

HVAC Market Research RFP

Updated February 28, 2025

CONTENTS

HVAC Market Research RFP	1
Contents	2
Introduction and background	3
CEE Background	3
ETA Overview	3
MN Air Source Heat Pump Collaborative	3
RFP Summary	4
RFP Schedule	4
Objectives	Error! Bookmark not defined.
Scope of Work	5
Project Overview	5
Scope 1: ASHP market share insight	5
Scope 2: Commercial HVAC market share insight	6
Scope 3: Commercial HVAC market mapping	7
Scope 3: Commercial HVAC market mapping Timeline	
	Error! Bookmark not defined.
Timeline	Error! Bookmark not defined. Error! Bookmark not defined.
Timeline Budget	Error! Bookmark not defined. Error! Bookmark not defined.
Timeline Budget Contractor Qualifications	Error! Bookmark not defined. Error! Bookmark not defined.
Timeline Budget Contractor Qualifications Diversity, Equity, and Inclusion	Error! Bookmark not defined. Error! Bookmark not defined.
Timeline Budget Contractor Qualifications Diversity, Equity, and Inclusion Subcontractors/partnerships	Error! Bookmark not defined. Error! Bookmark not defined.
Timeline Budget Contractor Qualifications Diversity, Equity, and Inclusion Subcontractors/partnerships Product Quality	Error! Bookmark not defined. Error! Bookmark not defined. 8 Error! Bookmark not defined. 8 8 8 8
Timeline Budget Contractor Qualifications Diversity, Equity, and Inclusion Subcontractors/partnerships Product Quality Proposal Submission	Error! Bookmark not defined. Error! Bookmark not defined. 8 Error! Bookmark not defined. 8 8 8 8 8
Timeline Budget Contractor Qualifications Diversity, Equity, and Inclusion Subcontractors/partnerships Product Quality Proposal Submission Question and Proposal submission	Error! Bookmark not defined. Error! Bookmark not defined. 8 Error! Bookmark not defined. 8 8 9
Timeline Budget Contractor Qualifications Diversity, Equity, and Inclusion Subcontractors/partnerships Product Quality Proposal Submission Question and Proposal submission Proposal Format	Error! Bookmark not defined. Error! Bookmark not defined. 8 Error! Bookmark not defined. 8 9 10



Introduction and background

CEE Background

For over 35 years, Center for Energy and Environment (CEE), a Minnesota-based nonprofit 501(c)(3) corporation, has worked to advance the public interest in cleaner energy and a healthier economy by ensuring businesses operate more efficiently; households and governments spend less on energy; homes and businesses are more comfortable and healthier places to live and work; and utilities achieve their clean energy goals cost-effectively. CEE's staff members conduct nation-leading technical research; implement award-winning clean energy programs for local governments, businesses, and utilities; advance state and local policy innovations; and run loan programs to finance upgrades for businesses and homeowners. CEE has served over 10,000 businesses and 100,000 homeowners and tenants in Minnesota through our programs.

ETA Overview

In 2023, CEE launched Minnesota's Efficient Technology Accelerator (ETA), a statewide market transformation program that will accelerate the adoption and availability of emerging energy efficiency technologies. Market transformation is a program strategy that identifies emerging energy efficient technologies and accelerates their adoption by engaging in the market early, working with industry stakeholders to identify and overcome market barriers, and facilitating accelerated adoption of the technology to create lasting change in the market. The goal of this type of intervention is to shift a technology's market adoption curve to result in higher levels of adoption earlier.

The ETA portfolio includes two initiatives related to this proposal: the MN ASHP Collaborative, focusing on air source heat pumps (ASHPs), and Next Gen RTUs, focusing on dual fuel heat pump roof top units (RTUs) and energy recovery ventilators (ERVs) integrated or bolted onto RTUs.

Minnesota's Efficient Technology Accelerator is a partnership funded by the state's investorowned utilities (IOUs), administered by the Minnesota Department of Commerce, Division of Energy Resources (DER), and implemented by Center for Energy and Environment (CEE).

MN Air Source Heat Pump Collaborative

The <u>MN Air Source Heat Pump (ASHP) Collaborative</u> was formed in 2019 and is currently operating as an initiative under Minnesota's ETA. The MN ASHP Collaborative aims to make heat pumps the first choice for contractors and homeowners when replacing their heating and cooling systems for efficient, climate-friendly heating and cooling.

Next Gen RTUs

<u>Next Gen Rooftop Units (RTUs)</u> is a statewide program under Minnesota's ETA. Next Gen RTUs are packaged heating and cooling units that use energy efficient technology to effectively heat and cool a commercial space, reducing energy consumption and emissions. The Next Gen RTU program strives to advance the performance of next gen rooftop units to meet the growing demand for energy efficient and sustainable building solutions and establish RTUs as the preferred choice for commercial buildings in Minnesota.

RFP Summary

As a part of the ETA, we are tasked with calculating energy savings from our work in the market, and we need to identify how many qualifying units are sold in the state of Minnesota. For air source heat pumps (ASHPs) and dual fuel heat pump roof top units (RTUs), there are not full statewide data sets or estimates of technology units sold that are readily available. We are working with some distributors and manufacturers to obtain their sales data; however, we know we will not have a complete set of sales data. Because of this, we need to extrapolate the sales data we do have to the full state, and we need assistance in determining market share of different distributors and manufacturers to identify what portion of the market the sales data we obtain represents.

In addition, we would like to learn more about the commercial HVAC market as it relates to energy recovery ventilators (ERVs) and RTUs and are looking for some market mapping, characterization, and key insights. We are hoping to use this research effort to identify areas for strategic influence as well as track market progress indicators related to our work in the market in Minnesota.

Thus, CEE is seeking qualified contractors to provide research and insights into these three areas:

- 1. Residential ASHP market share in MN
- 2. Commercial HVAC (RTU and ERV) market share in MN
- 3. Commercial HVAC (RTU and ERV) market mapping/characterization in MN

To allow for a variance of cost estimates and bid types, three scopes related to the HVAC market have been outlined; **responders can apply for one, two, or three of the work scopes**. However, cross-pollination between efforts is highly likely and bidders are encouraged to identify areas of overlap and potential cost sharing across scopes.

Services will begin in 2025 with a goal of having Scopes 1 and 2 completed by August 31st and Scope 3 completed by mid-December 2025.

RFP Schedule

Event	Date
RFP released	3/3/25
Bidder questions due*	3/12/25
Optional bidders call ^	3/17 at 12:00CT
Answers to questions emailed	3/19/25
Written proposals due*	3/28/25
Finalist presentations/interviews if needed	Week of 3/31/25
Estimated contract award date	Week of 4/7/25

*All due dates will occur on the specified date at 5:00PM CT.

^An invitation for the optional bidders call will be sent to entities who submit questions once questions are received.



Scopes of Work

Project Overview

CEE is looking for proposals for three work scopes related to the HVAC market. These scopes include determining market share estimates of residential ASHP manufacturers and distributors, determining market share estimates of commercial heat pump RTU and ERV manufacturers and distributors, and further mapping of the RTU market. **Bidders may submit bids encompassing one, two, or all three scopes.**

Scope 1: ASHP market share insight

CEE needs to gather estimates of market share represented by various manufacturers and distributors who sell air source heat pumps (ASHPs) in Minnesota to calculate energy savings. As mentioned, we have sales data from some manufacturers/distributors, and we need to know how much of the market those sales represent. We also expect that we will be adding more distributors in the future. Ideally, we would then be able to get an estimated market share from each distributor/manufacturer operating in the state (or the major entities and those we have relationships with) to fill out a table similar to this:

Entity name	Market Share % (based on units sold)
Distributor X	XX%
Distributor Y	XX%
Manufacturer Rep Z	XX%

We understand who the key players are but need a more concrete process to estimate their market share of ASHP sales. We anticipate this task could be accomplished through a Delphi panel approach but are open to other approaches. Please outline your preferred approach(es), associated tasks, and experiences with market share estimation. CEE can likely help identify some field experts for this effort, however, we would also look to the consultant to identify individuals and determine the right individuals for inclusion.

The final deliverables would include an internal, confidential document outlining the key players and their respective market share estimates, and an anonymized external-facing memo outlining similar data. We know this is sensitive information, and the external-facing memo would not necessarily have to be public (though that would be ideal), but at a minimum, it would need to be anonymized and shareable with our State and utility funding partners.

Deliverable:

- Internal, confidential document outlining the key players and their respective market share estimates.
- External, anonymized memo that can be provided to the State and utility funders outlining market share of various entities.



Timeline:

This project could begin immediately, with the memo being provided by August 31st to inform our calculations due in September. The selected vendor would be asked to share preliminary estimates as soon as available.

Scope 2: Commercial HVAC market share insight

Similar to Scope 1, CEE is looking for estimates of market share represented by various manufacturers and distributors in Minnesota who sell dual fuel heat pump RTUs and ERVs that are either integrated or bolted on to RTUs. We have sales data from some manufacturers/distributors, and we need to know how much of the market those sales represent. We also expect that we will be adding more distributors in the future. Ideally, we would then be able to get an estimated market share from each distributor/manufacturer operating in the state (or the major entities and those we have relationships with) to fill out a table similar to this:

Entity name	ERV Market Share % (based on units sold)	Dual fuel heat pump RTU Market Share % (based on units sold)
Distributor X	XX%	XX%
Distributor Y	XX%	XX%
Manufacturer Rep Z	XX%	XX%

There is some overlap between entities selling ERVs and heat pump RTUs, however, there are some differences. We would need information about both products separately.

We understand who the key players are but need a more concrete process to estimate their market share. We anticipate this task could be accomplished through a Delphi panel approach but are open to other approaches. Please outline your preferred approach(es), associated tasks, and experiences with market share estimation. CEE can likely help identify some field experts for this effort, however, we would also look to the consultant to identify individuals and determine the right individuals for inclusion.

The final deliverables would include an internal, confidential document outlining the key players and their respective market share estimates, and an anonymized external-facing memo outlining similar data. We know this is sensitive information, and the external-facing memo would not necessarily have to be public (though that would be ideal), but at a minimum, it would need to be anonymized and shareable with our State and utility funding partners.

Deliverable:

- Internal, confidential document outlining the key players and their respective market share estimates.
- External, anonymized memo that can be provided to the State and utility funders outlining market share of various entities.



Timeline:

This project could begin immediately, with the memo being provided by August 31st to inform our calculations due in September. The selected vendor would be asked to share preliminary estimates as soon as available.

Note: We anticipate this Scope 2 could dovetail well with Scope 1, the residential ASHP Delphi panel/data collection process, as experts may overlap within both residential and commercial HVAC sectors, or with Scope 3 around commercial HVAC market mapping activities. If applying to multiple scopes, please indicate if you plan to incorporate Scope 2 within the other work scopes or if there are any other anticipated synergies or cost sharing.

Scope 3: Commercial HVAC market mapping

CEE would like to know more about the commercial HVAC market, particularly around stocking for RTUs and ERVs. We would like to know more about how the markets flow and help identify the most effective leverage points for incentives to increase dual fuel heat pump RTUs and ERVs. Questions we would like to explore include:

- 1. What role does product stocking play, how often are products stocked, and what are the influences around product stocking, especially for RTUs?
- 2. What is the process for buying ERVs how do contractors order them, where do they order/buy them from, where are costs added, how is it delivered, etc.?
- 3. Where would incentives have the most impact midstream, downstream, upstream?

In addition, we would like for this study to help us track some of our market progress indicators including:

- % of contractors indicating that high-performance RTUs are readily available with reasonable lead times
- % of distributors stocking high-performance RTUs that align with our recommended specifications
- #/% of market actors reporting familiarity with dual fuel heat pump RTU products
- #/% of market actors reporting agreement that ERVs are beneficial for different applications (e.g., outdoor air requirements, existing buildings, new construction performance pathways)
- % of market actors reporting a favorable opinion of high-performance RTUs

We anticipate this work will require a few different research approaches. This will likely include interviews or surveys with contractors and distributors, however this group has been difficult to engage in research in the past. Please propose:

- 1. Your preferred approach (or a menu of approaches with associated tradeoffs e.g. cost, sample size, etc.) for answering the research questions above
- 2. Anticipated sample sizes or participant assumptions
- 3. Any ways that your firm may be uniquely qualified to best engage these audiences

Deliverables:

- Internal presentation of findings
- Public facing PPT slide deck
- Public facing detailed report outlining key research findings
- Raw data files

Timeline:

 We anticipate this effort to begin May/June 2025, wrapping up by mid-December 2025, however we could start work earlier to align with other work scopes.

Contractor Qualifications

CEE encourages responses from all entities and teams of contractors with relevant experience. The ideal applicant will possess experience in the following areas.

- Conducting Delphi panels or other expert research panels (Scopes 1&2)
- Estimating sales data, market share, and market share extrapolations
- Qualitative research design and implementation
- Subject matter expertise

Diversity, Equity, and Inclusion

CEE strives to afford opportunity in its procurement practices to businesses that are small, disadvantaged, women-owned, veteran-owned, minority-owned, LGBTQ -owned service disabled, local or rural. These include businesses who are certified through one of the following:

- <u>State Department of Administration's Certified Targeted Group, Economically</u>
 <u>Disadvantaged and Veteran-Owned Vendor List</u>
- Metropolitan Council Underutilized Business Program (MCUB)
- Small Business Certification Program: Central Certification Program (CERT)

Please include any DEI information with your proposal.

Product Quality

The selected contractor is expected to provide a high-quality product. Services are expected to be performed efficiently, factually accurate, tailored to appropriate audiences, and aligned with the agreed upon scope of work.

Proposal Submission

Question and Proposal submission

Questions are due via email by 5:00 p.m. CT on March 12th, 2025.



Final proposals are due via email by 5:00 p.m. CT on March 28th, 2025. Please include the full proposal and all appendices as one document if possible.

Send all questions and proposals to Cate Bruns at <u>cbruns@mncee.org</u>.

Proposal Format

The proposal should be limited to 15 pages or less in total length and should contain the following components.

- 1. **Executive Summary** Summarize the proposed implementation strategies and reasons that CEE should select your team.
- 2. **Proposed Implementation Strategy** Provide a detailed description of your proposed strategies for completing the scope of work. Please include all assumptions, as appropriate (e.g. sample sizes, key stakeholder groups to participate, etc.).
- 3. **Qualifications and Project Team** List your proposed implementation team including key personnel and any subcontractors. Include roles, qualifications, years of experience, and efforts on similar work. Please only include project staff who have available hours for the project. If awarded the project, implementers will not be allowed to change out key staff included in the proposal without advance written approval from the Administrator.
- 4. **Related projects** Include examples of similar work in market share estimation and market mapping.
- 5. **Timeline** Provide a timeline of the activities outlined in the proposed implementation strategy.
- Cost Proposal Provide a cost estimate per task including rates and hours for all
 personnel and any non-labor expenses. If applying to multiple scopes, please indicate any
 areas of cost savings.
- 7. **Optional Appendix** If publicly available, please include 1-3 examples of related project work deliverables as appropriate.



Definitions and Applicable Documents

Below are commonly used acronyms and definitions, along with links to specific documents that are often referenced in the market transformation work with CEE.

Acronym / Term	Definition
ASHP	<u>Air Source Heat Pump</u> – An electrically powered HVAC system that provides efficient heating and cooling
CEE	Center for Energy and Environment
ERV	Energy Recovery Ventilator – A type of technology designed to be integrated with and improve the efficiency of ventilation systems while reducing energy consumption
ΕΤΑ	Efficient Technology Accelerator – The name the statewide market transformation program, also the name of <u>the legislation passed</u> <u>in 2022</u> that has allowed the program
HVAC	Heating, Ventilation, and Air Conditioning
RFP	Request for Proposal
RTU	<u>Rooftop Unit</u> – A self-contained HVAC unit that provides both heating and cooling for a space, typically for commercial applications
Utility Stakeholders	Minnesota Utilities funding the Minnesota Efficient Technology Accelerator (ETA) that serve on ETA Committees

Terms and Conditions

Below are our proposed terms and conditions. Contractors should review and note any issues with potential compliance.

Terms and Conditions including Preferred Insurance Coverage

Agreement for Services

This Agreement is made by and between **CENTER FOR ENERGY AND ENVIRONMENT**, with offices at 212 Third Avenue North, Suite 560, Minneapolis, MN 55401 ("CEE"), and **PARTNER**, with offices at XXXX ("CONSULTANT").

1. Services/Scope of Work



HVAC Research RFP

- 1.1 CONSULTANT shall coordinate with CEE's TITLE, NAME at EMAIL or PHONE.
- 1.2 CONSULTANT shall provide SERVICES DESCRIPTION or REFER TO ATTACHED SOW.

2. Compensation

CEE shall compensate CONSULTANT for the Services as follows OR REFER TO ATTACHED BUDGET:

- 2.1 CONSULTANT shall be compensated as described in ATTACHMENT A.
- 2.2 CONSULTANT shall be compensated at \$XXX.00 per hour for services performed.
- **2.3** Compensation under this Agreement shall not exceed \$XXXX.00.
- 2.4 CONSULTANT shall submit to CEE, on a monthly basis, invoices for services performed under this Agreement, including such supporting documentation (such as time sheets and receipts) as CEE may reasonably request from time to time. Invoices may be submitted by email with a PDF attachment to <u>accounting@mncee.org</u> or by regular mail. Invoices are due to CEE within 5 days from the end of the reporting month. CEE shall pay each properly submitted invoice within thirty (30) days after submission of the invoice by CONSULTANT.
- 2.5 CONSULTANT shall submit a completed Form W-9, Vendor Survey, and if applicable, Certificate of Insurance, prior to receiving payment for services.

•

3. CONSULTANT's Obligations

3.1 CONSULTANT shall not engage in discriminatory employment practices against any employee or applicant for employment and shall in all respects comply with all federal, state and local laws, regulations and orders, including without limitation, Chapter 363 of the Minnesota Statutes, as amended from time to time. Failure to comply with the provisions hereof shall be deemed a material default under this Agreement.

4. Term and Termination

- 4.1 Unless earlier terminated as provided in the following paragraphs, this Agreement shall become effective on xxx, and continue until xxx.
- 4.2 This Agreement may be terminated by either party, for any reason or no reason, immediately upon written notice to the other party. In the event this Agreement is terminated by CONSULTANT prior to the expiration of the term set forth in paragraph 4.1, CONSULTANT shall provide CEE with such information as CEE may request regarding the status of any ongoing project.

5. Ownership of Work Products

- 5.1 All memoranda, research, notes, drawings, designs, data, records and documents of every type, and all copies thereof, whether written or maintained in computer files (collectively, the "Documents"), developed or obtained by CONSULTANT in connection with providing services pursuant to this Agreement are the property of CEE and shall be transferred, assigned and delivered promptly by CONSULTANT to CEE upon any termination of this Agreement.
- 5.2 The foregoing notwithstanding, CONSULTANT shall be entitled to retain for its files a copy of all Documents, but CEE shall retain all rights of ownership in the Documents, all ideas contained therein and all information derived therefrom, including without



limitation all rights to copyright the Documents and any and all information contained therein, all such property being deemed "works for hire" under applicable law.

- 5.3 CONSULTANT shall not, during the term of this Agreement or at any time following any termination of this Agreement, use any of the Documents or any information contained therein without the prior written consent of CEE.
- 5.4 CONSULTANT agrees to take such further action and execute such further documents as CEE may reasonably request from time to time in order to more effectively transfer and assign and deliver to CEE the Documents, to confirm the title of CEE to the Documents and to assist CEE in exercising its rights with respect to the Documents.

6. Insurance

6.1 During the term of this Agreement, CONSULTANT will obtain and maintain insurance of the types and in the amounts listed below:

General Liability	\$2,000,000	Aggregate Limit
Automobile Liability	\$1,000,000	Combined Single Limit
Excess Liability	\$2,000,000	Aggregate Limit
Professional Liability	\$2,000,000	Aggregate Limit
Workers Compensation		Statutory Requirements

- 6.2 CONSULTANT'S general liability policy or policies shall specifically include the interests of CEE by naming CEE as an additional insured (by way of an additional insured endorsement in such form as is acceptable to CEE) with respect to any claim arising out of CONSULTANT'S services under this Agreement.
- 6.3 CONSULTANT shall provide CEE with a certificate or certificates of insurance (signed by an agent of the insurance company with authority to bind the company) evidencing that the requirements of paragraph 6.1 have been met. CONSULTANT shall also provide a signed copy of the additional insured endorsement or endorsements as required by paragraph 6.2.
- 6.4 Failure of CEE to enforce the minimum insurance requirements listed above shall not relieve CONSULTANT of responsibility for maintaining these coverages.

7. Liability and Indemnification

- 7.1 CONSULTANT acknowledges that CEE cannot control the conditions at any site where the services may be provided, and, accordingly, CEE is not liable for any claim, damage, loss, injury or expense of any type which CONSULTANT may suffer as a result of providing the services under this Agreement.
- 7.2 CONSULTANT shall indemnify, defend and hold harmless CEE and its officers, directors, employees and agents from and against any and all claims, damages, losses, injuries and



HVAC Research RFP

expenses (including attorneys' fees and damages for death, personal injury and property damage) which CEE may incur as a result of any act or omission by CONSULTANT in providing services under this Agreement.

8. Confidentiality

Unless otherwise agreed by CEE in writing, CONSULTANT shall maintain in confidence and not disclose to any third party any information obtained regarding CEE and/or any of CEE's clients for which CONSULTANT is providing services; provided, however, that this obligation to maintain confidentiality shall not apply to:

- a) Information in the public domain at the time of disclosure;
- b) Information which becomes part of the public domain after disclosure through no fault of CONSULTANT; or
- c) Information which CONSULTANT can demonstrate was known by CONSULTANT prior to the date of this Agreement.

Notwithstanding the foregoing, CONSULTANT shall be entitled to disclose the documents or client information covered by this paragraph to governmental authorities to the extent CONSULTANT reasonably believes it has a legal obligation to make such disclosures and to the extent CONSULTANT reasonably deems to be necessary; provided, however, that if CONSULTANT believes that any such disclosure is required by law, it shall provide advance notice to CEE to provide CEE with a reasonable opportunity to attempt to obtain an injunction or other protective order preventing such disclosure.

9. Generative AI

The use of Generative AI for services performed under this Agreement is strictly prohibited unless agreed to in writing by CEE, at which time, CEE and CONSULTANT shall further define such use.

10. Relationship of Parties

CONSULTANT will provide services as an independent contractor under this Agreement. Neither CONSULTANT, nor any of its employees or agents, shall be considered employees or agents of CEE for any purpose, and neither shall CONSULTANT be eligible for any compensation or benefits which CEE may provide to its employees from time to time. CONSULTANT shall be solely responsible for all employment and other taxes applicable to providing services hereunder, and CEE will not withhold any taxes or contributions from the compensation payable to CONSULTANT under this Agreement. If any governmental authority (federal, state or other) claims that CEE owes taxes or contributions which allegedly should have been withheld or made, then, to the extent permitted by law, CONSULTANT shall pay CEE the amounts claimed to be due, plus reasonable attorneys' fees and any other costs which CEE may incur in defending such claim, whether or not a lawsuit is commenced.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date written below.



CENTER FOR ENERGY AND ENVIRONMENT

Ву:	lts:
Date:	
PARTNER	
CONSULTANT	
By:	Its:
Date:	Tax ID #

