



Request for Proposals

2022 Internal Decarbonization Plan

**City of Louisville, City Manager's Office
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Project Number: 101446-540910

**PROPOSALS DUE: FRIDAY, AUGUST 26
11:59 A.M.**

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PROPOSED PROJECT SCHEDULE

Proposals Due	Aug 26, 2022
Selection Committee – Interviews	Sept. 2022
Final Selection and Contract.....	Sept. 2022
Kick-off to begin.....	Oct. 2022
Baseline Review Process.....	Oct. 2022
Audits 1 - 3 (location TBD).....	Nov. 2022
Audits 4 – 6 (location TBD)	Dec. 2022
Audits 7 - 10 (location TBD).....	Jan. 2023
Audits 1 - 3 Deliverable.....	Feb. 2023
Audit 4 – 6 Deliverable.....	Mar. 2023
Audit 7 – 9 Deliverable.....	Apr. 2023
Audit 10 Deliverable & Final Report.....	May. 2023

CITY INFORMATION

Situated between Denver and Boulder, the City of Louisville, Colorado receives national attention for being one of the best places to live in the United States. The City has a population of approx. 21,000 residents and provides a wide range of services and amenities. As a home rule municipality with more than 400 employees to serve its residents, the City delivers core services and operates several public facilities that fall within the scope of work for this project.

In August of 2019, the Louisville City Council passed Resolution 25, Series 2019, which set clean energy and carbon emission reduction goals for the municipality and larger community. This resolution sets goals to meet all of Louisville's municipal electric needs with 100% carbon-free sources by 2025 and to reduce core municipal greenhouse gas emissions annually below the 2016 baseline through 2025.

As a result, the City is seeking a complete engineering, mechanical and financial analysis for each of its municipal facilities (ten facilities in total, some of which consist of multiple buildings) and associated fleet and equipment. The final deliverable for this project will include a strategic roadmap for electrification and decarbonization of all City buildings, fleet, equipment and operations by 2030.

INVITATION

The City of Louisville is inviting proposals from highly qualified firms (“Respondents”) exhibiting the following qualifications:

1. Seeking a team of creative and innovative engineers who have a track record of going above and beyond for clients performing tasks such as ASHRAE level 2 and level 3 audits with expertise in identifying strategic opportunities.
2. Seeking a team that has proven and significant realization rates from recommendation reports.
3. Seeking a team experienced in building energy sciences with Heating, Ventilation, and Air Conditioning (HVAC) design engineering expertise.
4. Seeking experience in building electrical system design, specifically regarding the electrification of existing natural gas systems.
5. Seeking heat pump operations expertise (ie, ability to evaluate and recommend specific designs, equipment, identify potential barriers, etc.)
6. Seeking electric vehicle charging, solar photovoltaic and energy storage engineering expertise.
7. Seeking knowledge of fleet vehicles/equipment and landscaping equipment for municipal operations (ie, mowers, leaf blowers, etc.) and electric alternatives
8. Must have knowledge of local, federal, and state funding opportunities and grants and utility programs and incentives.
9. Must have ability to research and analyze financial barriers and supply chain challenges when compiling recommendations report.
10. Requiring Professional Engineering License(s) for the State of Colorado.

The City may contract with multiple firms to obtain all desired services.

Scope of Services

The scope of work will involve an initial review of existing facility mechanical, electrical and plumbing (MEP) drawings, available ASHRAE audit reports, benchmarking data and fleet studies followed by electrification audits of each of the municipal facilities listed below. Each audit may require several experts to be present and these may include electrical engineering experts, HVAC and building mechanical systems experts, building automation and controls experts, building code experts, electric vehicle charging, battery storage design and solar PV expertise as well as others having expertise in the relevant electrification requirements for each of the systems included, but not limited to the following:

HVAC Equipment

1. Rooftop units
2. Heat recovery ventilators
3. Gas furnaces
4. Natural gas boiler systems
5. Commercial kitchen systems
6. Domestic hot water heating systems
7. Gas grills and fireplaces

HVAC Infrastructure

1. Ductwork
2. Piping
3. Electrical service (costs to upgrade to meet new electrical demand)
4. Backup Generators

Distributed Energy Resources

1. On-site solar photovoltaics (PV)
2. Electric energy storage battery systems
3. Demand response controls (hot water heating, batteries, thermal energy storage, lighting, etc.)
4. Vehicle to grid (V2G) planning
5. Innovative future planning (i.e. micro-grid, centralized/district heating and cooling systems (CHP), etc.)

Fleet Equipment

1. Fleet vehicle use evaluation
2. Fleet electric vehicle (EV) charging
3. EV charging infrastructure/electric service design and cost evaluation

Additional Equipment

1. Lawnmowers
2. Trimmers
3. Leaf blowers
4. Golf Carts
5. Snow Blowers
6. Operations equipment

Facilities Included in Scope

The municipal sites that will each require a full electrification audit and subsequent cost evaluation and recommended timeline for implementation will include:

1. Louisville City Services
2. Police and Municipal Court
3. City Hall
4. Louisville Public Library
5. Louisville Golf Course
6. Recreation and Senior Center
7. North Water Treatment Plant
8. South Water Treatment Plant
9. The Louisville Art Center
10. City of Louisville Wastewater Treatment Plant

Each of these municipal facilities have existing Energy Star Portfolio Manager accounts with baseline usage data as well as having completed ASHRAE level 1 audits available for baseline review. As mentioned, the scope of work will involve a thorough review and economic analysis with electrification audit reports delivered for each facility. Sites may contain multiple buildings (white house, golf course maintenance building, old city shops, etc.).

Project and Deliverables Scope

Respondents will be required to attend bi-weekly meetings with the internal working group and will be responsible for conducting staff interviews with representatives from various departments, including but not limited to: City Manager's Office, Public Works and Facilities,

Planning and Building, Parks and Golf Course, Open Space and Trails, and Sustainability to understand department priorities before conducting site visits. Throughout the project, respondents are responsible for regular communication with staff and will be available to answer questions and provide information as needed.

Upon delivery of each electrification audit report, respondents are responsible for department and/or executive management team presentations with results and recommendations to detail findings and answer questions. Respondents are responsible for one City Council presentation during the project, after the site audits are complete and before the audit reports are complete, to communicate audit findings and project progress and direction.

Upon completion of final report, respondent is responsible for three board presentations (Parks and Public Lands Advisory Board, Open Space Advisory Board and Sustainability Advisory Board) and one City Council presentation to detail project steps, findings, and recommendations with a focus on optimal implementation timeline, decarbonization potential and budget impacts.

The ten audit report deliverables shall contain, at minimum, the following sections:

- Executive Summary to include:
 - List of recommendations and alternative options for electrification and decarbonization of buildings and associated fleet and equipment with benefit/drawback analysis
 - Economic summary with options for financing and grants to offset costs
 - Report on GHG cost effectiveness (ie, GHG reduced / dollar spent) intended to help with prioritizing facilities/measures having the greatest GHG reduction cost effectiveness.
 - Total electrical infrastructure capacity upgrade requirement per facility that would allow for the full electrification and EV charging capacity detailed individually throughout the report
 - Availability of materials and supply chain impacts
 - Availability of service providers, electricians, and others as necessary
 - Recommended timeline and action items for implementation of each recommendation, with an emphasis on maximizing financial investments
 - Decarbonization summary (GHG reduced per recommendation and overall potential)
 - Baseline and proposed total facility site energy use intensity (EUI) comparison or Energy Star scores
- Background and introduction with facility descriptions and:
 - Recent (3-year) facility upgrades
 - Review of existing ASHRAE audits
 - Baseline utility data analysis
 - Interview staff to determine and report on knowledge gaps. Deliver on

recommended trainings to fill knowledge gaps (operations and maintenance)

- HVAC Electrification Sections to include:
 - Detailed sections for each HVAC electrification recommendations
 - Description of existing natural gas (or other) system to be upgraded
 - An evaluation of the existing and proposed electrical infrastructure upgrade requirements with cost estimates for the engineering design and implementation specific to each proposed equipment location.
 - An evaluation of each recommended equipment replacement to involve outreach to obtain cost estimates and availability to inform estimated timelines, taking into consideration supply chain barriers.
 - Evaluation of electrification risks (ie. where should building envelope be addressed prior to electrification to avoid future issues operating heat pumps)
 - Evaluation of alternative options (ie. opportunities for combining systems, heat recovery systems, ground-source, or air-source options, etc.)
- Distributed Energy Resources Section(s) to include:
 - Evaluation of electric energy generation, storage and resilience opportunities (necessary infrastructure, availability of equipment, specific equipment recommendations, charging and discharging strategy recommendations, costs, etc.)
 - On-site solar PV
 - Battery storage
 - Demand response
 - Vehicle to grid (V2G)
 - Industrial power-surge technologies that may be applicable
 - Innovative future planning (i.e. micro-grid, centralized heating and cooling, etc.) including necessary infrastructure, availability of equipment and costs.
 - Evaluation into peak demand cost savings potential for each DER system recommended.
 - Evaluation of cost comparison between on-site renewables and Xcel Energy subscription programs, including equipment depreciation costs and replacement schedules.
 - Evaluation of existing and proposed fire codes in locations where batteries are being stored, charged, etc. This should include any potential fire code changes that may result from other electrification measures.
- Fleet Electrification Sections to include:
 - Detailed sections for each fleet recommendation with:
 - Evaluation of existing fleet routes, schedules, and down-time
 - Recommendations with cost analysis and availability to replace the total fleet of vehicles with electric vehicles and necessary charging

infrastructure; including detailed recommendations that are specific to each fleet replacement vehicle, taking into consideration supply chain barriers.

- Evaluation and recommendations regarding leasing -vs- purchasing fleet EV's
 - Evaluation of the required fleet EV charging infrastructure with recommended schedules and schedule changes (this may involve overlap between each facility so fleet EV's may be shared and optimal charging achieved based on use and overlapping needs) and V2G opportunities.
 - Evaluation of EV charging needs offsite (away from facilities). This may include parks and other locations where our fleet EV's may require charging during the workday to avoid bringing vehicles back to facilities. This may or may not be necessary depending on the findings from evaluations listed previously.
 - Recommended fleet EV battery replacement schedules and costs for annual budgeting purposes.
 - Evaluation of existing and proposed fire codes in locations where batteries are being stored, charged, etc.. This should include any potential fire code changes that may result from other electrification measures.
 - Specific and overall estimates for GHG reductions
- Additional Equipment Electrification Section:
 - Evaluation of operations and lawn care equipment electrification such as lawnmowers, trimmers, leaf blowers, golf carts, snow removal equipment and other operations equipment.
 - Evaluation of existing equipment uses, schedules and down-time
 - Evaluation comparing options to lease our own electric operations equipment -vs- contracting with an all-electric service provider.
 - Recommendations with cost analysis and availability to replace the total number of equipment with electric; including detailed recommendations that are specific to each replacement equipment, taking into consideration supply chain barriers.
 - Evaluation of the required charging infrastructure needed at each facility with recommended charging and use schedules
 - Specific and overall estimates for GHG reductions
 - Evaluation of operations electric equipment charging needs offsite (away from facilities). This may include parks and other locations equipment may require charging during the workday to avoid bringing equipment back to facilities. This may or may not be necessary depending on the findings from evaluations listed previously.
 - Recommended operations electric equipment battery replacement schedules, and costs for annual budgeting purposes.

The final report will summarize the ten audit reports and include a strategic roadmap for full decarbonization of City facilities, fleet, equipment and operations by 2030. This roadmap will include a financial and technological feasibility assessment, implementation timeline, greenhouse gas reduction potential and annual budget implications to achieve decarbonization within the allotted timeframe. Project may be completed prior to May 2023 if deemed feasible by Respondent.

Piggyback Contract Award Opportunity

Please indicate your firm's willingness to extend the terms of resulting contracts, inclusive of price, to other Colorado local government entities, including counties and municipalities, should your firm be awarded a contract or contracts pursuant to this RFP. While this clause in no way commits any other local government entity to purchase from the City of Louisville's awarded contractor, nor does it guarantee any additional orders will result, it is intended to allow such local governmental entities, at their discretion, to make use of the City of Louisville's competitive process (provided said process satisfies their own procurement guidelines) and purchase directly from the awarded contractor. All purchases made by other local government entities will be transactions between that entity and the awarded vendor; the City of Louisville will not be responsible for any such purchases. While not dispositive, a response to this section in the negative may affect the City's decision on whether to award your firm a contract pursuant to this RFP.

Submittal Instructions

If you have any questions about the RFP, please contact Kayla Betzold in the City Manager's Office at 303-335-4534 or kbetzold@louisvilleco.gov. Submittals are due at Louisville City Hall (749 Main Street) for time and date recording on or before August 26, 2022 at 11:59 a.m.

Electronic submittals can be emailed to kbetzold@louisvilleco.gov.

All RFPs must be received, and time and date recorded by authorized City staff by the above due date and time. Sole responsibility rests with the Respondents to see that their RFP response is received on time at the stated location. Any responses received after due date and time will be returned to the Respondents.

The City of Louisville reserves the right to reject any and all responses, to waive any informalities or irregularities therein, and to accept the proposal that, in the opinion of the City, is in the best interest of the City of Louisville. Due to the complexity of work required, selection of a firm will not be based solely upon the lowest responsible bid but will also take into account experience gained from work on similar projects and an understanding of the project goals and approach to the project.

Digital copies of the Bidding Documents will be available beginning August 1, 2022 on-line through Rocky Mountain Bid System and linked through the City of Louisville's website at <http://www.louisvilleco.gov/business/bidding-opportunities>.

Terms and Conditions

1. Each Respondent shall furnish the information required in the proposal.
2. The Contract/Purchase Order will be awarded to the Respondent whose submittal, conforming to the Request for Proposals, will be most advantageous to the City of Louisville, price and other factors considered.
3. The City of Louisville reserves the right to reject any or all proposals and to waive informalities and minor irregularities in proposals received, and to accept any portion of or all items proposed if deemed in the best interest of the City of Louisville to do so.
4. No submittal shall be withdrawn for a period of thirty (30) days subsequent to the opening of RFPs without the consent of the City's delegated representative.
5. A signed purchase order or contract furnished to the selected firm results in a binding contract without further action by either party.
6. Late or unsigned RFPs will not be accepted or considered. It is the responsibility of Respondents to ensure that the RFP arrives at the City of Louisville no later than the time indicated in the "Request for Proposal."
7. The proposed price shall be exclusive of any Federal or State taxes from which the City of Louisville is exempt by law.
8. Any interpretation, correction or change of the RFP documents will be made by Addendum. Interpretations, corrections, and changes of the RFP documents made in any other manner will not be binding, and Respondents shall not rely upon such interpretations, corrections and changes. The City will not be responsible for oral clarification.
9. Confidential/Proprietary Information: RFPs submitted in response to this "Request for Proposal" and any resulting contract are subject to the provisions of the Colorado Public (Open) Records Act, 24-72-201 et.seq., C.R.S., as amended. Any restrictions on the use or inspection of material contained within the proposal and any resulting contract shall be clearly stated in the RFP itself. Confidential/proprietary information must be readily identified, marked and separated/packaged from the rest of the proposal. **Co-mingling of confidential/proprietary and other information is NOT acceptable. Neither a proposal, in its entirety, nor proposed price information will be considered confidential/proprietary. Any information that will be included in any resulting contract cannot be considered confidential.**
10. The City reserves the right to modify the Scope of Services and request revisions to proposals prior to entering into a written contract.

EVALUATION CRITERIA

Please respond to the evaluation criteria with comments that are concise and to the point. The City will evaluate, and finalists will be selected and invited to continue the process by making formal presentations to a selection committee. The best fit will be recommended to City Council authorizing the City to enter into a professional services agreement. The selection committee will evaluate and score the submittals using a weighted average based upon:

- A. Statement of Interest (SOI). In up to three (3) pages, express your interest in the project, specifically addressing:
 - 1. Specialized experience
 - 2. Analysis/identification of issues – identify constraints as well as opportunities.
 - 3. Goals – identify how your project goals meet or exceed the City’s project goals.
- B. Project Approach. In up to five (5) pages, express your project approach, specifically including:
 - 1. A detailed project schedule highlighting critical path and milestones for completion of the project.
 - 2. Examples of similar projects – quality finished projects with proven implementation results
 - 3. Innovative solutions – discuss project alternatives, and/or opportunities to add value to the project.
 - 4. On-time and budget – accountability for time, budget and firm availability.
- C. Project Team Listing
 - 1. Provide a listing of team members that will be involved in the process, relevant experience and other material that is pertinent and concise.
- D. References
 - 1. Submit three references for similar projects completed within the last three years along with contacts for the project.
- E. Cost Proposal
 - 1. A not-to-exceed amount for all phases of the Scope of Services.

SUBMITTAL

Please submit the following information in the order listed below:

1. Name of your company/organization
2. Type of Organization: (Corporation, Partnership, etc.)
3. Address
4. Names and Address of Project Team or Firm
5. Contact Person(s)
6. Telephone, Fax, E-mail
7. Statement of Interest
8. Project Approach
9. Project Team Listing
10. References
11. Cost Proposal

SIGNATURE PAGE

Failure to complete, sign and return this signature page with your proposal may be cause for rejection.

Contact Information	Response
Company Name	
Name and Title of Primary Contact Person	
Company Address	
Phone Number	
Email Address	
Company Website if applicable	

By signing below, I certify that:

I am authorized to bid on my company's behalf.

I am not currently an employee of the City of Louisville.

Signature of Person Authorized to Bid on

Date Firm's Behalf

Note: If you cannot certify the above statements, please explain in the space provided below.