

7/28/08

AHFC

**WEATHER-
IZATION**

HFIN

FILE

City of Napaskiak

P.O. BOX 6109
NAPASKIAK, ALASKA 99559

Phone 1-907-737-7432
Fax 1-907-737-7489

facsimile transmittal

Honorable
To: Governor Sarah Palin Fax: 1-907-465-3532

From: CARL MAXIE Sr. Date: 7-15-08

Re: Letter of Support Pages: 6 includes cover

CC: Includes Resolution 08-04 Fuel / Energy

Urgent For Review Please Comment Please Reply Please Recycle

Notes:

Please, let us know if you received all 6 faxed papers. Have a great day and sessions to come and Thank-you very much for your consideration to this matter on behalf of our community of Napaskiak and it sure will help residents (community) in financially, as to considering raising kWh rate to member of community.

Thank-you
Carl

P.O. Box 6109 Napaskiak, Alaska 99559 • Phone: 737-7626 • Fax: 737-7412

7/28/08

City of Napaskiak
P.O. Box 6109
Napaskiak, Alaska 99559
Phone 1-907-737-7626
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Napaskiak Utility (electric)
P.O. Box 6078
Napaskiak, Alaska 99559
Phone 1-907-737-7432
Fax 1-907-737-7989

Honorable Sarah Palin
Alaska State Capitol Building
P. O. Box 110001
Juneau, Alaska 99811-001

Sen. Lyman Hoffman
State Capital Building
Room 518
Juneau, Alaska 99801

Rep. Mary Nelson
State Cap. Building
Room 518
Juneau, Alaska 99801

July 14, 2008

Dear Honorable Legislators;

We are writing in support of state funding for pre-pay electric meters. We have talked with several communities that have been using the meters – some for many years. We have found that the pre-pay meters contribute to energy conservation and to the sustainability of electric utilities.

Residents in communities with pre-pay meters report that the devices help them to conserve power and save money. Watching your own money run backwards on the pre-pay system is a valuable incentive to actively manage power usage. Residents with the regular meters say they sometimes pass the 500 kWh limit paid by PCE before they know it. For people with such meters, it is hard to know when you have passed the 500 kWh until it is too late. With a pre-pay meter, you always know when you pass the limit.

We have also heard that the pre-pay meters help utilities use less fuel because their customers all use less power. This lowers the overall load on the generators which saves fuel costs.

The pre-pay meters also guarantee collections from our customers. It is often hard to collect from friends and family in a small community and to turn off their power. The pre-pay customers now decide when and how much to pay and we would no longer have to deal with collection problems.

The villages have also told us that the customers like the pre-pay system because they can save energy and are now in control. There are no longer large bills to pay at the end of the month.

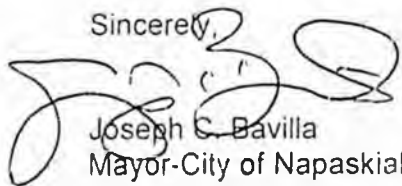
We hope you will put money into the energy program for pre-pay meters as an energy conservation measure and as a tool to ensure sustainability of our power company.

7/28/08

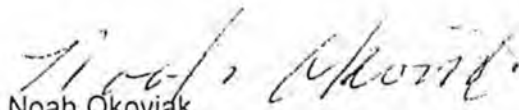
We are also declaring declaration for emergency fuel purchase assistance for fall fuel delivery due to financial ability to pay by our members in the community for up-coming fuel delivery prices and hope this pre-pay metering system solves the problem when it is funded. Last year of 2007, we bought 60,000 gallons of fuel for \$183,819.06 and the same fuel order for 60,000 gallons is for \$277,830.00 that is huge increase. Without any assistance from the great State of Alaska, we looking at huge increase in community with the kwh rates from .60 cents as of now to most likely above .60 cents a kwh and most likely some of the residents that don't have the financial ability to pay will definitely will be hurt financially to buy other essential needs in personal needs, such as, food, clothing, gas, etc.

Having a loan to buy fuel is another thing, it does not help the community nor the utility in a way to hire from the community, we only send out payments out of town that decreases the financial status to buy more fuel for future use and inability to hire from community due to financial situation.

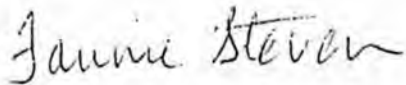
Sincerely,



Joseph C. Bavilla
Mayor-City of Napaskiak
P.O. Box 6109
Napaskiak, Alaska 99559



Noah Okoviak
Chairman-Utility Advisory Board
P.O. Box 6078
Napaskiak, Alaska 99559



Fannie Steven
City Clerk-City of Napaskiak



Carl Maxie Sr
Manager-Napaskiak Utility (electric)

Cc. file

Clarissa Quinlan
Marsh Creek Energy Systems

Energy-Efficiency Programs

\$300 million for energy programs



Weatherization
PROGRAM

Home Energy Rebate
PROGRAM

Working with Existing Programs

- \$200 million for weatherization
- \$100 million for rebates
- Additional training required



Weatherization

PROGRAM

\$200 Million



Wx Allocations

- Anchorage Region \$34 million
- Southcentral Region \$24 million
- Fairbanks Region \$29 million
- Interior Region \$12 million
- Juneau Region \$12 million
- Southeast Region \$14 million
- Northern Region \$18 million
- Western Region \$20 million
- Southwest Region \$12 million

Previous Weatherization Program

- Income-based program
- Program started in Alaska in 1978
- Over 30,000 homes weatherized to some degree since then
- Five experienced service providers holding contracts since 1990

New Weatherization PROGRAM

- Income-based
- Median income limit raised from 60% to 100%



FY 2008 HUD Income Limits for ALASKA

Effective
April 15,
2008

100 Percent of Adjusted Median Income (Updated 6/18/08)

Community Name	INCOME LIMIT - 1 PERSON	INCOME LIMIT - 2 PERSONS	INCOME LIMIT - 3 PERSONS	INCOME LIMIT - 4 PERSONS	INCOME LIMIT - 5 PERSONS	INCOME LIMIT - 6 PERSONS	INCOME LIMIT - 7 PERSONS	INCOME LIMIT - 8 PERSONS
Anchorage Borough	55,100	63,000	70,800	78,700	85,000	91,300	97,600	103,900
Aleutians East Borough	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Aleutians West Census	62,600	71,500	80,500	89,400	96,600	103,700	110,900	118,000
Bethel Census Area	53,800	61,500	69,200	76,900	83,100	89,200	95,400	101,500
Bristol Bay Borough	51,300	58,600	66,000	73,300	79,200	85,000	90,900	96,800
Denali Borough	60,600	69,200	77,900	86,500	93,400	100,300	107,300	114,200
Dillingham Census Area	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Fairbanks North Star Borough	49,900	57,000	64,200	71,300	77,000	82,700	88,400	94,100
Haines Borough	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Juneau Borough	60,900	69,600	78,300	87,000	94,000	100,900	107,900	114,800
Kenai Peninsula Borough	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Ketchikan Gateway Borough	51,000	58,300	65,600	72,900	78,700	84,600	90,400	96,200
Kodiak Island Borough	51,200	58,500	65,800	73,100	78,900	84,800	90,600	96,500
Lake and Peninsula Borough	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Matanuska-Susitna Borough	49,300	56,300	63,400	70,400	76,000	81,700	87,300	92,900
Nome Census Area	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
North Slope Borough	58,300	66,600	75,000	83,300	90,000	96,600	103,300	110,000
Northwest Arctic Borough	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Prince of Wales (outer Ketchikan)	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Skagway-Hoonah-Angoon	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Southeast Fairbanks Census Area	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Valdez-Cordova Census	52,200	59,700	67,100	74,600	80,600	86,500	92,500	98,500
Wade Hampton Census Area	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Wrangell-Petersburg Census Area	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Yakutat City & Borough	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000
Yukon-Koyukuk Census Area	47,700	54,600	61,400	68,200	73,700	79,100	84,600	90,000

Service Providers

- Original five weatherization providers ramping up
- Added 15 housing authorities as service providers
- Statewide training

New **Weatherization** PROGRAM

PROGRESS:

- \$30 million currently on the street
- 17% of allocated funds
- Previous program weatherized 600 homes per year
- This Year: 1800 homes
- Year Two: 4000 homes
- Year Three: 7,500 homes

New Weatherization PROGRAM

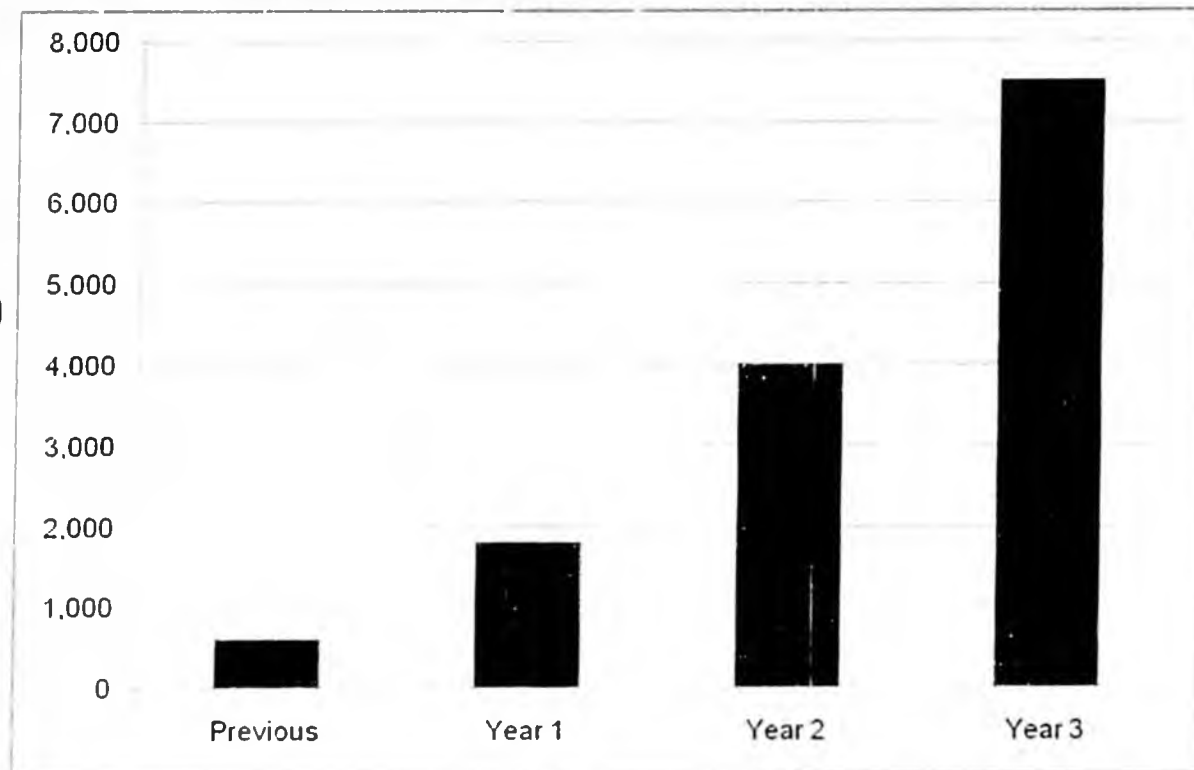
Wx Homes


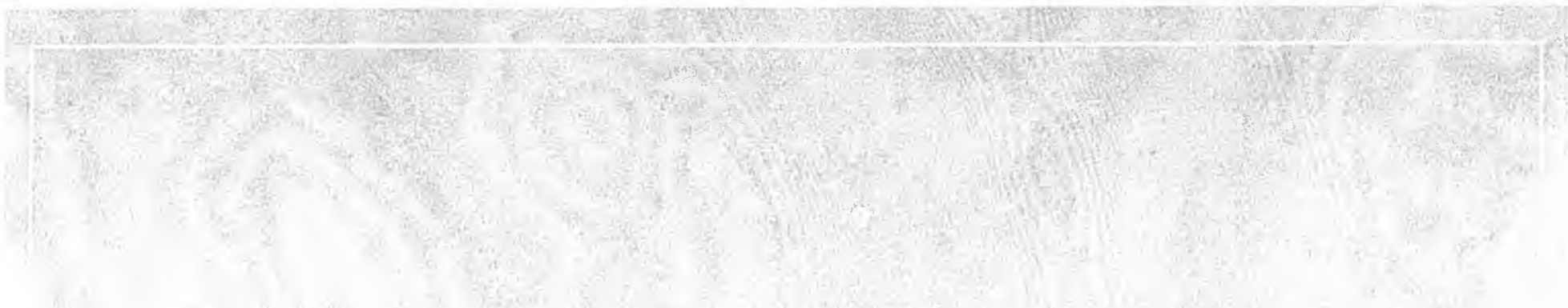
Last Year: 600

This Year: 1800

Year 2: 4000

Year 3: 7500





Home Energy Rebate
PROGRAM

\$100 Million



Rebate Allocations

- Anchorage Region \$26 million
- Southcentral Region \$16 million
- Fairbanks Region \$17 million
- Interior Region \$2 million
- Juneau Region \$4 million
- Southeast Region \$5 million
- Northern Region \$4 million
- Western Region \$5 million
- Southwest Region \$2 million



Home Energy Rebate

PROGRAM

- \$100 million available
- No income requirements
- Existing program, though not funded since 1996
- Owner-occupied, year-round residences



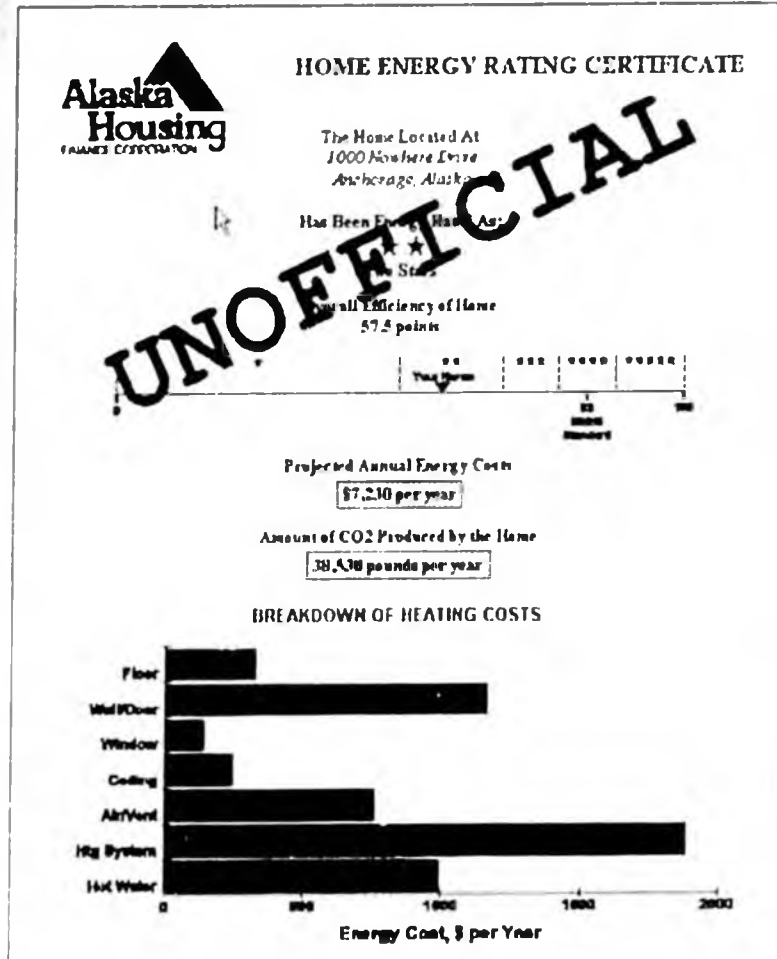
Energy Raters

- Home energy rating before improvements
- 83 energy raters currently AkWarm™ trained
- New & existing rater training statewide

Rebate Program How It Works

- Rating identifies eligible improvements
- AHFC reimburses homeowner for rating (up to \$325)
- Homeowner chooses improvements
- Homeowner does improvements or hires contractor

Sample Rating



Sample Rating

Improvement Options Report for sample 2 Star home (57.5 Points)

COST-EFFECTIVE IMPROVEMENTS:

Improvement Description	Location	Savings to Cost Ratio	Installed Cost	Annual Savings	Break- Even Cost	Rating Points Gained	Note
Caulk and Seal so that Home Air Leakage is Reduced by 500 CFM at 50 Pascals		4.08	\$400	\$179	\$1,631	4.2	
Install R-14 rigid foam board to exterior. Costs do not include siding	Above-Grade Wall House	2.72	\$1,716	\$258	\$4,661	6.8	1
Add R-19 to existing insulation	Cathedral Ceiling House	2.53	\$511	\$72	\$1,296	1.9	
Replace Heating Plant with New Furnace (60,000-100,000Btu) having AFUE of 93%	Primary Heating System	1.28	\$3,000	\$217	\$3,839	5.4	
TOTALS:			\$5,637.00	\$726.00	\$11,427.00	18.3	

ENERGY RATING		ENERGY RATING	
<i>Points</i>	<i>Rating</i>	<i>Points</i>	<i>Rating</i>
0-39	1 Star	73-77	3 Star +
40-49	1 Star +	78-82	4 Star
50-59	2 Star	83-87	4 Star+
60-67	2 Star +	88-91	5 Star
68-72	3 Star	92-100	5 Star+

Step Improvement	Maximum Rebate
1 Step	\$4,000
2 Steps	\$5,500
3 Steps	\$7,000
4 Steps	\$8,500
5 Steps or more	\$10,000

AS-Is Rating = 2 Star (57.5 points)

Improvements = 18.3 Points @ estimated cost \$5,637

Post Improvement Rating = 3 Star Plus (75.8 Points)

3 Step Improvement = **Rebate Maximum is \$7000**

...And your estimated savings = \$726 per year in energy costs

How it Works, Con't.

- Rater returns to verify work and provides new rating
- AHFC pays for post rating (up to \$175)
- Homeowner applies for rebate based on expenses and improved energy efficiency

Rebates

- Maximum rebate \$10,000
- Rebate is for actual expenses
- AHFC loan -- Second Mortgage for Energy Conservation up to \$30,000

Rebate Program

PROGRESS:

- 887 ratings completed
- 500 applications processed
- 200 applications awaiting processing
- \$9 million committed
- 50-100 applications received per day
- 300-500 inquiries per day

Training



Training/Education

- Weatherization Service Providers
- Housing Authorities
- Energy Raters
- Contractors
- General Public


Training/Education

Weatherization Providers & Housing Authorities

- 4 sessions & 144 hours of training completed (18 days)
- 8 sessions & 304 hours of training scheduled through August (38 days)

Training/Education

Energy Raters (100 needed)

- 40 existing raters retrained
 - 43 new raters trained
 - New raters in Fairbanks(11) & Anchorage (11), Nome, Petersburg, Ketchikan, Haines, Homer, Cordova, Glennallen, Talkeetna, Soldotna, Kenai
 - 2 additional trainings scheduled through September
 - Classes full and wait-listed
 - Focus is on training for communities without raters
- 

Training/Education

Contractors

- 18 trainings scheduled through October statewide

Consumer Education

- Program orientation through AHFC Home Choice classes statewide



Partners

- Alaska Building Science Network
- Alaska Works
- Alaska Craftsman Home Program
- Northern Building Science Group
- UAF Cooperative Extension
- UAS Building Science Program
- Wisdom & Associates
- Cold Climate Housing Research Center
- Opportunity Council
- Building Performance Institute

Emergency Regulations

- Policies and procedures were subject to change
- AHFC operated under emergency regulations
- Public comment for 120 days & public hearing
- Final regulations were adopted July 17

Weatherization Program Examples



**Courtesy Jim Lee, Interior Weatherization
Fairbanks**



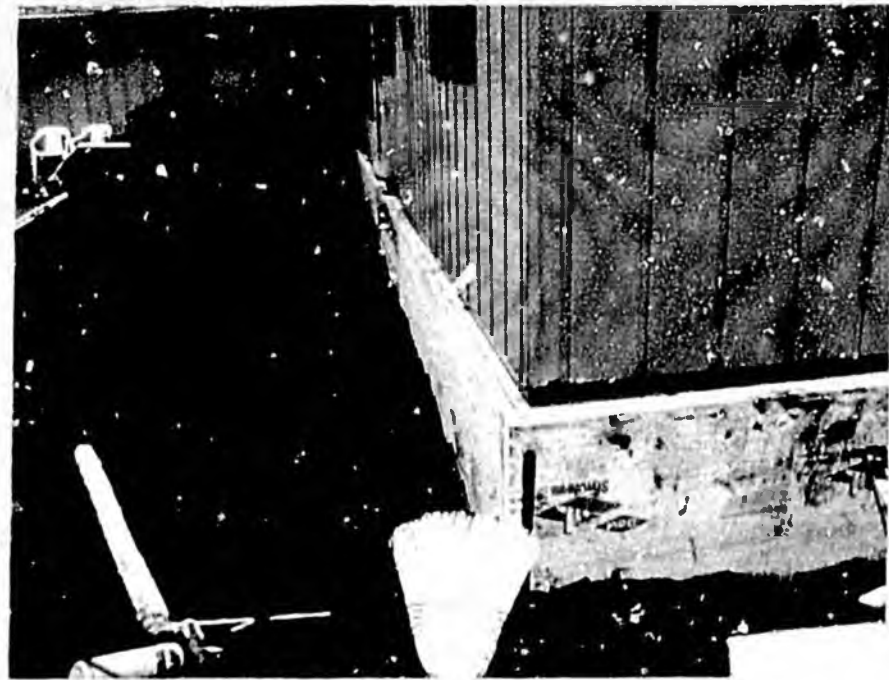
Example Home #1

- Estimated heating cost per year \$7,092 (2200 gal of heating oil + electric)
- Uninsulated concrete block foundation - unfinished basement
- 2x4 16" oc, R-11 walls
- Mix of single, double and triple pane windows
- R-11 batt with 3" cellulose in attic
- 1915 cfm50
- 75% combustion efficiency of oil furnace



Insulate Foundation

- 4" foam 2' below grade + 2" wing, 2' out --
- Estimated heating cost with insulation \$5,088 (original was \$7,092)
 - savings of \$2,004 or 28%
 - Cost to complete \$3,500
 - Simple payback 1.75 years
 - Return on Investment 57%



Energy Upgrade Options

Description	Savings	Cost	Payback	ROI	Priority
Insulate foundation	\$2,004	\$3,500	1.75	57%	1
Reduce blower door 1000cfm	\$262	\$1,000	3.82	26%	2
Install 8" cellulose in attic	\$227	\$900	3.96	25%	3
Upgrade furnace to AFUE 84%	\$1,421	\$6,500	4.57	22%	4
Sp to triple (20sf)	\$103	\$800	7.77	13%	5
Dp To triple (20sf)	\$53	\$800	15.09	7%	6
Insulate walls 2" foam.	\$213	\$6,500	30.52	3%	7



Example House #2

- 1400 sf Ranch
- Insulated concrete block 4' foundation
- R-19 fiberglass rim
- 2x6 24"oc, R-19
- 8" cellulose in attic
- Dbl pane vinyl windows
- Boiler 82%
- HRV
- Blower Door 1250
- 100w light fixtures (4hrs/day)



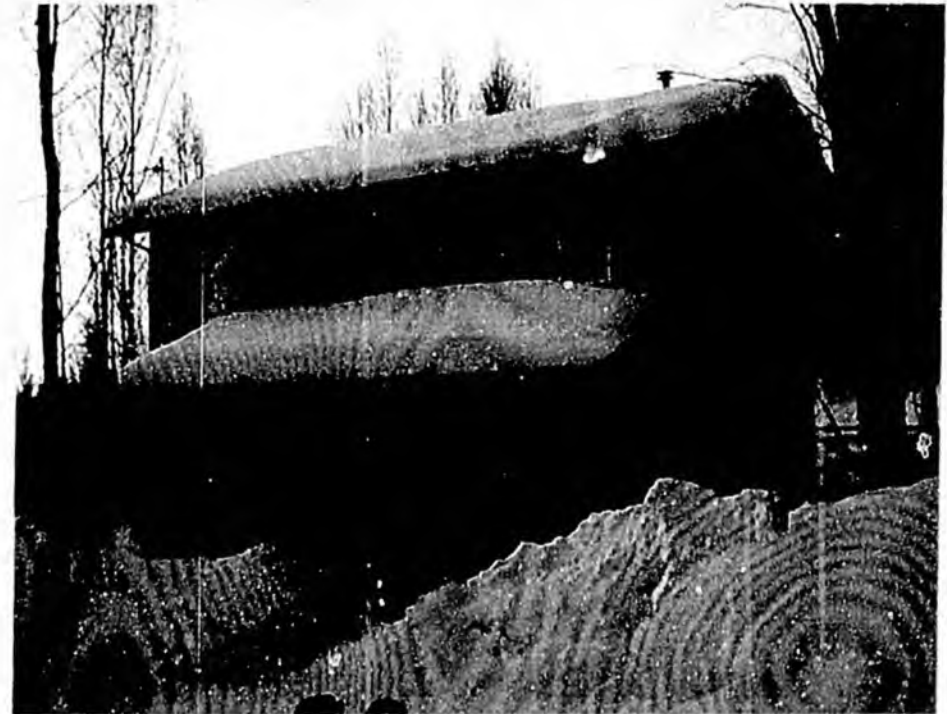
Energy Upgrade Options

Description	Savings	Cost	Payback	ROI	Priority
Insulate perimeter of crawlspace with 2" foam	\$179	\$600	3.4	30%	1
Switch light bulb to CFL (100w, 4 hours, to 23w cfl)	\$0.55	\$2	3.6	28%	2
Reduce blower door by 600 cfm	\$156	\$600	3.8	26%	3
CST heater (82% to 84%)	\$57	\$400	7.0	14%	4
Add 6" cellulose to attic	\$141	\$1,000	7.1	14%	5
Insulate ICF wall with 2" foam	\$80	\$1,400	17.5	6%	6
Insulate Rim with 2" Foam	\$15	\$350	23.3	4%	7
Upgrade dp windows to TP (20sf)	\$27	\$800	29.6	3%	8
Insulate above grade wall 2" foam	\$219	\$7,500	34.2	3%	9



Example House #3

- 1890 sf - 2 story
- Block foundation with 2" bead board
- Rim R-19
- 2x6 R-19 walls
- TP vinyl windows
- R-38 fiberglass (Voids)
- HRV
- Blower door 1800
- 60w lights - 6hrs/day



Energy Upgrade Options

Description	Savings	Cost	Payback	ROI	Priority
Reduce blower door by 1000 cfm	\$647	\$1,000	1.5	65%	1
C&T heater (78% to 83%)	\$215	\$400	1.9	54%	2
Insulate perimeter of crawlspace with 2" foam	\$156	\$700	4.5	22%	3
Add 6" cellulose to attic and fix voids in fiberglass	\$256	\$1,200	4.7	21%	4
Switch light bulb to CFL (60w, 6 hours, to 13w cfl)	\$0.40	\$2	5.0	20%	5
Insulate block wall with additional 2" foam	\$171	\$1,400	8.2	12%	6
Insulate Rim with 2" Foam	\$20	\$350	17.5	6%	7
Insulate above grade wall 2" foam	\$357	\$7,500	21.0	5%	8



On Average

Example House	Original Utilities	After Upgrades	Savings	Cost	ROI	% Savings
House 1	\$7,092	\$3,075	\$4,017	\$12,700	31.6%	56.6%
House 2	\$3,765	\$3,231	\$534	\$2,602	20.5%	14.2%
House 3	\$4,754	\$3,309	\$1,445	\$4,702	30.7%	30.4%
Totals	\$15,611	\$9,615	\$5,996	\$20,004		
			Average	\$6,668	30.0%	38.4%

House #1 owner update as of 2-19-08

Pre-work: 8 to 9 gallons per day in cold

Post weatherization: 2.5 to 3.5 gallons per day

65% savings (Approximately \$550 last month)

Huge change: warm (never warm at -50 before), comfortable and bath fan running 24hrs per day to control moisture



Energy-Efficiency Programs

\$300 million for energy programs



Weatherization
PROGRAM

Home Energy Rebate
PROGRAM