

Revolving Loan Fund Energy Audit Guide

January 22, 2024 | BIL Section 40502



Revolving loan funds (RLFs) are tools for completing building energy upgrades and retrofits. RLFs are pools of capital from which loans can be made for energy projects—as loans are repaid, the capital is then reloaned for other projects. This guide is a resource for states receiving capitalization grants from the Energy Efficiency Revolving Loan Fund Capitalization Grant Program (RLF Program) under the Bipartisan Infrastructure Law (Box 1) to support successful and compliant program implementation and may also inform energy audits funded by other programs.

Building energy audits help building owners understand the whole picture of a building’s energy use, comfort, and safety. An energy audit, also known as energy assessment, should be the first step a building owner takes before making upgrades or retrofits to help determine how much energy a building uses, where it is inefficient, and which problem areas and fixes should be prioritized to save energy and improve the comfort of a building.

RLF Program & Energy Audits

Box 1

The RLF Program—appropriated under the 2021 Bipartisan Infrastructure Law (BIL Section 40502)—capitalizes state RLFs to provide loans and grants for energy audits, upgrades, and retrofits to increase energy efficiency and improve the comfort of buildings. Energy upgrades and retrofits funded with RLF Program dollars must be preceded by energy audits that meet certain [requirements](#). This guide provides resources for meeting these requirements.

TIP: Visit the [Energy Efficiency Revolving Loan Fund Capitalization Grant Program](#) webpage for RLF Program information.

Auditors: Finding Auditors, Auditor Training & Workforce Development

Energy auditors, also known as energy assessors, conduct energy audits to identify where building energy is being wasted and opportunities to improve a building’s efficiency. These resources can help states identify energy auditors and train both existing and new energy auditors to build program capacity. Note: when training existing and new energy auditors, include information on program-specific audit requirements so auditors are aware of and can produce audits in compliance with these requirements.

FINDING AUDITORS

- **Commercial auditors:** Credentialing bodies are helpful resources for identifying energy auditors¹
- **Residential auditors:** [Finding and Selecting Home Energy Assessors](#)²

AUDITOR TRAINING RESOURCES

The [Building Science Education Solutions Center](#) is an online education catalog for building trades, including resources for [Energy Assessment Programs](#). The [Residential Energy Auditor Resource Repository](#) also includes data collection and analysis resources for auditors.

WORKFORCE DEVELOPMENT FUNDING OPPORTUNITIES

New DOE funding opportunities for states to support auditor workforce development:

- [State-Based Home Energy Efficiency Contractor Training Grants](#) (TREC) program is a funding opportunity for State Energy Offices (SEOs) targeting the residential sector. It includes \$150 million in formula funding and up to \$40 million in competitive grants. Formula applications due January 31, 2024; competitive applications to be announced.
- [Energy Auditor Training Grant Program](#) is a funding opportunity for SEOs to support auditor training. It includes \$40M in competitive grants for programs targeting the residential and commercial sectors (applications to be announced).
- Additional funding opportunities: [Workforce Development and Business Owner Training Programs](#).

CONTACT

For additional questions about the energy workforce and resources in the U.S. Department of Energy’s (DOE) Office of State and Community Energy Program (SCEP) contact EEWorkforcePrograms@hq.doe.gov.

¹ The [American Society of Heating, Refrigerating and Air-Conditioning Engineers](#) (ASHRAE) and the [Association of Energy Engineers](#) (AEE) are two such credentialing bodies.

² Homeowners looking to claim the Energy Efficient Home Improvement Credit (Section 25C) for energy audits can reference these [qualifying](#) energy auditor credentials.

Audit Tools & Resources

COMMERCIAL AUDITS

[BuildingSync](#) is a standard format for conveying data, which DOE recommends using for commercial energy audits. DOE's free [Audit Template](#) software, which utilizes BuildingSync, is a simple way to collect and manage audit data.

RLF Program: **Commercial Audits** Box 2

For commercial audits funded with RLF Program dollars, DOE requires the use of software that uses BuildingSync, and recommends the use of Audit Template.

BuildingSync Resources	Audit Template Resources
<ul style="list-style-type: none"> ▪ Start here: BuildingSync Onboarding Guide ▪ Published trainings: BuildingSync Webinar ▪ Example documentation: BuildingSync in RFPs 	<ul style="list-style-type: none"> ▪ Start here: Audit Template Quick Start Guide (EE-RLF) ▪ Published trainings: Introduction to the Audit Template Webinar ▪ Example: Audit Template PDF Report Example
<p>TIP: Request support for BuildingSync and Audit Template: Building Data Tools Help Desk.</p>	

RESIDENTIAL AUDITS

[Home Energy Score](#) is a standard scoring methodology of energy-related home assets used for residential energy audits. DOE recommends using energy scoring tools, such as the Home Energy Score, to estimate home energy use, associated costs, and provide energy solutions to cost-effectively improve the home's efficiency.

RLF Program: **Residential Audits** Box 3

For residential audits funded with RLF Program dollars, DOE requires audits provide either a Home Energy Score or equivalent score. The [RESNET Home Energy Rating System](#) (HERS) is one such alternative scoring tool.

Home Energy Score Resources
<ul style="list-style-type: none"> ▪ Start here: About the Home Energy Score <ul style="list-style-type: none"> – State and Local Governments Fact Sheet – Scoring Methodology ▪ Published trainings: Home Energy Score for State and Local Governments: Provide Transparency to Residents and Incentivize Energy Efficiency Webinar Home Energy Score 101: Assessing Efficiency and Savings Webinar ▪ Example: Home Energy Score Report Example
<p>TIP: Request support for the Home Energy Score.</p>

Audit Braiding

DOE encourages braiding RLFs with other federal programs to maximize the effectiveness and reach of funds.³ Examples of programs states are considering braiding with RLFs include, but are not limited to: the [Weatherization Assistance Program](#) (WAP), [Home Energy Rebates](#), [Solar for All](#), [Energy Efficiency and Conservation Block Grant Program](#) (EECBG), [Elective Pay and Transferability](#) (Direct Pay), and the [Home Energy Score](#). As States consider braiding opportunities between RLFs and other programs, energy audit requirements, which may differ across programs, must still be met (Box 4).

RLF Program: **Braiding** Box 4

Energy audits, upgrades, and/or retrofits funded with RLF Program dollars must meet RLF Program energy audit requirements. See the [Energy Efficiency Revolving Loan Fund Capitalization Grant Program](#) webpage for RLF Program energy audit requirements and view the Frequently Asked Questions on this page for additional information about energy audit requirement compatibility across programs.

Additional Resources

The [RLF Resource Library](#) provides resources to learn about, design, and manage RLFs. Find more information about the [RLF Program](#) online and reach out to EERevolvingLoanFund@hq.doe.gov with program questions.

³ IIJA Section 40502(f) states that, in terms of coordinating EERLF programs with existing programs, "a State receiving a capitalization grant under the program is encouraged to utilize and build on existing programs and infrastructure within the State that may aid the State in carrying out a revolving loan fund program."

Appendix: RLF Audit Requirements

Required and Optional Elements of Qualifying Energy Efficiency Audits and Upgrades⁴

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.
	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.⁵ • 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), 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.



⁴ Source: page 21 of the [Infrastructure Investment and Jobs Act of 2021, Energy Efficiency Revolving Loan Fund Capitalization Grant Program Grant Application Instructions](#).

⁵ See the [RLF Frequently Asked Questions](#) for more information about the Home Performance Assessment evaluation criteria.