

Building Successful Partnerships with Energy Auditors and Project Contractors

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ENERGY TECHNOLOGIES AREA | ENERGY ANALYSIS AND ENVIRONMENTAL IMPACTS DIVISION | ENERGY MARKETS & POLICY



Today's presenter – Rebecca Olson



Sr. Director of Residential and Community Energy

- Rebecca directs activities related to all residential and community-based programs and consulting work.
- She leads a strong team that works across disciplines to bring the most effective energy efficiency solutions to residents, owners and communities.
- Rebecca has worked in energy efficiency since 2006 and has had various roles including energy auditor, building science educator, and program director.
- She has served on various trades and community related boards like the MN Building Performance Association, the Building Performance Institute's (BPI) Standards Technical Committee, and the Minneapolis Energy Vision Advisory Committee.



Housekeeping

- ❑ Today's webinar: Building Successful Partnerships with Energy Auditors and Project Contractors
 - Purpose: Provide information on how to effectively partner with energy auditors and project contractors for RLF programs
 - Brief Q&A session at end of today's webinar
- ❑ Office hours **Tuesday July 9**, 2024 1pm ET for more in-depth and state-specific discussion (NOTE DATE HAS MOVED—it may not have moved on your calendar)
- ❑ Previous partnership webinar: [Building Successful Partnerships with Third-Party Program Administrators and Financial Institutions](#), May 20, 2024
- ❑ Free direct technical assistance services from Berkeley Lab: select “Get Technical Assistance” on EERLF Resource Page
<https://www.energy.gov/scep/revolving-loan-fund-technical-assistance-resources>)



Agenda

- Foundations
 - ▣ Review of terminology
 - ▣ Role of partners during program lifecycle
 - ▣ Characteristics of good partnerships
 - ▣ RLF program audit and retrofit requirements
- Auditor and contractor recruitment
- Auditor and contractor-friendly program design
 - ▣ Driving program uptake via contractors
- Additional resources



Foundations



Terminology

Partnership: An arrangement in which two or more parties agree to **cooperate** to advance their **mutual interests**.

RLF program partners can include:

- ❑ **Energy auditor** – a person/organization that conducts energy audits to identify where building energy is being wasted and opportunities to improve efficiency
- ❑ **Project contractor** – a person/organization that makes energy improvements to a building
- ❑ Program administrator
- ❑ Lender
- ❑ Others



Role of partners during program lifecycle

Phase 1 – Program design

Setting program goals, assessing market gaps, identifying target market/sector(s). Gathering partner feedback in program design.

Partners:

- Program administrator (optional)
- Auditor/contractor (recommended)

Phase 3 – Program execution

Implementing, monitoring, adapting, and troubleshooting.

Partners:

- Program administrator (optional)
- Lender (required for co-lending/LLR/IRB)
- Auditor/contractor

Pre-award/pre-capitalization

Award – 180 days

180 days on

Phase 2 – Establishing partnerships

Developing documents and agreements, navigating procurement, vetting potential partners.

Partners:

- Energy auditor (required by RLF 40502 funding)
- Project contractor (required to complete projects)
- PA/lender



Note: Today's webinar is primarily focused on establishing partnerships **(Phase 2)**, though content is applicable to Program Execution **(Phase 3)**.



Characteristics of effective partnerships

- ❑ Open communication
- ❑ Accessibility
- ❑ Flexibility
- ❑ Complementary strengths
- ❑ Measurable results
- ❑ Commitment



RLF program energy audit and retrofit requirements

Required and Optional Elements of Qualifying Energy Efficiency Audits and Upgrades

Commercial Energy Audits	REQUIRED	<ul style="list-style-type: none"> Determine the overall consumption of energy of the facility of the eligible recipient. Identify and recommend lifecycle cost-effective opportunities to reduce the energy consumption of the facility of the eligible recipient. Identify the period and level of peak energy demand for each building within the facility of the eligible recipient and the sources of energy consumption that are contributing the most to that period of peak energy demand. Recommend controls and management systems to reduce or redistribute peak energy consumption. Estimate the total energy and cost savings potential for the facility of the eligible recipient if all recommended upgrades and retrofits are implemented, using software approved by DOE.²¹
	OPTIONAL	<ul style="list-style-type: none"> Recommend strategies to increase energy efficiency of the facility of the eligible recipient through use of electric systems or other high-efficiency systems utilizing fuels, including natural gas and hydrogen.
Residential Energy Audits	REQUIRED	<ul style="list-style-type: none"> Use the same evaluation criteria as the Home Performance Assessment used in the Energy Star program.²² Identify and recommend lifecycle cost-effective opportunities to reduce the energy consumption of the facility of the eligible recipient. Recommend controls and management systems to reduce or redistribute peak energy consumption. Compare the energy consumption of the residential building of the eligible recipient to comparable residential buildings in the same geographic area. Provide a Home Energy Score, or equivalent score (as determined by the Secretary),²³ for the residential building of the eligible recipient by using DOE's Home Energy Score Tool or an equivalent scoring tool.
	OPTIONAL	<ul style="list-style-type: none"> Recommend strategies to increase energy efficiency of the facility of the eligible recipient through use of electric systems or other high-efficiency systems utilizing fuels, including natural gas and hydrogen.
Commercial and Residential Upgrades and Retrofits	REQUIRED	<ul style="list-style-type: none"> Recommended in the qualifying commercial energy audit or residential energy audit, as applicable, completed for the building or facility of the eligible recipient. Satisfy at least 1 of the criteria in the Home Performance Assessment used in the Energy Star program (residential only). Are life-cycle cost-effective. Improve, with respect to the building or facility of the eligible recipient, <i>at least one</i> of the following: <ul style="list-style-type: none"> The physical comfort of the building or facility occupants. The energy efficiency of the building or facility. The quality of the air in the building or facility. Lead to <i>at least one</i> of the following outcomes: <ul style="list-style-type: none"> Reduce the energy intensity of the building or facility of the eligible recipient. Improve the control and management of energy usage of the building or facility to reduce demand during peak times.

Source: [EE RLF IJA Application Instructions](#), p. 21

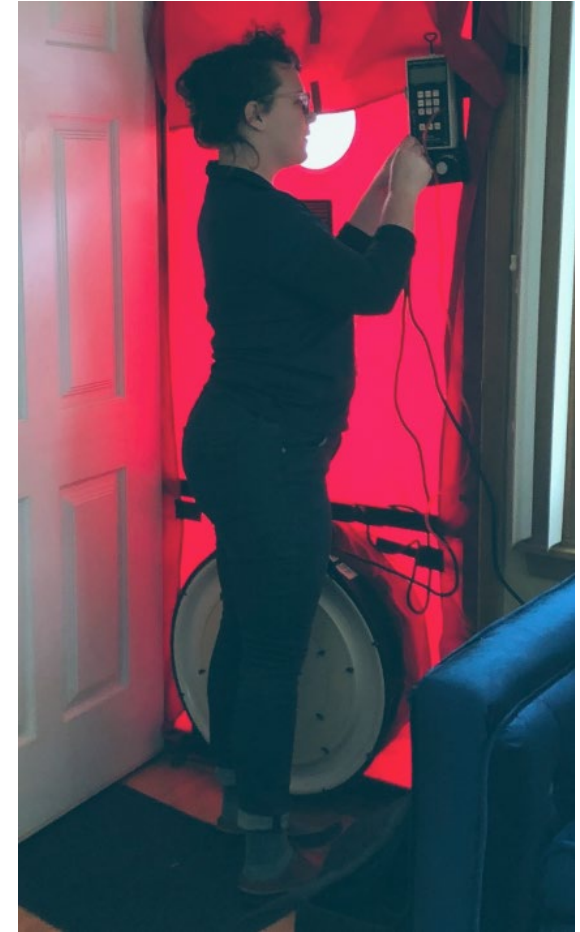


Auditor and contractor recruitment



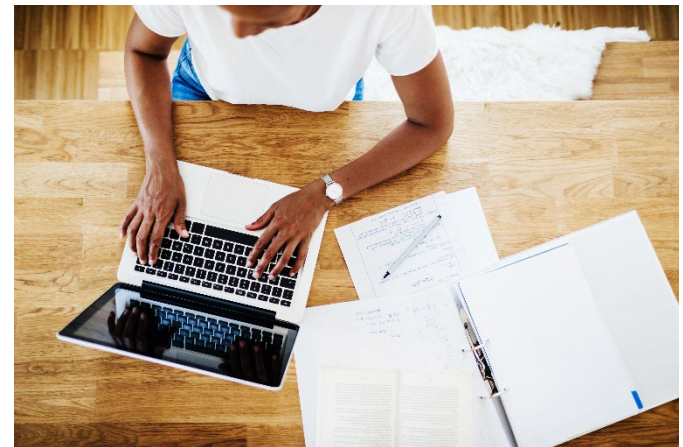
Finding auditors and contractors

- Residential (including multi-family)
 - ▣ Weatherization Assistance Program Providers
 - ▣ [Building Performance Association](#) (trade association)
 - ▣ [Building Performance Institute](#) (certification and standards)
 - ▣ [Residential Energy Services Network \(RESNET\)](#)
 - ▣ [Home Energy Score partners](#)
- Commercial
 - ▣ Engineering and consulting firms
 - ▣ [Association of Energy Engineers](#)
 - ▣ [American Society of Heating, Refrigerating and Air-Conditioning Engineers \(ASHRAE\)](#)
- Both
 - ▣ Contractor trade associations
 - ▣ Utility program contractor/vendor lists
 - ▣ Program implementers



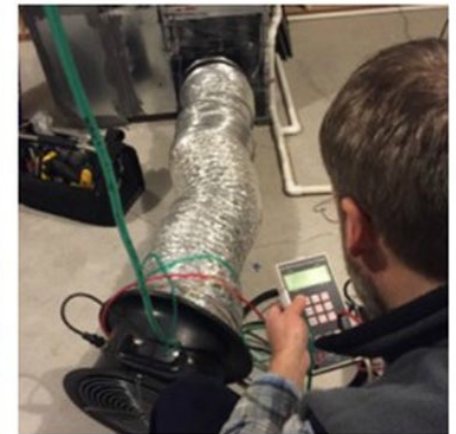
Auditor and contractor training

- Identify training and education needs early
- Likely training needed around **program** requirements
 - Recipients and projects eligible for funding
 - Reporting and data submission requirements
 - Timeline and other partners involved in projects
 - Any approval or touchpoints needed by auditors or contractors
- DOE is developing training resources for auditors and contractors for Revolving Loan Fund program requirements



Auditor and contractor training

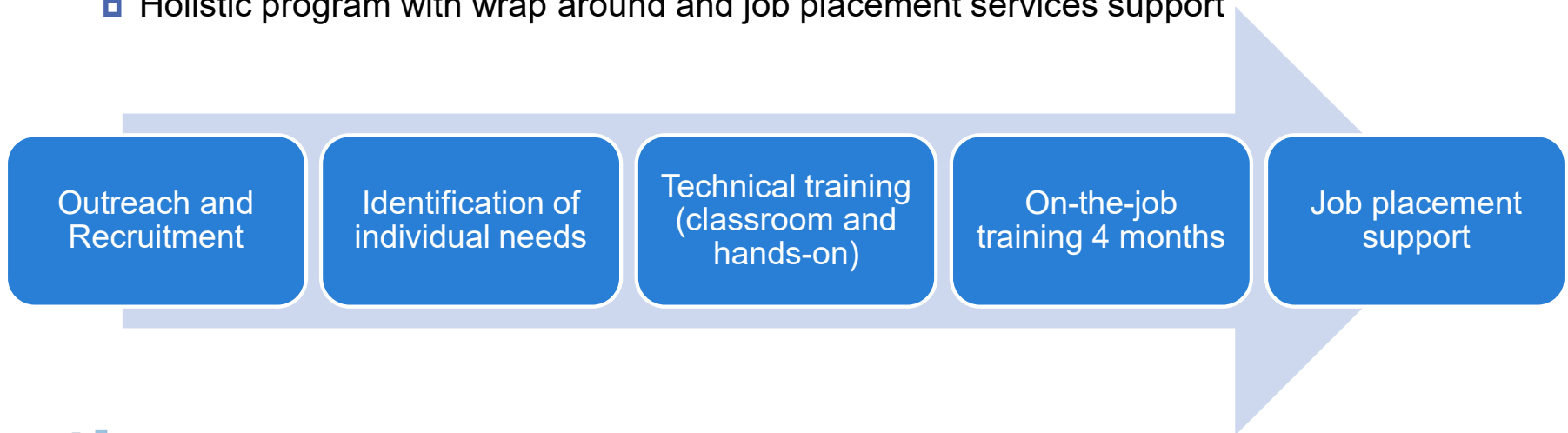
- Identify training and education needs early
- **Technical** training
 - ▣ Building science
 - ▣ Health and safety
 - ▣ Technology specific—i.e. heat pumps
 - ▣ Installation best practices by trade and work type
 - ▣ QA protocols
 - ▣ Software and diagnostic testing



Workforce development

- ❑ Identify major trade gaps that might need larger efforts to supply workforce
- ❑ Partner with State and other workforce efforts to bring new workers into energy efficiency and home performance work
- ❑ Connect contractors and auditing companies to those efforts

- ❑ Minnesota Example:
 - Utility, city, and county funded programs focused on recruiting BIPOC and Women from areas of concentrated poverty
 - Holistic program with wrap around and job placement services support



Auditor and contractor-friendly program design



Design program with contractor and auditor input

- ❑ Solicit input and feedback on program design elements early
- ❑ Ensure program is designed with parameters that current contractor/auditor base can meet
- ❑ If you identify barriers in this stage, work with contractor/auditor base to find a solution that meets DOE/State criteria
- ❑ Think through the value proposition for contractors to utilize program
- ❑ Getting input and feedback in the design phase will make implementation much more successful



Program design topics for discussion

Approved contractors and auditors

- Are there specific firms/companies approved or recommended?
- Is it solely based on certifications of practitioners?
- Is it open to all who meet RLF criteria?

Project process and timeline

- What kind of lead time do auditors and contractors need?
- What is the sequence of a project? Do certain steps need to be done before another?
- What is the turnaround time for an audit?



Program design topics for discussion

Alignment with other programs

- What programs do contractors and auditors currently use?
- What works well and doesn't work well?

Software and measure evaluation

- What software is currently used by auditors?
- What are the barriers or opportunities for current software alignment?
- Are there any standard protocols for measure recommendations that are used in this or other programs?

Work scope development

- Who creates the work scopes, who approves them? Auditor? State? 3rd Party administrator? Contractor?
- Who ensures the work scope is comprehensive and complete?



Program design topics for discussion

Quality control and quality assurance (QAQC)

- QAQC can help ensure project success by checking at key points
- Most code inspections don't check for performance of energy efficiency measures
- QA inspections could use a sampling protocol, coordinate with end of job timing, and include virtual options
- Some check on comprehensive work scopes should be done for each project

Project completion expectations

- Timing between project start and finish
- Expectations of payment turnaround
- Will QA be required before payment is issued?

Complaint resolution and dispute process

- Who does the complaint/dispute get reported to?
- Are there provisions in agreements with contractors for resolution/callbacks?



Driving loan program uptake using contractor and auditor networks

- Design a program that contractors want to sell
 - ▣ Streamlined processes for project and loan approvals
 - ▣ Rapid loan disbursement
 - ▣ Program covers up-front cost of audits
 - Covered by grant funding?
 - Rolled into loan if project proceeds?
 - ▣ Loan terms are better than existing alternatives
- Provide support for auditor and contractor networks
 - ▣ Provide frequent training and education on program offerings
 - ▣ Consider periodic social events to strengthen program network and demonstrate the program's appreciation for the partnership
 - ▣ Provide resources/collateral on program offerings to support outreach by contractors/auditors



Best practices for managing auditor/contractor networks



Engage early



Stay connected



Create a feedback loop



Trust their expertise, but know when to push back



Develop a value proposition for them to continue working with the program





Make it as aligned as possible with other programs



Resources



SCEP workforce development programs for SEOs

	Total Appropriations & Availability	Estimated Awards	Timeline	Program Summary
 State-Based Home Energy Efficiency Contractor Training Grants IRA 50123	\$200,000,000 \$150M Formula \$40M Competitive	Formula: 56 Eligible Applicants Competitive: 20-30 awards	<ul style="list-style-type: none"> • ALRD Publication for \$150M on 07/17/2023 • FOA Publication for up to \$40M on 3/28/2024 • TREC FOA applications are due on 7/12/2024 	Provides grants to States to: <ul style="list-style-type: none"> a) Reduce the cost of training contractor employees b) Provide testing & certification of contractors trained and educated under a state program c) Partner with nonprofits on a) or b)
 Energy Auditor Training Program BIL 40503	\$40,000,000 Competitive	20-30 awards	<ul style="list-style-type: none"> • FOA Publication on 12/20/2023 • Applications Due: July 12, 2024 	Provides grants to train individuals to conduct energy audits or surveys of commercial and residential buildings.

[Workforce Development and Business Owner Training Programs | Department of Energy](#)

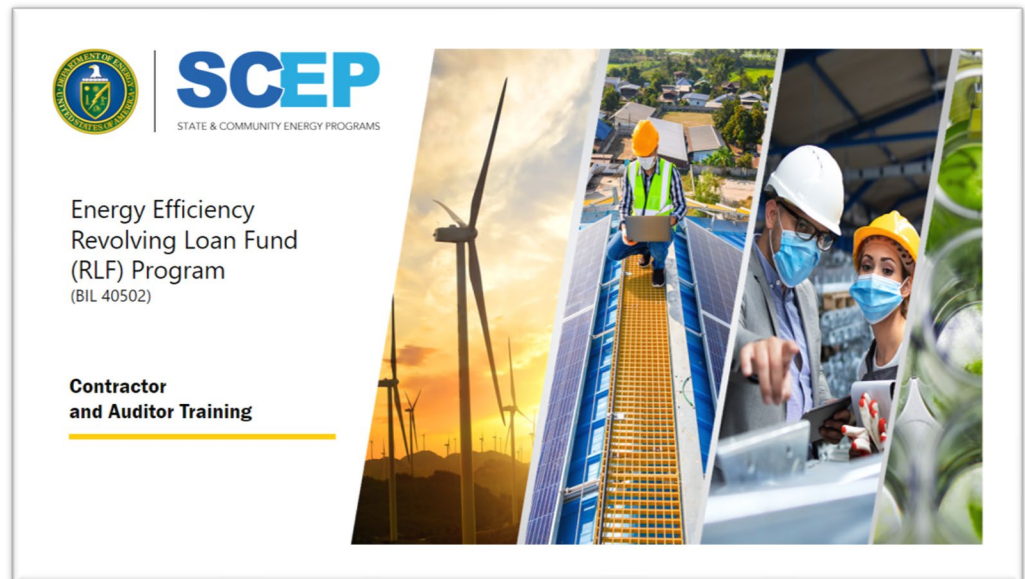


Contractor and auditor training resources

The RLF team is developing resources to support SEOs in training contractors and auditors on the RLF program, include 1) training slide template and 2) training recording.

The training will cover:

- ✓ RLF program requirements
- ✓ RLF commercial energy audits
- ✓ RLF residential energy audits
- ✓ RLF upgrades and retrofits



These resources will be available in the [RLF Resource Library](#) and shared this summer.

Additional resources

- [RLF Energy Audit Guide](#)
- [RLF Technical Assistance Resources](#)
- DOE/national lab auditor/contractor resources
 - ▣ [Professional Home Energy Assessments](#)
 - ▣ [Residential Energy Auditor Resource Repository](#)
 - ▣ [Building Science Education Solution Center](#)
- Audit tools
 - ▣ [Audit Template](#) (DOE commercial audit software)
 - [Support for Audit Template](#)
 - ▣ [Home Energy Score](#) (DOE residential scoring methodology)
 - [Support for Home Energy Score](#)



Q&A



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