

**FILE NO. 7191**  
**REQUEST FOR PROPOSALS FOR CONSULTANT SERVICES TO PROVIDE A COMMUNITY WIDE GREENHOUSE GAS INVENTORY**

Sealed proposals will be received at the Office of the Purchasing Agent, Room 303, City Hall, 795 Massachusetts Avenue, Cambridge Massachusetts 02139 until **11:00 am on Thursday, March 31, 2016 changed to April 7, 2016** for providing the following services to the City of Cambridge:

The undersigned hereby proposes to provide all labor, materials and equipment necessary to Provide Community Wide Greenhouse Gas Inventory. The consultant will work with City staff and relevant stakeholders to develop a methodology and complete the Communitywide GHG inventory. The consultant will work with City staff and relevant stakeholders to develop a methodology and complete an emissions forecast for a future year or years.

Copies of the Request for Proposal may be obtained at the Office of the Purchasing Agent on or after **Thursday, March 17, 2016 changed to Monday, March 21, 2016** 8:30 a.m. to 8:00 p.m. on Mondays, Tuesday through Thursday from 8:30 a.m. to 5:00 p.m., and Fridays from 8:30 a.m. to noon. This RFP may be downloaded from the City's website: [www.cambridgema.gov](http://www.cambridgema.gov), online services, Purchasing Bid List, Regular RFP, File No.7191. The City of Cambridge reserves the right to reject any or all proposals, waive any minor informalities in the proposal process, and accept the proposal deemed to be in the best interest of the City.

**There must be no mention of the applicant's fee in the proposal. Any mention of the fee will subject the proposal to rejection.**

Questions concerning the Request for Proposals must be submitted in writing by 11:00 a.m. on **Thursday, March 31, 2016** to **Amy L. Witts, Purchasing Agent** at the address above or by fax (617) 349-4008. Answers to questions will be posted to the website in a form of an Addendum.

**Two separate sealed envelopes, a sealed envelope containing one (1) original and five (5) copies of the non-price proposal and one electronic copy marked "Non-Price Proposal – Consultant Services for a Community Wide Greenhouse Gas Inventory" and one sealed envelope containing the price proposal form marked "Price –Proposal-Consulting Services for a Community Wide Greenhouse Gas Inventory" must be received by Amy L. Witts, Purchasing Agent, City of Cambridge, 795 Massachusetts Avenue, Cambridge, prior to **11:00 AM, Thursday, April 7, 2016**. **Failure to submit the electronic copy of the non-price proposal will automatically result in rejection.** Any proposals received after such time will not be accepted, unless the date and time has been changed by addendum. Delivery to any other office or department does not constitute compliance with this paragraph, unless the proposals are received by the Purchasing Agent by the established deadline.**

**Amy L. Witts**  
**Purchasing Agent**

**Confidentiality and Public Records Law**

All materials submitted by the vendor in response to this Request for Proposal will be opened for inspection by any person AFTER a decision for award has been made in accordance with the provisions of the Massachusetts Public Records Law and Massachusetts General Laws Chapter 30B.

**Terms and Conditions**

The terms and conditions of any contract awarded through this procurement are attached hereto and shall be affirmed by the City and selected proposer.

1. Proposals will remain in effect for a period of 90 days from the deadline for submission of proposals or until it is formally withdrawn, a contract executed or this RFP is canceled, whichever occurs first.
2. The Purchasing Agent shall cancel the contract if funds are not appropriated or otherwise made available to support continuation of performance in any fiscal year.
3. A sample contract is attached hereto. The bidder must be willing to sign the City's contract. The City will not accept a bidder's terms & conditions.
4. Rule for Award: The City will award a contract to the proposer submitting the most advantageous proposal taking into consideration the proposals Quality Requirements, Evaluation Criteria and composite ratings, references and price. Rates must remain firm or be reduced throughout the life of the contract. A Contract will be awarded within 90 days unless award date is extended by consent of all parties concerned.
5. The City of Cambridge Living Wage Ordinance is applicable. The current living wage rate is \$15.04 per hour (the ordinance is attached).
6. The successful proposer will be bound by all Terms and Conditions set forth herein and which will be incorporated into the contract awarded.
7. Each proposer must submit a completed CORI Policy form that is included herein affirming its compliance with the City's CORI Policy.
8. Each proposer must submit a completed Wage Theft Prevention Certificate that is included herein.
9. The contract period shall commence on the date of execution of the contract by the City of Cambridge and shall be in effect through December 31, 2016.

**INSTRUCTIONS TO PROPOSERS**

1. **Two separate sealed envelopes**, one sealed envelope that contains one (1) original and five (5) copies of the non-price proposal **and one electronic copy** marked “Non-Price Proposal – Consultant Services for a Community Wide Greenhouse Gas Inventory” and one sealed envelope that contains one (1) original price proposal form marked “Price Proposal – Consultant Services for a Community Wide Greenhouse Gas Inventory” must be received by the Purchasing Agent, City of Cambridge, 3<sup>rd</sup> floor City Hall prior to **11:00 AM, Thursday, April 7, 2016**. Chapter 30B requires that price proposals must be separate from technical proposals. Therefore please make no reference to price in the non-price proposal. Failure to adhere to this requirement will result in disqualification. It is the sole responsibility of the proposer to insure that the proposal arrives on time at the designated place. Parking is limited at City Hall it is strongly recommended that proposals are mailed or delivered in advanced of the due date and time. Late proposals will not be accepted.
2. The signature of the authorized official(s) must be provided on all the proposal forms. All proposals should be double -sided in conformance with the City's recycling policy.
3. The signature of the authorized official(s) should be organized and presented as directed. Accuracy and completeness are essential. The successful proposal will be incorporated into a contract; therefore, the proposer should not make claims that they are not prepared to commit themselves contractually.
4. The Price Summary form must be completed as instructed. No substitute form will be accepted. Pricing must remain firm. The bid submitted must be without conditions or exceptions.
5. Failure to answer any questions, to complete any form or to provide the documentation required will be deemed non-responsive and result in automatic rejection of the proposal unless the City determines that such failure constitutes a minor informality, as defined in Chapter 30B.
6. All interpretations of the RFP and supplemental instructions will be in the form of written addenda to the RFP specifications. Requests for clarification or any questions about information contained in the RFP should be addressed in writing to:

Amy L. Witts, Purchasing Agent  
795 Massachusetts Avenue  
Cambridge, MA 02139.

or faxed to  
(617) 349-4008

No requests or questions will be accepted after 11:00 a.m. on Thursday, March 31, 2016. **Answers to questions will be posted to the website in a form of an Addendum.**

7. Proposals must be unconditional. However, prior to the proposal opening proposers may correct, modify, or withdraw proposals by written request to , Amy L. Witts, Purchasing Agent, City of Cambridge, Room 303, City Hall, 795 Massachusetts Avenue, Cambridge, MA 02139. A letter will be sufficient for withdrawal of a proposal up the date of the proposal opening. Any correction or modification to a proposal must be submitted in writing and in a sealed envelope labeled "Energy Assessment and Study for Community Wide Greenhouse Gas Inventory - Modification to (or Withdrawal of) Proposal.

### **EVALUATIONS OF THE PROPOSALS**

All non-price proposals will be reviewed by the Evaluation Committee in accordance with M.G.L. Chapter 30B. Final selection will be based on evaluation and analysis of the information and materials required under the RFP, including information obtained by direct contact with references. The Evaluation Committee will be composed of Community Wide Greenhouse Gas Inventory stakeholders, including City staff, property owners, community organizations and educational institutions.

Proposals that meet the Quality Requirements will be reviewed for responses to the Comparative Evaluation Criteria. Each member of the Evaluation Committee will assign a rating of highly advantageous, advantageous or not advantageous to each Comparative Evaluation Criteria. Based on the Comparative Evaluation Criteria ratings, a composite rating by the Evaluation Committee will be determined for each proposal.

References will be contacted to determine if the proposer is responsive and responsible. References will be asked about their over-all impression of the proposer's quality of services performed and the timeliness of service delivery. The City reserves the right to use itself as a reference and contact references other than those submitted by the proposer.

After evaluation of the non-price proposals is complete, the price proposals will be opened. The price proposals will be evaluated and ranked by the Purchasing Agent. The contract will not necessarily be awarded to the proposal that receives the highest ranking with respect to the price proposal. The City will award the contract to only one responsive and responsible proposer submitting the most advantageous proposal taking into consideration the proposals' quality requirements, evaluation criteria and composite ratings, references and price. Before awarding the contract, the City may request additional information from the proposer. The City reserves the right to reject any and all proposals if it determines that the criteria set forth have not been met.

**INTENT**

The City of Cambridge is seeking a consultant to complete a Community-wide Greenhouse Gas Inventory. The budget for the Consultant Services to provide a Community Wide Greenhouse Gas Inventory is \$60,000.

**BACKGROUND**

As a signatory to the Compact of Mayors, the City has committed to completing an inventory of community wide greenhouse gas emissions using the Global Protocol for Community Wide Emissions.

The community wide greenhouse gas emissions inventory will advance the City's efforts to reduce and manage climate change impacts, and will fulfill the commitments the City has made as a signatory of the Compact of Mayors. The inventory provides the necessary foundation and baseline that advances and enables Cambridge's work towards setting greenhouse gas emissions reduction targets, engaging specific sectors in actions to reduce emissions, developing a plan to reduce emissions, and tracking the community's progress towards the emission reduction targets.

**SCOPE OF WORK****DEFINE GHG INVENTORY AND FORECASTING METHODOLOGY****Develop a methodology for Cambridge's community-wide greenhouse gas inventory**

The consultant will work with City staff and relevant stakeholders to develop the methodology that will be used to complete the Communitywide GHG inventory.

The inventory methodology shall comply with the Global Protocol for Community Wide Emissions. Additional methodologies to support the tracking of City's Climate Protection Action Committees goals and objectives related to emissions tracking and reductions will also be developed if not sufficiently addressed by the Global Protocol. These goals and objectives can be found in the appendix.

The methodology should also be replicable by any professional with GHG inventory experience, and based on the consultants identification and evaluation of the most reliable, accurate and appropriate data sources available. Taking into consideration the availability of the most reliable, accurate, and appropriate data sources, the consultant will advise and work with the City to select the baseline year for which the inventory will be completed, and the boundaries for the inventory.

The methodology will identify the activity data, emissions factors, assumptions and quantification tools used for the purpose of calculating emissions. Where Cambridge specific activity data is not available, the methodology should identify and use appropriate scaling factors to account for the City's portion of emissions causing activity.

When available, the City will provide the consultant with a list of any contacts with expertise, or data sources, for specific emissions sources. However, the Consultant is expected to be able to develop the contacts and data sources needed to complete the inventory. The Consultant will use and incorporate the data and methodology used for the City's municipal operations GHG inventory into the Communitywide GHG inventory. More information on the Municipal GHG inventory can be found in the verification report included in the appendix.

All data sources, emissions factors, assumptions and quantification tools should be non-proprietary, and be able to be reasonably procured by the City for the purpose of updating the inventory.

The methodology for the inventory will be documented in detail to enable verification of the inventory and future updates. The documentation of the methodology should include, but is not limited to, a detailed list of emissions sources included, data sources and key contacts for each emissions source, any scaling factors needed, emissions factors, and any assumptions being made.

**Develop a methodology for forecasting Cambridge's community-wide GHG emissions**

The consultant will work with City staff and relevant stakeholders to develop the methodology that will be used to complete an emissions forecast for a future year or years.

The methodology should also be replicable by any professional with GHG forecasting experience, and based on the consultants identification and evaluation of the most reliable, accurate and appropriate data sources available. The consultant will identify influential variables that will affect GHG emission in the forecast year (e.g. population & sector growth, vehicle miles traveled, City policy, projects and goals, and emission trends), and will at minimum refer to City growth projections and the Metropolitan Area Planning Council growth projections. Information on select City policy, projects and goals can be found in the appendix.

Taking into consideration the availability of the most reliable, accurate, and appropriate data sources, the consultant will advise and work with the City to select the year or years for which forecast emissions will be calculated. The boundaries and emissions categories for the forecast should align with the emissions inventory.

Forecasts will be developed for a business as usual scenario, with no local policy influence, and for a scenario that includes estimated reductions from local policy, including, but not limited to:

- Net Zero Action Plan
- Climate Protection Action Committee Goals and Objectives
- Environmental and Transportation Planning Division Strategic Goals and Objectives

Where Cambridge specific data is not available for influential variables, the methodology should identify and use appropriate scaling factors to account for the City's portion of emissions causing activity.

All data sources, emissions factors, assumptions and quantification tools should be non-proprietary, and be able to be reasonably procured by the City for the purpose of updating the inventory.

The methodology for forecasting emissions will be documented in detail to enable future updates. The documentation should include, but is not limited to, a detailed list of emissions sources included, data sources and contacts for each emissions source, any scaling factors used, emissions factors used, and any assumptions made.

#### **COMPLETE COMMUNITY WIDE GHG INVENTORY AND FORECAST**

The community GHG inventory will be completed per the methodology developed. At minimum it will include all stationary energy use within the City's geographic boundary, transportation emissions per the boundaries determined during development of the methodology, and emissions from waste (including wastewater) disposed of outside City boundaries.

The forecast emissions will be completed per the methodology developed. Assumptions for this forecast will be compatible with the City and demographic, economic, and transportation network projections from the Metropolitan Area Planning Council and

#### **Data Collection**

The consultant will collect the underlying activity data, energy use data, emissions factors, forecast variables and scaling factors needed to calculate community wide emissions for the emissions inventory and for the emissions forecast. The consultant will work with relevant stakeholders to collect the data needed to complete the inventory (e.g. the utilities that serve Cambridge, owners of cogeneration plants, local planning and transportation agencies). The City will review the data needs and provide assistance in data collection and management as needed.

**Data Analysis**

The Consultant will calculate total activity data and emissions for the emissions inventory baseline year and for the forecast year, per the methodologies developed. Emissions will be calculated by the categories defined in the methodologies, as well as by total emissions by scope.

Calculations for the inventory and forecast must be completed using non-proprietary methods, and all data sources, assumptions and calculation equations and outputs will be made available to the City. Unless agreed to by the City, the consultant shall complete the analysis using Microsoft Excel, or a cloud based data management and analysis software that can be reasonably procured by the City.

Spreadsheets and other data management tool outputs used for the analysis will be provided to the City, unless otherwise agreed to by the City. All documents will be well organized, clearly named, and will be readily followed by a knowledgeable user. Any formulas in spreadsheets will not contain embedded data or conversion factors, but will instead refer to cells containing such information. As much as is possible, spreadsheets will be created to have one raw numerical value entered only once, with subsequent use of the value referencing the original cell with the raw value.

**GHG EMISSIONS INVENTORY AND FORECAST REPORT****Create a community-wide GHG emissions inventory and forecast report**

The report will meet the requirements of the Global Protocol for Community Wide Protocol, reporting emissions by scope, sector, sub-sector and fuel type. It will use text and graphics to describe the methodology and findings of the analysis, including the underlying activity data and the total resulting emissions. The report should include a 1-5 page summary that is suitable for the general public.

Report shall be delivered in PDF as well as a single MS Word document with embedded unlinked graphics as needed. Consultant shall provide clear indication of the location of data underlying any graphics in order that City staff are readily able to reproduce or modify graphics as needed.

**Manage inventory and forecast data in Compact of Mayor reporting tools**

The consultant will either enter community inventory and forecast data into reporting tools used by the Compact of Mayors, or facilitate and assist with the entry of data by a City staff.

**PROJECT MANAGEMENT**

The consultant will maintain regular communications with the City's project manager on protocol decisions, information and data needs and concerns, and project progress. During the course of the project, the Consultant will be available to give three presentations during regular meeting times of City committees and organizations that work on climate change and greenhouse gas emissions. During the meetings, the consultant will give a presentation on the project status and be available to answer technical questions. The consultant will also be available to meet with other consultants that are working on related City projects and studies, including the City's Net Zero Action Plan, the Energy Assessment and Study for the Kendall Square EcoDistrict, the Municipal Facilities Capital Improvement Plan, and the Envision Cambridge Citywide Plan.

The Consultant will hold training sessions (no less than two) for City staff on how to update the inventory.

All documents produced per the scope of work will be well organized, clearly named, and readily followed by a knowledgeable user.

**CONSULTANT CAPABILITIES AND QUALIFICATIONS**

The City is seeking respondents who have experience conducting similar GHG analyses and reports for other municipalities. The City is looking to provide the community with a robust and understandable GHG emissions report. To this end, the Consultant should be capable of producing both sound analysis and high-quality reporting materials.

Consideration will be given to respondents' demonstrated ability to transfer knowledge to municipal clients in a way that has allowed for successful updating of the initial GHG inventory.

The scope of services does not include the development of GHG reduction strategies. However, respondents are encouraged to demonstrate in their responses how their approach to the baseline inventory and projections may provide advantages in future phases of the climate change planning process.

- Previous experience with GHG inventories in New England.
- Previous experience in Massachusetts.
- Previous experience completing Community wide GHG inventories.
- Familiarity and experience with GHG inventory methodologies. **Diploma or training from the Greenhouse Gas Management Institute is encouraged.**
- Familiarity and experience with data collection and data analysis at various scales needed to complete the community GHG inventory, including at the utility or agency, municipal, state and national level.
- Demonstrated ability to document project methodologies and manage data.
- Demonstrated ability to create high quality reporting materials.

**PERIOD OF PERFORMANCE**

The inventory should be completed by December of 2016. It should commence as soon as the contract is signed (anticipated to be no later than June 2016) to allow for long lead times needed to collect the appropriate data from utilities, regional and state sources/agencies, and other entities outside the City.

**PLACE OF PERFORMANCE**

The consultant should be able to travel to the City of Cambridge as needed per the scope of work.

**DELIVERABLES**

The proposer shall consider the items included in the Scope of Work as the deliverables for this project.

- Community wide GHG inventory methodology
- Community wide GHG forecast methodology
- Community wide GHG inventory data and analysis
- Community wide GHG forecast data and analysis
- Community wide GHG inventory report
- Community wide GHG forecast report
- Three presentations during City committee meetings
- Project management per the scope of work
- Full documentation of how the project was carried out, including but not limited to...
  - key assumptions
  - data sources and data inputs
  - emission factors
  - spreadsheets and other software tools that were used
  - other documentation that was created in the course of carrying out the project.

**This area is intentionally left blank.**

**PROPOSAL SPECIFICATION AND PREPARATION**

All information in the proposal should be organized and presented as directed below. Accuracy and completeness are essential. The successful proposal will be incorporated into a contract. To expedite the evaluation of proposals, it is essential that the proposer strictly adhere to the instructions below. Failure to answer any question, to complete any form, or to provide the documentation required will be deemed non-responsive and result in automatic rejection of the bid unless the City determines that such failure constitutes a minor informality, as defined in Chapter 30B.

A proposal may be deemed to be non - responsive, at the Purchasing Agent's discretion, if the proposer fails to comply with the following instructions.

**INTRODUCTION**

The introductory portion of the proposal should provide a straightforward and concise description of the proposal's commitment and ability to perform the services described in the scope of work.

It must also include a letter of Transmittal signed by the individual authorized to bind the proposer contractually. The letter must include: the name of the individual(s) who is/are authorized to negotiate and sign a contract on the proposer's behalf; the name, title, address and telephone number of the individual(s) who can supply additional information and a brief description of the overall services proposed. The signature of the authorized official (s) must be provided on all the proposal forms. All proposals should be double sided in conformance with the City's recycling policy.

**QUALITY REQUIREMENTS**

The Quality Requirements can be found on page13 of this document. Please complete the Quality Requirements form and include in the non-price proposal. A no response or a failure to respond to any of the quality requirements will result in a rejection of your bid.

**PROPOSAL**

The proposal should respond to the Scope of Services above.

**OTHER PROPOSAL SUBMISSION DOCUMENTS**

The following documents must be submitted with your non-price proposal.

**Professional Qualifications**

The proposer should describe its management capabilities in its field relevant to this RFP. This section should include the names and professional qualifications of any employee, staff, or team member who will have primary responsibility for executing this Study. Please provide a statement as to the availability of staff performing all services.

**References**

Please provide a list of three references. Two of the references must be from customers for which the proposer provided services similar to those outlined in the RFP within the past three years. One reference must be a client that is no longer an active customer of the proposer.

Include the name, contact person, his/her title, address and telephone number. In addition, the City reserves the right to use itself as a reference to determine the proposer's responsiveness and responsibility, and reserves the right to call current or former clients not listed as a reference. A proposal may be rejected on the basis of one or more references reporting poor past performance by the bidder.

**Relevant Experience**

Please describe the proposer's direct experience providing consultant services similar to those described in the Scope of Work.

**State Office of Minority and Women Business Assistance Certification (SOMWBA)**

If applicable

**Anti-collusion and Tax Compliance Certification**

A fully executed copy of the form must be submitted. The form can be found on page 17 of this document.

**Cori Compliance Form**

A CORI Compliance Form can be found on page 19 of this document.

**Wage Theft Certification**

The Wage Theft Certificate can be found on page 24 through 25.

**Other**

Copies of any legal document affecting the financial status of the company that has been filed with any state or federal court.

**PRICE PROPOSAL FORM**

The Price Proposal form can be found on page 17 of this document. This form must be completed as instructed. No substitute form will be accepted. Pricing must remain firm throughout the contract. **The Price Proposal form must be submitted separate from the non-price proposal, as described above. The proposer should make no reference to pricing, in any other part of the proposal. Failure to adhere to this may result in disqualification of the proposal.**

This area is intentionally left blank.

**QUALITY REQUIREMENTS**

**In order for a proposal to receive further consideration the proposer must unconditionally check “Yes” to each Quality Requirement below. The City shall reject in its entirety the proposal of any proposer who fails to check “Yes” or who modifies, qualifies or limits its affirmative response in any way.**

**Circle Yes or No for each of the following requirements.**

- 1. The consultant has completed at least five (5) GHG inventories.

YES NO

- 2. The consultant has completed at least two (2) community wide GHG inventories.

YES NO

- 3. The consultant has completed at least two (2) emissions forecasts.

YES NO

- 4. Consultant has produced at least three (3) documents on project methodologies and data management.

YES NO

- 5. The consultant has completed at least two (2) data collection and analysis projects in Massachusetts.

YES NO

This area is intentionally left blank.

**COMPARATIVE EVALUATION CRITERIA**

Responses to this Request for Proposals will also be evaluated according to the following criteria, which are intended to assist the City in evaluating the proposer's qualifications. Responses to the following areas should be brief, yet complete.

Each responsive and responsible proposal shall be assigned a composite rating using the categories of "highly advantageous", "advantageous", or "not advantageous."

**1. Demonstrated experience using the Global Protocol for Community Wide Emissions**

**Highly Advantageous:** To receive a highly advantageous rating the respondent shall be able to provide three (3) examples of GHG inventories completed using the Global Protocol for Community Wide Emissions.

**Advantageous:** To receive an advantageous rating, the respondent shall be able to provide at least one (1) example of a GHG inventory completed using the Global Protocol for Community Wide Emissions.

**Not Advantageous:** To receive a not advantageous rating, the respondent will not be able to provide an example of a GHG inventory completed using the Global Protocol for Community Wide Emissions.

**2. Demonstrated experience collecting and analyzing energy and energy emissions data.**

**Highly Advantageous:** To receive a highly advantageous rating the respondent shall be able to provide three (3) examples of completed projects that included the collection and analysis of community scale energy use and emissions.

**Advantageous:** To receive an advantageous rating, the respondent shall be to provide one (1) example of a completed project that included the collection and analysis of community scale energy use and emissions.

**Not Advantageous:** To receive a not advantageous rating, the respondent will not be able to provide an example of a completed project that included the collection and analysis of community scale energy use and emissions

**3. Demonstrated experience collecting and analyzing transportation and transportation emissions data.**

**Highly Advantageous:** To receive a highly advantageous rating the respondent shall be able to provide three (3) examples of completed projects that included the collection and analysis of community scale transportation activity data and emissions.

**Advantageous:** To receive an advantageous rating, the respondent shall be able to provide one (1) example of a completed project that included the collection and analysis of community scale transportation activity data and emissions.

**Not Advantageous:** To receive a not advantageous rating, the respondent shall not be able to provide an example of a completed project that included the collection and analysis of community scale transportation activity data and emissions.

**4. Demonstrated experience collecting and analyzing waste and waste emissions data.**

**Highly Advantageous:** To receive a highly advantageous rating the respondent shall be able to provide three (3) examples of completed projects that included the collection and analysis of community scale waste data and emissions.

**Advantageous:** To receive an advantageous rating, the respondent shall be able to provide one (1) example of a completed project that included the collection and analysis of community scale waste data and emissions.

**Not Advantageous:** To receive a not advantageous rating, the respondent shall not be able to provide an example of a completed project that included the collection and analysis of community scale waste data and emissions.

**5. Demonstrated experience working with relevant stakeholders in Cambridge.**

**Highly Advantageous:** To receive a highly advantageous rating, the respondent shall have demonstrated ability to collect data from Massachusetts specific stakeholders including Eversource, Veolia, the State RMV, the MAPC, and/or the Massachusetts DEP.

**Advantageous:** To receive an advantageous rating, the respondent shall have demonstrated ability to collect data from utility companies, local and state agencies, and local planning organizations.

**Not Advantageous:** To receive a not advantageous rating, the respondent shall not be able to demonstrate an ability to collect data from relevant data sources.

**6. Demonstrated experience with forecasting emissions data.**

**Highly Advantageous:** To receive a highly advantageous rating, the respondent shall be able to provide three (3) examples of completed community wide emissions forecasts.

**Advantageous:** To receive an advantageous rating, the respondent shall to provide one (1) example of a completed community wide emissions forecast.

**Not Advantageous:** To receive a not advantageous rating, the respondent shall not be able to provide an example of a completed community wide emissions forecast.

**7. Demonstrated ability to create high quality emissions reports, graphics and methodology documentation.**

**Highly Advantageous:** To receive a highly advantageous rating, the respondent shall be able to provide three (3) examples of emissions inventory reports that include graphics and methodology documentation.

**Advantageous:** To receive an advantageous rating, the respondent shall be able to provide one (1) example of emissions inventory reports that include graphics and methodology documentation.

**Not Advantageous:** To receive a not advantageous rating, the respondent shall not be able to provide an example of an emissions inventory report that include graphics and methodology documentation.

**8. Demonstrated ability to identify and use non-proprietary GHG inventory management and analysis tools.**

**Highly Advantageous:** To receive a highly advantageous rating, the respondent shall be able to provide two (2) examples of a GHG inventory and/or forecast project completed using non-proprietary tools and methodologies.

**Advantageous:** To receive an advantageous rating, the respondent shall be able to provide one (1) example of a data collection and analysis project completed using non-proprietary tools and methodologies.

**Not Advantageous:** To receive a not advantageous rating, the respondent shall not be able to provide an example of projects completed using non-proprietary tools and methodologies.

**PRICE PROPOSAL FORM**

**This price proposal form must be submitted in a sealed envelope, separate from the technical proposal.** Failure to adhere to this instruction will result in automatic disqualification of your proposal. Price must remain firm or be reduced for the entire contract.

The total price must be complete and include all costs, including any and all estimated expenses, associated with providing the Consultant Services to provide a Community Wide Greenhouse Gas Inventory in accordance with the Scope of Work, Specifications and Deliverables including all other details referenced in this Request for Proposal.

Flat Fee \$ \_\_\_\_\_

Flat Fee in words: \_\_\_\_\_

**If Addenda issued by the City, this proposal includes addenda numbered:** \_\_\_\_\_

Signature of Individual submitting proposal: \_\_\_\_\_

Name of business: \_\_\_\_\_

Address of Bidder: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Please check one of the following and insert the requested information:

( ) Corporation, incorporated in the State of: \_\_\_\_\_

( ) Partnership. Names of partners: \_\_\_\_\_

( ) Individual \_\_\_\_\_

**THIS FORM MUST BE SUBMITTED IN A SEPARATE SEALED ENVELOPE MARKED "PRICE PROPOSAL – CONSULTANT SERVICES TO PROVIDE A COMMUNITY WIDE GREENHOUSE GAS INVENTORY"**

**ANTI-COLLUSION AND TAX COMPLIANCE CERTIFICATE**

**The undersigned certifies under penalties of perjury that this proposal has been made and submitted in good faith and without collusion or fraud with any person. As used in this certification, "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization or other group of individuals.**

As required by MGL Chapter 62C, Section 49A, the undersigned further certifies under penalty of perjury that the bidder has complied with all of the laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

**Signature:** \_\_\_\_\_

**Name of person signing proposal:** \_\_\_\_\_

**Title of officer signing for firm, if applicable:** \_\_\_\_\_

**Name of business, of applicable:** \_\_\_\_\_

**Address:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Signature of all firm partners, if applicable:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**THIS FORM MUST BE SUBMITTED WITH THE NON- PRICE PROPOSAL**

### **CORI COMPLIANCE FORM**

Persons and businesses supplying goods and/or services to the City of Cambridge (“Vendors”), who are required by law to perform CORI checks, are further required by Section 2.112.060 of the Cambridge Municipal Code to employ fair policies, practices and standards relating to the screening and identification of persons with criminal backgrounds through the CORI system. Such Vendors, when entering into contracts with the City of Cambridge, must affirm that their policies, practices and standards regarding CORI information are consistent with the policies, practices and standards employed by the City of Cambridge as set forth in the City of Cambridge CORI Policy (“CORI Policy”) attached hereto.

### **CERTIFICATION**

The undersigned certifies under penalties of perjury that the Vendor employs CORI related policies, practices and standards that are consistent with the provisions of the attached CORI Policy. **All Vendors must check one of the three lines below.**

1. \_\_\_\_\_ CORI checks are not performed on any Applicants.
2. \_\_\_\_\_ CORI checks are performed on some or all Applicants. The Vendor, by affixing a signature below, affirms under penalties of perjury that its CORI policies, practices and standards are consistent with the policies, practices and standards set forth in the attached CORI Policy.
3. \_\_\_\_\_ CORI checks are performed on some or all Applicants. The Vendor’s CORI policies, practices and standards are not consistent with the attached CORI Policy. Please explain on a separate sheet of paper.

\_\_\_\_\_  
 (Typed or printed name of person  
 signing quotation, bid or Proposal)

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 (Name of Business)

**NOTE:**

**The City Manager, in his sole discretion may grant a waiver to any Vendor on a contract by contract basis.**

**Instructions for Completing CORI Compliance Form:**

**A Vendor should not check Line 1 unless it performs NO CORI checks on ANY applicant. A Vendor who checks Line 2 certifies that the Vendor’s CORI policy conforms to the policies, practices and standards set forth in the City’s CORI Policy. A Vendor with a CORI policy that does NOT conform to the City’s CORI Policy must check Line 3 and explain the reasons for its nonconformance in writing. Vendors, who check Line 3, will not be permitted to enter into contracts with the City, absent a waiver by the City Manager.**

**THIS FORM MUST BE SUBMITTED WITH THE NON-PRICE PROPOSAL**

**ORDINANCE NUMBER 1312**

**Final Publication Number 3155. First Publication in the Chronicle on December 13, 2007.**

**City of Cambridge**

**In the Year Two Thousand and Eight**

**AN ORDINANCE**

**In amendment to the Ordinance entitled “Municipal Code of the City of Cambridge”**

Be it ordained that Cambridge Municipal Code Chapter 2.112 is hereby amended by adding a new Section 2.112.060 entitled “CORI Screening by Vendors of the City of Cambridge” as follows:

Adding after Section 2.112.050 the following new sections:

**SECTION 2.112.060**

**CORI SCREENING BY VENDORS OF THE CITY OF CAMBRIDGE**

**Sections:**

- 2.112.061 Purpose**
- 2.112.062 Definitions**
- 2.112.063 CORI-Related Standards of the City of Cambridge**
- 2.112.064 Waiver**
- 2.112.065 Applicability**

**2.112.061 Purpose**

These sections are intended to ensure that the persons and businesses supplying goods and/or services to the City of Cambridge deploy fair policies relating to the screening and identification of persons with criminal backgrounds through the CORI system.

**2.112.062 Definitions**

Unless specifically indicated otherwise, these definitions shall apply and control.

*Awarding Authority* means the City of Cambridge Purchasing Agent or designee.

*Vendor* means any vendor, contractor, or supplier of goods and/or services to the City of Cambridge.

### **2.112.063 CORI-Related Standards of the City of Cambridge**

The City of Cambridge employs CORI-related policies, practices and standards that are fair to all persons involved and seeks to do business with vendors that have substantially similar policies, practices and standards. The City of Cambridge will do business only with vendors who, when required by law to perform CORI checks, employ CORI-related policies, practices, and standards that are consistent with policies, practices and standards employed by the City of Cambridge. The awarding authority shall consider any vendor's deviation from policies, practices and standards employed by the City of Cambridge as grounds for rejection, rescission, revocation, or any other termination of the contract.

### **2.112.064 Waiver**

The City Manager may grant a waiver to anyone who or which has submitted a request for waiver if it is objectively reasonable; and the City Manager, or a delegate, shall report promptly in writing to the City Council all action taken with respect to every request for a waiver and the reasons for the decision.

### **2.112.065 Applicability**

If any provision of these sections imposes greater restrictions or obligations than those imposed by any other general law, special law, regulation, rule, ordinance, order, or policy then the provisions of these sections shall control.

In City Council January 28, 2008.

Passed to be ordained by a yea and nay vote:-

Yeas 9; Nays 0; Absent 0.

Attest:- D. Margaret Drury, City Clerk.

A true copy;

ATTEST:-

D. Margaret Drury  
City Clerk

### City of Cambridge CORI Policy

1. Where Criminal Offender Record Information (CORI) checks are part of a general background check for employment or volunteer work, the following practices and procedures will generally be followed.
2. CORI checks will only be conducted as authorized by Criminal History Systems Board (CHSB). All applicants will be notified that a CORI check will be conducted. If requested, the applicant will be provided with a copy of the CORI policy.
3. An informed review of a criminal record requires adequate training. Accordingly, all personnel authorized to review CORI in the decision-making process will be thoroughly familiar with the educational materials made available by the CHSB.
4. Prior to initiating a CORI check, the City will review the qualifications of the applicant to determine if the applicant is otherwise qualified for the relevant position. The City will not conduct a CORI check on an applicant that is not otherwise qualified for the relevant position.
5. Unless otherwise provided by law, a criminal record will not automatically disqualify an applicant. Rather, determination of suitability based on CORI checks will be made consistent with this policy and any applicable law or regulations.
6. If a criminal record is received from CHSB, the authorized individual will closely compare the record provided by CHSB with the information on the CORI request form and any other identifying information provided by the applicant, to ensure the record relates to the applicant.
7. If, in receiving a CORI report, the City receives information it is not authorized to receive (e.g. cases with dispositions such as not guilty or dismissal, in circumstances where the City is only authorized to receive convictions or case-pending information), the City will inform the applicant and provide the applicant with a copy of the report and a copy of CHSB's *Information Concerning the Process in Correcting a Criminal Record* so that the applicant may pursue correction with the CHSB.
8. If the City of Cambridge is planning to make an adverse decision based on the results of the CORI check, the applicant will be notified immediately. The applicant shall be provided with a copy of the criminal record and the City's CORI policy, advised of the part(s) of the record that make the individual unsuitable for the position and given an opportunity to dispute the accuracy and relevance of the CORI record.
9. Applicants challenging the accuracy of the criminal record shall be provided a copy of CHSB's *Information Concerning the Process in Correcting a Criminal Record*. If the CORI

record provided does not exactly match the identification information provided by the applicant, the City of Cambridge will make a determination based on a comparison of the CORI record and documents provided by the applicant. The City of Cambridge may contact CHSB and request a detailed search consistent with CHSB policy.

10. If the City of Cambridge reasonably believes the record belongs to the applicant and is accurate, then the determination of suitability for the position will be made. Unless otherwise provided by law, factors considered in determining suitability may include, but not be limited to the following:
  - (a) Relevance of the crime to the position sought;
  - (b) The nature of the work to be performed;
  - (c) Time since the conviction;
  - (d) Age of the candidate at the time of offense;
  - (e) Seriousness and specific circumstances of the offense;
  - (f) The number of offenses;
  - (g) Whether the applicant has pending charges;
  - (h) Any relevant evidence of rehabilitation or lack thereof;
  - (i) Any other relevant information, including information submitted by the candidate or requested by the City.
11. The Personnel Department will assist affected departments, in assessing the suitability of candidates in accordance with paragraph 10 a through i above, to ensure consistency, fairness, and protection of employment opportunities and the public interest.
12. The City of Cambridge will notify the applicant of the decision and the basis of the decision in a timely manner.
13. CORI information shall not be disseminated or shared with any unauthorized employees or other, but shall be maintained in confidence consistent with the obligations of law.

Revised May 5, 2007

## **WAGE THEFT PREVENTION CERTIFICATION**

In Executive Order 2016-1, the City of Cambridge established requirements for City contracts in an effort to prevent wage theft. Prospective vendors must provide the following certifications or disclosures with their bids/proposals. Failure to provide the following shall result in rejection of the bid/proposal.

### **Instructions for this form:**

A prospective vendor must check box 1 or box 2, as applicable, as well as boxes 3-5, and must sign this Form, certifying compliance with the requirements set out in this Form. This Form must be included with the bid or proposal, and for multi-year contracts must be completed annually on the contract anniversary and filed with the Purchasing Agent.

The undersigned certifies under the pains and penalties of perjury that the vendor is in compliance with the provisions of Executive Order 2016-1 as currently in effect.

### **All vendors must certify that [check either box 1 or box 2, as applicable]:**

1.  Neither this firm nor any prospective subcontractor has been subject to a federal or state criminal or civil judgment, administrative citation, final administrative determination, order or debarment resulting from a violation of G.L. c. 149, G.L. c. 151, or 29 U.S.C. 201 *et seq.* within three (3) years prior to the date of this bid/proposal submission.

**OR**

2.  This firm, or a prospective subcontractor of this firm, has been subject to a federal or state criminal or civil judgment, administrative citation, final administrative determination, order or debarment resulting from a violation of G.L. c. 149, G.L. c. 151, or 29 U.S.C. 201 *et seq.* within three (3) years prior to the date of this bid/proposal submission and such documentation is included in the bid/proposal submission.

### **In addition, all vendors must certify each of the following:**

3.  Any federal or state criminal or civil judgment, administrative citation, final administrative determination, order or debarment resulting from a violation of G.L. c. 149, G.L. c. 151, or 29 U.S.C. 201 *et seq.* imposed on this firm or on any prospective subcontractor while any bid/proposal to the City is pending and, if awarded a contract, during the term of the contract, will be reported to the Purchasing Agent or other City department within five (5) days of receiving notice.

Name of Bidder: \_\_\_\_\_

- 4.  Vendors awarded a contract that have disclosed a federal or state criminal or civil judgment, administrative citation, final administrative determination, or order resulting from a violation of G.L. c. 149, G.L. c. 151, or 29 U.S.C. 201 *et seq.* within three (3) years prior to the date of this bid/proposal, while the bid/proposal was pending, or during the term of the contract shall, upon request, furnish their monthly certified payrolls for their City contract to the Purchasing Agent for all employees working on such contract and are required to obtain a wage bond or other suitable insurance in an amount equal to the aggregate of one year's gross wages for all employees. Vendors subject to a state or federal debarment for violation of the above laws or prohibited from contracting with the Commonwealth are prohibited from contracting with the City, and upon a finding or order of debarment or prohibition, the City may terminate the contract.
  
- 5.  Notice provided by the City, informing employees of the protections of Executive Order 2016-1 and applicable local, state, and federal law will be posted by this firm in conspicuous places.

Attested hereto under the pains and penalties of perjury:

\_\_\_\_\_  
(Typed or printed name of person signing quotation, bid or proposal)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
(Name of Business)

Pursuant to Executive Order 2016-1, vendors who have been awarded a contract with the City of Cambridge must post the Massachusetts Wage and Hour Laws notice informing employees of the protections of G.L. c. 149, G.L. c. 151, and 21 U.S.C. 201 *et seq.* in conspicuous places. This notice can be found at <http://www.mass.gov/ago/docs/workplace/wage/wagehourposter.pdf>

**GENERAL TERMS AND CONDITIONS**

- LAWS:** All deliveries shall conform in every respect with all applicable laws of the Federal government, Commonwealth of Massachusetts and City of Cambridge.
- EQUAL OPPORTUNITY:** The Vendor in the performance of the contract shall not discriminate on the grounds of race, color, religious creed, national origin or ancestry, age, disability, sexual orientation, marital status, family status, military status, source of income, or sex in employment practices or in the selection or retention of subcontractors, and in the procurement of materials or rental of equipment. The City may cancel, terminate or suspend the contract in whole or in part for any violation of this paragraph
- TAXES:** Purchases made by the City are exempt from the payment of Federal excise tax and the payment of Commonwealth of Massachusetts sales tax (except for gasoline) and any such taxes must not be included in the bid prices.
- QUANTITIES:** Unless otherwise stated, the quantities set forth herein are ESTIMATES ONLY. The City reserves the right to purchase the commodity(ies) specified in any amount less than the estimated amount.
- BID PRICES:** Bid prices shall include transportation and delivery charges fully prepaid to the City of Cambridge destination. Where the unit price and the total price are at variance, the unit price will prevail.
- DELIVERY AND PACKAGING:** Deliveries must be made in such quantities as called for in the purchase order and in the manufacturer's original packages. All deliveries must be **"inside" delivery with no assistance from City personnel. Tailgate deliveries will not be accepted.** Rejected material will be returned to the vendor at the vendor's expense.
- MODIFICATION OF BIDS:** Prior to bid opening, a bidder may correct, modify or withdraw its bid by making the request in writing prior to the time and date for the bid opening. All corrections and modifications must be delivered to the Purchasing Department in a sealed envelope indicating that it contains a modification or correction of the original bid submitted for the particular commodity and indicating the time and date of the bid opening.
- REJECTION OF BIDS:** The City reserves the right to reject any and all bids if it is in best interest of the City to do so.
- AWARD OF CONTRACT:** Contract(s) will be awarded within forty-five days of the bid opening unless award date is extended by consent of all parties concerned.
- INDEMNITY:** Unless otherwise provided by law, the Vendor will indemnify and hold harmless the City against any and all liability, loss, damages, costs or expenses for personal injury or damage to real or tangible personal property which the City may sustain, incur or be required to pay, arising out of or in connection with the performance of the Contract by reason of any negligent action/inaction or willful misconduct by the Contractor, its agents, servants or employees
- TERMINATION OF CONTRACT:** Except as otherwise provided in the Articles of Agreement, the City may terminate the contract upon seven days notice.
- ASSIGNABILITY:** The Vendor shall not assign, sell, subcontract or otherwise transfer any interest in this contract without the prior written consent of the City.

**MATERIAL SAFETY DATA SHEETS:** Pursuant to M.G.L. c. 111F, ss. 8, 9, and 10, any vendor who receives a contract resulting from this invitation agrees to submit a Material Safety Data Sheet for each toxic or hazardous substance or mixture containing such substance when deliveries are made. The vendor agrees to comply with all requirements set forth in the pertinent laws above.

## Chapter 2.121

### LIVING WAGE ORDINANCE

#### Sections:

<b>2.121.010</b>	<b>Title and Purpose</b>
<b>2.121.020</b>	<b>Definitions</b>
<b>2.121.030</b>	<b>Living Wage</b>
<b>2.121.040</b>	<b>Waivers and Exceptions</b>
<b>2.121.050</b>	<b>Notification Requirements</b>
<b>2.121.060</b>	<b>Duties of covered Employers</b>
<b>2.121.070</b>	<b>Community Advisory Board</b>
<b>2.121.080</b>	<b>Enforcement</b>
<b>2.121.090</b>	<b>Severability</b>
<b>2.121.100</b>	<b>Effective Date</b>

#### **2.121.010 Title and Purpose.**

This Chapter shall be known as the "Cambridge Living Wage Ordinance". The purpose of this ordinance is to assure that employees of the City of Cambridge and employees of City contractors, subcontractors and beneficiaries of tax abatements, loans, grants, subsidies and other assistance provided by the City earn an hourly wage that is needed to support a family of four.

#### **2.121.020 Definitions.**

For the purposes of this ordinance, the term:

**(a) "Applicable Department"** means the Personnel Department for employees of the City of Cambridge, the Purchasing Department, with the advice and assistance of the appropriate department which receives the services, for Covered Employers who contract or subcontract with the City of Cambridge, the School Department for employees, contractors and subcontractors of the School Department, and the City Manager's Office for any other Person who is a Beneficiary of assistance other than a contract or subcontract.

**(b) "Assistance"** means:

(1) any grant, loan, tax incentive, bond financing, subsidy, or other form of assistance valued at least \$10,000 that an employer receives by or through the authority or approval of the

City of Cambridge, including, but not limited to, c. 121A tax abatements, industrial development bonds, Community Development Block Grant (CDBG) loans and grants, Enterprise Zone designations awarded after the effective date of this Chapter, and the lease of city owned land or buildings below market value; and

(2) any service contract, as defined herein, of at least \$10,000 with the City of Cambridge that is made with an employer to provide services pursuant to G.L.c. 30B or other public procurement laws, awarded, renegotiated or renewed after the effective date of this Chapter.

(3) any service subcontract, as defined herein, of at least \$10,000.

**(c) "Beneficiary"** means:

(1) any person who is a recipient of Assistance;

(2) any company or person that is a tenant or sub-tenant, leaseholder or sub-leaseholder of a recipient of Assistance, provided that said company or person employs at least 25 persons and occupies property or uses equipment or property that is improved or developed as a result of Assistance, after the effective date of this Chapter; and

**(d) "Covered Employer"** means the City of Cambridge or a Beneficiary of Assistance.

**(e) "Covered Employee"** means:

(1) a person employed by the City of Cambridge except for persons in those positions listed in Section 2.121.040(j) of this ordinance; and

(2) a person employed by a Covered Employer, or a person employed by an independent contractor doing business with a Covered Employer, who would directly expend any of his or her time on the activities funded by the contract or the activities for which the Beneficiary received the Assistance, except for persons in those positions listed in Section 2.121.040(j) of this ordinance..

**(f) "Living Wage"** has the meaning stated in Section 2.121.030.

**(g) "Person"** means one or more of the following or their agents, employees, servants, representatives, and legal representatives: individuals, corporations, partnerships, joint ventures, associations, labor organizations, educational institutions, mutual companies, joint-stock companies, trusts, unincorporated organizations, trustees, trustees in bankruptcy, receivers, fiduciaries, and all other entities recognized at law by the Commonwealth of Massachusetts.

**(h) "Service Contract"** means a contract let to a contractor by the City of Cambridge for the furnishing of services, to or for the City, except contracts where services are incidental to the delivery of products, equipment or commodities. A contract for the purchase or lease of goods, products, equipment, supplies or other property is not a "service contract" for the purposes of this definition.

**(i) "Service Subcontract"** means a subcontract primarily for the furnishing of services, to or for a recipient of Assistance, except where services are incidental to the delivery of products,

equipment or commodities. A contract for the purchase or lease of goods, products, equipment, supplies or other property is not a “service subcontract” for the purposes of this definition.

### **2.121.030 Living Wage.**

**(a) Applicability.** Covered Employers shall pay no less than the Living Wage to their employees.

**(b) Amount of wage.** The Living Wage shall be calculated on an hourly basis and shall be no less than \$10.00, subject to adjustment as provided herein. The Living Wage shall be upwardly adjusted each year no later than March first in proportion to the increase at the immediately preceding December 31 over the year earlier level of the Annual Average Consumer Price Index for All Urban Consumers (CPI -U) Boston-Lawrence-Salem, MA - NH, as published by the Bureau of Labor Statistics, United States Department of Labor applied to \$10.00.

**(c) No reduction in collective bargaining wage rates.** Nothing in this Chapter shall be read to require or authorize any beneficiary to reduce wages set by a collective bargaining agreement.

**(d) Cuts in non-wage benefits prohibited.** No Beneficiary will fund wage increases required by this Chapter, or otherwise respond to the provisions of this Chapter, by reducing the health, insurance, pension, vacation, or other non-wage benefits of any of its employees.

### **2.121.040 Waivers and Exceptions.**

**(a) Waivers.** A Covered Employer may request that the City Manager grant a partial or whole waiver to the requirements of this Chapter.

**(b) General Waivers.** Waivers may be granted where application of this Chapter to a particular form of Assistance is found by the City Solicitor to violate a specific state or federal statutory, regulatory or constitutional provision or provisions, and the City Manager approves the waiver on that basis.

**(c) Hardship Waivers for certain not-for-profit employers.** An employer, who has a contract with the City of Cambridge which is not subject to the provisions of G.L. c. 30B, may apply to the City Manager for a specific waiver where payment of the Living Wage by a not-for-profit Covered Employer would cause a substantial hardship to the Covered Employer.

**(d) Chapter 30B contract waivers.** Prior to issuing an invitation for bids for a procurement contract subject to the provisions of G.L. c. 30B, any Applicable Department may apply to the City Manager for a waiver of the application of the Living Wage to the contract where payment of the Living Wage by a Covered Employer would make it inordinately expensive for the City to contract for the services or would result in a significant loss of services, because the contracted work cannot be segregated from the other work of the Covered Employer.

**(e) General Waiver Request Contents.** All General Waiver requests shall include the following:

- (1) The nature of the Assistance to which this Chapter applies;
- (2) The specific or official name of the Assistance and Assistance program, the statutory or regulatory authority for the granting of the Assistance, and a copy of that authority;
- (3) The conflicting statutory, regulatory, or constitutional provision or provisions that makes compliance with this Chapter unlawful, and a copy of each such provision; and
- (4) A factual explication and legal analysis of how compliance with this Chapter would violate the cited provision or provisions, and the legal consequences that would attach if the violation were to occur.

**(f) Hardship Waiver Request Contents.** All Hardship Waiver requests shall include the following:

- (1) The nature of the Assistance to which this Chapter applies;
- (2) A detailed explanation of why payment of the Living Wage would cause a substantial hardship to the Covered Employer; and
- (3) A statement of proposed wages below the Living Wage.

**(g) Chapter 30B Contract Waiver Request Contents.** A Chapter 30B contract waiver request shall include the following:

- (1) The nature of the Assistance to which this Chapter applies;
- (2) A detailed explanation of why the contracted work cannot be segregated from the other work of the bidding Covered Employers thereby making the cost of the contract with the payment of the Living Wage inordinately expensive or would result in a significant loss of services;

**(h) Community Advisory Board review and recommendation regarding waiver requests.** The Community Advisory Board, as described in Section 2.121.070 of this ordinance, shall consider waiver requests along with their supporting documentation and analysis, and may hold a public hearing to consider the views of the public before making a recommendation to the City Manager regarding the waiver request. For a hardship waiver, the Community Advisory Board shall offer an opportunity to be heard to employees of the Covered Employer. After reviewing the recommendation of the Community Advisory Board, the City Manager may approve and grant or deny all or part of a request. The City Manager may in his or her discretion grant a temporary hardship waiver pending the hearing before the Community Advisory Board. For Chapter 30B contract waivers, the Community Advisory Board shall make its recommendation to the City Manager no more than thirty days after it is notified of the request for a Chapter 30B contract waiver.

**(i) Terms of exceptions.** If an employer is subject to this Chapter as a result of its receipt of more than one kind of Assistance covered by this Chapter, and if the City Manager grants a waiver with respect to one form of Assistance, the City Manager need not find that this Chapter is inapplicable to the employer with respect to another form of Assistance received by the employer.

**(j) Exceptions.** The following positions will be excepted from the requirement of the payment of the Living Wage upon certification in an affidavit in a form approved by the Applicable

Department and signed by a principal officer of the Covered Employer that the positions are as follows:

- (1) youth hired pursuant to a city, state, or federally funded program which employs youth as defined by city, state, or federal guidelines, during the summer, or as part of a school to work program, or in other related seasonal or part-time program;
- (2) work-study or cooperative educational programs;
- (3) trainees who are given a stipend or wage as part of a job training program that provides the trainees with additional services, which may include, but are not limited to, room and board, case management, or job readiness services.
- (4) persons working in a recognized supported employment program that provides workers with additional services, which may include, but are not limited to, room and board, case management, counseling, or job coaching:
  - (5) positions where housing is provided by the employer;
  - (6) employees who are exempt from federal or state minimum wage requirements; and
  - (7) individuals employed by the City of Cambridge where the employment of such individuals is intended primarily to provide a benefit or subsidy to such individuals, although the City is compensating them for work performed.

**2.121.050 Notification Requirements.**

All Applicable Departments shall provide in writing an explanation of the requirements of this ordinance in all requests for bids for service contracts and to all persons applying for Assistance as defined by this ordinance. All persons who have signed a service contract with the City of Cambridge or a contract for Assistance shall forward a copy of such requirements to any person submitting a bid for a subcontract on the Assistance contract.

**2.121.060 Duties of Covered Employers.**

**(a) Notification Requirements.** Covered employers shall provide each Covered employee with a fact sheet about this ordinance and shall post a notice about the ordinance in a conspicuous location visible to all employees. The fact sheet and poster shall be provided to the Covered Employer by the Applicable Department and shall include:

- (1) notice of the Living Wage amount;
- (2) a summary of the provisions of this ordinance;
- (3) a description of the enforcement provisions of the ordinance;
- (4) the name, address, and phone number of a person designated by the Applicable Department to whom complaints of noncompliance with this ordinance should be directed.

**(b) Contract for Assistance.** At the time of signing a contract for assistance with the City of Cambridge or with a Beneficiary, the contract must include the following:

- (1) the name of the program or project under which the contract or subcontract is being awarded;

- (2) a local contact name, address, and phone number for the Beneficiary;
- (3) a written commitment by the Beneficiary to pay all Covered Employees not less than the Living Wage as subject to adjustment under this ordinance and to comply with the provisions of this ordinance;
- (4) a list of Covered Employees under the contract with the employees' job titles;
- (5) a list of all subcontracts either awarded or that will be awarded to Beneficiaries with funds from the Assistance. Upon signing any subcontracts, the Covered Employer shall forward a copy of the subcontract to the Applicable Department.

**(c) Maintenance of payroll records.** Each Covered Employer shall maintain payrolls for all Covered Employees and basic records relating thereto and shall preserve them for a period of three years. The records shall contain the name and address of each employee, the job title and classification, the number of hours worked each day, the gross wages, deductions made, actual wages paid, and copies of social security wage and withholding reports, and evidence of payment thereof and such other data as may be required by the Applicable Department from time to time.

**(d) Applicable Department duties.** The Applicable Department shall cause investigations to be made as may be necessary to determine whether there has been compliance with this Ordinance. The Applicable Department shall report the findings of all such investigations to the Community Advisory Board.

**(e) Covered Employer to cooperate.** The Covered Employer shall submit payroll records on request to the Applicable Department. The Covered Employer shall permit City representatives to observe work being performed upon the work site, to interview employees and to examine the books and records relating to the payrolls being investigated to determine payment of wages.

**(f) City Assistance Reports.** Each Applicable Department shall file a City Assistance Report with the City Manager and the Community Advisory Board by July 31 of each year. The report shall include, for each Assistance package or contract approved during the preceding fiscal year:

- (1) the name of the Applicable Department (awarding agency), the name of the specific program under which the Assistance was awarded, and the origin of funds for Assistance;
- (2) a description of the purpose or project for which the Assistance was awarded;
- (3) the name, address, and phone number of a local contact person for the Covered Employer;
- (4) the total cost to the City of Assistance provided to each Beneficiary, including both face-value of Assistance, as well as revenue not collected as a result of the Assistance.

## **2.121.070 Community Advisory Board.**

**(a) Purpose.** The purpose of the Community Advisory Board shall be to review the effectiveness of this Ordinance at creating and retaining Living Wage jobs, to make recommendations to the City Manager regarding the granting of Waivers to Covered Employers, to review the

implementation and enforcement of this ordinance, and to make recommendations from time to time in connection therewith.

**(b) Composition.** The Community Advisory Board shall be composed of nine members and shall include representatives of labor unions, community organizations and the business community. All members will be appointed by the City Manager. Members of the Board shall serve a three-year term. Whenever a vacancy shall occur the City Manager shall appoint a replacement within thirty days of said vacancy.

**(c) Meetings.** The Community Advisory Board shall meet quarterly and in special session as required. All meetings of the Board shall be open to the public and will allow for public testimony on the uses of the City Assistance generally, and on specific instances of Assistance or proposed Assistance as received or sought by individual enterprises.

**(d) Conflict of Interest.** No member of the Community Advisory Board shall participate in any proceeding concerning a Beneficiary, a Covered Employer or a Covered Employee, or applicant for waiver or exemption, if the member or any member of his or her immediate family has a direct or indirect financial interest in the outcome of said proceeding.

#### **2.121.080 Enforcement.**

**(a) Enforcement powers.** In order to enforce this Chapter, the Applicable Department may, with the approval and assistance of the City Solicitor, issue subpoenas, compel the attendance and testimony of witnesses and production of books, papers, records, and documents relating to payroll records necessary for hearing, investigations, and proceedings. In case of failure to comply with a subpoena, the City may apply to a court of appropriate jurisdiction for an order requiring the attendance and testimony of witnesses and the productions of books, papers, records, and documents. Said court, in the case of a refusal to comply with any such subpoena, after notice to the person subpoenaed, and upon finding that the attendance or testimony of such witnesses or the production of such books, papers, records, and documents, as the case may be, is relevant or necessary for such hearings, investigation, or proceedings, may issue an order requiring the attendance or testimony of such witnesses or the production of such documents and any violation of the court's order may be punishable by the court as contempt thereof.

**(b) Complaint procedures.** An employee who believes that he or she is a Covered Employee or an applicant for a position to be filled by a Covered Employee who believes that his or her employer is not complying with requirements of this Chapter applicable to the employer may file a complaint with the Applicable Department or with the Community Advisory Board. Complaints of alleged violations may also be filed by concerned citizens or by the City Council. Complaints of alleged violations may be made at any time, but in no event more than three years after the last date of alleged violation, and shall be investigated promptly by the Applicable Department. Statements written or oral, made by an employee, shall be treated as confidential and shall not be disclosed to the Covered Employer without the consent of the employee.

**(c) Investigations and hearings.** The Applicable Department shall investigate the complaint, and may, in conjunction with the City Solicitor, and in accordance with the powers herein granted, require the production by the employer of such evidence as required to determine compliance. Prior to ordering any penalty the applicable Department shall give notice to the employer and conduct a hearing. If at any time during these proceedings, the employer voluntarily makes restitution of the wages not paid to the employee making the complaint and to any similarly situated employees, by paying all back wages owed plus interest at the average prior year Massachusetts passbook savings bank rate, or otherwise remedies the violation alleged if the violation involves matters other than wages, then the Applicable Department shall thereafter dismiss the complaint against the employer.

**(d) Remedies.** In the event that the Applicable Department, after notice and hearing, determines that any Covered Employer has failed to pay the Living Wage rate or has otherwise violated the provisions of this Chapter, the Applicable Department may order any or all of the following penalties and relief:

(1) Fines up to the amount of \$300 for each Covered Employee for each day that the Covered Employer is in violation of this Ordinance, except if the violation was not knowing and willful, then the total fine shall not exceed the amount of back wages plus interest owed;

(2) Suspension of ongoing contract and subcontract payments;

(3) Ineligibility for future City Assistance for up to three years beginning when all penalties and restitution have been paid in full. In addition, all Covered Employers having any principal officers who were principal officers of a barred beneficiary shall be ineligible under this section; and

(4) Any other action deemed appropriate and within the discretion and authority of the city.

Remedies in this section shall also apply to the party or parties aiding and abetting in any violation of this chapter.

**(e) Private right of action.** Any Covered Employee, or any person who was formerly employed by a Beneficiary, may bring an action to enforce the provisions of this Chapter to recover back pay and benefits, attorneys fees and costs, by filing suit against a Beneficiary in any court of competent jurisdiction.

**(f) Remedies herein non-exclusive.** No remedy set forth in this Chapter is intended to be exclusive or a prerequisite for asserting a claim for relief to enforce the right granted under this Chapter in a court of law. This Chapter shall not be construed to limit an employee's right to bring a common law cause of action for wrongful termination.

**(g) Retaliation and discrimination barred.** A Covered Employer shall not discharge, reduce the compensation or otherwise retaliate against any employee for making a complaint to the City, otherwise asserting his or her rights under this Chapter, participating in any of its proceedings or using any civil remedies to enforce his or her rights under the Chapter. The City shall investigate allegations of retaliation or discrimination and shall, if found to be true, after notice and a hearing, order appropriate relief as set out in paragraphs (c) and (d) herein

**2.121.090 Severability.**

In the event any provision of this ordinance shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provisions hereof.

**2.121.100 Effective Date.**

This law shall be effective sixty (60) after final passage.

The Living Wage Ordinance (2.121) provides, at 1.121.030(b) that the wage shall be upwardly adjusted each year no later than March 1<sup>st</sup> in proportion to the increase in the Annual Average Consumer Price Index for the prior calendar year for All Urban Consumers (CPI-U) in the Boston area, as published by the federal Bureau of Labor Statistics.

For calendar year 1999, the CPI-U increased by 2.5%. Therefore the new living wage, as of March 1, 2000 is \$10.25.

For calendar year 2000, the CPI-U increased by 4.3%. Therefore the new living wage, as of March 1, 2001 is \$ 10.68.

For calendar year 2001, the CPI-U increased by 4.3%. Therefore the new living wage, as of March 1, 2002 is \$11.11.

For calendar year 2002, the CPI-U increased by 2.6% . Therefore the new living wage, as of March 1, 2003 is \$11.37.

The City Council has voted to amend the section of the Living Wage Ordinance (1.121.030 (b) that provides the method for calculating cost of living increases each year. As a result of this change, the living wage as of March 30, 2003 is \$11.44.

For calendar year 2003, the CPI-U increased by 3.76%. Therefore the new living wage, as of March 1, 2004 is \$11.87.

For calendar year 2004, the CPI-U increased by 2.7%. Therefore the new living wage, as of March 1, 2005 is \$12.19.

For calendar year 2005, the CPI-U increased by 3.3%. Therefore the new living wage, as of March 1, 2006 is \$12.59.

For calendar year 2006 the CPI-U increased by 3.1 %. Therefore the new living wage, as of March 1, 2007 is \$12.98.

For calendar year 2007 the CPI-U increased by 1.9 %. Therefore the new living wage, as of March 1, 2008 is \$13.23.

For calendar year 2008 the CPI-U increased by 3.5 %. Therefore the new living wage, as of March 1, 2009 is \$13.69.

For calendar year 2009 the CPI-U decreased by .67 %. Therefore the new living wage, as of March 1, 2010 will remain at \$13.69.

For calendar year 2010 the CPI-U increased by 1.57%. Therefore the new living wage, as of March 1, 2011 is \$13.90.

For calendar year 2011 the CPI-U increased by 2.71%. Therefore the new living wage, as of March 1, 2012 is \$14.28.

For calendar year 2012 the CPI-U increased by 1.58%. Therefore the new living wage, as of March 1, 2013 is \$14.51.

For calendar year 2013 the CPI-U increased by 1.37%. Therefore the new living wage, as of March 1, 2014 is \$14.71.

For calendar year 2014 the CPI-U increased by 1.61% Therefore the new living wage, as of March 1, 2015 is \$14.95.

For calendar year 2015 the CPI-U increased by .06% Therefore the new living wage, as of March 1, 2016 is \$15.04.

**City of Cambridge**  
**Articles of Agreement**  
**SAMPLE**

**Commodity:**

**File Number:**

This agreement is made and entered into this xx/xx/xx by and between the **City Of Cambridge** ("the CITY"), a municipal corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and **xxxxxxxx**. a corporation duly organized and existing under the laws of the **xxxxxxxx**("the Contractor").

**Address:**

**Telephone:**

**Article I. Definition.** "This Contract" as used herein shall mean these Articles of Agreement and "the bid documents," which include, but are not limited to, the instructions to bidders, the Contractor's bid or proposal, the specifications, the general conditions, the requirements, the applicable addenda, and all documents and forms submitted with the Contractor's bid or proposal that were accepted by the City.

**Article II. Duration.** The Contractor shall commence the performance of this contract for the period beginning on **xx/xx/xx** and ending on **xx/xx/xx**.

**Article III. Terms.** The Contractor agrees to provide the services all in accordance with the bid documents of **xx/xx/xx**.

**Contract Value:**

**Article IV. Payment.** The City agrees to pay to Contractor the sum set forth in the Contractor's bid or proposal. **Contractor shall invoice the department to which it provided the service, not the Purchasing Department.**

**Article V. Termination.** The following shall constitute events of default under this Contract requiring immediate termination: a) any material misrepresentation made by the Contractor, b) any failure by the Contractor to perform any of its obligations under this Contract including, but not limited to, the following: (i) failure to

commence performance of this Contract at the time specified in this Contract due to a reason or circumstance within the Contractor's reasonable control, (ii) failure to perform this Contract with sufficient personnel and equipment or with sufficient material to ensure the completion of this Contract within the specified time due to a reason or circumstance within the Contractor's reasonable control, (iii) failure to perform this Contract in a manner reasonably satisfactory to the City, (iv) failure to promptly re-perform within reasonable time the services that were rejected by the City as erroneous or unsatisfactory, (v) discontinuance of the services for reasons not beyond the Contractor's reasonable control, (vi) failure to comply with a material term of this Contract, including, but not limited to, the provision of insurance and nondiscrimination, and (vii) any other acts specifically and expressly stated in this Contract as constituting a basis for termination of this Contract.

Except as otherwise provided in the Articles of Agreement, the City may terminate the contract upon seven days notice.

**Article VI . Damages.** From any sums due to the Contractor for services, the City may keep for its own the whole or any part of the amount for expenses, losses and damages as directed by the Purchasing Agent, incurred by the City as a consequence of procuring services as a result of any failure, omission or mistake of the Contractor in providing services as provided in this Contract.

**Article VII. Conflict.** In the event there is a conflict between these Articles and the bid documents, the bid documents shall supersede these articles.

**Article VIII. Governing laws and ordinances.** This Contract is made subject to all the laws of the Commonwealth and the Ordinances of the City and if any such clause thereof does not conform to such laws or ordinances, such clause shall be void (the remainder of the Contract shall not be affected) and the laws or ordinances shall be operative in lieu thereof.

**Article IX. Performance Security.** Upon execution of this Contract by the Contractor, the Contractor shall furnish to the City security for the faithful performance of this Contract in the amount of **0%** of the value of the bid in the form of a performance bond issued by a surety satisfactory to the city or in the form of a certified check.

**Article X. Equal Opportunity.** the Contractor in the performance of all work under this contract will not discriminate on the grounds of race, color, sex, age, religious creed, disability, national origin or ancestry, sexual orientation, marital status, family status, military status, or source of income in the employment practices or in the selection or retention of subcontractors, and in the procurement of materials and rental of equipment. The city may cancel, terminate or suspend the contract in whole or in part for any violation of this article.

**Article XI. Assignability.** the Contractor shall not assign, sell, subcontract or transfer any interest in this contract without prior written consent of the city.

In witness whereof the parties have hereto and to three other identical instruments set their hands the day and year first above written.

**The City:**

**The Contractor:**

\_\_\_\_\_  
**Richard C. Rossi**  
**City Manager**

\_\_\_\_\_  
**Signature and Title**

\_\_\_\_\_  
**Amy L. Witts**  
**Purchasing Agent**

**Approved as to Form:**

\_\_\_\_\_  
**Nancy E. Glowa**  
**City Solicitor**

**APPENDICES**

**NET ZERO ACTION PLAN**

Please visit <http://www.cambridgema.gov/CDD/Projects/Climate/NetZeroTaskForce> for more information particularly appendices G AN E in the final report and appendices tab.

**CLIMATE PROTECTION ACTION COMMITTEE STRATEGIC GOALS AND OBJECTIVES****Climate Protection Action Committee Goals and Objectives for 2020**

The Climate Protection Action Committee is submitting for adoption an updated roadmap for the City's role in the global response to climate change. The roadmap provides a broad framework for actions that will move the City toward an 80% reduction in greenhouse gas emissions by 2050, the timeframe by when the scientific community advises the world needs to achieve greenhouse gas reductions to avoid dangerous disruptions to our climate. CPAC asks that the City Council adopt this roadmap.

Based on the best scientific information, the City of Cambridge believes that future generations of Cantabridgians face in the coming decades costly and disruptive weather events as a result of global climate change, including rising sea levels, more intense storms, and higher temperatures and heat waves. These impacts will affect the way we live and work. Their severity depends on how much the concentration of greenhouse gases, such as carbon dioxide, in the atmosphere increases. The concentration of these gases is driven in part by the world's daily energy-consuming activities. Cambridge's contribution to atmospheric greenhouse gases is miniscule on a global level, yet the actions we take can be used in communities throughout the world as a model for reducing greenhouse gas emissions. Cambridge cannot solve the greenhouse gas accumulation problem on its own, but it can contribute to solutions through technological and social innovation while taking responsibility for its own emissions. The city must also begin to prepare for the unavoidable impacts of climate change even as we work to minimize the degree of those impacts.

The roadmap includes high-level goals and objectives that provide a framework for actions by stakeholders that move the city toward the vision and goals. The City will continue to identify and prioritize actions in a manner that is flexible and responsive to opportunities, challenges, and innovations that emerge in the short term. CPAC will continue to work with the City to review specific actions and to evaluate progress towards these goals and objectives. Many of the objectives indicate a target year of 2020. This is consistent with the Commonwealth's near-term goal and is not so far off as to be made obsolete by technological and social changes. As Cambridge approaches 2020, it can take stock and re-set objectives for the next stage.

## COMMUNITY CLIMATE PROTECTION VISION

*Cambridge will become a center for innovation, entrepreneurship, and leadership on actions to minimize greenhouse gas emissions and increase resiliency to the impacts of global climate change.*

## CLIMATE PROTECTION GOALS

By 2050, Cambridge City Government, institutions, businesses, and citizens will achieve this vision by harnessing the wealth of intellectual, entrepreneurial, social, financial, and physical resources in Cambridge. Leveraging these resources will transform Cambridge into a city that....

- A. Minimizes GHG emissions from all measureable sources
- B. Drives Energy Efficiency
- C. Depends on walking, bicycling, and transit for mobility
- D. Runs on renewable and non-fossil fuel energy sources
- E. Minimizes the impacts of material consumption and waste
- F. Minimizes the urban heat island effect
- G. Anticipates and prepares for the impacts of climate change
- H. Is internationally recognized for climate change education
- I. Is a center of innovation for climate change solutions
- J. Has the capacity to effectively mitigate greenhouse gas emissions and prepare for climate change

## CLIMATE PROTECTION GOALS AND OBJECTIVES

### Goal A: Minimizes greenhouse gas emissions from all measureable sources

*Objective 1: Reduce municipal greenhouse gas emissions by a specific amount below 2008 levels by 2020. Quantify the amount by December 2015.*

*Objective 2: Track and report quantifiable sources of greenhouse gas emissions in the community. Establish targets for community GHG emissions reduction.*

### Goal B: Drives energy efficiency

*Objective 3: Reduce municipal energy use by a specific amount below 2008 levels by 2020. Quantify the amount by 2015.*

*Objective 4: Continually reduce the energy use intensity (EUI)(e.g., energy use per square foot) for commercial and residential buildings below current levels. Establish targets and benchmarks as information about building energy use becomes available.*

### Goal C: Depends on walking, bicycling, and transit for mobility

*Objective 5: Reduce ownership of conventional vehicles 10 percent below 2010 levels by 2020.*

*Objective 6: Reduce vehicle miles traveled by vehicles registered in Cambridge 5 percent below 2010 levels by 2020.*

### Goal D: Runs on renewable and non-fossil fuel energy sources

*Objective 7: Increase the portion of municipal electricity use that is supplied by renewable energy on city property to 5 percent by 2020.*

*Objective 8: Increase the portion of community-wide electricity use that is supplied by renewable sources to 20 percent by 2020.*

### Goal E: Minimizes the impacts of material consumption and waste

*Objective 9: Reduce residential waste collected by the City trash service 30 percent from 2008 levels by 2020 and 80 percent by 2050.*

Goal F: Minimizes Urban Heat Island Effect

*Objective 10: Increase the overall amount of vegetative cover and reduce use of materials that absorb heat. Quantify the objective by 2015.*

Goal G: Anticipates and prepares for the impacts of climate change

*Objective 11: Complete a vulnerability assessment of the impacts of climate change in Cambridge in 2014.*

*Objective 12: Complete a climate change adaptation plan in 2015.*

Goal H: Is internationally recognized for climate change education

*Objective 13: Identify best practices in climate change education and implement climate change curriculum in Cambridge Public Schools.*

Goal I: Is a center of innovation for climate change solutions

Goal J: Has the capacity to effectively mitigate greenhouse gas emissions and prepare for climate change

*Objective 14: Identify gaps in community access to appropriate resources, knowledge, data, and evaluative tools which would enable all community members to effectively understand and implement climate mitigation and preparedness goals.*

*Objective 15: Identify gaps in municipal access to appropriate resources, knowledge, data, and evaluative tools which would enable the City to effectively understand and implement climate mitigation and preparedness goals in coordination with Cambridge residents.*



## **Verification Report**

### **City of Cambridge – 2008 & 2012 GHG Emissions Inventories**

Prepared for:

City of Cambridge

November 13, 2015

Ruby Canyon Engineering  
743 Horizon Ct. Suite 385  
Grand Junction, Colorado 81506  
(970) 241-9298

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## 1.0 Introduction

Ruby Canyon Engineering (RCE) was contracted by the City of Cambridge (City) to perform the third-party greenhouse gas (GHG) emissions inventories verifications for the City's facilities reporting under operational control to the ISO 14064 standard and the requirements of The Climate Registry's (TCR) reporting program for the baseline year, 2008, and 2012. The City is not reporting to TCR for 2008 or 2012, except as historic inventories; however, the inventories are being verified against TCR's program requirements.

### 1.1 Inventory Description

The City of Cambridge's 2008 and 2012 emissions inventories include emissions from all City facilities and include emissions from stationary combustion, emissions from mobile combustion, fugitive emissions, and emissions from purchased electricity. Emissions of all six Kyoto Protocol gases plus nitrogen trifluoride (NF<sub>3</sub>) are included; however, the entity has no PFC, SF<sub>6</sub> or NF<sub>3</sub> emissions.

### 1.2 Responsible Parties

City of Cambridge  
344 Broadway  
Cambridge, MA 02144

### 1.3 Verification Team

The RCE verification team consisted of the following individuals who were selected based upon verification experience and knowledge of general reporting of GHG emissions sources and local government operations.

Lead Verifier: Nina Pinette  
Team Member/Subcontractor: Lynne Santos, AQA  
Team Member: Jessica Stavole  
Independent Peer Reviewer: Michael Coté

### 1.4 Objectives

The objective of the verification activities was to ensure that the reported GHG emissions are complete, transparent, verifiable, and estimated and reported according to TCR's reporting protocols. Furthermore, the verification activities ensure that the data provided to RCE is well documented and free of any material errors or omissions.

### 1.5 Scope

The scope of the verification consisted of the following independent and objective activities:

- Review the 2008 and 2012 GHG emission sources;
- Review the 2008 and 2012 inventory support documents;
- Review the organizational and operational boundaries;
- Conduct a site visit to selected City facilities;
- Review the inventory data acquisition and quality control procedures;
- Review the GHG emissions calculations;
- Review the documents and data against the Verification Criteria listed in Table 1;
- Issue requests for corrective actions, additional documentation, and clarifications as necessary; and
- Issue a Verification Report and List of Findings to the City of Cambridge.

## 1.6 Verification Criteria

**Table 1. Verification Criteria**

Criteria	Details
Standards and Protocols for Verification	<ul style="list-style-type: none"> <li>The Climate Registry's General Reporting Protocol (GRP) Version 2.0 (March 2013)</li> <li>The Climate Registry's General Verification (GVP) Protocol Version 2.1 (June 2014)</li> <li>ISO 14064-3 Specification with guidance for the validation and verification of greenhouse gas assertions</li> </ul>
Reporting Years	2008 & 2012
Reporting Basis	Full – North America
Level of Assurance	Reasonable assurance
Materiality	A +/-5 percent materiality threshold assessed separately for Scope 1 and Scope 2 emissions

## 2.0 Verification Activities Summary

As the first step in verification activities, RCE developed a verification plan to follow throughout the verification process. The verification plan included the following activities:

- RCE completed an internal Conflict of Interest Assessment Form to identify any potential conflicts of interest with the City. The COI assessment revealed no conflicts of interest.
- RCE held a verification kickoff meeting with the City on May 15, 2015. During the kickoff meeting, RCE reviewed the verification objectives, verification process, and the verification schedule.
- RCE performed a strategic review and risk assessment of the received data and support documents in order to understand the scope and areas of potential risk in the GHG emissions inventories.
- RCE developed risk-based sampling plans based upon the strategic review and risk assessment. The verification team used the verification plan and sampling plan throughout the verification, and they were revised as needed based upon additional risk assessments.
- RCE conducted a site visit on June 4, 2015. During the site visit RCE performed key personnel interviews; inspected GHG emission sources; observed the onsite data management systems; and reviewed data gathering, monitoring, and handling procedures.
- RCE performed a risk-based desktop review of the submitted verification documents. The review included an assessment of the GHG emissions calculation methods and inputs, source data completeness, GHG data management and monitoring systems, and company record retention practices.
- RCE submitted requests for corrective actions, additional documentation, and clarifications as necessary throughout the verification.
- RCE's independent peer reviewer conducted a review of the verification sampling and verification report.
- RCE issued a final Verification Report and List of Findings.
- RCE held an exit meeting with the City on November 9, 2015.

## 3.0 Verification Findings

### 3.1 Assessment of the GHG Emission Sources

Prior to the site visit, the verification team reviewed the City's inventory calculation spreadsheets. Based on the information in the spreadsheets, the verification team developed a sampling plan for the site visit. The sampling plan was based on the relative magnitude of emissions from each category as well as the relative magnitude of emissions from individual sources. The relative magnitude of emissions from each City department is shown in Table 2 below.

RCE conducted the site visit on June 4, 2015. The verification team visited the Department of Public Works Ryan Garage, the Walter J. Sullivan water treatment plant, and the Cambridge Rindge Latin School. The Department of Public works maintains and manages City vehicles at the Ryan Garage. Here, RCE viewed a vehicle fueling station and reviewed the Fuel Master program. RCE also viewed a sample of vehicles owned by the City including rubbish trucks, police vehicles, pickup trucks, and snow equipment. The water treatment plant is a large electric consumer—accounting for 22 percent of Scope 2 emissions in 2008 and 18 percent in 2012; here, RCE viewed electric pumps and natural gas boilers. RCE also selected the Cambridge Rindge and Latin School for a site visit because it is the largest school; schools represented 46 percent of Scope 1 emissions in 2008 and 36 percent in 2012. At the school, RCE viewed boilers, hot water heaters, a diesel emergency generator, and a chiller.

During the visit, the team met with and interviewed City personnel responsible for the development of the GHG assertion which was provided to the verification team prior to the visit. RCE also met with the City's Energy and Sustainability Analyst who manages MEI (discussed in more detail below). The team discussed source data used in the development of the GHG emissions inventories which consists of database extracts and fuel invoices.

### 3.2 Assessment of the GHG Emissions Data Management System

During the site visit, RCE performed interviews with the key personnel who developed the GHG inventories. RCE reviewed the City's procedures for data collection, data handling, and data QA/QC as well as record retention and backup procedures. RCE confirmed that these procedures were rigorous, that there are redundant procedures in place to ensure that data will be backed up in multiple locations, and that in the event that any data used as an input to calculate emissions is lost, it can be recovered.

The City uses Mass Energy Insight (MEI) to track all municipal fuel use data, including electricity. MEI is a state-level online software which tracks utility data. Utilities upload data into the system. RCE also compared invoices to MEI data for some accounts as discussed below.

**Table 2. Scope 1 Emissions from City of Cambridge Departments**

Facility	2008 Emissions (tCO <sub>2</sub> e)	2008 % of Scope 1	2012 Emissions (tCO <sub>2</sub> e)	2012 % of Scope 1
Buildings and Other Facilities	7,700.70	62.57%	5,774.08	63.76%
Vehicle Fleet	3,032.74	24.64%	2,706.70	29.89%
Fugitive	1,058.00	8.60%	209.00	2.31%
Water Delivery	512.80	4.17%	365.68	4.04%
Street Lights/Traffic Signals	2.28	0.02%	0.31	0.00%
Wastewater	0.11	0.00%	-	-
<b>Scope 1 Total</b>	<b>12,306.63</b>		<b>9,055.78</b>	

*Individual sources may not sum to total; table is for summary purposes only*

### **3.3 Assessment of the GHG Emissions Calculations**

RCE's emissions calculations assessment included a review of the data inputs into the City's inventory calculation spreadsheets, calculation of the input values, and accuracy of the emission factors and calculation methodologies selected for each emissions source. RCE evaluated the completeness and validity of the original data and how the data was transferred to the inventory calculation spreadsheets.

During the desktop review, RCE conducted cross checks of spreadsheet functionality and compared calculation methodologies in the spreadsheets to the methods described by key personnel onsite during the site visit and to TCR's General Reporting Protocol methodologies. RCE found that the GHG calculations were accurate and consistent with TCR's methodologies.

#### **3.3.1 Scope 1**

RCE reviewed the calculation of stationary combustion emissions from natural gas combustion at City facilities for 2008 and 2012 which represent 31 percent and 50 percent of total Scope 1 emissions respectively. Natural gas is combusted in boilers, heaters, hot water heaters, and cafeteria kitchens. Emissions from natural gas represent a higher percentage of Scope 1 emissions in 2012 because equipment was converted from oil to natural gas between 2008 and 2012. RCE also reviewed the calculation of stationary combustion emissions from oil which represent 38 percent and 17 percent of total Scope 1 emissions, respectively, also showing a complementary decrease in emissions from oil combustion in 2012 relative to the increase in natural gas emissions in 2012. RCE reviewed the sums of monthly fuel quantities by account in MEI and compared invoices for natural gas and oil for some accounts to the monthly quantities in MEI. RCE also confirmed that appropriate emission factors were applied to the fuel quantities to calculate emissions. RCE identified some small errors in the emissions calculations due to not prorating for the 365 days in CY2008 and CY2012 and/or instances where one monthly invoice was missing and thus one month of fuel consumption was excluded from the annual total. The largest discrepancy was due to the exclusion of natural gas consumption at the Walter J. Sullivan water treatment plant for December 2012 which resulted in approximately 0.9 percent underreporting of Scope 1 emissions for 2012. There were similar exclusions for smaller facilities. When combined, these discrepancies due to not prorating and exclusions of end-of-year invoices were non-material for both years.

Mobile emissions accounted for 26 percent of Scope 1 emissions in 2008 and 30 percent of Scope 1 emissions in 2012. Although the relative magnitude of mobile emissions of total Scope 1 emissions increased from 2008 to 2012, actual mobile emissions decreased by almost 11 percent. The relative magnitude increase is due to an even larger decrease in stationary combustion emissions from 2008 to 2012. Again, the City utilizes MEI to track gasoline and diesel fuel for mobile sources. The City also tracks fuel dispensed using its Fuel Master program. RCE used Fuel Master records for dispensed fuel as a check on fuel purchases tracked in MEI and the totals were similar (with the exclusion of fire department and cemetery fueling stations which are not tracked by Fuel Master). RCE also reviewed the selection and application of CO<sub>2</sub> emission factors for gasoline and diesel in the emissions calculations and reviewed the City's use of TCR's Simplified Estimation Method (SEM) to calculate CH<sub>4</sub> and N<sub>2</sub>O emissions using the factors in Table 13.9 for metric tons of GHG per metric ton of CO<sub>2</sub>.

RCE reviewed service records for refrigerant recharge in Department of Public Works chillers/AC units in 2012 which were used to calculate fugitive emissions from chillers/AC units. Service records were not available for 2008.

RCE reviewed the City's calculations of fugitive emissions using SEMs for chiller/AC unit refrigerant fugitive emissions for 2008 and vehicle refrigerant fugitive emissions for 2008 and 2012. The City used

the SEMs screening method for both chiller/AC unit refrigerants and vehicle refrigerants. The screening method uses the charge capacity for each piece of equipment or the upper bound capacity value from Table 16.2 along with the leakage rate of operation from Table 16.2. The City used its inventory of equipment and appropriately estimated fugitive emissions using the screening method. RCE confirmed that, combined, the fugitive emissions calculated using SEMs—fugitive emissions from vehicles and chillers/AC units and mobile combustion emissions of CH<sub>4</sub> and N<sub>2</sub>O—account for approximately 4.1 percent of total Scope 1 emissions in 2008 and 0.9 percent of total emissions in 2012 which is below the 5 percent threshold for both years, as required by the GRP. The decrease fugitive emissions from 2008 and 2012 is due to a change in calculation methodology and is discussed in more detail in Section 3.3.3 below.

RCE confirmed that the City's reported Scope 1 emissions are materially correct.

### 3.3.2 Scope 2

RCE reviewed the calculation of emissions from purchased electricity for the City. Again, the City utilizes MEI to track purchased electricity. RCE reviewed the sums of monthly electricity consumption by account in MEI and compared electric invoices for some accounts to the monthly quantities in MEI. Like with natural gas, there were calculation errors for some accounts which did not include the full 365 calendar days and/or were not prorated for CY2008 or CY2012. These discrepancies were non-material for both years and are estimated to result in approximately 1 percent underreporting of Scope 2 emissions for each year.

RCE also confirmed that appropriate emission factors were applied to the quantities to calculate emissions. The City used ISO New England Inc. CO<sub>2</sub> emission rates for New England for 2008 and 2012. These factors are third-party developed geographic emission factors, are publicly documented, and have been through a review process. RCE confirmed that the use of these factors was reasonable and met TCR's requirements for third-party developed emission factors. The City used eGRID factors to calculate CH<sub>4</sub> and N<sub>2</sub>O emissions from purchased electricity.

RCE confirmed that the City's reported Scope 2 emissions are materially correct.

### 3.3.3 2008 to 2012 Comparison

RCE compared 2008 emissions to 2012 emissions. Scope 1 emissions decreased 28 percent from 2008 to 2012. This is primarily due to the conversion of boilers in many city buildings, especially schools, from oil to natural gas. The former police station at 5 Western Avenue was occupied and within the City's operational control in 2008 but was under construction and was no longer under the City's operational control in 2012, which showed a decrease in emissions.

Additionally, the calculation methodology to calculate fugitive refrigerant emissions changed from 2008 to 2012. For 2008, SEMs were used to calculate all fugitive refrigerant emissions, as explained above. In 2012, records were available for fugitive refrigerant emissions from chiller/AC unit service and recharge, which provides a more accurate description of fugitive emissions. Thus the 80 percent decrease in fugitive emissions between 2008 and 2012 is a result of improved data rather than actual reductions.

Scope 2 emissions decreased 16 percent from 2008 to 2012. Some of this decrease is accounted for by the change in ISO New England electricity emission factors from 2008 (890 lb/MWh) to 2012 (719 lb/MWh), which reflects the grid being supplied by more renewable electricity sources. There were also electricity efficiency measures implemented at the water treatment plant between 2008 and 2012.

## 4.0 Verification Results

The City provided sufficient evidence and documentation of its emissions calculations, data collection procedures, and monitoring and quality control procedures for its facilities and emission sources. The verification process focused on verifying the emissions calculations and the source data used by the City to quantify its GHG emissions in accordance with TCR's General Reporting Protocol. The following is a summary of the verification results.

The City reported Scope 1 emissions of 12,306.63 metric tons of CO<sub>2</sub>e in 2008 and 9,055.78 metric tons of CO<sub>2</sub>e in 2012, Scope 2 emissions of 16,178.46 metric tons of CO<sub>2</sub>e in 2008 and 13,705.94 metric tons of CO<sub>2</sub>e in 2012 as per the information provided in the inventory calculation spreadsheets. Table 3 defines the GHG emissions verified for 2008 and 2012.

During the verification process, RCE made requests for corrective actions, additional documentation, and clarifications to complete the verification. The City sufficiently addressed all material corrective actions. The details of these requests are documented in RCE's List of Findings provided to the City.

## 5.0 Conclusion

RCE conducted a risk-based analysis of the City's GHG emissions inventories and a strategic review of the inventory data and calculations. Based upon the processes and procedures and the evidence collected, RCE concludes that the GHG assertions are a fair representation of the GHG emissions for 2008 and 2012 and can be considered:

- In conformance with The Climate Registry's General Reporting Protocol Version 2.0,
- Without material discrepancy in Scope 1 or Scope 2 emissions, and
- Verified to a reasonable level of assurance.

**Table 3. Total Entity Emissions by Emission Type Under Operational Control**

Emissions Verified	2008 CO <sub>2</sub> e (metric tons)	2012 CO <sub>2</sub> e (metric tons)
Stationary Combustion	8,215.89	6,140.08
Mobile Combustion	3,032.74	2,706.70
Fugitive	1,058.00	209.00
Scope 1 Total	12,306.63	9,055.78
Scope 2 Total	16,178.46	13,705.94

\*Individual categories may not sum to total due to rounding

Lead Verifier Signature



Nina Pinette

Independent Peer Reviewer Signature



Michael Coté