



# Forum on Rural Population Health

May 19-21, 2025  
Seaside, Oregon  
[ohsu.edu/orhforum](https://ohsu.edu/orhforum)



## Synergy Between Rural Residential Energy Improvements and Occupant Health

Karen Chase, MBA, MSPH, Energy Trust of Oregon



# Agenda

- Orientation & Introductions
- Energy Burden & Rural EB
- Non-Energy Benefits – like occupant health
- Building Rural CBO Partner Relationships
- Braiding Energy & Health Efforts
- Wrap Up





## Take-Aways



- Home energy improvements can benefit physical and mental health
- Energy-related funding can often be stacked; may serve as grant match
- Energy Trust has a mission & an established lane, AND is innovative and flexible
- We are increasingly collaborating with others/agencies, and partnering with communities and community-based organizations
- Our priority customers are those who have been historically underserved
  - communities of color, RURAL and tribal communities, small businesses and people with low and moderate incomes
- Working across industries for mutual success = greater benefits

*Energy is Essential*

# **ORIENTATION & INTRODUCTIONS**

## Joy Lark (IVCDO) – Making a difference, locally



## Critical Conditions:

- Affordability
- Reliability
- Resiliency

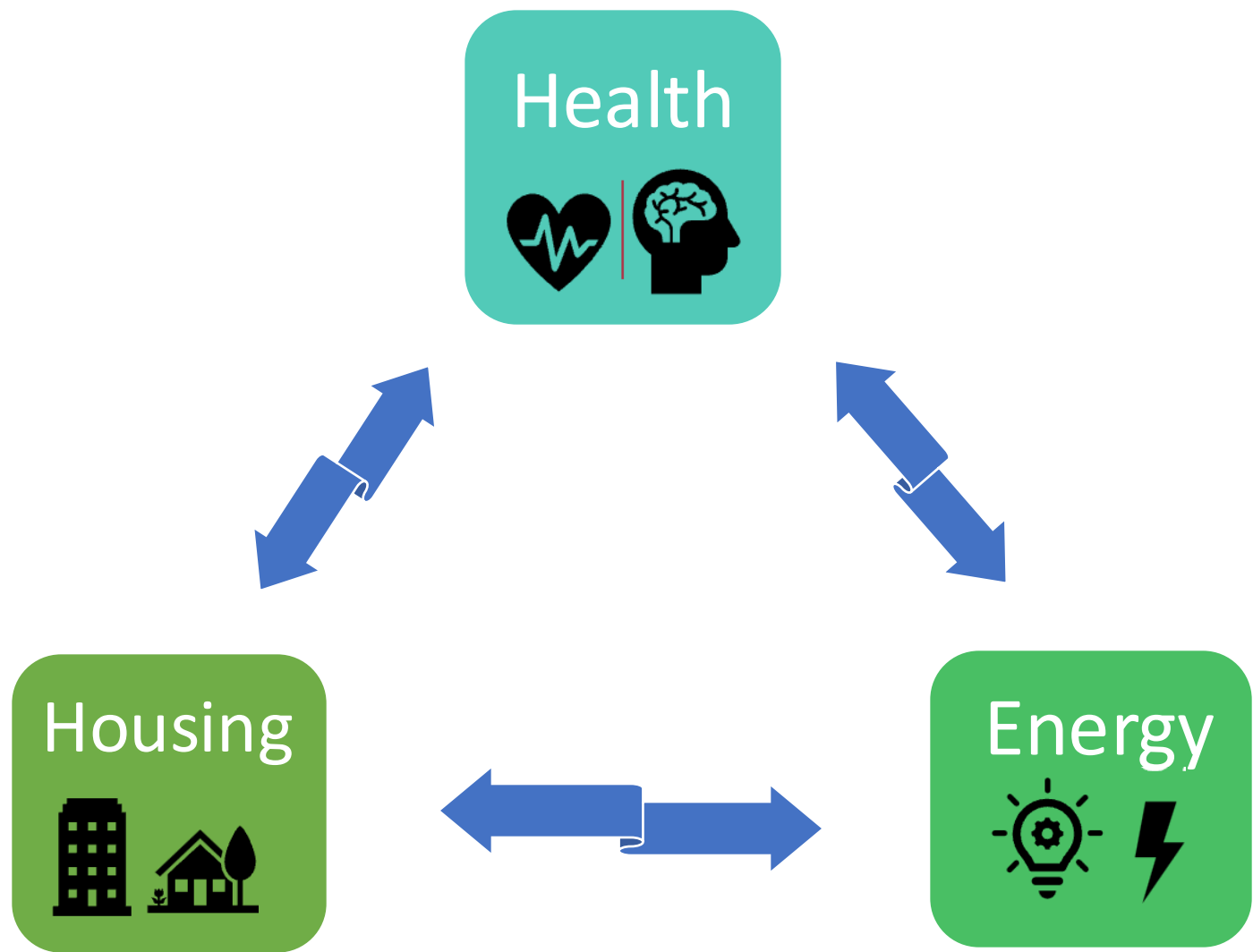
## Basic Home IEQ Requirements:

- Heating
- Cooling
- Fresh air
- Air cleaning

IMPROVED  
QUALITY OF LIFE



ENVIRONMENTAL  
BENEFITS





# Housing Stock Upgrade Initiative

- Replace dilapidated manufactured homes
- Multiple agencies and organizations
- Oregon Solutions – ReHome Oregon/NWU
  - becomes 2020 Wildfires groundwork
- How to pay for this?

**Key Learning: Energy funding can be derived from the monetized value of future energy savings, resulting from efficiency improvements made now**

Older home



Replacement model



Source: Washington State Department of Commerce.



# Health Impact Assessment (2013) – honored at the 2015 national HIA conference

[Health Impact Assessment Helps Families Replace Unsafe Manufactured Housing](#)  
to 4:30



**August 30, 2013**

**Annette Klinefelter, MA, Curry County Economic Development**

**Contributing Authors:**

**Tia Henderson, Upstream Public Health**

**Nadege Dubisson, Oregon Health Authority**

**Andrea Hamberg, Oregon Health Authority**

9-13-2020



At noon on Sunday, the worst air in the United States was Sisters, with an AQI of 566. Salem was second with 556. Roseburg was at 540. Madras registered at 534.

Bend was 441, Eugene was 433 and Pendleton was 417.

Portland had the worst air of any major city in the nation, at 409.

Other Oregon cities above 400 were Ashland, Applegate Valley, Cave Junction, and Cottage Grove.

Prineville was 384. Other cities over the 300 "hazardous" rating were La Grande, Klamath Falls, Oakridge, Albany, Beaverton and Corvallis.

# Cave Junction, Happy Camp ranked third, fourth least clean air on average in U.S., 2023

## Cave Junction, Happy Camp ranked third, fourth least clean air on average in U.S.

By: Matt Wreden, KHSL & Isabela Lund, KDRV Mar 26, 2024 Updated Mar 26, 2024 0

f X e i q



This was in 2023.

CAVE JUNCTION, Ore. & HAPPY CAMP, Calif. -- A new study ranked Cave Junction and Happy Camp as having the third and fourth least clean air on average in the U.S. in 2023.



WEATHER

## Cave Junction air quality among the worst in the world

Mount Hood and the Columbia River Gorge have seen big air quality gains since Monday. Cave Junction has also improved, but remains among the worst in the world.



# Rebuilding after disaster

- 2020 Labor Day Wildfires
  - Cross-agency & -orgs collaboration
  - Coordinated offers for improved rebuilding incentives
  - Manufactured housing replacements
- Pendleton flood
- Wallowa County wind and hail storm
- 2025 SW Oregon flooding





In The News

Oregon officials and nonprofits work on rebuilding resources for people who lost homes in Alameda fire



By Jane Vaughan (JPR)  
April 14, 2022 1:33 p.m.

A variety of programs are being offered to help those who lived in manufactured homes purchase or rebuild energy-efficient units

# Manufactured housing replacement

- **Oregon Housing and Community Services** will continue offering a **forgivable loan program**. While it was originally designed to help people upgrade older homes, Marsh said the program has been amended to be more effective for wildfire survivors
- The nonprofit, **Energy Trust of Oregon** is offering an [incentive program](#) for wildfire survivors to help with the purchase or rebuilding of energy-efficient homes. The manufactured home replacement program includes \$10,000 to \$16,000 in incentives for rebuilding
- An additional program from the **Oregon Department of Energy** will offer up to \$12,500 in incentives for individuals who build energy efficient manufactured homes

# Electricity demand could double in Pacific NW over next 2 decades

Updated: Apr. 30, 2025, 9:17 a.m. | Published: Apr. 30, 2025, 7:00 a.m.



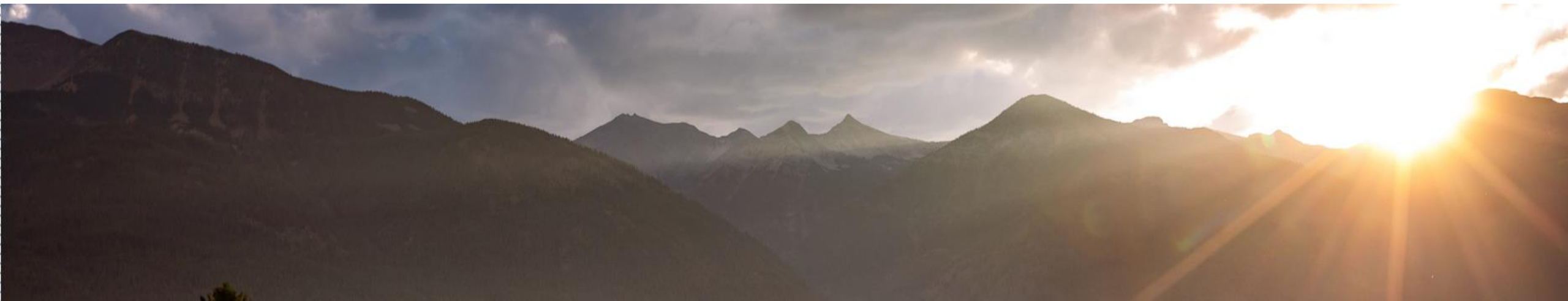
Electricity demand in the Pacific Northwest could double over the next two decades as data centers, electric vehicles, homes and businesses clamor for more power, according to a new forecast by the Northwest Power and Conservation Council. AP

How do we  
meet  
demand for  
energy  
resources?



# Oregon utilities - overview

- 3 electric & 3 natural gas investor-owned utilities (IOU)
- 38 consumer or publicly-owned utilities
- Investor-owned utilities, IOUs (“public” utilities, private ownership) – regulated by Oregon Public Utility Commission
  - **Ensure safe, reliable and affordable energy**



## Energy Trust - overview

- 1999 legislature; 2002 launch – Non-profit
- Oversight by OPUC
- Funding from IOU ratepayers; other
- **To keep utility customers' rates as low as possible**
- **Acquire cost-effective efficiency resources**
- Small-scale **renewable energy** systems and grid-connected technologies
- 2021 OPUC sets first **DEI metrics** for Energy Trust

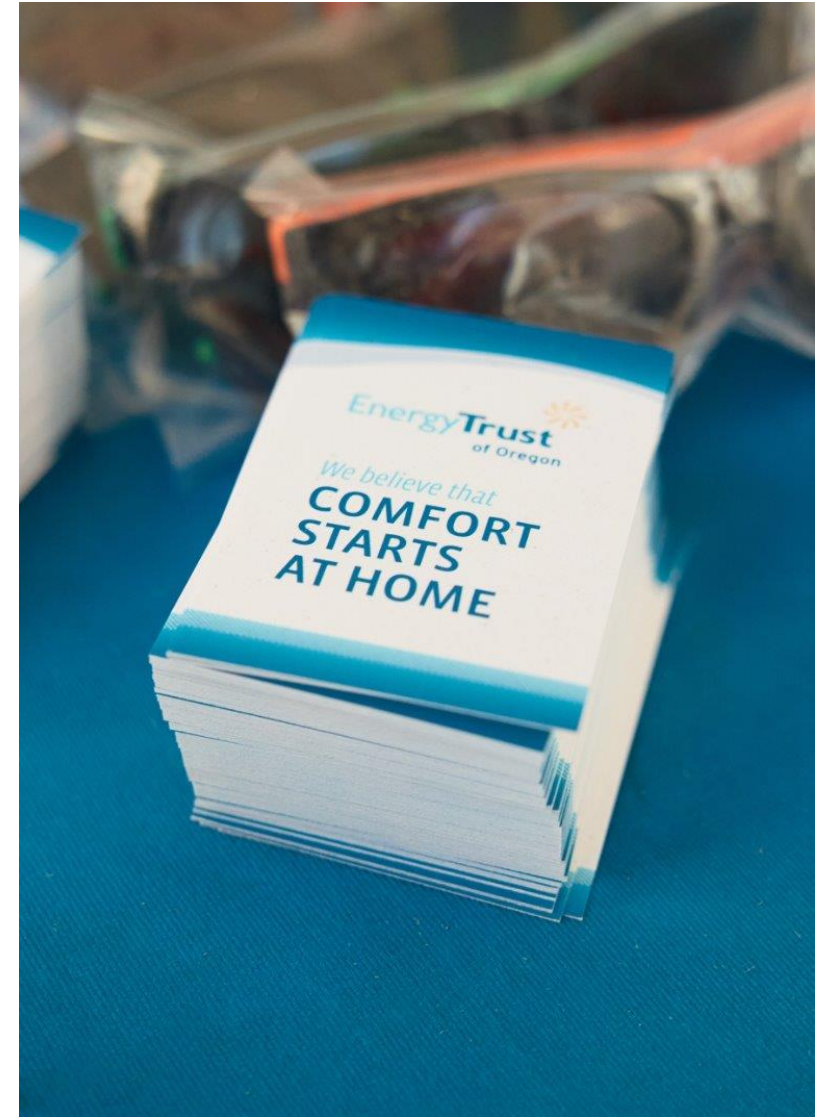


Saving energy, reducing loads, controlling costs

Conservation

Energy efficiency

Renewable (alternative) energy



# Acquiring cost-effective energy

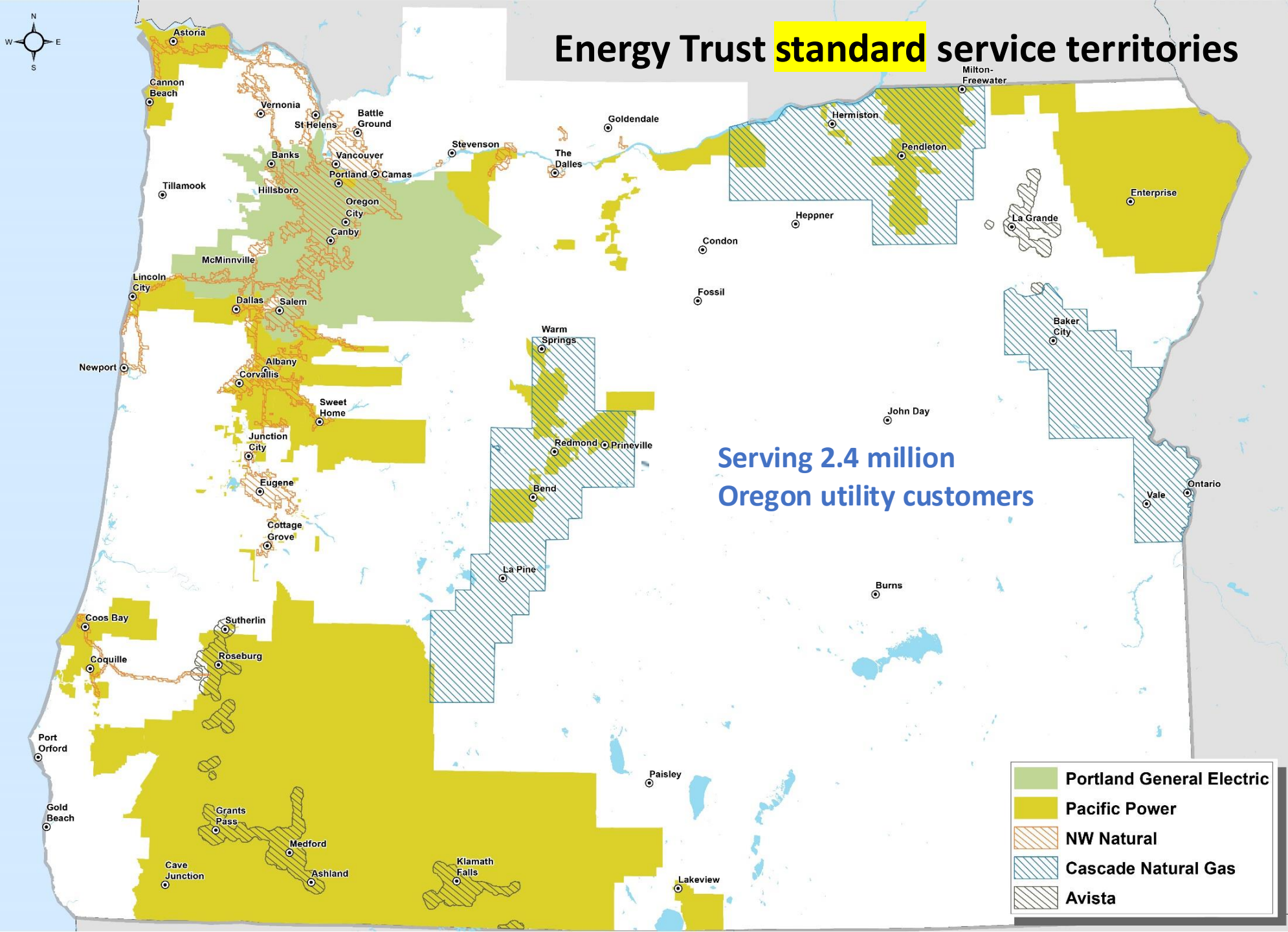
- Reduce utility loads – defers new power plants
  - Saves customers energy and lowers their utility costs
- Offers & services
  - For all types of utility customers (rate payers)
  - Education and Information; Training; Technical assistance
  - Cash **incentives** – returning savings for the long-run
- Analysis of cost-effective offers
- Network of program and incentive delivery systems
  - Includes CBO and community-based delivery
  - Contractors; Network of Trade Allies
- Oversight by OPUC – high standards for performance, financial management and transparency

Every dollar invested in energy efficiency by Energy Trust will save residential, commercial and industrial customers about \$3 in deferred utility investment in generation, transmission, fuel purchase and other costs





# Energy Trust **standard** service territories



- Portland General Electric
- Pacific Power
- NW Natural
- Cascade Natural Gas
- Avista



825,000  
sites served

20+ Years of  
Delivering  
Results to  
our Region



\$7.2 billion  
in customer  
utility bill savings



1,800  
contractor  
trade allies



Independent  
nonprofit



Rigorous and efficient  
financial management



## Final Proposed 2025 Budget Summary

- **Investing \$344.9 million**
- **Saving 57.3 aMW and 7.0 MMTh**
  - 82.9 MW of reduced demand during summer peak, 89.3 MW during winter
  - 7,300 therms reduced demand during peak hour, 97,000 therms during peak day
  - Includes 0.3 MMth gas transport, 0.2 MMth NW Natural WA
- Delivering highly cost-effective energy
  - 4.7 cents/kWh levelized
  - 70.6 cents/therm levelized OR, \$1.31/therm levelized WA
- **Generating 5.6 aMW**
- **Distributing \$184.1 million in incentives;** 53% of total expenditures
- Administrative costs are 5.8% of expenditures

*Photo: Albany Water and Hydroelectric Plant, Albany, OR*



## Customer Benefits from 2025 Investments

- **Lower energy bills and energy burden**—\$1.3 billion in future bill savings for participants
- **Opportunities for 1,600+ local businesses, greater support for community-based organizations** and investments in workforce development
- Local investments that **keep dollars in our communities**
- **Cleaner air** by avoiding 2.7 million metric tons of carbon dioxide over time
- Support for **community-led clean energy efforts**, such as resilience
- Access to **direct benefits for customers experiencing low incomes**, including those in rural areas and people of color

*Photo: Humane Society for Southwest Washington, Vancouver, WA*



# Energy Trust – 2025 Organizational Goals



Customers will save and generate energy and reduce costs in 2025 and beyond as a result of investments in clean energy programs, including those designed to meet the needs of customers the organization has historically underserved.



Customers will gain access to a broader and more diverse network of qualified contractors who can install clean energy upgrades in their communities, and potential trades people will gain skills and opportunities in the energy efficiency and solar industries.



Community-based organizations will have opportunities to bring clean energy benefits to their communities by partnering with Energy Trust to deliver programs and accessing funding, training, mentorship and connections.



Customers, partners and stakeholders will benefit from Energy Trust's ability to achieve long-term goals by shifting to a multiyear budgeting and planning process.

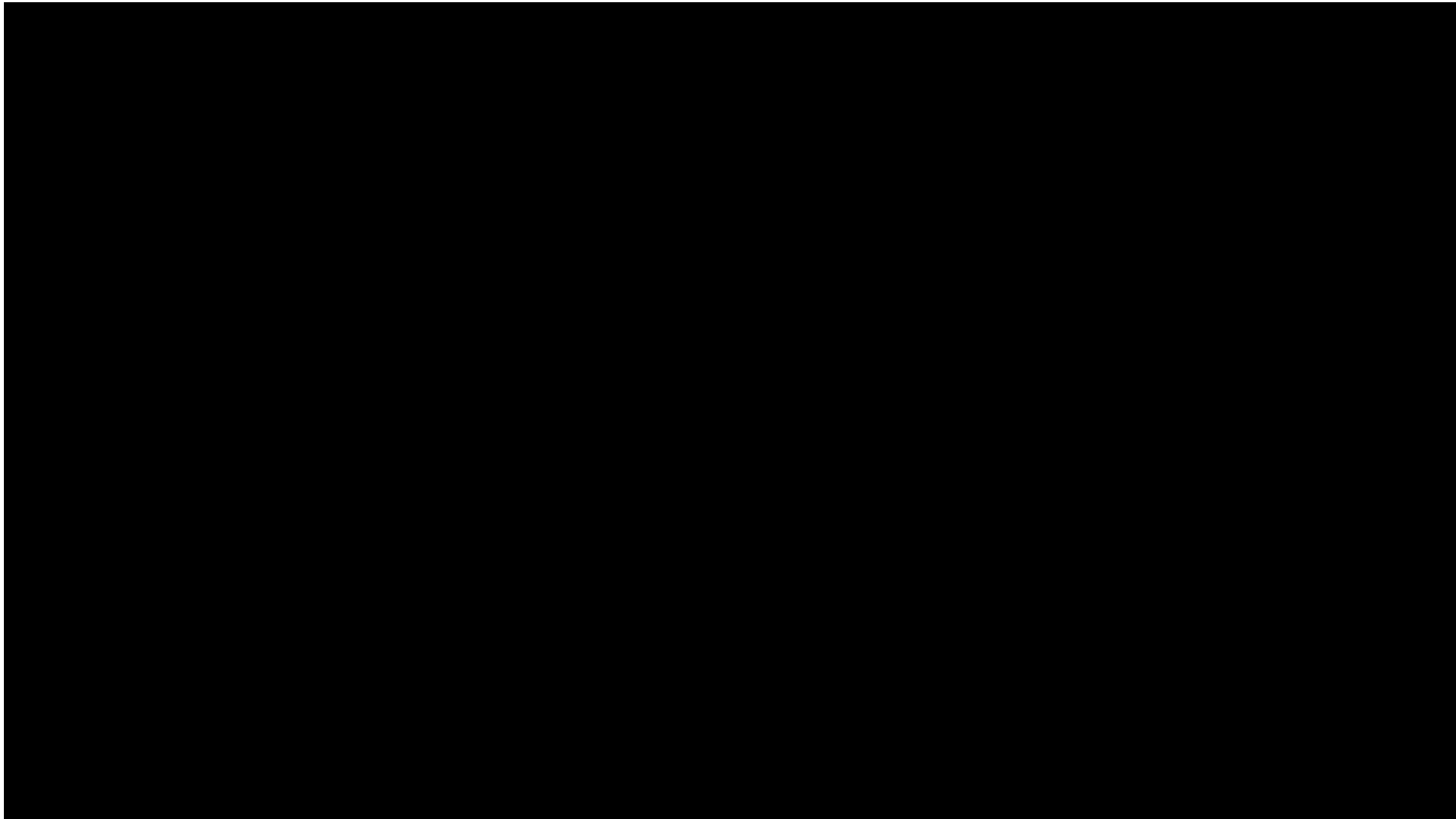


# Energy Trust working in communities

- Working directly with qualified community-based organizations (CBOs, 28+) who deliver services, higher incentives (Community Partner Funding)
- Cross-community and cross-CBO collaboration
- Capacity-building; Support for AmeriCorps RARE members
- Working Together Grants support community-led activities that increase awareness of and access to Energy Trust offers
- FEMA natural hazard mitigation planning; Resiliency - Solar+Storage
- Disaster recovery coordination with agencies, communities, local partners and CBOs to bring incentives and support for rebuilding



Joy Lark (IVCDO) - Improved Well-being – wildfire smoke



# ENERGY BURDEN + RURAL



# Energy Burden

$$\text{Energy burden} = \frac{\text{Annual household energy spending}^{12}}{\text{Annual household income}^{13}}$$

- The percentage of gross income a household spends on energy costs – electricity, natural gas and other home heating fuels
- Households that **exceed 6% of income** on energy cost = highly or severely energy burdened (APPRISE 2005)
- Households with high energy burdens are more likely to experience **poor health and poverty** (Lima, Ferreira, and Leal 2022; Hernández and Laird 2021; Partnership for the Public Good and PUSH Green 2022; Bohr and McCreery 2020; Goodson Bell et al. 2023; National Energy Assistance Directors' Association 2018)

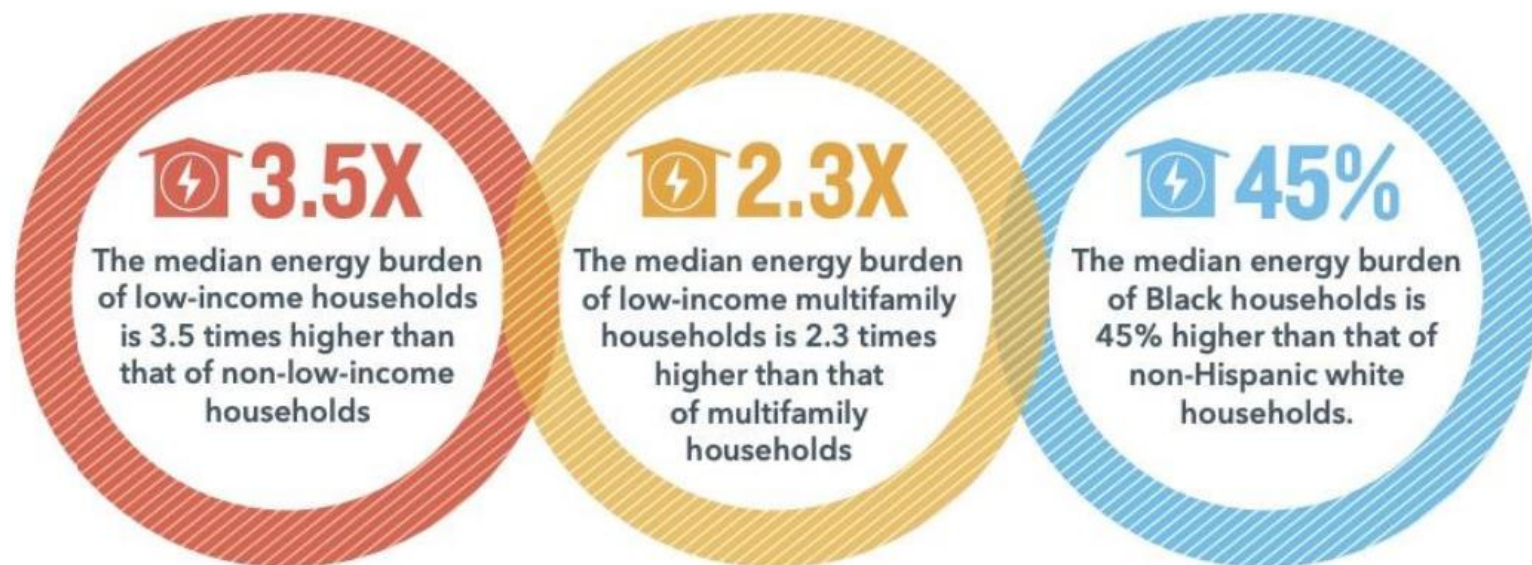
ACEEE

**Data Update: City Energy Burdens**

SEPTEMBER 2024

# National Energy Burden Findings

- **25%** of all households (**30.6 million**) have a high energy burden (above 6%)
- **36% of Black households** (6 million)
- **28% of Hispanic households** (4.6 million)
- **36% of Native American households** (540,000)
- Median energy burden is **3.1%**, and the **median low-income energy burden is 8.1%**
- **A quarter of low-income households** have an energy burden above 14.4%,



National Energy Burden Factsheet available at [aceee.org/energy-burden](https://aceee.org/energy-burden)

# ACEEE Rural Findings, July 2018

**The High Cost of Energy in Rural America:**  
Household Energy Burdens and Opportunities for Energy Efficiency

**Rural households are disproportionately energy-burdened**

**TABLE 7. NATIONAL MEDIAN RURAL ENERGY BURDEN BY DEMOGRAPHIC**

| <b>Demographic</b>    |                               | <b>Rural</b> |
|-----------------------|-------------------------------|--------------|
| <b>Total</b>          | Rural households              | 4.4%         |
|                       | Metropolitan households       | 3.1%         |
| <b>Income</b>         | Low-income (<200% FPL)        | 9.0%         |
|                       | Non-low-income                | 3.1%         |
| <b>Housing type</b>   | Manufactured                  | 5.8%         |
|                       | Small multifamily (2–4 units) | 4.9          |
|                       | Large multifamily (5+ units)  | 4.6%         |
|                       | Single-family                 | 4.1%         |
| <b>Age</b>            | Elderly                       | 5.6%         |
|                       | Non-elderly                   | 3.9%         |
| <b>Housing tenure</b> | Renters                       | 5.3%         |
|                       | Owners                        | 4.1%         |
| <b>Race</b>           | Nonwhite                      | 5.1%         |
|                       | White non-Hispanic            | 4.3%         |



# Energy burden & health

ACEEE – Rural report, July 2018

**The High Cost of  
Energy in Rural America:  
Household Energy Burdens and  
Opportunities for Energy Efficiency**

- Households with high energy burdens are correlated with **under-heating** and lower indoor temperatures (Healy and Clinch 2004)
- Households with lower temperatures tend to be more susceptible to **dampness and mold**, which can increase the **risk of asthma** (Fisk, Lei-Gomez, and Mendell 2007)
- Among the elderly, research has found that colder homes may lead to **increased risk of strokes, circulatory and respiratory issues, hospital admissions, and falls and injuries** (Woodhouse, Khaw, and Plummer 1993; Rudge and Gilchrist 2005)
- Studies have also found correlations between high energy burdens and negative health impacts due to **increased financial stress** or less money available for other health-related expenditures (Kearns et al. 2008)
- The US Energy Information Agency (EIA) has estimated that roughly **one in five households has to forgo or reduce food and medicine spending to pay energy bills** at least one month a year, and that more than 10% of households cannot use heating and/or cooling equipment at least one month a year due to cost concerns (EIA 2017)
- **Energy efficiency upgrades in homes can reduce triggers of respiratory illnesses**, such as mold, exposure to cold air or sudden temperature changes, air pollution, and pollen (Mayo Clinic 2018)

## **EXCESSIVE ENERGY COST CAN IMPACT RESIDENTS' HEALTH AND COMFORT.**

Researchers have found that high energy burdens in unhealthy housing, along with other health issues like lead poisoning, lead to respiratory problems, obstructive pulmonary disease, and are associated with heat or heat stress related to heating and cooling. (Norton, Brown, and

## **HIGH ENERGY BURDENS IMPACT MENTAL HEALTH OF RESIDENTS.**

High energy burdens can have mental health impacts—such as chronic stress, anxiety, and depression—associated with fear and uncertainty around access to energy, the complexities of navigating energy assistance programs, and the inability to control energy costs (Hernández, Phillip, and Siegel 2016). In addition, Hernández (2016) found that low-income residents who were experiencing energy insecurity worried about losing their parental rights as they struggled to maintain essential energy services, such as lighting, in their homes.

Households experiencing energy insecurity may forego needed energy use to reduce energy bills, forcing them to live in uncomfortable and unsafe homes. Hernández, Phillips, and Siegel (2016) found that half of the study's participants who experienced high monthly utility bills engaged in coping strategies such as using secondary heating equipment (i.e., stoves, ovens, or space heaters) to compensate for inefficient or inadequate heating systems. Employing this coping measure can compromise resident safety and comfort, and it may increase exposure to toxic gases. Teller-Elsberg et al. (2015) found that excess winter deaths potentially caused by fuel poverty kill more Vermonters each year than car crashes. In addition, according to the Residential Energy Consumption Survey, one in five U.S. households reported reducing or forgoing necessities such as food or medicine to pay an energy bill (EIA 2018). These tradeoffs can impact long-term health and well-being.

Climate change, rising temperatures, and subsequent cooling demands will continue to exacerbate household energy burdens—and prove deadly for some. In Maricopa County, Arizona—one of the hottest regions in the southwest—more than 90% of residents have access to a cooling system, yet up to 40% of heat-related deaths occur indoors (Maricopa County Department of Public Health 2020). A recent survey of homebound individuals found that one-third faced limitations on home cooling system use, with the overwhelming majority (81%) citing the “cost of bills” as a contributing factor (Maricopa County Department of Public Health 2016). As residents are increasingly forced to weigh the cost of properly cooling their homes, high energy burdens will likely become an even greater public health priority in the years to come.



## HEATING BREAKDOWN

| Type of Heating                          | Number of Respondents |
|--|-----------------------|
| Electric Baseboard/Cadet                 | 2                     |
| Electric Baseboard/Cadet + Woodstove     | 1                     |
| Electric Ducted Heat Pump                | 20                    |
| Electric Ducted Heat Pump + Woodstove    | 7                     |
| Electric Ducted Heat Pump + Space Heater | 1                     |
| Space Heater                             | 6                     |
| Woodstove                                | 9                     |
| Electric Furnace                         | 3                     |
| Oil Heater + Oven                        | 1                     |
| Other Bulk Fuels                         | 5                     |
| Heated Electric Floors                   | 1                     |
| Minisplit                                | 8                     |

| Type of Heating                       | Number of Respondents |
|---------------------------------------|-----------------------|
| Minisplit + Woodstove                 | 7                     |
| Minisplit + Space Heater              | 1                     |
| Minisplit + Other Bulk                | 1                     |
| Minisplit + Space Heater+ Other Bulk  | 1                     |
| Minisplit + Woodstove + Space Heater  | 2                     |
| Woodstove + Space Heater              | 10                    |
| Woodstove + Other Bulk                | 4                     |
| Woodstove + Electric Furnace          | 3                     |
| Woodstove + Electric Ducted Heat Pump | 1                     |
| Space Heater + Propane Heater         | 1                     |
| Space Heater + Kerosene Heater        | 1                     |
| Space Heater + Woodstove + Other Bulk | 1                     |

Unpublished, preliminary data from low-income rural Oregon community survey, approx. 100 respondents, 2025; electric-only service territory

Kate Dwyer (Four Way Community Foundation & IVCDO board of directors) – Back to living



Kate Dwyer, Four Way Community Foundation

# **NON-ENERGY BENEFITS HEALTH**

# Non-Energy benefits (NEB)



**Improved safety and comfort**



**Less waste**



**Job creation and economic investment**



**Resilience in the face of natural disasters**



**Lower emissions resulting in cleaner air**



## The Benefits of a Weatherized Home



ENERGY COSTS SAVINGS



WATER COST SAVINGS



LESS OUT-OF-POCKET  
HEALTH COSTS



LOWER LOAN INTEREST  
PAYMENTS

Weatherization not only helps households, it also helps revitalize communities by spurring economic growth and reducing environmental impact. Weatherization returns \$2.78 in non-energy benefits for every \$1.00 invested in the Program (*National Evaluation*).

Johnathan Van Roekel (LCRI) - Energy and NEB impacts



## The Benefits of a Weatherized Home



ENERGY COSTS SAVINGS

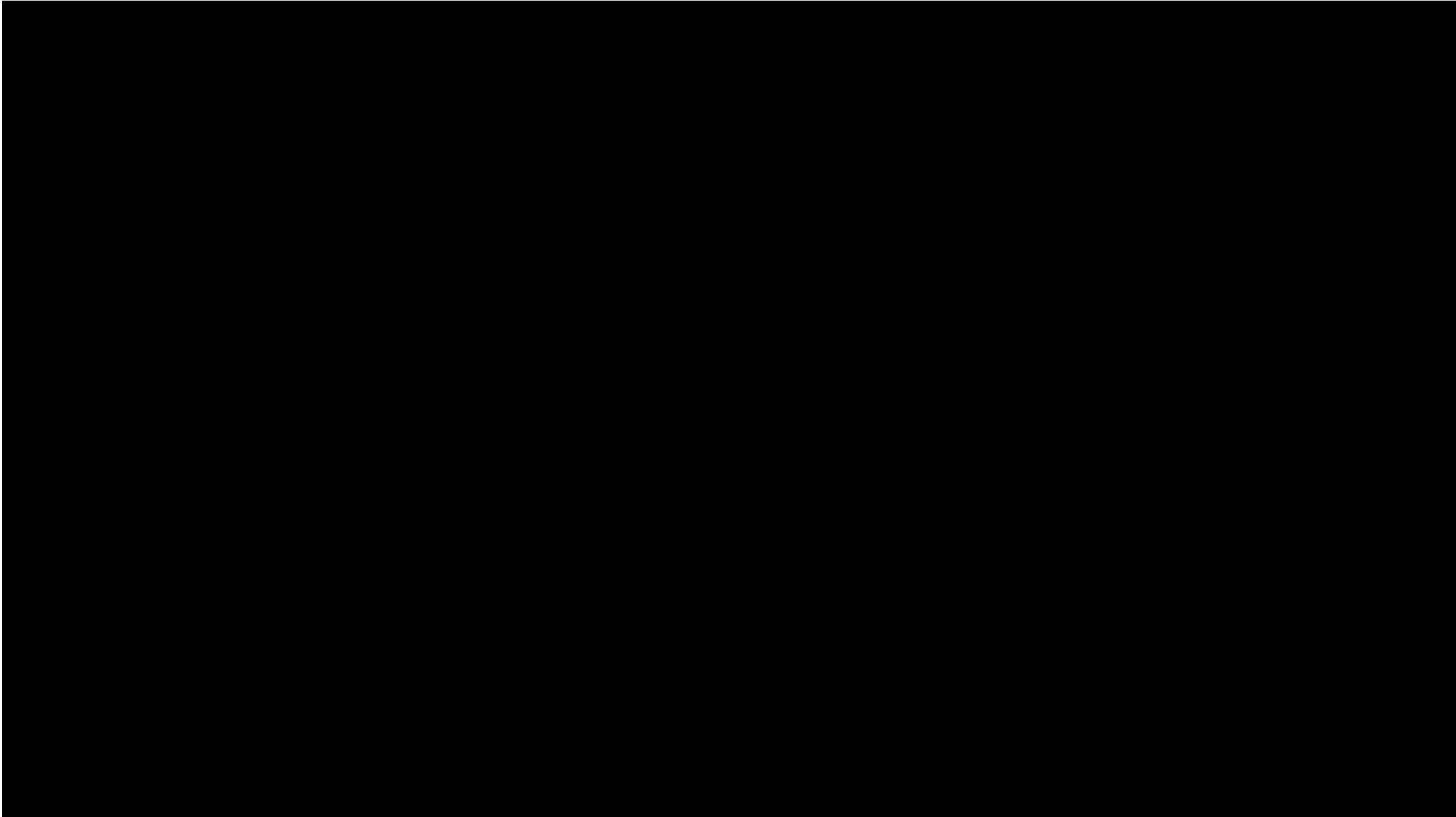


WATER COST SAVINGS

LESS OUT-OF-POCKET  
HEALTH COSTSLOWER LOAN INTEREST  
PAYMENTS

**Non-energy benefits** represent tremendous benefits for families whose homes receive weatherization services. After weatherization, families have homes that are more livable, resulting in **fewer missed days of work** (i.e. sick days, doctor visits), and **decreased out-of-pocket medical expenses by an average of \$514**. The total health and household-related benefits for each unit is **\$14,148** (*National Evaluation*).

Christina Zamora (KLCAS) – health & energy outcomes





# **BUILDING RURAL CBO PARTNER RELATIONSHIPS**

# Understanding RURAL

- Anchor industries have changed, closed, left
- Workforce availability issues
- Limited physical and digital infrastructure
- Fewer sources of capital
  - 20% of population; 7% of philanthropic funding
- Older; more White; POC fastest growing demographic
- Less education; Lower wages/incomes; High poverty
- Older and dilapidated housing
- Higher energy burden
- Lower in health outcomes; higher in premature deaths
- **Traditional outreach methods – typically ineffective**



# 3 Rural Oregon Counties – A Demographic Snapshot (ACS)

| 2023 <u>est%</u>    | <u>JosephineCo</u> | <u>KlamathCo</u> | Lake Co | OREGON | U.S.   |
|---------------------|--------------------|------------------|---------|--------|--------|
| Older than 65       | 27.7               | 22.8             | 25.7    | 19.6   | 17.7   |
| Bach degree +       | 18.6               | 20.8             | 19.8    | 35.5   | 34.3   |
| Disability <65      | 15.2               | 14.7             | 11.8    | 10.6   | 8.9    |
| Labor civilian 16+  | 49.7               | 51.3             | 48.6    | 62.4   | 63.0   |
| Median H income\$   | 56,068             | 57,219           | 54,663  | 76,632 | 75,149 |
| Per Capita Income\$ | 32,159             | 31,260           | 29,400  | 41,805 | 41,261 |
| Persons in poverty  | 18.0               | 15.5             | 16.5    | 12.1   | 11.5   |
| American Indian*    | 1.7                | 5.0              | 2.6     | 1.9    | 1.3    |
| Hispanic or Latino  | 9.1                | 14.4             | 11.4    | 14.9   | 19.5   |
| White alone**       | 84.5               | 76.2             | 81.2    | 72.8   | 58.4   |

Median Household Income and Per Capita Income: 2018-2022 in 2022 dollars

\*and Alaskan Native    \*\*not Hispanic or Latino

## Alaina Kuhlman (formerly LCRI) - Clear and present impacts





# Building rural community & CBO relationships

- Time/presence
- Mutual Benefit
- No “best” type
- Not traditional program contractors
- Community responsibility
- Equitable pay – community multiplier
- Can move to co-creation
- Capacity, capacity, capacity
- Trust
- Culture



## Titus Tomlinson (RARE) - Rural capacity & AmeriCorps RARE

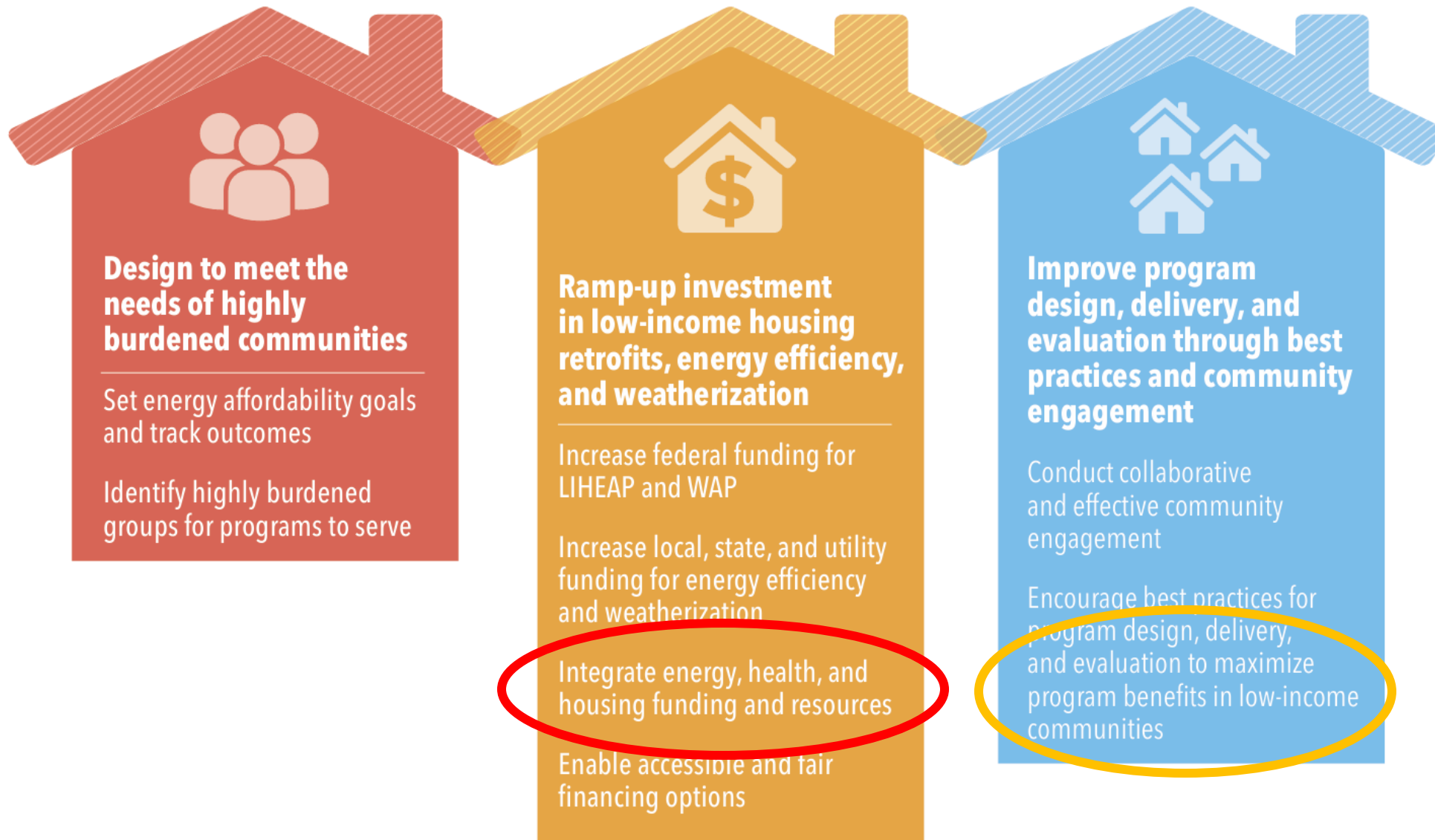


Titus Tomlinson, RARE AmeriCorps Program

# **BRAIDING ENERGY & HEALTH EFFORTS**



**FIGURE ES2. Strategies to improve and expand low-income energy efficiency and weatherization programs**



## How High Are Household Energy Burdens?

An Assessment of National and Metropolitan Energy Burden across the United States  
Ariel Dreihobl, Lauren Ross, and Roxana Ayala



# Common Efficiency-Related Measures

## Typical Weatherization Measures



### MECHANICAL MEASURES

- Clean, tune, repair, or replace heating and/or cooling systems.
- Install duct and heating pipe insulation.
- Repair leaks in heating/cooling ducts.
- Install programmable thermostats.
- Repair/replace water heaters.
- Install water heater tank insulation.
- Insulate water heating pipes.
- Install solar hot water heating system.



### BUILDING SHELL MEASURES

- Install insulation where needed.
- Perform air sealing.
- Repair/replace windows/doors.
- Install window film, awnings and solar screens.
- Repair minor roof and wall leaks prior to attic or wall insulation.



### HEALTH & SAFETY MEASURES

- Perform heating system safety testing.
- Perform combustion appliance safety testing.
- Repair/replace vent systems to ensure combustion gas draft safely outside.
- Install mechanical ventilation to ensure adequate indoor air quality.
- Install smoke and carbon monoxide alarms when needed.
- Evaluate mold/moisture hazards.
- Perform incidental safety repairs when needed.



### ELECTRIC & WATER MEASURES

- Install efficient light sources.
- Install low-flow showerheads.
- Replace inefficient refrigerators with energy-efficient models.



### CLIENT EDUCATION ACTIVITIES

- Educate on potential household hazards such as carbon monoxide, mold & moisture, fire, indoor air pollutants, lead paint and radon.
- Demonstrate the key functions of any new mechanical equipment or appliances.
- Discuss the benefits of using energy-efficient products.

U.S. DEPARTMENT OF  
**ENERGY**

Office of **ENERGY EFFICIENCY  
& RENEWABLE ENERGY**

For more information, visit: [energy.gov](https://energy.gov)

DOE/1561 • June 2019

# Braiding and stacking funding and financing for comprehensive retrofits

## BRAIDING ENERGY AND HEALTH FUNDING FOR IN-HOME PROGRAMS: FEDERAL FUNDING OPPORTUNITIES

By Sara Hayes and Christine Gerbode

RESEARCH REPORT  
JULY 2020

[ACEEE Report](#), July 2020

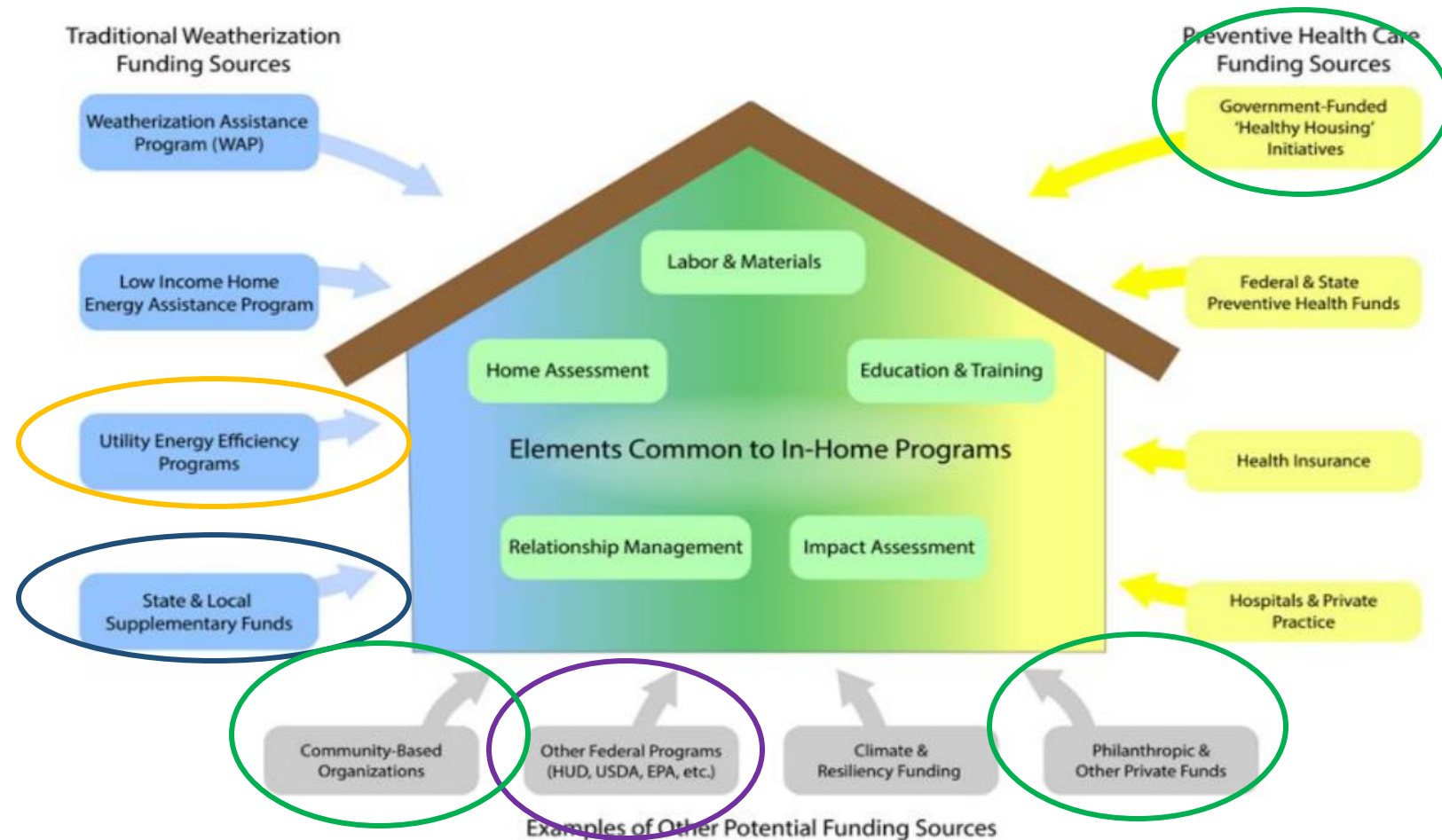
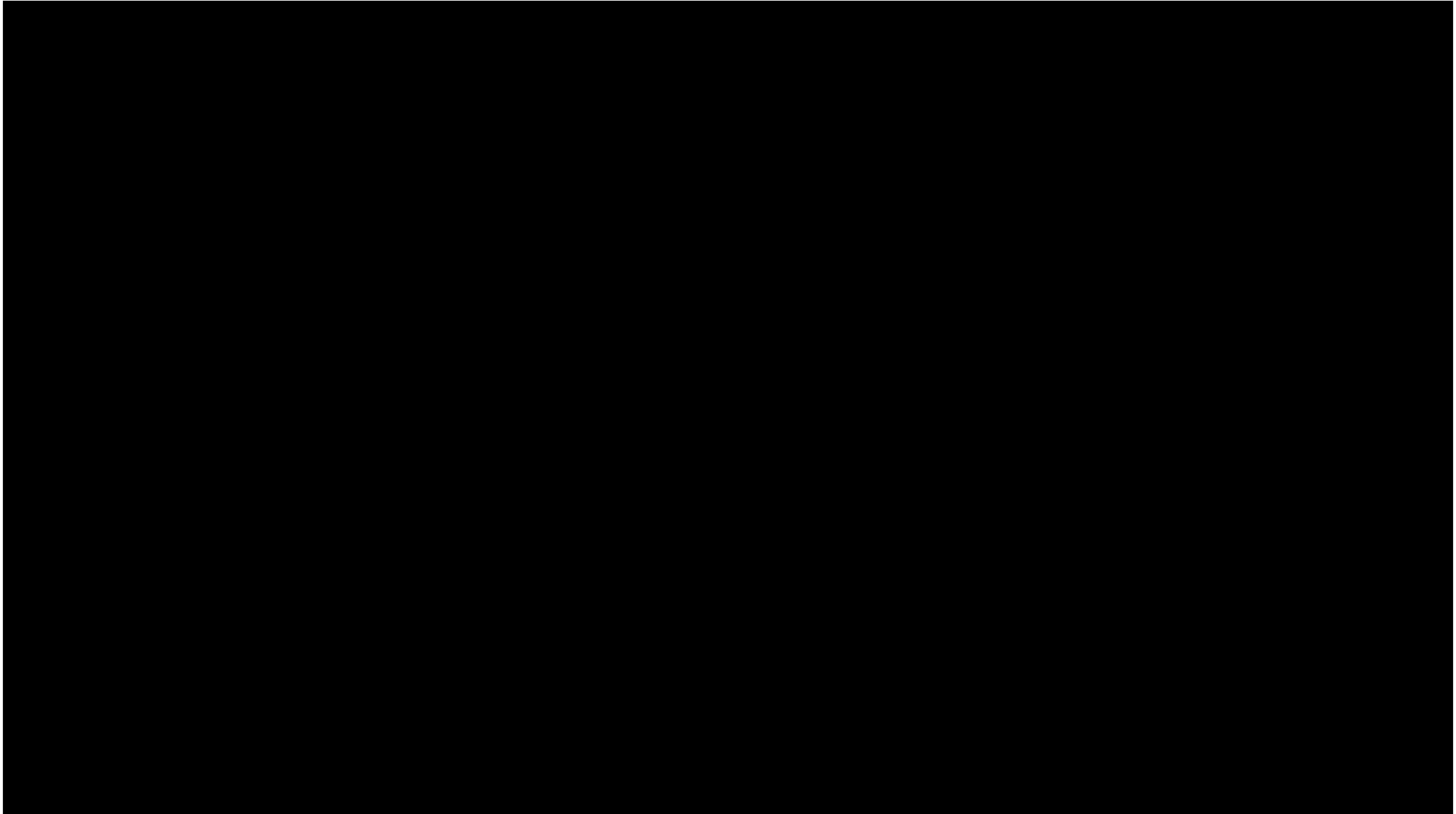


Figure ES-1. Energy efficiency and health sector funding sources that might be braided together to support program elements common to the work of both.

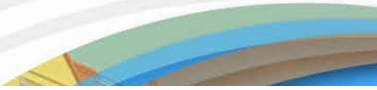
## Joy Lark – Intro and working w Energy Trust and finding other opportunities



# BRAIDING ENERGY AND HEALTH FUNDING FOR IN-HOME PROGRAMS: FEDERAL FUNDING OPPORTUNITIES

By Sara Hayes and Christine Gerbode

RESEARCH REPORT  
JULY 2020



**Table 2. Potential for avoided health costs from addressing select health harms with in-home energy efficiency programs (in 2019 dollars)**

| Hazard type              | Costs avoided in first year | Costs avoided after 10 years |
|--------------------------|-----------------------------|------------------------------|
| Trip and fall            | \$177,200,000               | \$2,180,000,000              |
| Asthma                   | \$38,500,000                | \$593,000,000                |
| Exposure to extreme cold | \$8,000,000                 | \$73,000,000                 |
| Exposure to extreme heat | \$4,600,000                 | \$41,000,000                 |
| Total                    | \$228,000,000               | \$2,888,000,000              |

Source: Hayes, Kubes, and Gerbode 2020    ACEEE, July 2020



## Christina Zamora (KLCAS)– Better when we work together



Christina Zamora, ED, Klamath & Lake Community Action Services

# Funding opportunities w/ energy or energy component

- HOMES & HEAR
  - Home Efficiency Rebates program
  - Home Electrification & Home Appliance Rebates
- Solar for All
- Climate pollution reduction grants
  - DEQ Climate Protection Program
- OHA Healthy Homes grant
- OHA – Resilience Hub funding
- ODOE – County resilience funding
- Utility programs – OLIEE (NWN)
- Other community programming - ex: Habitat's home repair program
- Standard programming
- OTHERS



# Ways to do more (even with less)

- Joint programming to do more with “other people’s money”
- Better understand other industries – potentially compatible
- Listen to and learn from CBOs – create collaborative programming that provides greater benefits
- Use the fact that health, housing and energy are intricately related
  - Gather data/research that supports collaboration and ID’s increased benefits



**WRAP UP**



## Joy Lark (IVCDO) - Much more is possible



# Summary

## *Energy is Essential*

- Home energy improvements can benefit physical and mental health
- Energy-related funding can often be stacked; may serve as grant match
- We all have missions & established lanes. Let's be innovative and flexible
- Collaborating with others/agencies, and partnering with communities and community-based organizations is mutually beneficial
  - **They are expert at braiding and stacking funding; We can be too!**
- Our priority customers are those who have been historically underserved
- Working across industries for mutual success = greater benefits





Thank you



Clean, affordable energy for everyone

**Karen Chase, Senior Community  
Strategies Manager**

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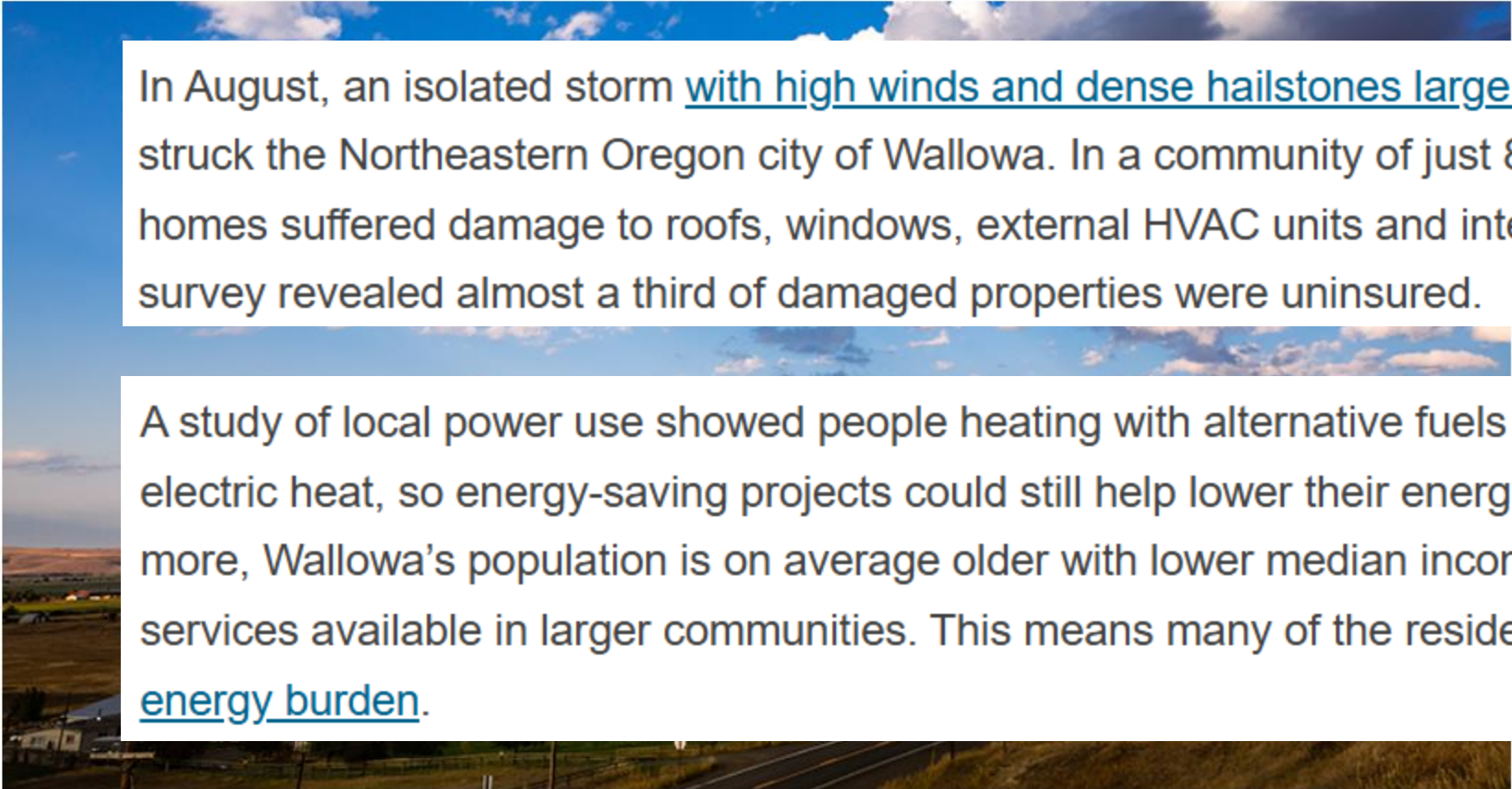
# ACEEE – Rural report, July 2018

## The High Cost of Energy in Rural America: Household Energy Burdens and Opportunities for Energy Efficiency

- Approximately **41% of households in rural areas have incomes below 200% of FPL**, compared with **about a third of households in urban areas**
- **Rural households are disproportionately energy burdened**
- Rural low-income households have **highest median energy burden at 9%** (up to >15%) = approx. 3x the non-low income household median
- Residents of **rural manufactured housing** experience a median energy burden that is **42% higher than that of rural single-family homes**
- Residents of **multifamily** structures with 2–4 units have a median energy burden that is 20% higher than that of rural single-family households
- The median energy burden of **rural elderly households is 44% higher than that of non-elderly households**
- **Rural renters** experience a median energy burden 29% higher than that of owners
- The median energy burden of **nonwhite households** in rural areas is 19% higher than that of their white counterparts

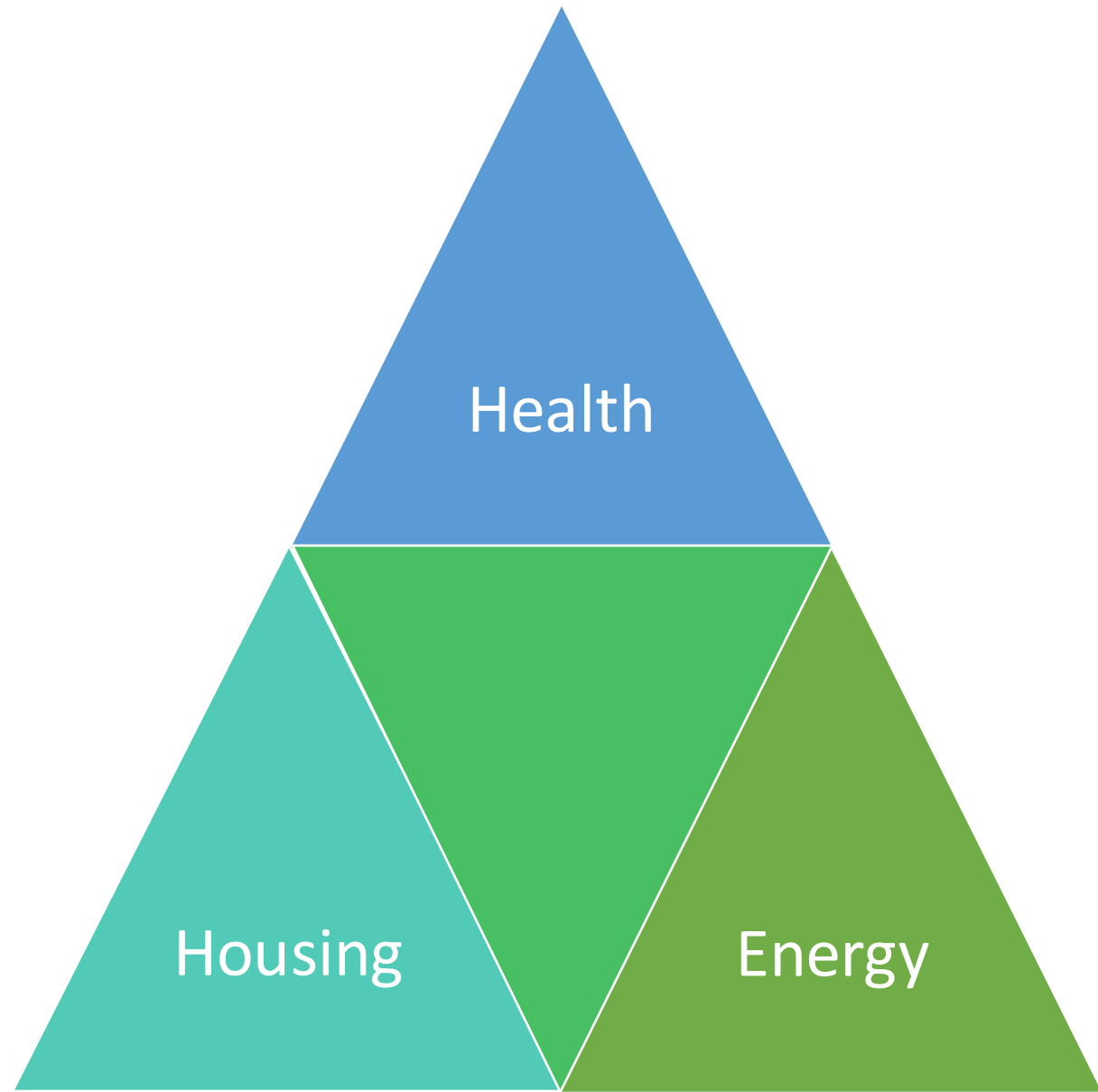
# Energy Trust supports rebuilding following powerful hailstorm in Wallowa

January 20, 2023



In August, an isolated storm [with high winds and dense hailstones large enough to puncture a roof](#) struck the Northeastern Oregon city of Wallowa. In a community of just 800 residents, nearly 300 homes suffered damage to roofs, windows, external HVAC units and interior spaces; a community survey revealed almost a third of damaged properties were uninsured.

A study of local power use showed people heating with alternative fuels often supplement with electric heat, so energy-saving projects could still help lower their energy use and costs. What's more, Wallowa's population is on average older with lower median incomes and limited access to services available in larger communities. This means many of the residents already face a [high energy burden](#).







# Thank you to the 2025 Forum partners!

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