED SUBCONTRACTORS.....	8
PART 3 - OFFER PREPARATION INSTRUCTIONS.....	9
3.1 OFFER PREPARATION INSTRUCTIONS.....	9
PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION	10
4.1 EVALUATION PROCEDURES	10
4.2 BASIS OF SELECTION.....	14
PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION	15
5.1 CERTIFICATIONS REQUIRED WITH THE OFFER.....	15
5.2 CERTIFICATIONS PRECEDENT TO THE ISSUANCE OF A STANDING OFFER AND ADDITIONAL INFORMATION.....	15
PART 6 – SECURITY AND FINANCIAL REQUIREMENTS	17
6.1 SECURITY REQUIREMENTS	17
6.2 FINANCIAL CAPABILITY	17
PART 7 - STANDING OFFER AND RESULTING CONTRACT CLAUSES	18
A. STANDING OFFER	18
7.1 OFFER	18
7.2 SECURITY REQUIREMENTS	18
7.3 STANDARD CLAUSES AND CONDITIONS	18
7.4 TERM OF STANDING OFFER.....	19
7.5 AUTHORITIES	19
7.6 PROACTIVE DISCLOSURE OF CONTRACTS WITH FORMER PUBLIC SERVANTS.....	20
7.7 IDENTIFIED USERS.....	20
7.8 CALL-UP PROCEDURES	20
7.9 CALL-UP INSTRUMENT	21
7.10 LIMITATION OF CALL-UPS.....	21
7.11 FINANCIAL LIMITATION	22
7.12 PRIORITY OF DOCUMENTS.....	22
7.13 CERTIFICATIONS AND ADDITIONAL INFORMATION	22
7.14 APPLICABLE LAWS.....	22
7.15 TRANSITION TO AN E-PROCUREMENT SOLUTION (EPS).....	23
B. RESULTING CONTRACT CLAUSES	24
7.1 STATEMENT OF WORK.....	24

Solicitation No. - N° de l'invitation
23229-129462/C
Client Ref. No. - N° de réf. du client
23229-129462

Amd. No. - N° de la modif.
File No. - N° du dossier
009sl.23229-129462

Buyer ID - Id de l'acheteur
009sl
CCC No./N° CCC - FMS No./N° VME

7.2	STANDARD CLAUSES AND CONDITIONS	24
7.3	TERM OF CONTRACT	24
7.4	PROACTIVE DISCLOSURE OF CONTRACTS WITH FORMER PUBLIC SERVANTS.....	24
7.5	PAYMENT	24
7.6	INVOICING INSTRUCTIONS.....	27
7.7	INSURANCE	27
ANNEX "A"		28
STATEMENT OF WORK.....		28
APPENDIX 1 TO ANNEX "A"		31
LIST OF PROPOSED INDIVIDUALS		31
ANNEX "B"		32
BASIS OF PAYMENT		32

The purpose of this Request for Standing Offers (RFSO) is to qualify Offerors for the following areas of expertise, which were originally solicited under RFSO 23229-129462/A dated August 21, 2013:

Category 40: Active Solar Thermal Systems – Thermo-Chemical Storage Materials Research and Development (R&D)

Category 43: Active Solar Thermal Systems - Monitoring and Instrumentation

Category 44: Active Solar Thermal Systems - Industry Survey

Category 45: Active Solar Thermal Systems - District Systems

PART 1 - GENERAL INFORMATION

1.1 Introduction

The Request for Standing Offers (RFSO) is divided into seven parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Offeror Instructions: provides the instructions applicable to the clauses and conditions of the RFSO;
- Part 3 Offer Preparation Instructions: provides offerors with instructions on how to prepare their offer to address the evaluation criteria specified;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria which must be addressed in the offer, and the basis of selection;
- Part 5 Certifications and Additional Information: includes the certifications and additional information to be provided;
- Part 6 Security, Financial and Insurance Requirements: includes specific requirements that must be addressed by offerors; and
- Part 7 7A, Standing Offer, and 7B, Resulting Contract Clauses:
 - 7A, includes the Standing Offer containing the offer from the Offeror and the applicable clauses and conditions;
 - 7B, includes the clauses and conditions which will apply to any contract resulting from a call-up made pursuant to the Standing Offer.

The Annexes include the Statement of Work, the Basis of Payment and the List of Proposed Individuals. The Attachments include the Financial Offer Presentation Sheet.

1.2 Summary

- 1.2.1** Natural Resources Canada (NRCan) has a requirement for up to three Standing Offers each for the following Areas of Expertise:

-
- i. Category 40: Active Solar Thermal Systems – Thermo-Chemical Storage Materials Research and Development (R&D)
 - ii. Category 43: Active Solar Thermal Systems - Monitoring and Instrumentation
 - iii. Category 44: Active Solar Thermal Systems - Industry Survey
 - iv. Category 45: Active Solar Thermal Systems - District Systems.

1.2.2 Services are required from the date of authorization to use the Standing Offer to May 6, 2020. Canada may authorize the use of the Standing Offer beyond its initial period, for one additional one year period. Should Canada authorize the use of the Standing Offer beyond its initial period, the rates will be calculated in accordance with the Consumer Price Index specified herein.

1.2.3 For services requirements, Offerors must provide the required information as detailed in article 2.3 of Part 2 of the Request for Standing Offers (RFSO), in order to comply with Treasury Board policies and directives on contracts awarded to former public servants.

1.2.4 The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA).

1.2.5 The requirement is for Energy Research and Development (GSIN: AG614500) which is excluded from the application of the North American Free Trade Agreement (NAFTA) as per Annex 1001.1b-2, Class A (Research and Development), AND the World Trade Organization - Agreement on Government Procurement (WTO-AGP) under Appendix 1, Annex 4.

1.3 Estimated Utilization

The estimated usage for each area of expertise is \$86,000.00 (Applicable Taxes extra) for the initial period ending May 6, 2020.

The offers deemed responsive with the three lowest firm all-inclusive hourly rates under the area will share the estimated usage of \$86,000.00 (Applicable Taxes extra) for each area of expertise for the initial period of the Standing Offer ending May 6, 2020, in accordance with the following:

- (a) the lowest price offer will share 50% of the estimated total cost for the area of expertise (\$43,000.00 for the initial period of the SO ending May 6, 2020); and
- (b) the second lowest price offer will share 30% of the estimated total cost for the area of expertise (\$25,800.00 for the initial period of the SO ending May 6, 2020); and
- (c) the third lowest price offer will share 20% of the estimated total cost for the area of expertise (\$17,200.00 for the initial period of the SO ending May 6, 2020).

In the event that only two offers are deemed responsive:

The two lowest firm all-inclusive hourly rates under an area will share the estimated usage of \$86,000.00 (Applicable Taxes extra) for the area of expertise for the initial period of the Standing Offer ending May 6, 2020, in accordance with the following:

- (a) the lowest price offer will share 60% of the estimated total cost for the area of expertise (\$51,600.00 for the initial period of the SO ending May 6, 2020); and
- (b) the second lowest price offer will share 40% of the estimated total cost for the area of expertise (\$34,400.00 for the initial period of the SO ending May 6, 2020).

In the event that only one offer is deemed responsive under an area, the offeror will be allocated 100% of the estimated usage of \$86,000.00 (Applicable Taxes extra) for the area of expertise for the initial period of the Standing Offer ending May 6, 2020.

The same usage as described above will apply if the optional extension period exercised.

The level of service specified herein is only an approximation of the requirements given in good faith.

The Work will be allocated in accordance with article 7.8.1, "Allocation of Work", under Part 7 of the Standing Offer Resulting Contract Clauses.

1.4 Debriefings

Offerors may request a debriefing on the results of the request for standing offers process. Offerors should make the request to the Standing Offer Authority within 15 working days of receipt of the results of the request for standing offers process. The debriefing may be in writing, by telephone or in person.

1.5 Anticipated migration to an e-Procurement Solution (EPS)

Canada is currently developing an online EPS for faster and more convenient ordering of goods and services. In support of the anticipated transition to this system and how it may impact any resulting Standing Offer that is issued under this solicitation, refer to article 7.15 Transition to an e-Procurement Solution (EPS).

The Government of Canada's [press release](#) provides additional information.

PART 2 - OFFEROR INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the Request for Standing Offers (RFSO) by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/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.

Offerors who submit an offer agree to be bound by the instructions, clauses, and conditions of the RFSO and accept the clauses and conditions of the Standing Offer and resulting contract(s).

The [2006](#) (2018-05-22) Standard Instructions - Request for Standing Offers - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the RFSO.

2.2 Submission of Offers

Offers must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on the front page of the RFSO.

Due to the nature of the Request for Standing Offers, transmission of offers by facsimile or electronic mail to PWGSC will not be accepted.

2.3 Former Public Servant

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, offerors must provide the information required below before the issuance of a standing offer. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of offers is completed, Canada will inform the Offeror 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 offer 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; or
- b. an individual who has incorporated; or
- 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 Offeror a FPS in receipt of a pension? **YES () NO ()**

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

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

By providing this information, Offerors agree that the successful Offeror'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 Offeror a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **YES () NO ()**

If so, the Offeror must provide the following information:

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

2.4 Enquiries - Request for Standing Offers

All enquiries must be submitted in writing to the Standing Offer Authority no later than ten (10) calendar days before the Request for Standing Offers (RFSO) closing date. Enquiries received after that time may not be answered.

Offerors should reference as accurately as possible the numbered item of the RFSO to which the enquiry relates. Care should be taken by offerors 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 offerors do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all offerors. Enquiries not submitted in a form that can be distributed to all offerors may not be answered by Canada.

2.5 Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Offerors may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their offer, 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 offerors.

2.6 Basis for Canada's Ownership of Intellectual Property

The Department of Natural Resources Canada (NRCan) has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, on the following grounds: the main purpose of the resulting call-up, or of the deliverables contracted for, is to generate knowledge and information for public dissemination.

2.7 List of Proposed Subcontractors

If the offer includes the use of subcontractors, the Offeror agrees, upon request from the Standing Offer Authority, to provide a list of all subcontractors including a description of the things to be purchased, a description of the work to be performed and the location of the performance of that work. The list should not include the purchase of off-the-shelf items, software and such standard articles and materials as are ordinarily produced by manufacturers in the normal course of business, or the provision of such incidental services as might ordinarily be subcontracted in performing the Work.

PART 3 - OFFER PREPARATION INSTRUCTIONS

3.1 Offer Preparation Instructions

Due to the nature of the RFSO, offers transmitted by epost Connect service and by facsimile will not be accepted.

Canada requests that offerors provide their offer in separately bound sections as follows:

- Section I: Technical Offer (5 hard copies)
- Section II: Financial Offer (1 hard copy)
- Section III: Certifications (1 hard copy)

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

Canada requests that offerors follow the format instructions described below in the preparation of hard copy of their offer:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper; and
- (b) use a numbering system that corresponds to the RFSO.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process (Policy on Green Procurement <https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). To assist Canada in reaching its objectives, Offerors should use:

- 1) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Offer

In their technical offer, offerors should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Offer

Offerors must submit their financial offer in accordance with Annex "B" Basis of Payment.

Section III: Certifications

Offerors must submit the certifications and additional information required under Part 5.

3.1.1 Exchange Rate Fluctuation

SACC Manual Clause - [C3011T](#) (2013-11-06), Exchange Rate Fluctuation.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Offers will be assessed in accordance with the entire requirement of the Request for Standing Offers including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the offers.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

The Offeror must comply with the following Mandatory Technical Requirement and provide the necessary documentation to support compliance.

Any offer which fails to meet the following Mandatory Technical Requirement will be declared non-responsive.

Except where expressly provided otherwise, the experience described in the bid must be the experience of one or more of the following:

1. The Offeror itself (which includes the experience of any companies that formed the Offeror by way of a merger but does not include any experience acquired through a purchase of assets or an assignment of contract); or
2. The Offeror's affiliates (i.e. parent, subsidiary or sister corporations, maximum of 2), provided the Offeror identifies and demonstrates the transfer of know-how, the use of toolsets and the use of key personnel from the affiliate for the applicable criterion; or
3. The Offeror's subcontractors (maximum of 2), provided the Offeror includes a copy of the teaming agreements and identifies the roles and responsibilities of all parties under the agreement and how their work will be integrated.

The experience of the Offeror's suppliers will not be considered.

In the event that the Offeror fails to submit any supporting information pursuant to **M1** below, the Standing Offer Authority may request it thereafter in writing, including after the closing date of the bid solicitation. It is mandatory that the Offeror provide the missing information within three business days of the written request or within such longer period as specified by the Standing Offer Authority in the notice to the Offeror.

Offerors may propose resources for one or any number of the categories below, but each category will be evaluated separately:

- Category 40: Active Solar Thermal Systems – Thermo-Chemical Storage Materials Research and Development (R&D)
- Category 43: Active Solar Thermal Systems - Monitoring and Instrumentation
- Category 44: Active Solar Thermal Systems - Industry Survey
- Category 45: Active Solar Thermal Systems - District Systems

M1 The Offeror must demonstrate, that each of the proposed resources(s) has a minimum of three years of experience within the last ten years, (measured back from date of RFSO closing) related to the Area of Expertise (AE) identified herein for which an offer is being submitted.

To demonstrate the years of experience, the Offeror must identify the period of actual work performed in the Area of Expertise (i.e. from month/year to month/year).

4.1.1.2 Point Rated Technical Criteria

Total overall points available for each expert under the Area of Expertise (AE): 92 points.
Minimum overall points required for each expert to pass: 64 points

Each of the proposed resources meeting the related Area of Expertise (AE) years of experience identified under M1 above, will be evaluated and scored separately in accordance with the following evaluation criteria.

Marks are assigned to each individual and marks of more than one individual cannot be combined.

For a complete "Overview" and "Description of Tasks" for each area of expertise, reference is made to Part 7, "STANDING OFFER AND RESULTING CONTRACT CLAUSES" and "ANNEX "A", STATEMENT OF WORK".

4.1.1.2 (a) Point Rated Criteria – Proposed Resource Experience Exceeding Those Identified Under M1 above.

The Offeror will identify the resources highest number of years of experience (measured back from the date of RFSO closing).

To demonstrate the years of experience, the offeror should identify the period of actual work performed in the Area of Expertise (i.e. From month/year to month/year).

1 point to a maximum of 7 points will be scored for every year that exceeds M1.

4.1.1.2 (b) Point Rated Criteria for Membership and Affiliations Related to the AE.

For each of the proposed resources, the Offeror will identify the memberships and affiliations related to the AE.

The membership should be clearly specific to the AE; general memberships to associations whose role is not linked to the AE do not count.

Proposed resources involved in multiple sub-committees or working groups (e.g. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) technical committees, Canadian Code Commission working-groups) can count involvement in each sub-group as a separate membership or affiliation.

1 point to a maximum of 5 points will be scored for each membership or affiliation.

4.1.1.2 (c) Point Rated Criteria – Quantitative Assessment for each Area of Expertise

The Offeror must demonstrate for each of the proposed resources, experience related to the Area of Expertise (AE) by providing up to 5 relevant projects.

For each project, provide the following information:

- Project Title
- Client Organization
- Year Completed
- Overall Project Description (2 sentences)
- Your Relevant Project Contribution (2 sentences)
- Project Result(s) (2 sentences)
- Value of Project (in \$CAD)

10 points will be awarded for each relevant project.

Maximum points available for each Area of Expertise: 50

- Each project can score points where all of the information requested is provided.
- No brochures or additional written materials will be accepted other than the needed data as expressed above.
- Partial points **will not** be awarded for projects where any of the requested information is missing.
- If more than the number of requested projects are provided, only the number of requested projects in order of presentation will be evaluated.

4.1.1.2 (d) Point Rated Criteria – Qualitative Assessment for the Area of Expertise

For the AE, the Offeror is to select one of the five projects provided in the responses under the Quantitative Assessment for the AE. In 250 words or less, provide a detailed description of the project's significance, methodology, and outcomes, as well as the individuals' role in the initiatives, identifying how the project meets relevant components of the task requirements of the AE (refer to Annex "A", Statement of Work).

The detailed description will be scored according to the following rubric:

30 points: Project is relevant to the AE. It makes a significant contribution to industry's advancement in this area. A significant contribution to industry's advancement is defined as a technology that is an advancement on the highest level of development for current commercially available products or service. Methodology is logical and the outcomes are described. Individual led or played a significant leading role in the project. Description inspires confidence that future efforts will be successful.

25 points: Project is relevant to the AE. Methodology is logical and outcomes are described. Individual led or played a significant role in project. Based on the value of the project (minimum of \$ 50,000.00 CAD, applicable taxes included) and its successful outcomes, the description inspires confidence that future efforts will be successful.

20 points: Project is relevant to the AE. Methodology is logical and outcomes are described. Individual led or played a significant role in project.

0 points: Project is not relevant to AE. Methodology and outcomes are not described or limited details are provided. The role of the individual is unclear or insignificant in project.

Maximum points available: 30

Minimum points required to pass: 20

4.1.2 Financial Evaluation

SACC *Manual* Clause M0220T (2016-01-28), Evaluation of Price.

4.2 Basis of Selection

To be considered responsive, an offer must:

- (a) Meet all of the Mandatory Requirements of the bid solicitation; and
- (b) Achieve at least the minimum pass mark of 20 points under the point-rated criterion at article 4.1.1.2 (d) Point Rated Criteria – Qualitative Assessment; and
- (c) Achieve at least the minimum overall pass mark of 64 points under the point-rated criteria for each individual. Marks of one individual cannot be combined with those of another.

Offers not meeting (a) and (b) and (c) above will be given no further consideration. Subject to the Offeror's compliance with the *Certifications required with the Offer* and the *Certifications Precedent to Issuance of a Standing Offer* contained in Part 5, it will be recommended to authorize the use of three lowest priced responsive offers shared in accordance with Part 1, Article 1.3 "ESTIMATED UTILIZATION" of this RFSO. In the event of a tie, the Offeror with the highest technical score will be recommended. In the event of a second tie, the proposed resource with the most years of experience identified under **M1** will be recommended.

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Offerors must provide the required certifications and additional information to be issued a standing offer.

The certifications provided by offerors to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare an offer non-responsive and will have the right to set-aside a standing offer or will declare a contractor in default if any certification made by the Offeror is found to be untrue, whether made knowingly or unknowingly during the offer evaluation period, the Standing Offer period or the contract period.

The Standing Offer Authority will have the right to ask for additional information to verify the Offeror's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Standing Offer Authority will render the offer non-responsive and result in the setting aside of the Standing Offer or constitute a default under the Contract.

5.1 Certifications Required with the Offer

Offerors must submit the following duly completed certifications as part of their offer.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all offerors must provide with their offer, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>) to be given further consideration in the procurement process.

5.2 Certifications Precedent to the Issuance of a Standing Offer and Additional Information

The certifications and additional information listed below should be submitted with the offer, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Standing Offer Authority will inform the Offeror of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the offer non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Offeror must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Federal Contractors Program for Employment Equity - Standing Offer Certification

By submitting an offer, the Offeror certifies that the Offeror, and any of the Offeror's members if the Offeror is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity ("FCP Limited Eligibility to Bid" list) available at the bottom of the page of the [Employment and Social Development Canada-Labour's](https://www.canada.ca/en/employment-social-development/canada-labour) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#s4>).

Canada will have the right to declare an offer non-responsive, or to set-aside a Standing Offer, if the Offeror, or any of the Offeror's members if the Offeror is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of issuing of a Standing Offer or during the period of the Standing Offer.

5.2.3 Additional Certifications Precedent to Issuance of a Standing Offer

5.2.3.1 Status and Availability of Resources

The Offeror certifies that, should it be issued a standing offer as a result of the Request for Standing Offer, every individual proposed in its offer will be available to perform the Work resulting from a call-up against the Standing Offer as required by Canada's representatives and at the time specified in a call-up or agreed to with Canada's representatives. If for reasons beyond its control, the Offeror is unable to provide the services of an individual named in its offer, the Offeror may propose a substitute with similar qualifications and experience. The Offeror must advise the Standing Offer 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 Offeror: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Offeror has proposed any individual who is not an employee of the Offeror, the Offeror 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 Offeror must, upon request from the Standing Offer Authority, provide a written confirmation, signed by the individual, of the permission given to the Offeror and of his/her availability. Failure to comply with the request may result in the offer being declared non-responsive.

PART 6 – SECURITY AND FINANCIAL REQUIREMENTS

6.1 Security Requirements

There is no security requirement applicable to the Standing Offer.

6.2 Financial Capability

SACC Manual clause - M9033T (2011-05-16) Financial Capability

PART 7 - STANDING OFFER AND RESULTING CONTRACT CLAUSES

A. STANDING OFFER

7.1 Offer

7.1.1 The Offeror offers to perform the Work in accordance with the Statement of Work at Annex "A".

7.2 Security Requirements

7.2.1 There is no security requirement applicable to the Standing Offer.

7.3 Standard Clauses and Conditions

All clauses and conditions identified in the Standing Offer and resulting contract(s) by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/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.

7.3.1 General Conditions

2005 (2017-06-21) General Conditions - Standing Offers - Goods or Services, apply to and form part of the Standing Offer.

7.3.2 Standing Offers Reporting

The Offeror must compile and maintain records on its provision of goods and services to Canada under contracts resulting from the Standing Offer. This data must include all purchases done by Canada, including those acquired and paid for by Canada acquisition cards.

The Offeror must provide this data in accordance with the reporting requirements detailed in Article 7.3.3 "Periodic Usage Reports - Template". If some data is not available, the reason must be indicated in the report. If no goods or services are provided during a given period, the Offeror must provide a "nil" report.

The data must be submitted on a semi-annual basis to the Standing Offer Authority.

The semi-annual reporting periods are defined as follows:

- 1st period: January 1 to June 30; and
- 2nd period: July 1 to December 31.

The data must be submitted to the Standing Offer Authority no later than ten calendar days after the end of the reporting period.

7.3.3 Periodic Usage Reports – Template

The following information is to be provided on a semi-annual basis for each call-up made pursuant to this Standing Offer.

Date of Call-up	Call-up Number	Name of Identified User	Call-up Value (Applicable Taxes extra)
			\$
			\$
			\$
Total			\$

All data fields of the report must be completed as requested. If some data is not available, the reason must be indicated in the report. If no goods or services are provided during a given period, the Offeror must still provide a "NIL" report. Failure to provide fully completed reports in accordance with the above instructions may result in the setting aside of the Standing Offer and the application of a vendor performance corrective measure.

7.4 Term of Standing Offer

7.4.1 Period of the Standing Offer

The period for making call-ups against the Standing Offer is from date of issuance of the Standing Offer to May 6, 2020.

7.4.2 Extension of Standing Offer

If the Standing Offer is authorized for use beyond the initial period, the Offeror offers to extend its offer for an additional one year period, from May 7, 2020 to May 6, 2021 under the same conditions and at the rates or prices specified in the Standing Offer.

The Offeror will be advised of the decision to authorize the use of the Standing Offer for an extended period by the Standing Offer Authority prior to the expiry date of the initial period of the Standing Offer. A revision to the Standing Offer will be issued by the Standing Offer Authority.

7.5 Authorities

7.5.1 Standing Offer Authority

The Standing Offer Authority is:

Laura Duffy
Public Works and Government Services Canada
Acquisitions Branch
Innovation Procurement Directorate (IPD)
10 Wellington Street, 4th floor
Gatineau, QC K1A 0S5
Telephone: 613-859-0462
E-mail: laura.duffy@tpsgc-pwgsc.gc.ca

The Standing Offer Authority is responsible for the establishment of the Standing Offer, its administration and its revision, if applicable. Upon the making of a call-up, the Standing Offer Authority is responsible for any contractual issues relating to individual call-ups made against the Standing Offer by any Identified User.

7.5.2 Project Authority

The Project Authority for the Standing Offer is:

The Technology Officer or its authorized representative
Natural Resources Canada (NRCan)
Policy & Planning Branch/IETS
580 Booth Street, 13th floor
Ottawa, ON K1A 0E4

The Project Authority for each resulting contract will be identified in the Call-up and is responsible for all the technical content of the Work under the resulting Contract

7.5.3 Offeror's Representative

The Offeror's Representative for the Standing Offer is:

Name: _____
Title: _____
Organization: _____
Address: _____
Telephone: ____ - ____ - ____
E-mail address: _____

7.6 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.

7.7 Identified Users

The Identified User authorized to make call-ups against the Standing Offer is the Project Authority for the Standing Offer.

7.8 Call-up Procedures

A call-up made against this Standing Offer shall form a contract only for those goods or services, or both, which have been called-up, provided always that such call-up is made in accordance with the provisions of this Standing Offer.

Call-ups made against this Standing Offer will be authorized as follows:

1. The Project Authority will provide the Offeror with a description of the Work to be performed.
2. The Offeror will submit to the Project Authority a price proposal (ie: a firm price, a ceiling price or a limitation of expenditure), and a delivery schedule for each task, with supporting details. The price of the Work to be performed will be established in accordance with the Basis of Payment attached hereto as **Annex "B"**. A ceiling price or a limitation of expenditure will be used instead of a firm price only in cases where the Work to be performed is not in sufficient detail to accurately establish a firm price.

3. The Offeror will be authorized by the Project Authority to proceed with the Work by the issuance of a duly completed and **signed** Call-up form PWGSC-TPSGC 942. A description of the Work to be performed will be appended to the form PWGSC-TPSGC 942. The Offeror must not commence any work until it has received a Call-up form PWGSC-TPSGC 942 **signed by** the Project Authority. The Offeror acknowledges that any and all work performed in the absence of a **signed** call-up will be done at its own risk, and Canada shall not be liable for payment therefor.

7.8.1 Allocation of Work

Call-ups will be issued on a proportional basis such that:

If the area of expertise has authorized three standing offers: the offeror with the lowest hourly rate receives 50 percent of the predetermined amount of the work, the second lowest hourly rate receives 30 percent of the predetermined amount of the work and the 3rd lowest hourly rate receives 20 percent of the predetermined amount of the work;

If the area of expertise has authorized two standing offers: the offeror with the lowest hourly rate receives 60 percent of the predetermined amount of the work and the second lowest hourly rate receives 40 percent of the predetermined amount of the work;

If the area of expertise has authorized one standing offer: the offeror will receive 100 percent of the predetermined amount of the work.

Call-up activities will be monitored to ensure that call-ups are allocated in accordance with the predetermined work distribution specified herein.

The same usage as mentioned above will apply to any extension period exercised.

7.9 Call-up Instrument

The Work will be authorized or confirmed by the Identified User(s) using the duly completed form identified below.

Call-ups must be made by Identified Users' authorized representatives under the Standing Offer and must be for services included in the Standing Offer at the prices and in accordance with the terms and conditions specified in the Standing Offer.

The following form can be used and is available on the [PWGSC Forms Catalogue](#) website:

- PWGSC-TPSGC 942 Call-up Against a Standing Offer

Or

An equivalent form or electronic call-up document which contains at a minimum the following information:

- standing offer number; and
- statement that incorporates the terms and conditions of the Standing Offer; and
- description and unit price for each line item; and
- total value of the call-up before taxes; and
- point of delivery; and
- confirmation that funds are available under section 32 of the Financial Administration Act; and
- confirmation that the user is an Identified User under the Standing Offer with authority to enter into a contract.

7.10 Limitation of Call-ups

Individual call-ups against the Standing Offer must not exceed \$80,000.00 (Applicable Taxes included).

7.11 Financial Limitation

The total cost to Canada resulting from call ups against the Standing Offer must not exceed the sum of \$(*to be determined*) CAD (Applicable Taxes excluded) unless otherwise authorized in writing by the Standing Offer Authority. The Offeror must not perform any work or services or supply any articles in response to call ups which would cause the total cost to Canada to exceed the said sum, unless an increase is so authorized.

The Offeror must notify the Standing Offer Authority as to the adequacy of this sum when 75 percent of this amount has been committed, or four months before the expiry date of the Standing Offer, whichever comes first. However, if at any time, the Offeror considers that the said sum may be exceeded, the Offeror must promptly notify the Standing Offer Authority.

7.12 Priority of Documents

If there is a discrepancy between the wordings 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.

- a) the call up against the Standing Offer, including any annexes;
- b) the articles of the Standing Offer;
- c) the general conditions 2005 (2017-06-21), General Conditions - Standing Offers - Goods or Services;
- d) the general conditions 2040 (2018-06-21), General Conditions - Research and Development;
- e) Annex A, Statement of Work;
- f) Annex B, Basis of Payment;
- g) the Offeror's offer dated ____.

7.13 Certifications and Additional Information

7.13.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Offeror with its offer or precedent to issuance of the Standing Offer (SO), and the ongoing cooperation in providing additional information are conditions of issuance of the SO and failure to comply will constitute the Offeror in default. Certifications are subject to verification by Canada during the entire period of the SO and of any resulting contract that would continue beyond the period of the SO.

7.13.2 SACC Manual Clauses

M3020C (2016-01-28) Status and Availability of Resources

7.14 Applicable Laws

The Standing Offer and any contract resulting from the Standing Offer must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____.

7.15 Transition to an e-Procurement Solution (EPS)

During the period of the Standing Offer, Canada may transition to an EPS for more efficient processing and management of individual call-ups for any or all of the SO's applicable goods and services. Canada reserves the right, at its sole discretion, to make the use of the new e-procurement solution mandatory.

Canada agrees to provide the Offeror with at least a three-month notice to allow for any measures necessary for the integration of the Offer into the EPS. The notice will include a detailed information package indicating the requirements, as well as any applicable guidance and support.

If the Offeror chooses not to offer their goods or services through the e-procurement solution, the Standing Offer may be set aside by Canada.

B. RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from a call-up against the Standing Offer.

7.1 Statement of Work

The Contractor must perform the Work described in the call-up against the Standing Offer.

7.2 Standard Clauses and Conditions

7.2.1 General Conditions

2040 (2018-06-21), General Conditions - Research and Development, apply to and form part of the Contract.

7.2.2 SACC Manual Clauses

K3410C (2015-02-25) Canada to Own Intellectual Property Rights in Foreground Information

7.3 Term of Contract

7.3.1 Period of the Contract

The period of the Contract is from date of Contract to May 6, 2020 inclusive.

7.3.2 Delivery Date

Delivery must be completed in accordance with the call-up against the Standing Offer.

7.4 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.

7.5 Payment

7.5.1 Basis of Payment

The Basis of Payment attached hereto as **Annex "B"** must be used to price any call-up made pursuant to this Standing Offer.

Depending on the type of call-up, one of the following will apply:

- (a) For a Firm Price Call-up: In consideration of the Contractor satisfactorily completing all of its obligations under the call-up, the Contractor will be paid the firm price stipulated in the call-up, calculated in accordance with **Annex "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 Specifications will be authorized or paid to the Contractor unless such design changes, modifications or interpretations have been approved, in writing, by the Standing Offer Authority prior to their incorporation into the Work.

- (b) For a Call-up subject to a Ceiling Price: The Contractor will be paid its costs reasonably and properly incurred in the performance of the Work under the call-up, to the ceiling price specified in the call-up, which must be established in accordance with **Annex "B"**.

The ceiling price is subject to downward adjustment so as not to exceed the actual charges and costs reasonably incurred in the performance of the Work and computed in accordance with the Basis of Payment specified in the call-up.

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 Specifications will be authorized or paid to the Contractor unless such design changes, modifications or interpretations have been approved, in writing, by the Standing Offer Authority prior to their incorporation into the Work.

- (c) For a Call-up subject to a Limitation of Expenditure: The Contractor will be paid its costs reasonably and properly incurred in the performance of the Work under the call-up, in accordance with the Basis of Payment specified in the call-up, which must be established in accordance with **Annex "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 Specifications will be authorized or paid to the Contractor unless such design changes, modifications or interpretations have been approved, in writing, by the Standing Offer Authority prior to their incorporation into the Work. The Contractor shall not be obliged to perform any work or provide any service that would cause the total liability of Canada to be exceeded without the prior written approval of the Standing Offer Authority. The Contractor shall notify the Standing Offer Authority, in writing, as to the adequacy of this sum when:

- (i) it is 75 percent committed, or
- (ii) four months prior to the call-up delivery date, or
- (iii) if the Contractor considers the funds provided in the call-up are inadequate for the completion of the Work,

whichever comes first.

In the event that the notification refers to inadequate funds, the Contractor must also provide to the Standing Offer Authority, in writing, an estimate for the additional funds required. Provision of such notification and estimate for the additional funds does not increase Canada's liability.

7.5.2 Method of Payment

Payments will be made not more frequently than once a month, provided that:

- (a) an invoice is submitted to Canada in accordance with the clause "Invoicing Instructions" hereafter; and
- (b) the invoice is approved by the Project Authority.

7.5.2.1 Firm Price Call-Ups

Depending on the method of payment specified in each individual "Firm Price" call-up, one of the following two clauses will apply:

Single Payment

Canada will pay the Contractor upon completion and delivery of the Work in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract; and
- b. all such documents have been verified by Canada; and
- c. the Work delivered has been accepted by Canada.

- Or -

Milestone Payments

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the call-up and the payment provisions of the Contract if all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

7.5.2.2 Call-Ups Subject to a Ceiling Price or a Limitation of Expenditure

Depending on the method of payment specified in each individual "Ceiling Price" or "Limitation of Expenditure" call-up, one of the following two clauses will apply. Backup documentation (time sheets, receipts) must be provided to support the invoice.

Single Payment

Canada will pay the Contractor upon completion and delivery of the Work in accordance with the payment provisions of the call-up if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the call-up;
- b. all such documents have been verified by Canada;
- c. the Work delivered has been accepted by Canada.

- Or -

Progress Payments

1. Canada will make progress payments in accordance with the call-up Basis of Payment provided that the invoice is supported by back-up documentation as specified in the call-up and the Standing Offer.
2. The balance of the amount payable must be paid upon satisfactory completion of the Work and upon the delivery and acceptance of all deliverables, provided that a final invoice for such payment is submitted.
3. Progress payments must be regarded as interim payments only and Canada shall have the right to conduct interim cost/time verifications or audits and to make adjustments from time to time during the performance of the Work. Any overpayment resulting from such progress payments or otherwise must be refunded promptly to Canada.
4. Payment by Canada to the Contractor for the Work must be made:
 - (a) in the case of a progress payment other than the final payment, within thirty days following the date of receipt of an invoice submitted in accordance with the instructions specified herein;

- (b) in the case of a final payment, within thirty days following the date of receipt of a final invoice submitted in accordance with the instructions specified herein, or within thirty days following the date on which the Work is completed, whichever date is the later.
5. If Canada has any objection to the form of the invoice, within fifteen days of its receipt, Canada shall notify the Contractor of the nature of the objection. "Form of the invoice" means an invoice which contains or is accompanied by such substantiating documentation as Canada requires. Failure by Canada to act within fifteen days will only result in the date specified in subsection 4 of this clause to apply for the sole purpose of calculating interest on overdue accounts.

7.5.3 SACC Manual Clauses

C3015C (2017-08-17) Exchange Rate Fluctuation Adjustment

7.6 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice has been completed.
2. Invoices must be distributed as follows:
 - (a) An electronic copy to the Project Authority identified in the resultant Standing Offer for certification and payment; and
 - (b) An electronic copy to be forwarded to the Standing Offer Authority identified under the section entitled "Authorities" of the Standing Offer.

7.7 Insurance

SACC Manual Clause G1005C (2016-01-28) Insurance – No Specific Requirement

ANNEX "A"

STATEMENT OF WORK

Background

The Housing, Buildings and Communities and other groups of Canmet ENERGY-Ottawa (CE-O) of Natural Resources Canada (NRCan), are extensively involved in research and development, demonstration and dissemination activities related to the residential stock, both domestically and internationally. The various activities seek to commercialize energy-efficient and environmentally friendly technologies and systems to increase overall efficiency, ensure healthy environments and accelerate their adoption in the marketplace. Projects and programs carried out by CE-O have contributed to Canada being recognized as being one of the leaders in energy-efficient construction.

The success of research conveyed to the building industry and the public is in part based on the use of various mechanism/products and services to suit targeted audiences. For example, demonstration projects such as the Advanced Houses Program (1990's) have led to increased public awareness on innovative housing features and to direct technology transfer to builders, designers and housing component manufacturers. The Advanced Integrated Mechanical Systems (AIMS) initiative pooled the financial and technical resources of both government and private sector stakeholders towards the development of integrated mechanical systems, known as ēKOCOMFORT™ products, now being field-tested. The creation of user-friendly software tools for the industry (e.g., HOT2000, HOT2 XP, EE4) reflects the need by stakeholders (e.g., utilities, builders and consulting profession) for tools that permit the assessment of innovative housing components in a cost effective manner. SBC's technical input and expertise to various agencies (e.g., R-2000 Initiative) and its involvement in collaborative projects (e.g. with the National Research Council, Canada Mortgage and Housing Corporation, Public Works & Government Services Canada) provide opportunities for shared resources towards building research of mutual interest.

Strong linkages with national and international associations have been established to ensure continuing Canadian influence in the building area. Proactively, the SBC initiated the Super E program, to encourage the export of Canadian products, technologies and services to residential markets via Super E Houses that meet R-2000 based technical criteria while respecting local codes, cultural tastes and housing trends. Japan was first targeted in the mid-90's and following its success, more recently, Super E is promoted in the United Kingdom with future plans for other European countries as well as emerging markets such as Mexico.

The execution of such a wide array of activities in a timely and cost-effective manner requires in part the availability of expertise for specific projects.

General Context – Active Solar Thermal Systems

Description

The Solar Thermal R&D Program within NRCan is the lead program within the Federal Government for the development of solar thermal technologies in Canada. The primary objective of the program is to accelerate the development and commercialization of solar thermal energy technologies which have significant potential to be more cost-effective, efficient, and less polluting than conventional technologies.

These areas of expertise in the standing offer will establish an approved list experts on solar thermal technologies and related specialties to provide professional services to CanmetENERGY-Ottawa, in support of activities related to solar thermal research, development, and demonstration projects for Natural Resources Canada.

Category 40: Active Solar Thermal Systems - Thermo-Chemical Storage Materials Research and Development (R&D)

Description task list:

Potential tasks in this area of expertise include:

- Assessing technical and economic market potential for compact thermo-chemical materials (TCM's) for solar seasonal storage applications in Canada and abroad
- Developing optimum integration strategies, configurations and controls for solar seasonal storage systems using TCM's
- Developing TCM reactor designs for Canadian retrofit and new home applications
- Carrying out construction and testing of prototype TCM reactor and heat exchange systems
- Developing linkages with manufacturers, utilities, energy service providers, industry associations and Provinces on collaborative initiatives to accelerate TCM development for solar seasonal storage applications
- Participating on various Canadian and international code/standards committees (e.g., Canadian Standards Association (CSA), American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), International Standards Organization (ISO)) related to TCM storage systems and components
- Participating on International Energy Agency (IEA) Tasks related to TCM storage.

Category 43: Active Solar Thermal Systems - Monitoring and Instrumentation

Description task list:

Potential tasks in this area of expertise include:

- Specifying, implementing and installing monitoring equipment for solar thermal systems
- Developing analysis algorithms for data collected on solar thermal systems
- Managing field monitoring campaigns and assessment of solar thermal components and systems
- Upgrading of instrumentation, and measurement analysis algorithms and software at the National Solar Test Facility.
- Managing data storage, monitoring and post processing of measured data
- Implementing and managing user-friendly web displays of monitored data.

Category 44: Active Solar Thermal Systems – Industry Survey

Description task list:

Potential tasks in this area of expertise include, but not limited to:

- Developing survey documents and questionnaires to determine industry needs and future research priorities
- Developing contact list of solar thermal companies active in Canada and distributing the survey and collecting responses
- Summarizing and analyzing the data aggregated to protect confidentiality
- Obtaining third party alternative statistics data for validation of the survey results
- Preparing reports describing collected data and analysis thereof, as well as presenting the results to NRCan staff and industry as required

Category 45: Active Solar Thermal Systems - District Systems

Description task list:

Potential tasks in this area of expertise include:

- Designing and reviewing community district heating and cooling systems to optimize the use of renewable energy and in particular solar heating in new and retrofit applications
- Developing novel piping and substation designs for reducing the cost of community district heating and cooling systems
- Specifying and reviewing low cost, reliable remote energy metering for district heating and cooling systems

APPENDIX 1 to ANNEX "A"

LIST OF PROPOSED INDIVIDUALS

Multiple individuals could be proposed for an Area of Expertise.

AREA OF EXPERTISE		NAME OF PROPOSED INDIVIDUAL(S)
ACTIVE SOLAR THERMAL SYSTEMS		
40	Thermo-Chemical Storage Materials Research and Development (R&D)	
43	Monitoring and Instrumentation	
44	Industry Survey	
45	District Systems	

ANNEX "B"

BASIS OF PAYMENT

The Contractor will be paid in accordance with the following Basis of Payment for the Work pursuant to each approved Call-up against the Standing Offer. For the entire Standing Offer period, the following rates will apply. Firm all-inclusive hourly rate, Applicable Taxes extra, DDP (destination), as applicable.

CATEGORY OF EXPERTS		Firm, All-inclusive hourly rates for the initial period of the standing offer ending on May 6, 2020	Firm, All-inclusive hourly rates for the extension period of the standing offer ending May 6, 2021
ACTIVE SOLAR THERMAL SYSTEMS			
40	Thermo-Chemical Storage Materials Research and Development (R&D)	\$	the same as the initial period
43	Monitoring and Instrumentation	\$	the same as the initial period
44	Industry Survey	\$	the same as the initial period
45	District Systems	\$	the same as the initial period