



Energy Conservation Residential Quickstart Guide

2026





Introduction

Bonneville Power Administration's (BPA) energy conservation group works with utility customers to meet energy-saving targets established in the Northwest Power and Conservation Council's Power Plan. To support this objective, BPA's residential energy conservation program develops measures, programs, and opportunities identified in the Implementation Manual (IM) that utilities can implement within their service territories.

This guide is intended as a resource for utilities to identify measures, programs, and opportunities that can strengthen their energy efficiency initiatives and keep power rates low. For specifics on the complete suite of Residential sector program guidelines and requirements, please consult the BPA IM.

Implementation Manual

As referenced in the Energy Conservation Agreement, the [Implementation Manual](#) provides the requirements for implementing energy conservation projects and lays out what BPA's public and federal utility customers must fulfill to receive incentive payments and savings credits for conservation accomplishments.

BPA publishes the IM once a rate period (every two years) and updates it every six months (in April and October). These six-month, or mid-cycle updates are revisions or amendments that address critical changes, such as new policy directives, urgent regulatory requirements, or significant adjustments that cannot wait for the next publication. The IM is available on the BPA's website.

Residential Measures

BPA's Residential sector delivers program infrastructure and measure offerings to increase energy conservation in the Northwest. With the highest number of utilities participating in energy conservation programs, the Residential sector offers key measure groups including appliances and consumer products, new construction, weatherization, HVAC systems, and water heating. BPA also offers energy conservation programs through its Income Qualified and Tribal program offerings.

Residential energy conservation is primarily offered through unit energy savings (UES) measures listed in the IM. The BPA engineering team is available for custom projects in technologies that aren't available in the IM or projects that address a whole-building approach, such as multifamily retrofits. Programs and measures in the Residential sector are detailed below.

Comfort Ready Home

BPA's [Comfort Ready Home](#) (CRH) program aims to increase residential energy conservation projects in the Northwest by building and supporting a robust network of educated contractors who work with BPA customer utilities to support homeowners. The program addresses critical market barriers such as contractor workforce limitations, complex utility requirements, and lack of consumer awareness.

By providing comprehensive services including [field specialist support](#), hands-on technical [training](#), online [learning resources](#), marketing toolkits, and contractor recruitment assistance, CRH seeks to empower contractors to effectively complete energy conservation projects while helping utilities implement successful programs. CRH offers resources in both English and Spanish and maintains flexibility to serve a wide range of utility territories from small rural cooperatives to large urban service areas. These activities are designed to increase contractor participation in utility programs, improve technical expertise, and enhance coordination between utilities and contractors.



Appliances and Consumer Products

Consumer products help reduce electric use year round. ENERGY STAR® appliances use less electricity than standard models, which helps reduce energy costs without sacrificing performance. BPA leverages the Energy Star program and partners with the Northwest Energy Alliance (NEEA) to support the identification and documentation of energy-efficient equipment models that qualify for energy savings. BPA also supports utility-run appliance programs for eligible clothes washers and dryers, and other energy efficient consumer electronics. BPA tracks upcoming changes in ENERGY STAR® appliance specifications, maintaining cost-effective measures with BPA payments and providing access to qualified products lists and regional marketing opportunities.



Water Heating

Water heating accounts for approximately 15-20 percent of all energy use in homes with electric water heating. Water-saving devices, such as thermostatic shut-off valves, reduce the energy required to heat less water which saves homeowners money. Heat pump water heaters transfer heat from the surrounding air to the water in the tank, rather than generating their own heat. This allows them to use a fraction of the energy of a standard electric water heater, while producing the same reliable hot water. BPA supports efficient water heating by offering a variety of heat pump water heaters and thermostatic shut-off valve measures.



HVAC

Heating, Ventilation and Air Conditioning (HVAC) is usually the largest consumer of electricity, typically accounting for 40–50 percent of total household energy usage. BPA offers incentives for HVAC equipment and efficiency improvements such as ductless heat pumps, air source heat pumps, ground source heat pumps, packaged terminal heat pumps, duct sealing, and thermostats. The implementation of HVAC projects is heavily supported by the CRH program.

New Construction

BPA supports energy efficient new home construction for single-family, multifamily, and manufactured homes. Residential energy efficient new construction measures set up new homeowners with lower utility bills, healthier living environments, greater comfort, and increased property values. BPA leverages voluntary new construction certification programs and organizations such as the Northwest Energy Efficient Manufactured Housing Program™ (NEEM) to encourage above-code, energy efficient design and construction. New construction projects often work closely with certified raters who inspect and evaluate a home's energy efficiency potential. Certified raters provide third party expertise, including modeling, to maximize energy savings and ensure projects meet all requirements.

Weatherization

BPA offers utility incentives for weatherization projects in single-family, multifamily, and manufactured homes. Residential weatherization offerings help to improve the overall efficiency of the home's envelope with measures including but not limited to insulation, efficient window and door replacements, and air sealing. Proper weatherization can reduce air leakage by keeping heated and cooled air inside the home. This not only improves the overall energy performance but also helps homeowners save on energy costs each year. Weatherization measures are largely supported through the CRH program.

Behavioral

Utilities may choose to offer Behavioral programs such as home energy reports (HER). Behavioral home energy reports (HER or bHER) are distributed to residents and include information collected on seasonal household energy consumption, a normative comparison of household energy consumption to similar households, and tips and strategies for residents to reduce home energy consumption. HERs would qualify for residents living in single-family, multifamily, or manufactured homes that do not already receive home energy reports from their utility or any participating third-party vendors. These tools provide homeowners and residents with tailored recommendations for energy saving, cost-effective opportunities for their unique residence.



Custom Programs and Projects

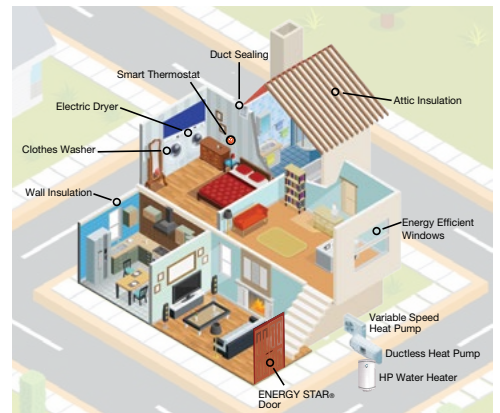
For projects or ideas that are not yet a UES offering, utilities can propose custom programs or projects. Custom programs are used when a combination of similar projects, measures, and/or end-users that have the same evaluation plan or measure and verification (M&V) across the entire program. Custom Projects are individual energy-saving projects that are not currently offered in the IM. Additionally, there is a custom rate for Income Qualified existing residential projects and programs. For proposals or further information, utilities should reach out to their Energy Conservation Account Executive (ECAE).



Income Qualified

BPA's Income Qualified Energy Conservation (IQEC) program improves access for income qualified residents to energy conservation projects to help lower their utility bills, improve indoor air quality, and create safer, more efficient homes. "Income qualified" is typically defined as households with income at or below 200 percent of the federal poverty level or at a level that is aligned with state or tribal income guidelines or those receiving certain federal assistance.

BPA's initiative supplements the Department of Energy's Weatherization Assistance Program and offers higher incentives for many residential and some limited commercial measure offerings in qualifying existing homes.



Getting Started

BPA provides the following resources to help utilities effectively market the benefits of their energy efficient products, programs, and rebate offers to their customers.

Customer Service

ECAEs foster and maintain customer relationships, and serve as the primary point of contact for BPA's Energy Conservation program with utilities. They coordinate the customer service team, which also includes field engineers and Program Compliance Specialists (PCS) for each utility. ECAEs collaborate with all BPA staff, third-party personnel, and contract support to oversee, coordinate, and execute all communications with utilities.

If a utility is interested in developing a building energy model to estimate potential savings or require other project-specific support, the ECAE can bring in a subject matter expert, such as a program manager, engineer, or sector lead to perform a field visit.







For inquiries, feedback, or concerns regarding BPA's Energy Conservation program, your ECAE should be your initial point of contact. If the ECAE does not immediately have an answer, they will find it or facilitate a connection with the right person.

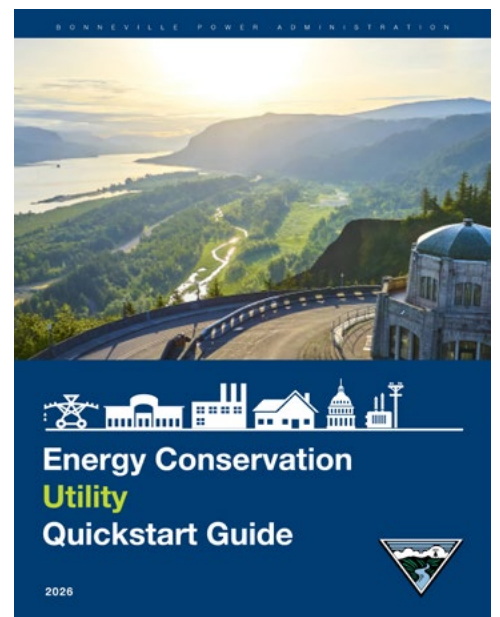
Marketing Toolkit

Marketing tools and templates are available in the Residential Marketing Toolkit on bpa.gov. This suite of tools includes a wide range of customizable marketing templates, graphics, and stock photography available for download.

Utilities that need additional support may also work directly with the BPA Marketing team to adapt toolkit materials for their individual needs. ECAEs and the BPA Marketing team are happy to help customers find and develop custom solutions.

Important Resources

-  [Energy Conservation Implementation Manual](#)
-  [Residential Marketing Toolkit](#)
-  [Implementation Manual Document Library](#)
-  [Energy Conservation Utility Quickstart Guide](#)
-  [Residential Sector Website](#)
-  [Comfort Ready Home Website](#)



Measure Summary Table

RESIDENTIAL MEASURES

MEASURE CATEGORY	PAYMENT
11.2 APPLIANCES	
11.2.1 for both ENERGY STAR Clothes Washers and ENERGY STAR Clothes Dryers	\$36-\$125/washer \$50-\$175/dryer
11.3 EV CHARGERS	
11.3.1 ENERGY STAR Level 2 Networked EV Chargers	\$20/unit
11.4 ELECTRIC WATER HEATING	
11.4.1 Thermostatic Shut Off Valves (TSV)	\$14-\$20/unit
11.4.2–11.4.3 Unitary Heat Pump Water Heaters (BPA-Qualified)	\$1,400-\$1,800/water heater
11.4.4 Split System Heat Pump Water Heaters	\$2,200/water heater
11.5 HEATING, VENTILATION, AIR CONDITIONING MEASURES	
11.5.1 Ductless and Ducted Mini Split Heat Pumps	See Implementation Manual
11.5.2 Air Source Heat Pump Conversion from Electric Forced Air Furnace to Air Source Heat Pump	\$1,250
11.5.3 Air Source Heat Pump Conversion from Electric Forced Air Furnace to Variable Speed Air Source Heat Pump	\$1,560
11.5.4 Variable Speed Air Source Heat Pump Upgrade	\$600
11.5.5 Centrally Ducted Air Conditioners	\$60
11.5.6 Packaged Terminal Heat Pump	\$125-\$200
11.5.7 Ground Source Heat Pump (BPA-Qualified)	See Implementation Manual
11.5.8 Prescriptive Duct Sealing (BPA-Qualified)	\$200-\$250
11.5.9 Duct Insulation	\$0.60 per linear foot insulated
11.6 THERMOSTATS	
11.6.1 Line Voltage Thermostats	\$18
11.6.2 Communicating Line Voltage Thermostats	\$35
11.6.3 Advanced Smart Thermostats	\$140-\$165
11.7 NEW CONSTRUCTION	
11.7.1 New Northwest Energy Efficient Manufactured Housing	\$1,200-\$1,400/home
11.7.2 Replacement of Pre-1976 Manufactured Home with NEEM Certified Home	\$2,200-\$2,500/home
11.7.3 Single family New Construction Performance Path	Varies based on measures installed.
11.7.4 Energy Efficient New Multifamily Construction	See Implementation Manual
11.7.5 Zero Energy Ready New Multifamily Construction	See Implementation Manual
11.8 WEATHERIZATION	
11.8.1 Insulation	See the UES Measure List.
11.8.2 Prime Window and Patio Door Replacement	\$8-\$20/square foot
11.8.3 Low-E Storm Windows	\$2/square foot
11.8.4 Exterior Insulated Doors	\$40/door
11.8.5 Whole House Air Sealing and Testing	See the UES Measure List.
11.8.6 Prescriptive Air Sealing	See the UES Measure List.
11.8.7 Door Sweeps	\$25/each

RESIDENTIAL MEASURES

MEASURE CATEGORY	PAYMENT
11.9 INCOME QUALIFIED MEASURES	
Weatherization, Heat Pump Technology, Prescriptive Duct Sealing, Duct Insulation, Thermostat Technology, HPWHs, Clothes Washers and Dryers, and some Commercial Multifamily Heating Technology	See Implementation Manual
11.10 BEHAVIORAL	
11.10.1 Behavioral Home Energy Reports (BPA-Qualified)	See Implementation Manual

Commonly Used Acronyms

ACRONYMS	DEFINITION
BEETS	Bonneville Energy Efficiency Tracking System
BPA	Bonneville Power Administration
CAA	Community Action Agencies
ECAE	Energy Conservation Account Executive. Formerly Energy Efficiency Representative (EER)
CAP	Community Action Provider/Partner/Programs
CPP	Custom Project Proposal Calculator
CRH	Comfort Ready Home
ECA	Energy Conservation Agreement
EC	Energy Conservation
EEL	Energy Efficiency Incentive
IM	Implementation Manual
kWh	Kilowatt Hours
M&V	Measurement and Verification Plan
NEEA	Northwest Energy Efficiency Alliance
PCS	Program Compliance Specialist
RTF	Regional Technical Forum
SRR	Small, Rural and Residential
UES	Unit of Energy Savings (deemed)
USB	Utility Sounding Board

For a more comprehensive list of energy conservation terms, and acronym definitions, please refer to the BPA [Implementation Manual](#) or contact your ECAE.



For more information, visit bpa.gov

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