RMI

ELECTRICITY AFFORDABILITY TOOLKIT

Low-Income Energy Efficiency

COST CONTROL | CUSTOMER AGENCY | ✓ SAFEGUARD

AT A GLANCE

TARGET COST DRIVERS

- **Aging grid infrastructure**
- **Fuel price volatility**
- **Extreme weather/wildfires**
- **Load growth**
- **Misaligned utility incentives**

Because low-income energy efficiency provides household savings as well as system-wide benefits, this policy can address both overall affordability and provide a solution specific to certain cost drivers.

IMPACT TIME HORIZON *Page 2*

How long it typically takes before changes materialize in utility behavior or customer bills

●○○ **Short-term (0–2 years)**

POTENTIAL COST SAVINGS *Page 2*

The level of cost savings that can reasonably be expected to result from this policy

●●○ **Medium**

CONTEXT AND BACKGROUND

Energy efficiency programs for low-income households reduce energy consumption and utility costs by supporting measures like air sealing, insulation, and equipment upgrades to increase energy affordability and provide additional benefits, such as improved health and home comfort.

Many low-income households live in older, less energy-efficient homes, disproportionately experiencing issues like drafts, inefficient heating and cooling systems, and poor insulation — making these targeted support programs especially important.

Energy efficiency programs typically take two forms: deep energy retrofits that deliver large bill savings to a small number of customers or lighter improvements that provide more modest benefits to a broader population.

Funding and financing can also take many forms, including upfront rebates, on-bill financing, grants, and low-interest loans; it is important to design incentives to ensure that low-income households can access them, ideally by reducing or eliminating out-of-pocket costs.

REAL-WORLD EXAMPLES

Most states offer some form of low-income energy efficiency support, such as weatherization, incentives for more efficient appliances, and/or improved controls.

California's Low-Income Weatherization Program provides no-cost energy efficiency retrofits, solar photovoltaic systems, and health and safety upgrades to low-income households with specific focuses on disadvantaged communities, farmworker housing, transitional housing, and homeless shelters. Funding is appropriated through the state's cap-and-trade program with an average of approximately $35 million annually from fiscal years 2014/25 through 2022/23. Multiple pieces of legislation provide the foundation for this program, including, for example, Senate Bill 535, which links cap-and-trade funds to disadvantaged communities.

Colorado enacted Article 8.7 in its utility statutes in 2005, which formally established the Colorado Affordable Residential Energy (CARE) Program. CARE provides no-cost energy efficiency upgrades and energy audits to customers of participating utilities, living in a participating county, with household income that meets program limits, or with a household member who participates in aid programs (e.g., Supplemental Nutrition Assistance Program (SNAP), Section 8). It is funded by Energy Outreach Colorado, a nonprofit.

Massachusetts's Mass Save program delivers a suite of energy efficiency services, including no-cost weatherization, equipment upgrades, and health and safety improvements for low-income households. The program is administered by a group of the state's utilities and energy efficiency service providers with oversight from the state's Department of Public Utilities and advisory input from the Energy Efficiency Advisory Council. Funding comes from a dedicated energy efficiency surcharge on both gas and electric bills. The Green Communities Act of 2008 spurred the creation of Mass Save.

FURTHER READING

- "We Can End Energy Poverty in the Electric Sector: Here's How," RMI, 2025
- "Funding Our Future: Creating a One-Stop Shop for Whole-Home Retrofits," RMI, 2022
- "Supporting Low-Income Energy Efficiency: A Guide for Utility Regulators," American Council for an Energy-Efficient Economy, 2021

IMPACT TIME HORIZON

Short-term (0–2 years)

Designing, approving, and launching a low-income energy efficiency program often takes a year or two.

POTENTIAL COST SAVINGS

Medium

Program impacts vary greatly depending on design. For example, programs providing deep retrofits can achieve high cost savings while those offering lighter efficiency measures may deliver lower savings. Comprehensive energy efficiency measures can reduce household energy bills by 50% or more, but finite program funding can limit the reach of deep energy efficiency upgrades to a relatively small percentage of eligible households

LEGISLATIVE DESIGN AND IMPLEMENTATION CONSIDERATIONS

Legislative approaches to low-income energy efficiency will differ state-to-state but can consider the following actions and parameters:

Incentive structure

Establish the form of the program. Comprehensive low-income programs are often grant-funded, but low-income energy efficiency programs may take a variety of forms.

- **Direct installation programs** fund the installation of measures directly in homes, such as smart thermostats, lighting upgrades, and high-efficiency appliances.
- **Upfront rebates** provide discounts on appliances at point-of-sale.
- **On-bill financing or repayment** spread upgrade costs over time through utility bills, in such a way that cost savings are greater than charges.
- **Grants and loans** fund efficiency improvements without high-interest debt.

Eligibility criteria

Define which households will qualify for protections based on income, participation in federal programs, or other characteristics to reach the intended populations. This may also depend on administration and implementation (e.g., eligibility may depend on being a customer of a participating utility if utilities administer the program).

Source of funding

Provide clear, dedicated funding through a mix of federal, state, utility, nonprofit, and/or other sources. Funding stability could be ensured by, for example, requiring utilities to spend a certain percentage of their budgets on the program.

Administration

Clarify the role of regulators, utilities, nonprofits, or others in program planning, administration, and implementation.

Scope of services

Establish a framework for which services will be funded or provided. Consider enabling or directing program administrators to include health and safety upgrades, in addition to energy-related retrofits, or coordinate with entities that provide those related services to ensure the program does not turn away families in homes with health and safety issues. This approach builds more inclusive, fair, and comprehensive home upgrade programs.

Reporting requirements

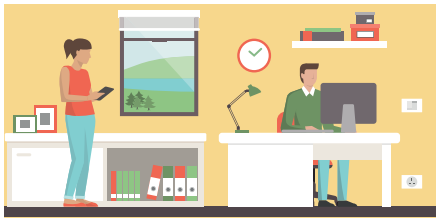
Require regular reporting of program impacts (e.g., households served by

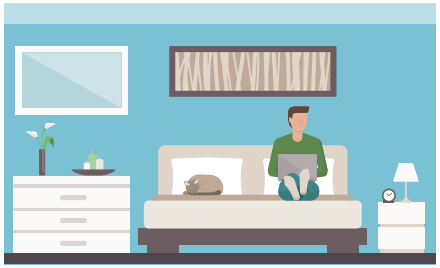
The table below provides examples of how authority and responsibility for low-income energy efficiency programs may be distributed across key entities.

VENUE	POTENTIAL ROLES
Legislature	• Establish incentive structure • Define eligibility criteria • Set roles for administration and implementation • Create a framework for the scope of services to be included
Regulator	• Refine eligibility criteria details • Develop or approve enrollment process • Determine or approve how funds will be distributed across customers • Ensure program administrators have strong customer outreach and support plans • Coordinate with other programs
Administration	• Propose budget support • Advertise program to key audiences
RTO/ISO	• No major role

income bracket) to build transparency and enable ongoing assessments of program effectiveness.

Establishment of related policies
Specify a minimum low-income sector spending or savings target or requirement to help ensure that low-income customers are benefiting from efficiency programs. Pennsylvania, for example, adopted a requirement that utilities achieve savings of at least 5.8% of their portfolio from programs directed at low-income customers.





CASE STUDY: NEVADA

OVERVIEW

Nevada's Home Energy Retrofit Opportunities for Seniors (HEROS) program improves energy affordability and home comfort for seniors via no-cost home retrofits and technical assistance for eligible, low-income households with residents aged 60 and older. Assembly Bill 466 in the state's 2015 legislative session provided the legal framework for the state to allocate funding to programs like HEROS.

THE DETAILS

Eligibility criteria
To qualify, households must have at least one resident aged 60 and older, have an income at or below 200% of federal poverty guidelines, and be owner-occupied.

Source of funding
Funding comes from the Renewable Energy Account in the State General Fund.

Administration
The Governor's Office of Energy created the program and provides funding to the Nevada Housing Division, which works with nonprofit service providers that implement the upgrades.

Scope of services
Upgrades are no-cost and include insulation, air sealing and ductwork repair, appliance and lighting upgrades, and heating, ventilation, and air conditioning (HVAC) system repair or replacement.

Reporting requirements
Reporting requirements were not legislatively mandated but were established administratively.

KEY TAKEAWAYS

Energy upgrades from HEROS reduce household energy use by an average of 64% and can create healthier and more comfortable living environments, reducing issues like asthma and carbon monoxide risks. By delivering tangible energy efficiency benefits to vulnerable households, the program addresses an issue at the intersection of energy affordability, aging in place, and housing quality.