
Rural Alaska Community Action Program, Inc.

Energy Programs:

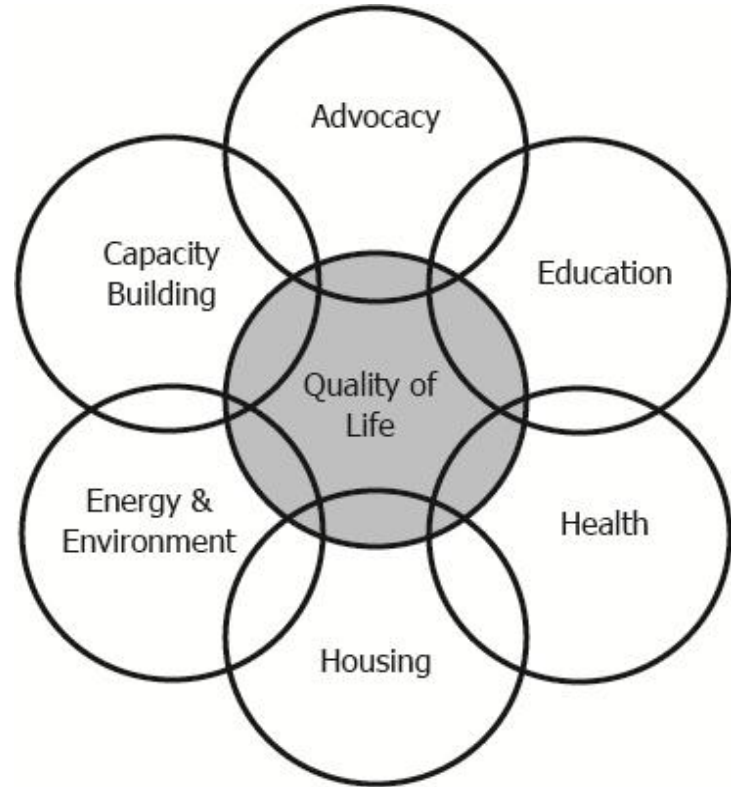
Designed to Meet the Needs of Alaskans



Rural Alaska Community Action Program, Inc.
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2013-2015 Strategic Directions

- **Advocacy**
- **Education**
- **Health**
- **Housing**
- **Energy & Environment**



Capacity Building



RurAL CAP

Employed 1,023 Alaskans in 81 communities last year

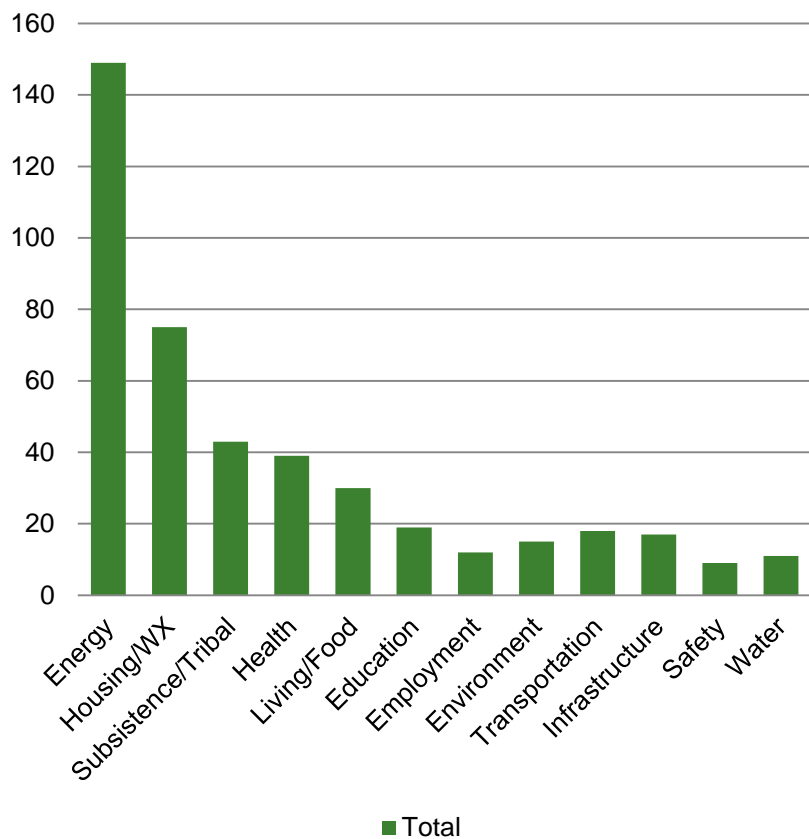


What are the top issues in your community?

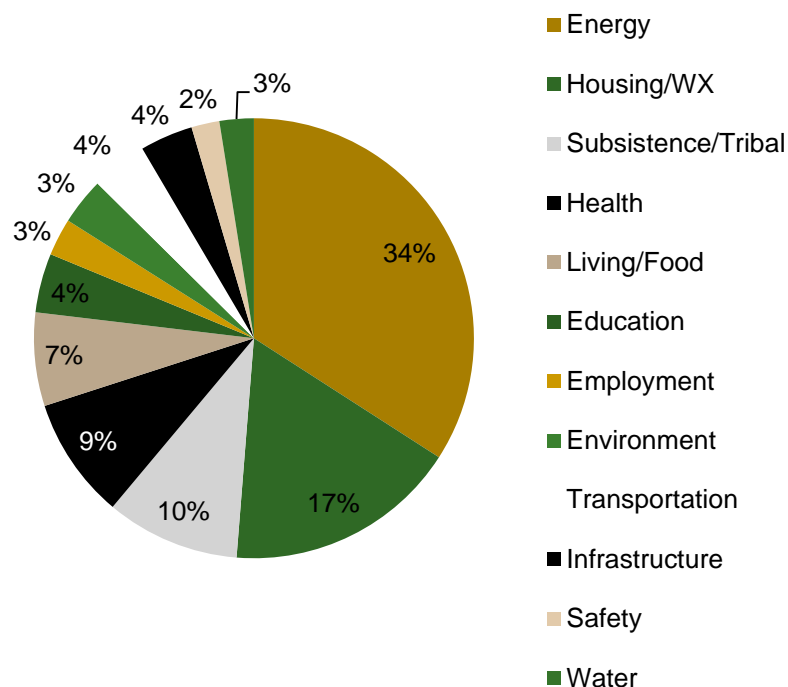
2012 AFN Survey

(Rural: n=182 from 171 villages)

Rural Total



Total

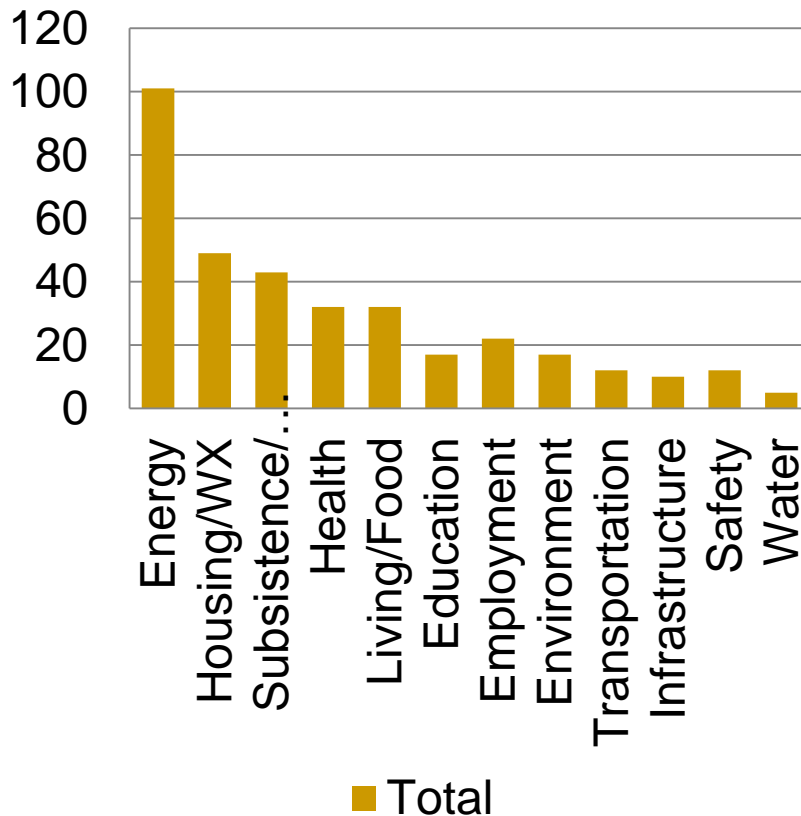


What are the top issues in your community?

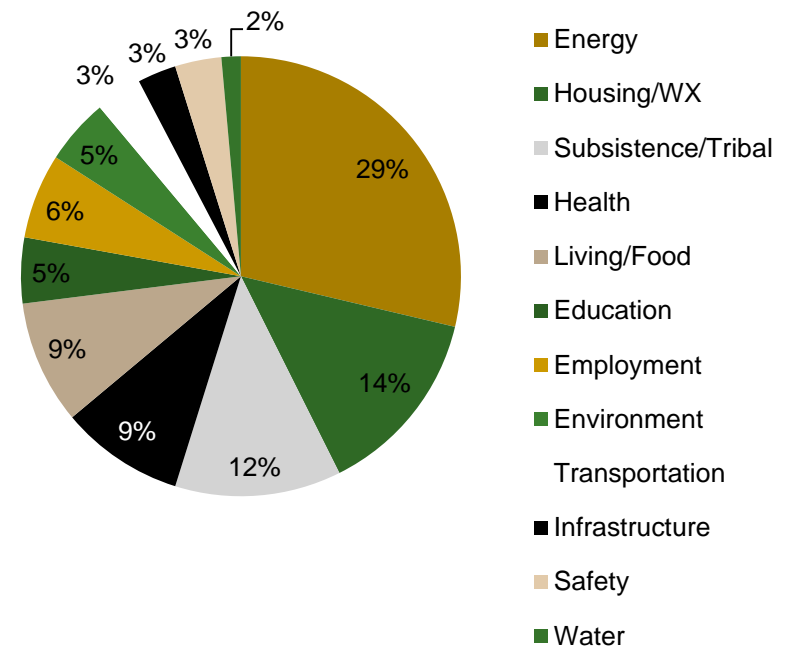
2012 AFN Survey:

(n=143)

Urban* Totals



Total



*Includes Anchorage, Eagle River, Wasilla, Palmer, Fairbanks, North Pole, Juneau

RURAL ENERGY CRISIS

AHFC estimates of annual average household fuel and electric costs by region reported in the 2011 "Energy Savers Tips for Alaska:"

- Northern: \$10,773
- Southwest: \$8,361
- Interior: \$8,317
- Southeast: \$5,947
- Railbelt: \$4,753



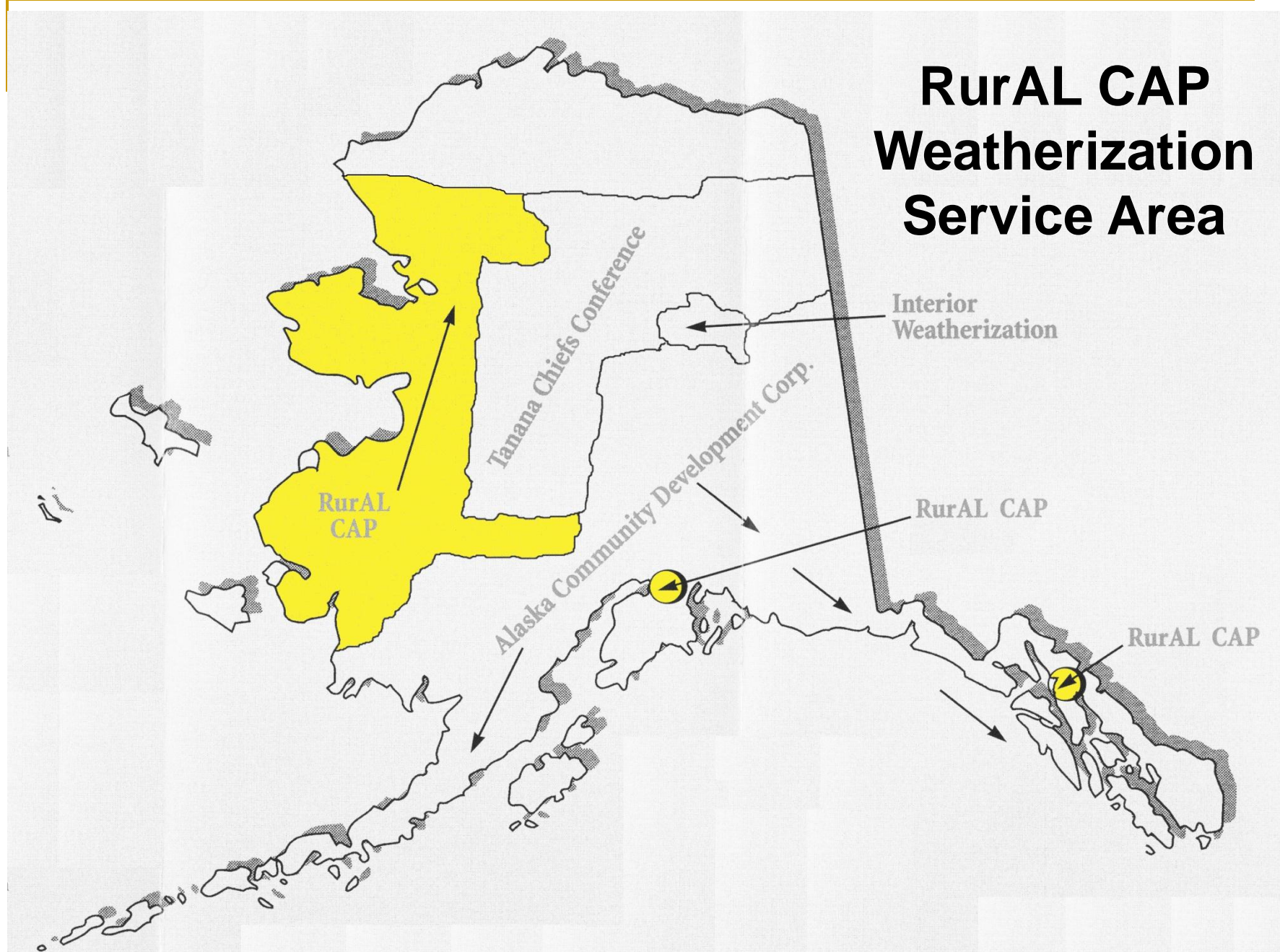
RURAL ENERGY CRISIS

According to the 2012 Commonwealth North report; “Energy for a Sustainable Alaska; The Rural Conundrum;”

“Remote households with the lowest incomes face the highest cost burden, estimated in some cases to be 47% of their total income.”



RurAL CAP Weatherization Service Area



2013 RuRAL CAP Weatherization Sites

■ # Homes	Community
■ 500	Anchorage
■ 100	Juneau
■ 40	Kotzebue
■ 13	Shaktoolik
■ 12	Nome
■ 40	Unalakleet
■ 60	Chevak
■ 8	Platinum
■ 33	Toksook Bay
■ 830	Total



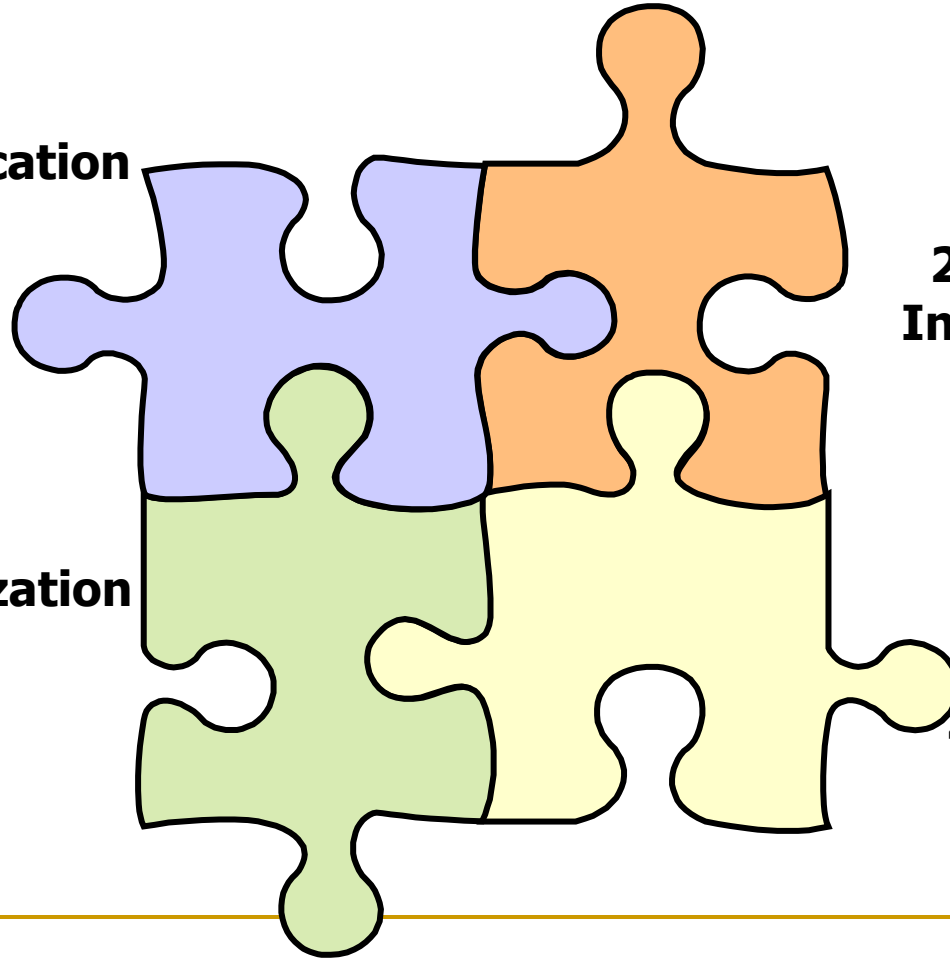
Four Steps to a Weatherized Home

1. Application

**2. Home
Inspection**

**3. Weatherization
Work**

**4. Quality
Control**



1. EZ Application process

- Already getting public assistance, LIHEAP, SSI, Sec 8 Sec 202/811 housing, LIHTC, Senior benefits, or food stamps?
 - ☞ Good news: **YOU AUTOMATICALLY QUALIFY!**
- Application assistance is available for everyone
- New, easier to complete application

Households with Seniors over 55 and/or children under 6 are a priority



2. Home Assessment



A complete check-up is done. Top to bottom, inside and out, each home is inspected to identify where energy is being wasted and air quality needs improvement.

Each home gets an individual “prescription.”



3. Weatherization Work



Shaktoolik Wx Crew ready to go out to their job sites for the day

- Local hires, working under the supervision of highly-trained field supervisors and foremen, perform the weatherization work.



Typical Weatherization Work

Local workers receive on the job training



Ventilation for extreme climates



Sealing prior to installing
a new window



Wrapping a home to
increase insulation



Completed homes



Homeowners select the colors to top off the finished weatherization job.



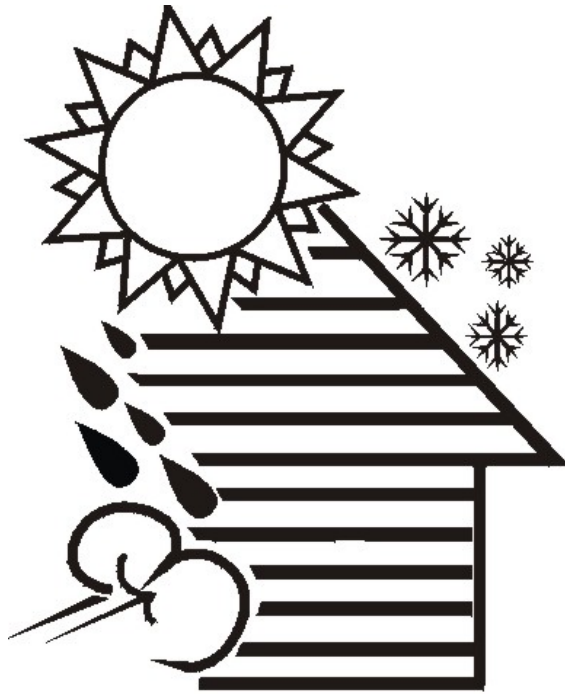
4. Quality Control



Weatherization improvements are reviewed with homeowner both before and after the work is done.

Follow-up visit is made after completion to ensure that everything is working properly and to respond to issues or questions.





*Weatherization
Works*

www.weatherizeme.org

❖ 907-771-7800



Rural Alaska Community Action Program, Inc.'s

Energy W^{ise} Program



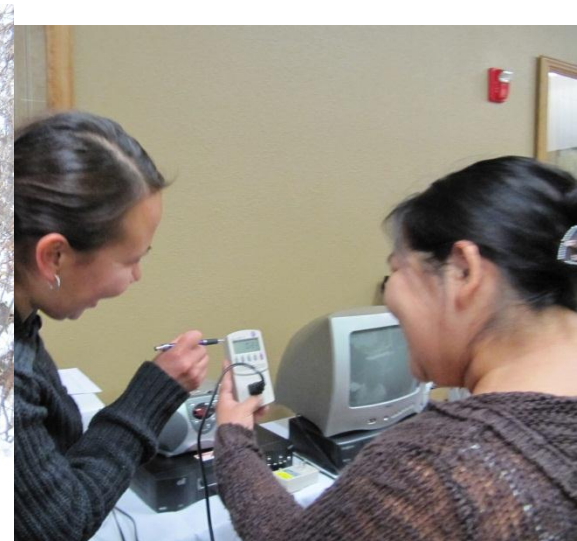
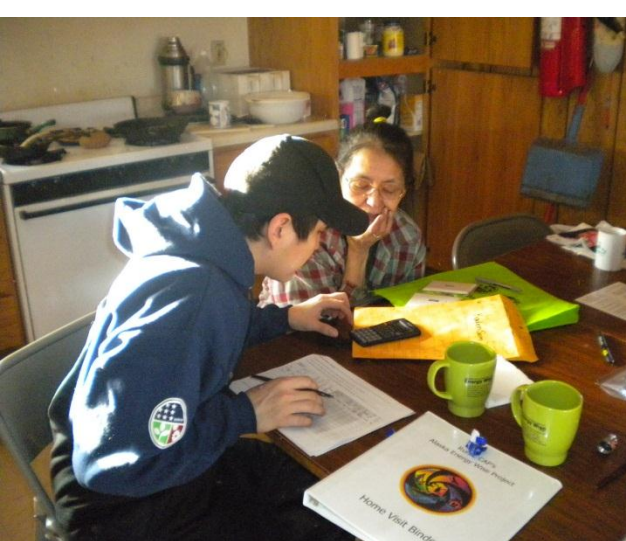
Rural Alaska Community Action Program, Inc.'s

Energy Wise

Program

Energy Wise is a comprehensive residential energy efficiency and conservation education program.

- RurAL CAP works in partnership with local communities to reduce the burden of high energy costs.



Energy Wise Program

- **Reduces** energy consumption, **saves** money (resident) and PCE subsidy (state)
 - ❑ Household assessment of energy use
 - ❑ Identification of best savings options
 - ❑ Low-cost home upgrades
- **Creates jobs** for rural Alaskans
 - ❑ Hire and train locally
 - ❑ Professional development and certification



PROVEN PERFORMANCE AND RESULTS



Since 2010:

- 22 communities served, over 2,000 households benefited (95% participation rate)
- More than 80% report maintaining changes, lower bills, warmer homes
- 240 rural Alaskans trained and employed



PROVEN PERFORMANCE AND RESULTS

Articles about Energy Wise:

- Information Insights identified RurAL CAP's Energy Wise program as a best practice, proven tactic and recommended action step to improve the energy crisis in their 2011 report *"Recommendations for Alaska Energy Efficiency and Conservation Public Outreach Education and Outreach"* commissioned by the Alaska Energy Authority
- Highlighted in as a successful program in:
 - ❑ Alaska Business Monthly
 - ❑ The Hunter
 - ❑ Arctic Sounder
 - ❑ National Native News - NPR
 - ❑ Petroleum News
 - ❑ KTVA Channel 11

APRN



COLLABORATIVE EFFORT WITH STATE ENERGY PARTNERS

Designed and implemented in partnership with:

- Alaska Housing Finance Corporation
 - Alaska Energy Authority
 - Weatherization Service Providers
 - Housing Authorities
 - Department of Energy
 - Denali Commission
 - Department of Labor
 - Regional and community organizations
- Utilities



COMPLEMENTS WEATHERIZATION

- Prioritizes communities not recently served or scheduled to be served by Weatherization
- Focuses on immediate improvements for energy savings and education
- Residents are involved in assessing energy use and making changes in their homes
- Engages the entire community, all homes eligible



EFFECTIVE PROGRAM DESIGN

- Community Partnership
- Message Delivered by Local Crews
 - 4- 10 hired per community, 6-12 weeks
 - Professional training and certification





Preparing for future employment in:

Energy Development
Weatherization
Construction Fields

Crews receive certification in:

- Weatherization Tech 1
General building science
Weatherization basics
Hands-on installation experience
- Occupational Safety and Health Administration (OSHA) 10
Construction safety standards
- First Aid



EFFECTIVE PROGRAM DESIGN

- Energy Fair
 - ❑ Engages entire community
 - ❑ Residents sign-up for home assessment



EFFECTIVE PROGRAM DESIGN

- Home Visits - Energy Assessments
 - ❑ 2 crew members, 1 full day (8 hours) per home
 - ❑ Residents participate in finding where energy is used and how to save
 - ❑ Review energy bills and identify potential savings
 - ❑ \$300 of energy efficiency supplies installed



HOME VISIT



Crews Show Residents How to Save Energy and Money



[illegible]

-

ENERGY ASSESSMENT HOME VISITS



Installing
water heater
blankets and
teaching
maintenance



Insulating outlets and switches

Installing
door sweep
and
weather-
stripping



EFFECTIVE PROGRAM DESIGN

■ Follow-Up Education and Survey

- ❑ 3 to 6 months after home assessment
- ❑ Distribute additional educational materials and supplies



ENERGY WISE BUDGET BREAKDOWN

\$2,000/HOME

Energy Wise Budget Breakdown



Communities Receive:

- Up to 10 locally hired crew members employed for 8-12 weeks, receiving training and professional certification
- On-site 'Launch Week' for hiring and training local crews
- Energy Fair engaging residents, schools and organizations
- Homes receive:
 - Full day home visit from a trained, locally hired crew
 - Household energy/kilowatt consumption and cost assessment conducted with the resident
 - Education on energy cost-saving strategies
 - Home energy efficiency supplies installed (\$300 value)
 - Follow-up visit and survey about project results by crew member 2-3 months after initial home visit



2010 ENERGY WISE RESULTS

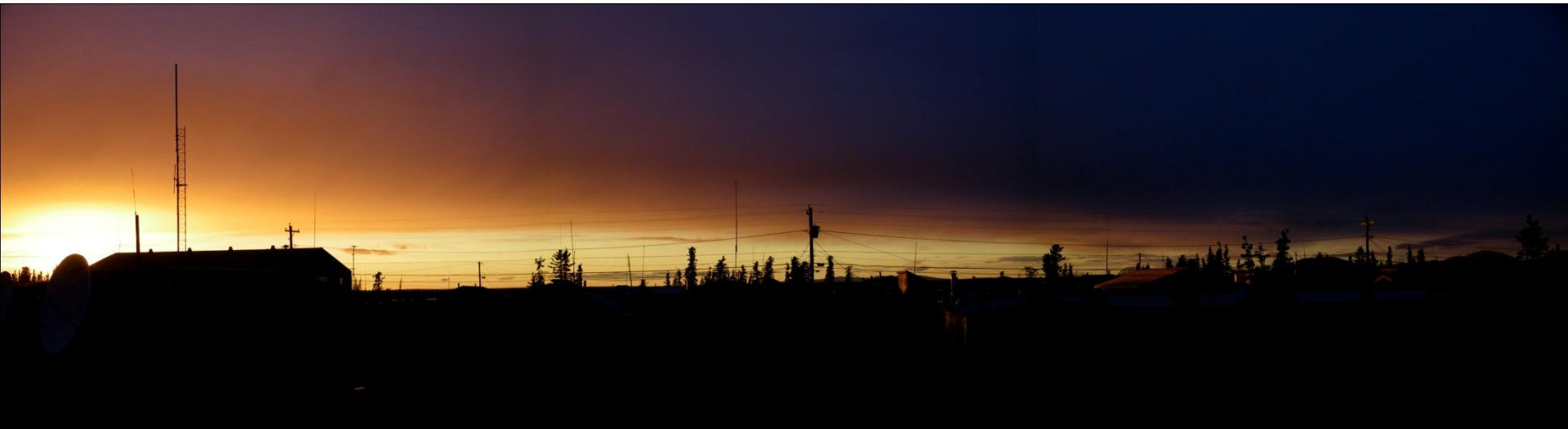
- 120 rural Alaskans trained and employed
- 90% retention of crews
- 1,000 homes served
- 7,500 educated
- \$\$\$ energy and money saved



2010 OUTCOMES – SUSTAINED CHANGE

Based on 700 follow-up home surveys:

- 86% reported they were still practicing energy efficiency and conservation measures
- 82% reported decreased home heating costs
- 80% reported decreased electric bills



KASIGLUK CASE STUDY

2010 AVERAGE MONTHLY ELECTRICAL SAVINGS

- Before Energy Wise:
 - \$186 = 287 kWh/month
 - \$63 paid by resident
 - \$123 covered by PCE
- After Energy Wise:
 - \$127 = 197 kWh/month
 - \$43 by resident = **\$20 savings**
 - \$84 by PCE = **\$39 savings**

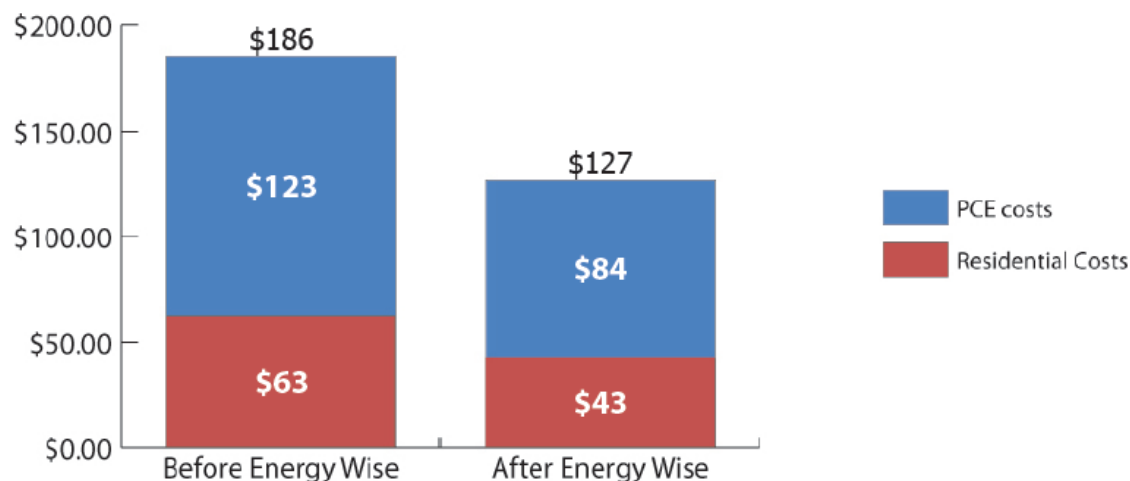
After Energy Wise:

- **90 kWh/month reduction**
- **\$59 savings in resident and PCE electricity costs**



KASIGLUK

Energy Wise 2010 Average Monthly Electrical Savings*



Before Energy Wise

Average Electric Bill: \$186 = 287 kWh/month

- \$63 paid by resident
- \$123 covered by PCE

After Energy Wise

Electric Bill: \$127 = 197 kWh/month (**90 kWh savings**)

- \$43 paid by resident (**\$20 savings**)
- \$84 covered by PCE (**\$39 savings**)

Resident and PCE Electrical Savings of \$59/month = \$708/year

Project Cost = \$2,000/home

Return on Investment of less than 3 years in electrical savings alone

*Based on an independent evaluation completed in consultation with ISER using AVEC data for 2010 Rural CAP Energy Wise communities

RETURN ON INVESTMENT BASED ON KASIGLUK STUDY

- Residents save:
 - \$20/month in electricity = \$240/year
- State saves - PCE reduction:
 - \$39/month = \$468/year
- Project cost is \$2,000/home:
 - Annual savings = \$708/year
- Return on Investment = less than 3 years in electrical savings alone



NANA - ENERGY WISE

CORPORATE — NON-PROFIT PARTNERSHIP

According to the Northwest Arctic Strategic Energy Plan:

- 1 in 4 household dollars in the region goes to heating and electric (\$1/20 is typical in lower 48)
 - 20% poverty rate
 - 20% unemployment rate
 - \$788/month average spent on home heating and electric
 - Approximately 50% reported some knowledge of energy efficiency or conservation
 - About 80% reported reducing subsistence activities because of energy costs
-

NANA - ENERGY WISE

CORPORATE – NON-PROFIT PARTNERSHIP

In 2011, NANA Regional Corporation, through their Village Economic Development Council, decided to contract with RurAL CAP to bring the Energy Wise program to every household in their region.



NANA - ENERGY WISE 2011-13 PARTNERS

- NANA Regional Corporation
- Alaska Energy Authority
- Community Partners
- Northwest Arctic Borough
- Northwest Inupiat Housing Authority
- Denali Commission/Department of Labor
- U.S. Department of Energy, NREL
- Alaska Works Partnership



NANA - ENERGY WISE

2011-13 Outcomes

- 11 communities served: Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Kotzebue (180 homes), Noatak, Noorvik, Selawik, and Shungnak
- 60+ crew members received professional certification
- 120 crew members trained in energy efficiency and conservation techniques and community education
- 1,022 homes visited; 95% participation rate
- Over 4,000 people received energy efficiency and conservation education and resources
- Energy bill savings



2011-12 OUTCOMES – SUSTAINED CHANGE

Results in NANA communities based on January 2012 survey:

- Average electric bill the month before Energy Wise was \$312
- Average savings on electrical bill after the Energy Wise visit was \$35
- 82% reported that their homes felt warmer – despite record breaking cold temperatures



REDUCING THE ENERGY BURDEN

CAPSIS request submitted for \$1.6M to conduct Energy Wise in 12 communities in rural Alaska.

- Energy Wise is a tested and proven initiative with immediate and long-term results
- Energy Wise can provide immediate relief to communities outside the Railbelt with few other options
- RurAL CAP is committed to reducing the energy burden for Alaskans while creating healthy economies and sustainable communities
- Regional and local requests for expansion



ADDITIONAL FUNDING

\$2M total project budget for FY13

- \$1.6M requested from State of Alaska
- \$100,000 secured through the Denali Commission – for Venetie and Arctic Village
- \$300,000 requested through the Rasmuson Foundation
 - The Rasmuson Foundation has met with RurAL CAP and agreed that they would be interested in funding project supplies, should state funding be secured



OPERATIONAL PLAN CAPSIS REQUEST

- 12 communities will be served
- 1,000 households will benefit
- 70 rural Alaskans will be employed
- Competitive selection process will evaluate:
 - ❑ Energy burden and resources
 - ❑ Economic stress
 - ❑ Efficiency considerations: population size and geographic dispersion
 - ❑ Community and regional organization buy-in, commitment of available resources, and support





Rural Alaska Community Action Program, Inc.'s
Energy W^{ise} Program

Healthy People, Sustainable Communities, Vibrant Cultures

For more information, contact:

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