

*Tlingit and Haida Regional
Housing Authority*

Energy Cents Program

Tribal DOE Review

March 26th, 2014

Tasha McKoy



Regional Housing Authority

Program Overview

- Tlingit Haida Regional Housing Authority (THRHA) is the largest housing provider in Southeast, AK
- Program focus is small household energy efficiency upgrades and region wide energy conservation education
- Program deliverables:
 - **Train 28 field assessors to conduct energy assessments in 400 homes throughout Southeast, AK**
 - **Energy fairs/community meetings in 14 communities**
 - **K-12 education**

Project Deliverables (PDs)

- 28 field assessors conduct home assessments



400 Energy Usage Assessments (PDs)



Community Meetings & Energy Fairs (PDs)



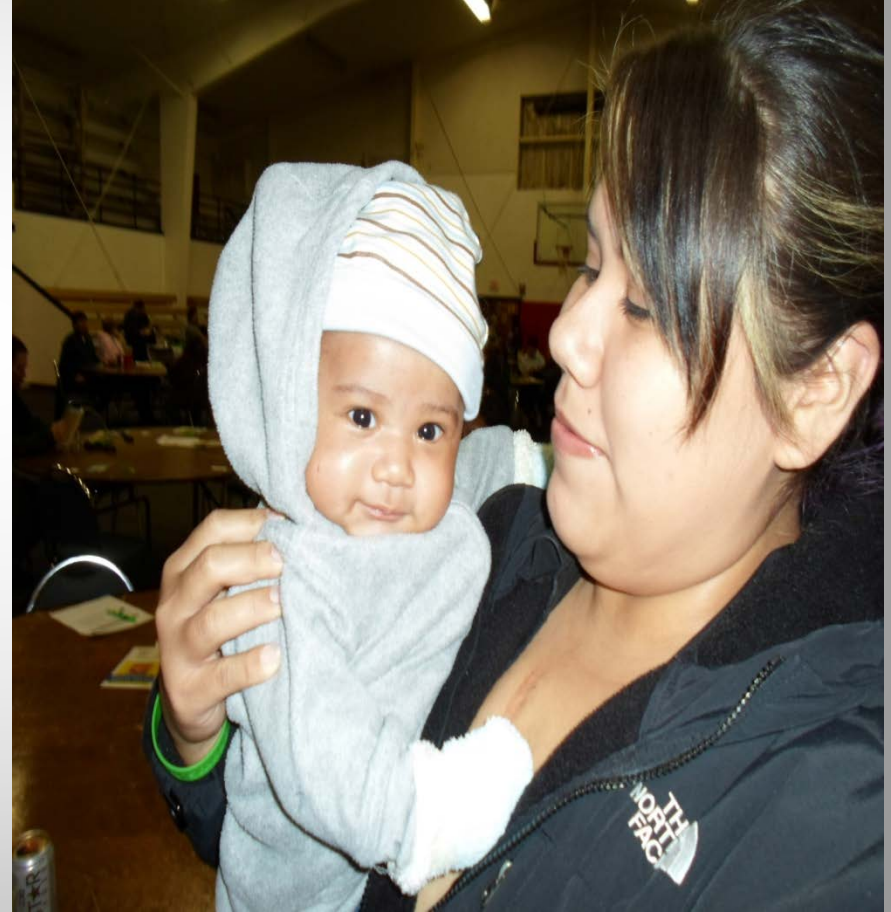
Energy Fair Participants- Angoon



Hoonah and Juneau Fair



Energy Assessors and Kake Participant



Kake Energy Fair



Kake Vendors and Fair Workers



Door Prize Winner and Tlingit Dancers



Saxman Energy Fair



Saxman Participants



Saxman Energy Crew and Saxman Fair Songbird



Yakutat Energy Fair Tlingit Dancers



Leverage

- 81 donators,
- \$21,193.00 in donated supplies
- \$17,500 in cash donations
- This doesn't include volunteerism, venues donations, presenter time, etc.!!

NAHASDA, First Bank, Sealaska, Renewable Alaska Energy Project, Alaska Housing Finance Corporation, Central Council Tlingit and Haida Indian Tribes of Alaska.

Statement of Project Objectives

1) Community Awareness and Education plan:



Statement of Project Objectives

2.) Distribute and impart tenant information regarding Energy Cents work in the home



Statement of Project Objectives

3.) Home energy assessment planning



Statement of Project Objectives

4.) Home assessments and Energy Cents Champion work



Energy Cents Crew Member- Shiann

Statement of Project Objectives

5-a.) Home energy assessment results and recommendations:

Table 1. Surveyed Home Characteristics

City	Household Count (n=225)	Avg. Residents per Home (n=206)	Avg. Therm. Setting, °F (n=177)
Angoon	42	3.6	71.7
Hoonah	18	2.3	68.6
Kake	57	3.0	68.6
Juneau	30	3.0	67.3
Other Cities	78	2.5	68.5
Total Sample	225	2.9	68.9

Statement of Project Objectives

5-b.) Home energy assessment results and recommendations:

Table 3. Primary Household Heating Fuel Types, by City

Region/City	Counts						Percent				
	Elect.	Oil	Wood	Other	NR	Total	Elect.	Oil	Wood	Other	NR
Angoon	9	17	10	---	6	42	21%	40%	24%	---	14%
Hoonah	11	---	5	---	2	18	61%	---	28%	---	11%
Kake	2	38	10	2	5	57	4%	67%	18%	4%	9%
Juneau	11	15	---	---	4	30	37%	50%	---	---	13%
Other Cities	17	41	12	---	8	78	22%	53%	15%	---	10%
Total	50	111	37	2	25	225	22%	49%	16%	1%	11%

49 percent of surveyed households rely on heating oil as the primary heating fuel, 22 percent rely on electric and 16 percent rely on wood.

Statement of Project Objectives

5-c.) Home energy assessment results and recommendations:

Table 4. Secondary Household Heating Fuel Types, by Primary Fuel Type

		<i>Secondary Fuel Counts</i>					Total
		No Second-ary or NR	Electric	Oil	Wood	Other	
<i>Primary Fuel</i>	Fuel						
	Electricity	33	6	4	7		50
	Oil	70	9	6	22	4	111
	Wood	9	5	21	---	2	37
	Other	---	1	1	---	---	2
Total		112	21	32	29	6	200

Of the homes reporting a primary fuel, 44 percent report secondary heating systems. The most common secondary heating system for respondents is oil (36 percent) and electric (24 percent). About two-thirds of homes heated primarily by electricity and oil did not report a secondary heating system.

Statement of Project Objectives

5-d.) Home energy assessment results and recommendations:

Table 5. Household Previous Weatherization Complete, by City

Region/City	Counts				Percent		
	Yes	No	NR	Total	Yes	No	NR
Angoon	17	18	7	42	40%	43%	17%
Hoonah	7	9	2	18	39%	50%	11%
Kake	31	23	3	57	54%	40%	5%
Juneau	2	18	10	30	7%	60%	33%
Other Cities	31	39	8	78	40%	50%	10%
Total	88	107	30	225	39%	48%	13%

48 percent of the surveyed households reported never weatherizing their homes.

Statement of Project Objectives

5-e.) Home energy assessment results and recommendations:

Table 6. Households by Residents with Allergies or Asthma, by City

Region/City	Counts				Percent		
	Yes	No	NR	Total	Yes	No	NR
Angoon	13	22	7	42	31%	52%	17%
Hoonah	9	7	2	18	50%	39%	11%
Kake	18	36	3	57	32%	63%	5%
Juneau	14	13	3	30	47%	43%	10%
Other Cities	30	41	7	78	38%	53%	9%
Total	84	119	22	225	37%	53%	10%

37 percent of surveyed homes reported at least one resident with asthma or an allergy.

Statement of Project Objectives

6.) Update targeted communities on the results of the energy assessments.

THRHA will send results of energy assessments to assessed households and tribal/city offices. If available, THRHA will also host an event to share details of survey results with community members.

Statement of Project Objectives

7.) Compile data and final report.

THRHA will compile a final data report by end of grant period.

THRHA homes will have utilities data from 2011 (pre EC program) to 2014 (post EC program).

Because of Tribal DOE support...

- Youth, our most important asset



- ACEP K-12 Curriculum
- 2013 Energy Conservation Calendar Contest
- *And...*

Energy Hog Presentations-Kake, Angoon, Hoonah



Partnership Opportunities

- 1500 Energy Assistance clients receive energy kits



Partnership Opportunities

- Extended Energy Champion Work



Partnership Opportunities

- **Save-Energy Save-Money Video with Thrive**



Testimonials

- Thank you for what you offered for my hometown of Wrangell!! All the clients are happy by what we taught them and what we all learned- *Byron Cady and Sue Stevens, EC Crew*
- I never use too much heat, I never leave my lights on, but I will get rid of that damn toaster- *Helen Adams, Hydaburg resident*

Testimonials

- You helped me save energy and money, which will help my children learn how to conserve energy-*Michelle Mingmins-EC client*
- It teaches kids how important it is to be conscious of what is going on in the home, and I am able to pay my energy bill on time instead of being behind!-*Lorena Cano EC client*

Testimonials

- I learn little things matter. Lights matter, my home is not wasteful, but small things make a difference, I'm saving much more than before!- *Harold Frank-EC client*
- You are a blessing, thank you for your time. I save money now on my energy, I can afford to do more, I am happier. *Henrich Kadake-EC client*

Low-income Multifamily Energy Efficiency Building Audits-2014

Objectives

- Decrease energy demand by increasing energy efficiency for low-income multifamily buildings
- Reduce household energy consumption through energy conservation education and energy upgrades
- Project energy savings based on fossil fuel reduction to environmentally and economically benefit Tribal southeast communities.

Low-income Multifamily Energy Efficiency Building Audits-2014

- 50 + comprehensive EE audits, monitoring, and usage assessments on low-income multifamily buildings in 14 southeast Alaska communities
- Identify cost effective feasible weatherization options for building retrofits that can reduce energy consumption by 30% or more.
- Determine funding for buildings based on feasibility recommendations for energy upgrades /retrofits

Low-income Multifamily Energy Efficiency Building Audits-2014

- Local weatherization crew members trained to complete multifamily building energy audits
- Wx audits will produce comprehensive project plans sufficient for funding applications and implementation of multi-family energy efficiency measures

