

**Market Research & Evaluation
Request for Proposals:
RFP #52505
Fan Systems Market Characterization Study**



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1 Introduction

About the Northwest Energy Efficiency Alliance

The Northwest Energy Efficiency Alliance (NEEA) is an alliance of more than 140 utilities and energy efficiency organizations working on behalf of more than 13 million energy consumers. NEEA is dedicated to accelerating both electric and natural gas energy efficiency, leveraging its regional partnerships to advance the adoption of energy-efficient products, services and practices.

Since 1997, NEEA and its partners have saved enough energy to power more than 985,000 homes each year. As the second-largest resource in the Northwest, energy efficiency can offset most of our new demand for energy, saving money and keeping the Northwest a healthy and vibrant place to live. www.neea.org

2 Background

NEEA's Efficient Fans Program, which is currently in development and scheduled to commence pilot activities in early 2023, aims to accelerate adoption of efficient fans and fan system products including motors, drives, and controllers (hereinafter referred to simply as "fan system products"). The program is currently intended to influence the regional commercial and industrial (C&I) fan system market (with potential future expansion to additional sectors, e.g., the agricultural market) through a defined set of interventions, potentially including but not necessarily limited to:

- Engagement with Air Movement and Control Association International (AMCA) to increase market awareness and enable product differentiation through raising awareness of Fan Energy Index (FEI)
- Engagement with fan manufacturers to prioritize the following:
 - o Production and promotion of more efficient fans
 - o Increased visibility of Fan Energy Index (FEI) in fan manufacturers' software
 - o Increased number of fan system products which are AMCA certified sold regionally through manufacturers
 - o Sharing of sales data to inform program strategy, measure progress, and determine energy savings

The Efficient Fans Program will focus on accelerating adoption of efficient fan system products that are not embedded in HVAC systems ("stand-alone fan systems"). The Northwest Regional Technical Forum (RTF) currently includes a planning measure for commercial and industrial fans, with preliminary market research suggesting a significant energy savings potential from increasing the efficiency of fan systems.

The Efficient Fans Program will initially partner with manufacturers and industry associations to increase awareness, visibility, and adoption of more efficient fan system products. By developing and promoting reliable energy metrics that allow manufacturers to differentiate products and making those metrics more visible in the fan selection

process, NEEA believes the overall market efficiency of fans will improve. Through targeted upstream interventions, NEEA hopes to shift manufacturers' product mix toward more efficient products that will diffuse across the market. Ultimately, the Program intends to contribute to manufacturers' production and promotion of efficient fan systems, resulting in (a) an overall increase in fan efficiency of 20–25% above the naturally occurring baseline established through the program and (b) the first federal test procedure and standard for fans.

NEEA encourages interested bidders to consider the following documents and materials as resources to contextualize and inform their proposals:

- NEEA's [Commercial & Industrial Stand-Alone Fans Market Research Report](#)
- NEEA's [Commercial Building Stock Assessment Reports and Data](#)
- NEEA's [2014 Industrial Stock Assessment Report and Analytic Results](#)
- Bonneville Power Administration's [Industrial Pump and Fan ASD Data Collection Summary](#)
- Lawrence Berkeley National Laboratory's [Motor Systems Market Report](#)
- ComEd's [overview](#) of fan energy efficiency in commercial buildings
- The RTF's [Commercial and Industrial Fans Measure](#)
- AMCA's [FEI Advocacy Brief](#)

Additionally, once a Non-Disclosure Agreement has been signed, NEEA will provide the selected contractor with further documents and materials to support their analysis, including but not limited to:

- Preliminary results of prior market research pertaining to C&I stand-alone fan market sales conducted by NEEA and regional partner organizations
- Lists of currently identified relevant market actors active in the alliance's four-state region (ID, MT, OR, and WA), including but not necessarily limited to C&I stand-alone fan manufacturers and specifiers
- Additional relevant internal documentation pertaining to the C&I stand-alone fan regional sales market

These documents and materials, along with any other relevant resources published or otherwise made available in the period between this RFP's release and awarding of a contract, should serve as the basis for a literature review to be conducted by the selected contractor prior to primary data collection activities. As such, while NEEA encourages thoughtful and focused incorporation of prior learnings to guide proposed study designs and activities, bidders are not expected to conduct a comprehensive review during the preparation of their proposals.

3 Research Objectives

NEEA is soliciting proposals for research to characterize the commercial and industrial market for efficient fan system products in Idaho, Montana, Oregon, and Washington ("the Northwest"). The primary research objectives and learning areas for this market characterization study are described below (note that some overlap may be present across learning areas; bidders are encouraged to leverage efficiencies in study design where such overlaps exist).

3.1 Profile and size the regional fan system market

The market characterization should yield findings illustrating the approximate size and nature of the regional C&I fan system market, including the relationships between market actor groups as pertaining to product flow. Specific objectives for this learning area include the following:

- Review and confirm or recommend changes to the NEEA definition of stand-alone fan system products as articulated above
- Building upon the results of NEEA's currently underway C&I Fan System Manufacturer Regional Market Share research, provide a working estimate of the size of the market for stand-alone C&I fan systems in the Northwest
- Provide segmentation of regional fan system sales to support future energy savings estimation (bidders are encouraged to address feasibility of this objective relative to their proposed study design):
 - By sector (commercial, industrial, and agricultural if supported by study design)
 - By horsepower bin
 - By FEI bin
 - By sales type (custom vs. off-the-shelf)
- Characterize fan system market processes and channels
 - Map the general Northwest fan system distribution flow (provide picture of relative product flow through distributors, direct purchase from manufacturers, etc.)
 - Identify and assess the level of regional sales activity (if any) of retailers of off-the-shelf stand-alone fan systems
 - Identify key fan system distributors and manufacturers' representatives and estimate ranking of larger to smaller fan distributors/representatives in terms of regional market sales activity
 - Assess and document types and nature of influence held by market actors involved in fan system selection, distribution, and installation, including identification of potential leverage points for market intervention
 - Assess and document types and nature of market actor engagement with communities typically underserved by energy efficiency efforts (e.g., economically disadvantaged communities), including any efforts taken by market actors to increase access to efficient fan system products among underserved communities

3.2 Identify and prioritize market barriers

NEEA requires an assessment of the nature, magnitude, and tenacity of market barriers that may impede the uptake and diffusion of efficient fan system technologies targeted by the Efficient Fans Program. Prior market research led to the development of a preliminary list of market barriers which should serve as the foundation for refinement through this market characterization. Specific research objectives for this learning area include the following:

- Confirm or recommend changes (including additions and/or deletions) to the following list of market barriers identified in NEEA’s Commercial & Industrial Stand-Alone Fans Market Research Report:
 - Specifiers and buyers select fans with an emphasis on fit for application and first cost and lack access to data needed for return-on-investment calculations
 - Stand-alone fans are typically a small and relatively simple component of larger HVAC equipment specification processes
 - End users lack familiarity with efficient products and do not know how to identify or request efficient fans
 - Specifiers do not prioritize efficiency when specifying stand-alone fans
 - FEI is not commonly used in fan selection
 - Customers and end users are not familiar with fan efficiency or how to ask for efficient fans
 - Suppliers prefer familiar, customized solutions and like-for-like replacements, due in part to constraints pertaining to spatial fit
 - There is a lack of full-category data that could hinder NEEA’s ability to understand the market
- Articulate the significance of all identified barriers with regard to severity of risk, scale of market presence, and likely degree of tenacity/resistance to interventions
- Assess and describe variance in identified barriers across key factors (e.g., sector, market actor group, state, product type) where appropriate.

3.3 Document market actor motivations and fan system path-to-purchase

Understand and document the full process by which efficient fan systems are selected for a given project, including the perspectives, motivations, and pain points of relevant market actor groups. This should include documentation of factors supporting and constraining the decision to purchase an efficient fan, including but not limited to factors associated with manufacturers’ selection software. Specific research objectives for this learning include the following:

- Identify and document the motivations, priorities, and pain points of market actors involved in the fan system decision-making process, including how (if at all) these dynamics coincide or conflict across market actor groups
- Assess the ways in which market actors conceive of, represent, and prioritize efficiency relative to their role in the fan system decision-making process
- Describe the path whereby fan systems are selected and installed, including (at a minimum) the following information:
 - The role and influence of each market actor in the decision-making process associated with fan system path-to-purchase
 - Typical motivations and perspectives expressed by each market actor associated with fan system purchase decision-making
 - The factors and priorities by which market actors assess fan system options when considering a purchase decision
 - The relationships and interactions between market actors throughout the fan system selection and purchasing process, particularly attending to dynamics of decision influence

4 Scope of Work

The proposed activities should address the learning areas and research objectives outlined in the Section 3 and document the firmographic characteristics (size, annual operating budget, geographic location, etc.) of relevant fan system market actors where such information is available.

4.1 Sample Population

Bidders should propose a sample design drawing from key market actors appropriate to support the proposed study design and methodology. NEEA recommends bidders consider including some or all of the following market actor groups in the proposed sample design:

- Fan system end users (e.g., building/facility managers)
- Fan system specifiers (e.g., designers, engineers, architects)
- Fan system contractors/Installers
- Fan system manufacturers¹
- Fan system manufacturers' representatives
- Building service providers

NEEA encourages bidders to consider how best to include these groups in the research, and to add, exclude, and/or combine groups based on the bidder's view of how to best achieve NEEA study objectives. In recent years, NEEA has found that recruitment has been challenging for the types of market actors likely to be included in this study. Please include a detailed description of your approach for recruiting respondents for participation once identified.

4.2 Research Design (Approach and Methodology)²

NEEA expects bidders to recommend an approach that best meets the objectives and tests the assumptions laid out above. NEEA is open to well-thought-out and designed research approaches incorporating qualitative, quantitative, or mixed methodologies.

For each research activity, bidders should include the activity's objective, what will be done, the market actor group(s) included in that activity, and the activity's timeline from initiation to completion.

4.3 Deliverables

The selected contractor will provide the following deliverables:

¹ Note that NEEA's recently completed C&I Fan System Manufacturer Regional Market Share study included outreach to regionally active fan system manufacturers; a report from this study will be posted publicly in Q1 2023, and the selected bidder may review study findings prior to publication upon request. Given this, NEEA encourages bidders to limit the inclusion of this market actor group in proposed study activities and leverage findings from this prior study as appropriate.

² The Efficient Fans Program team intends to build long-term relationships with regional market actors who participate in program interventions. NEEA will work with the selected contractor to develop an acceptable contact protocol with the research participants.

- Draft and final work plans
- A kickoff meeting with NEEA staff, including draft and final agenda and slides
- Two working sessions with the NEEA program team at logical intervals, including draft and final agenda and slides for each session. The awarded Contractor will work collaboratively with the NEEA MRE Project Manager to plan an agenda and facilitation approach for each session that fosters team engagement and socialization of results.
- Draft and final market actor sample lists; final sample lists should be cleaned and include (a) current contact information and (b) any notes generated during recruitment
- Draft and final data collection instruments (e.g., survey questionnaires, interview guides)
- Draft and final reports. A report outline shall be submitted to the NEEA MRE Project Manager. This outline will serve as a basis for discussion between the selected contractor, the NEEA MRE Project Manager, and other NEEA stakeholders. Based on review and input generated in response to the report outline, the selected contractor will produce the draft final report and present it to the NEEA MRE Project Manager for review and comment. This draft will be reviewed and commented on by NEEA staff. Based on these comments, the selected contractor shall make revisions and deliver to NEEA a final version of the report. Proposals should plan and budget for multiple iterations with NEEA to achieve an acceptable final report.

Bidders may include additional deliverables in their proposals, provided any such deliverables are clearly tied to study objectives and related activities.

4.4 Timeline

NEEA expects the final report to be completed within eight months of the contract start date.

4.5 Budget

Proposals should be provided on a time and materials basis. Bidders should provide a competitive budget estimate that is sufficient to cover their proposed work. A reasonable estimate for the budget for this effort is \$140,000-\$150,000. However, budget should not be considered a limiting factor. NEEA's MRE Project Manager will work with finalists to negotiate the specifics of the proposed research activities to meet resource constraints.

Note that proposal estimates should reflect that the Contractor is responsible and accountable for the following:

- All logistics associated with executing the research tasks such as, but not limited to travel, facilities, and scheduling
- Preparing identified deliverables as specified in Section 4.3
- Any subcontractors used on this project
- Contractors' allocation of resources to tasks
- Invoicing & expense reporting per contract terms
- Distribution of honorariums/incentives for study participation

5 Proposal Format

Proposals should not exceed 12 total pages (excluding any appendices) and be structured to include the following:

5.1 Executive Summary

Describe the reasons NEEA should select your team. Include your key strategies and general approach to meeting the research objectives. State the proposed budget and timeline.

5.2 Approach & Methodology

Provide a detailed description of the specific methodologies and approach to be undertaken to complete the scope. Include project management activities in the proposed implementation strategy as well. Identify all major phases and milestones for the project and the associated deliverables. In recent years, NEEA has found that recruitment has been challenging for the types of market actors included in this research. Please include a detailed description of your approach for recruiting respondents for survey completion once identified.

5.3 Project Team Identification

Identify the proposed project team by task, including subcontractors if relevant.

5.4 Project Timeline & Cost Estimate

Provide your proposed project timeline in table format. Provide a separate budget table for all major phases and milestones of the project, broken out by task. Please include the hourly rate and estimated number of hours for each project team member in the budget table.

5.5 Proposal Appendices

- Hourly Rate Sheet - for all proposed project team members with estimated hours by task
- Company background & qualifications
- Project Team & Team Bios – Include information about program team members and team structure, past team efforts on similar work, years of experience and other relevant qualifications.
- Examples of relevant projects/case studies (you may provide links to reports or include a summary of a project or projects completed previously, that demonstrate your capabilities as they relate to this work)

6 Proposal Submission

Bidder shall submit (1) electronic copy of the proposal via email to Chris Cardiel (ccardiel@neea.org) by the close of business on February 2, 2023. Key dates for this RFP process are as follows:

6.1 RFP Schedule

01/05/2023	RFP released
01/13/2023	Intent to Bid and questions for clarification submitted by email

01/18/2023	Answers to all questions received distributed to all bidders
02/02/2023	Written proposals due
02/10/2023	Anticipated award date
02/27/2023	Anticipated project kick-off date

6.2 RFP Point of Contact

All correspondence, included but not limited to, questions and submissions shall be directed to:

Chris Cardiel
 Senior MRE Scientist, Market Research and Evaluation
 E-mail: ccardiel@neea.org

6.3 Intent to Respond

All “Intent to Respond” forms (see Appendix A) must be received no later than by the end of business day listed in the RFP Schedule.

Only those parties submitting the “Intent to Respond” form will be provided with updates to the RFP, have questions responded to and have their proposals considered.

7 Selection and Insurance Requirements

Bidding firms will be rated among others in terms of the overall responsiveness to the RFP – how well all RFP requests have been addressed including, but not limited to:

- 1) Demonstrated understanding project objectives, nuances, and potential roadblocks to meeting objectives
- 2) The thoughtfulness and appropriateness of the proposed design used to accomplish the desired results of the project
- 3) Thoughtfulness and appropriateness of respondent recruitment approach and ability to address potential issues
- 4) How well deliverable examples and descriptions meet the stated needs and intended use
- 5) Overall value for expenditure
- 6) Evidence of innovation / creativity in both overall design, recruitment and deliverables
- 7) Evidence of flexibility throughout the project lifecycle
- 8) Ability to communicate complex ideas/concepts in a clear and succinct fashion
- 9) The balance of the complexity of design with the succinctness of communication of the design

In addition, the following factors will play a key role in the selection process:

- 1) The experience and qualifications of the individuals specifically proposed to execute and manage the project. (Note: Proposed staffing is a significant factor in bidder selection. As such, no changes in key staff/substitutions or changes in roles/responsibilities can be made without the written agreement of NEEA Project Manager once the RFP has been awarded.)

- 2) The experience of the firm or team of firms making the proposal.
- 3) The capability to execute the plan, including past experience and aptitude for collaboration.

Proposals may be evaluated by the NEEA Project Manager and other NEEA staff that we believe have the perspective needed to make this important decision. NEEA is under no obligation to provide work to any vendors responding to this solicitation, nor is there any obligation or intent implied to reimburse any party for the cost of preparing a proposal in response to this RFP.

7.1 Preferred Insurance

Firms interested in working with NEEA should be aware of the following insurance requirements for all NEEA vendors.

Vendors must maintain adequate and reasonable insurance covering their performance under any offered contract, including, but not limited to Commercial General Liability insurance of at least \$1,000,000/occurrence, Business Automobile Liability insurance, and any workers' compensation and unemployment insurance required by law. Professional Liability and Cyber Liability insurance may also be required. NEEA may request a copy of such insurance policies prior to awarding work.

See sample terms and conditions for additional information about minimum insurance requirements: <https://neea.org/img/documents/sample-neea-contract-terms-and-conditions.pdf>.

Appendix A - Intent to Respond Form

RFP #: 52505

Project Title: Fan Systems Market Characterization Study
NEEA Point of Contact: Chris Cardiel (ccardiel@neea.org)

Refer to section: Point of Contact for more details

PLEASE PRINT:

Company	
Address	
City, State, Zip	
Contact Name	
Contact Title	
Phone #	
E-mail	

The company named above intends to submit a proposal in response to NEEA's request for proposal listed above. Deadline for submitting the "Intent to Respond" form is end of business day of date listed in the RFP schedule.

List any Disadvantaged Business Enterprise (DBE) certifications and the state of the certifications below:

Signature of Authorized Representative _____
Print Name _____
Title _____
Date _____