

**HB**

**35**

<TARGET><BILL>HB 35</BILL><SUBJECT>HB  
35</SUBJECT><COMM>HFIN28</COMM></TARGET>

# Fiscal Note

State of Alaska  
2014 Legislative Session

Bill Version: HB 35  
Fiscal Note Number: \_\_\_\_\_  
( ) Publish Date: \_\_\_\_\_

Identifier: HB035-DOR-AHFC-01-21-14  
Title: HOME HEATING CONVERSION LOANS  
Sponsor: \*\* T.WILSON, THOMPSON  
Requester: (H) FIN

Department: Department of Revenue  
Appropriation: Alaska Housing Finance Corporation  
Allocation: AHFC Operations  
OMB Component Number: 110

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2015	Included in	Out-Year Cost Estimates				
	Appropriation Requested	Governor's FY2015 Request	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
<b>OPERATING EXPENDITURES</b>	<b>FY 2015</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
Personal Services	***		***	***	***	***	***
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
<b>Total Operating</b>	***	0.0	***	***	***	***	***

**Fund Source (Operating Only)**

None							
<b>Total</b>	***	0.0	***	***	***	***	***

**Positions**

Full-time							
Part-time							
Temporary							

<b>Change in Revenues</b>	***		***	***	***	***	***
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Estimated SUPPLEMENTAL (FY2014) cost: 0.0

Estimated CAPITAL (FY2015) cost: 0.0

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? Yes  
If yes, by what date are the regulations to be adopted, amended or repealed? 09/30/14

**Why this fiscal note differs from previous version:**

This version updates last year's information into this current year's FY2015 format.

Prepared By:	Les Campbell, Budget Director	Phone:	(907)330-3856
Division:	Alaska Housing Finance Corporation	Date:	12/23/2013 03:06 PM
Approved By:	Bryan Budtcher, CEO	Date:	12/23/13
Agency:	Alaska Housing Finance Corporation		

FISCAL NOTE ANALYSIS

STATE OF ALASKA  
2014 LEGISLATIVE SESSION

BILL NO. HB 35

**Analysis**

HB 35 creates a lending program similar to the existing AHFC residential energy improvement second mortgage program but the proposed loan may only be used to improve or replace the homeowner's heating system. Similar to other loans of this type, it would be originated by an AHFC approved lender and administered and serviced by AHFC. AHFC would pay for its costs through repayments of principal on the loan. Loan interest would be returned to the general fund.

An appropriation by the legislature is required to fund the program. However, AHFC is unsure of the intent of the legislature regarding the size of the fund. In addition, AHFC estimates a ten percent administrative fee will be required to cover the costs of the program, including payment to lending partners. No additional staff is expected. Mortgage regulations would have to be amended to implement this new program.

This is an Indeterminate fiscal note because the fiscal impact of this legislation cannot be accurately determined at this time.

# Fiscal Note

State of Alaska  
2013 Legislative Session

Bill Version: HB 35  
Fiscal Note Number: 1  
(H) Publish Date: 2/13/13

Identifier: HB035-DOR-AHFC-02-08-13  
Title: HOME HEATING CONVERSION LOANS  
Sponsor: \*\* T.WILSON, THOMPSON  
Requester: (H) ENE

Department: Department of Revenue  
Appropriation: Alaska Housing Finance Corporation  
Allocation: AHFC Operations  
OMB Component Number: 110

**Expenditures/Revenues**

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2014 Appropriation Requested	Included in Governor's FY2014 Request	Out-Year Cost Estimates				
			FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
<b>OPERATING EXPENDITURES</b>	<b>FY 2014</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
Personal Services	***		***	***	***	***	***
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
<b>Total Operating</b>	***	0.0	***	***	***	***	***

**Fund Source (Operating Only)**

None							
<b>Total</b>	***	0.0	***	***	***	***	***

**Positions**

Full-time							
Part-time							
Temporary							

**Change in Revenues**

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Estimated SUPPLEMENTAL (FY2013) cost: 0.0

Estimated CAPITAL (FY2014) cost: 0.0

**ASSOCIATED REGULATIONS**

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? Yes  
If yes, by what date are the regulations to be adopted, amended or repealed? 09/30/13

**Why this fiscal note differs from previous version:**

Initial version
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Prepared By:	Les Campbell	Phone:	(907)330-8356
Division:	Alaska Housing Finance Corporation	Date:	02/08/2013 05:30 PM
Approved By:	Dan Fauske CEO, Alaska Housing Finance Corporation	Date:	02/08/13
	Department of Revenue		

FISCAL NOTE ANALYSIS #1

STATE OF ALASKA  
2013 LEGISLATIVE SESSION

BILL NO. HB 35

**Analysis**

HB 35 creates a lending program similar to the existing AHFC residential energy improvement second mortgage program but the proposed loan may only be used to improve or replace the homeowner's heating system. Similar to other loans of this type, it would be originated by an AHFC approved lender and administered and serviced by AHFC. AHFC would pay for its costs through repayments of principal on the loan. Loan interest would be returned to the general fund.

An appropriation by the legislature is required to fund the program. An indeterminate fiscal note is provided because AHFC is unsure of the intent of the legislature regarding the size of the fund so it estimates a 10 percent administrative fee will be required to cover the costs of the program, including payment to lending partners. No additional staff is expected.

This is an Indeterminate fiscal note.

**Alaska State Legislature  
House of Representatives  
Representative Tammie Wilson**

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## **House Bill 35**

**"An Act creating a low-interest loan program for homeowners who improve or replace their home heating systems; and providing for an effective date."**

House Bill 35 will create a low-interest loan program, providing Alaskans an affordable avenue for converting to a more efficient heating system.

The loan program established under HB 35 will be overseen by the Alaska Housing Finance Corporation, allowing qualified applicants, regardless of income level, to receive up to a \$15,000 loan for a new heating appliance, including the costs of labor and materials. Conditions of the loan are set at one percent interest over a ten year term. The loan program is open to all forms of heating systems, allowing homeowners to convert to the available low-cost heating methods within their community.

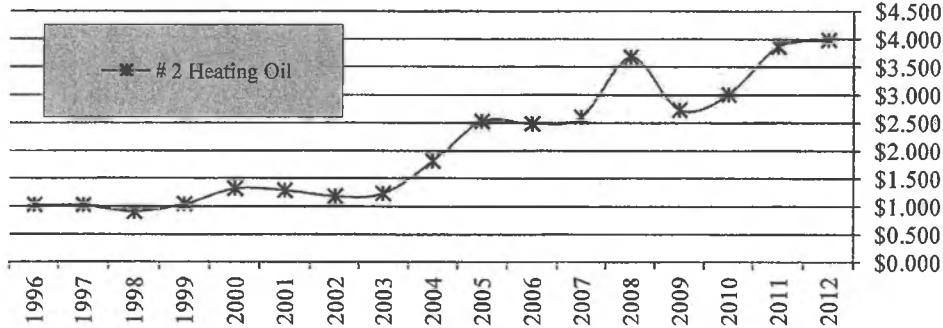
An additional benefit of HB 35 will be the program's effects on a community's air quality. Currently, the U.S. Environmental Protection Agency has declared the Fairbanks North Star Borough a PM 2.5 nonattainment area. This designation has serious economic development impacts. One example of such impacts is the potential loss of Federal highway funding. By converting to cleaner heating systems, such as natural gas, the FNSB will be able to apply the loan program of HB 35 towards their required EPA state implementation plan to mitigate the existing air quality concerns.

I urge your support of HB 35 to help provide Alaska's homes and families with cleaner, efficient and affordable heating options.

## Cost of Living

### AVERAGE HEATING OIL PRICES

Fairbanks North Star Borough  
September 1996-2012



### HEATING OIL PRICES

Fairbanks North Star Borough  
September 1986-2012

Year	#1 Fuel Oil		#2 Fuel Oil	
	Average	Range (\$)	Average	Range (\$)
1986	\$0.778	(0.750-0.795)	\$0.728	(0.715-0.755)
1987	\$0.918	(0.918-0.970)	\$0.875	(0.815-0.920)
1988	\$0.880	(0.800-0.922)	\$0.847	(0.770-0.895)
1989	\$0.957	(0.900-0.992)	\$0.911	(0.860-0.952)
1990	\$1.179	(1.110-1.222)	\$1.140	(1.070-1.200)
1991	\$0.927	(0.880-0.977)	\$0.901	(0.850-0.940)
1992	\$0.975	(0.915-1.037)	\$0.941	(0.895-0.980)
1993	\$0.999	(0.975-1.045)	\$0.939	(0.918-0.970)
1994	\$0.961	(0.930-1.015)	\$0.903	(0.880-0.945)
1995	\$0.955	(0.900-1.040)	\$0.888	(0.830-0.960)
1996	\$1.088	(1.040-1.155)	\$1.023	(0.970-1.068)
1997	\$1.087	(1.050-1.120)	\$1.019	(0.970-1.060)
1998	\$0.964	(0.940-1.000)	\$0.900	(0.880-0.930)
1999	\$1.075	(1.030-1.120)	\$1.035	(1.000-1.050)
2000	\$1.372	(1.330-1.400)	\$1.312	(1.270-1.360)
2001	\$1.343	(1.300-1.380)	\$1.283	(1.260-1.310)
2002	\$1.212	(1.175-1.210)	\$1.175	(1.110-1.280)
2003	\$1.273	(1.220-1.320)	\$1.224	(1.200-1.260)
2004	\$1.824	(1.770-1.870)	\$1.809	(1.770-1.840)
2005	\$2.544	(2.500-2.610)	\$2.523	(2.480-2.560)
2006	\$2.494	(2.390-2.580)	\$2.479	(2.380-2.550)
2007	\$2.683	(2.640-2.730)	\$2.598	(2.540-2.640)
2008	\$3.670	(3.610-3.790)	\$3.670	(3.630-3.770)
2009	\$2.731	(2.680-2.750)	\$2.722	(2.690-2.740)
2010	\$3.020	(2.980-3.060)	\$3.000	(2.960-3.060)
2011	\$3.922	(3.890-3.950)	\$3.852	(3.820-3.880)
2012	\$4.055	(4.010-4.080)	\$3.977	(3.940-4.010)

**SOURCE:** Fairbanks North Star Borough, Community Research Center surveys, 1986-2012.

**NOTE:** Discounts of several cents per gallon may be available from retailers depending on method and timing of payment. Prices based on automatic delivery of 500 gallons of heating oil, without early payment discount.

# COST OF LIVING

**C2ER COST OF LIVING INDEX\***  
For Selected Cities  
Third Quarter 2012

City	Composite Index 100%	Grocery			Trans- portation	Health Care	Msc. Goods & Services
		Items 13.36%	Housing 28.64%	Utilities 10.46%			
<b>West:</b>							
Fairbanks, AK	139.8	132.0	135.9	242.5	114.6	144.1	121.1
Anchorage, AK	125.9	126.5	143.6	94.5	109.3	137.3	124.0
Kodiak, AK	130.4	146.3	126.7	164.0	128.2	129.4	117.3
Juneau, AK	141.5	132.5	169.9	168.9	115.0	142.2	119.8
Phoenix, AZ	96.0	99.3	95.2	96.5	106.8	91.5	92.3
San Diego, CA	134.4	108.1	209.6	92.5	107.0	112.6	104.4
Denver, CO	105.1	97.3	114.5	89.8	107.3	106.1	104.0
Boise, ID	97.2	97.8	84.6	95.0	102.0	105.0	106.3
Kalispell, MT	96.9	106.5	84.3	97.8	104.4	110.9	99.5
Carlsbad, NM	89.3	97.1	83.8	89.4	90.5	95.5	89.7
Seattle, WA	116.2	107.8	137.8	92.7	107.4	119.1	110.8
Pierre, SD	101.9	105.4	115.5	92.8	96.5	98.7	93.7
<b>South:</b>							
Miami, FL	108.1	108.5	113.9	100.6	112.4	106.8	103.9
Atlanta, GA	95.0	105.8	84.4	88.4	100.4	99.6	99.7
Lafayette, LA	96.5	94.8	111.1	82.9	102.3	86.6	88.2
Springfield, MO	89.2	98.8	74.7	97.2	103.1	98.3	89.5
Tulsa, OK	88.3	92.0	65.2	94.8	102.0	93.2	100.0
Memphis, TN	85.6	91.8	73.2	83.3	87.8	100.7	92.0
Dallas, TX	96.4	98.9	75.2	122.8	103.8	100.8	102.6
<b>North Central:</b>							
Indianapolis, IN	93.8	94.9	83.6	89.9	98.2	118.7	98.9
Grand Rapids, MI	91.5	94.6	75.9	100.3	105.1	87.8	97.1
Wausau, WI	95.7	102.1	80.2	102.3	101.8	106.1	101.3
<b>Northeast:</b>							
New York, NY	229.5	152.0	447.0	126.6	124.6	134.6	150.2
Philadelphia, PA	122.8	121.4	138.1	132.3	106.3	100.9	115.1
Boston, MA	142.8	118.5	180.5	151.4	108.6	122.9	130.5
Raleigh, NC	90.9	104.3	72.0	103.2	94.8	95.4	96.1
Richmond, VA	109.6	104.6	91.1	106.3	101.8	113.4	103.4
Avg. of 304 Urban Areas	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**SOURCE:** Council for Community and Economic Research (C2ER) (aka ACCRA (American Chamber of Commerce Researchers Association), *Cost of Living Index, Comparative Data for Urban Areas*, (3rd Qtr.), October 2012.

**NOTE:** This Cost of Living Index does not measure inflation (price change over time). Because each quarterly report is a separate comparison of prices at a single point in time, and because both the number and the mix of participants changes from one quarter to the next, **index data from different quarters cannot be compared.** The *Index* reflects cost differentials for professional and executive households in the top income quintile. For inflation data contact the US Bureau of Labor Statistics (BLS) at [www.bls.gov](http://www.bls.gov).

\* Item percentages change so please watch for current percentages.

## Cost of Living

### RESIDENTIAL HEATING FUEL COMPARISON

Fairbanks, Alaska  
November 2012

Fuel (see notes below)	Avg Price	Per Unit	Gross Heat (BTU)	Heater Efficiency	\$/100,000 Useful Heat	Useful BTU's per \$1.00
Electricity (100% eff.)	\$0.2277	/kWh	3,413	100%	\$6.672	14,989
District Hot Water Heat	\$27.0300	/mmBtu	1,000,000	100%	\$2.703	36,996
District Steam Heat	\$10.5000	/1,000 lb	1,066,000	100%	\$0.985	101,524
Fuel oil #2 (85% eff.)	\$3.8670	/gal	135,000	85%	\$3.370	29,674
Natural gas (85% eff.)	\$23.3500	/mcf	1,010,000	85%	\$2.720	36,767
Propane (85% eff.)	\$4.1170	/gal	91,333	85%	\$5.303	18,857
Wood, pellet (85% eff.)	\$282.0000	/ton	16,000,000	85%	\$2.024	48,227
Wood, birch (70% eff.)	\$325.0000	/cord	20,500,000	70%	\$2.265	44,154
Wood, spruce (70% eff.)	\$327.0000	/cord	15,000,000	70%	\$3.114	32,110
Coal, stoker	\$115.0000	/ton	15,200,000	55%	\$1.376	72,696
Electricity (distributed): PRICE includes rate, customer charge, RCA charge, cost of fuel adjustment charge.				0.293 watt hours = (1) BTU	\$0.228	per kWh
Hot water				per million BTUs	\$27.0300	hot water
Steam				per 1,000 lbs p/month	\$10.5000	steam heat
Wood, according to a table on the energy content of Interior Alaska trees prepared by George Sampson, a former Institute of Northern Forestry research forester: Paper birch provides 25.4 million BTU per cord, tamarack provides 24.8 million BTU per cord				varies: p/ton; p/cord	\$325.833	per cord of wood
Fuel oil (common: "60% #2, 40% #1 blend" or "-15, #2") (delivered by truck)				135,000 BTU/gal	\$3.867	per gal
Natural gas (liquefied, trucked to Fairbanks, delivered by pipeline). NOTE: an average home in Fairbanks may use 250 CCF or 25,000 cubic feet (cf) of gas in a typical January, when natural gas is used for heating only. PRICE includes rate, customer charge, RCA				1,010 BTU/cf	\$2.335	per 100 cubic feet (CCF)
Propane (delivered by truck to homes)				91,333 BTU/gal	\$4.117	per gal
Coal, delivered to downtown				avg \$115/ton	\$115.0000	per ton

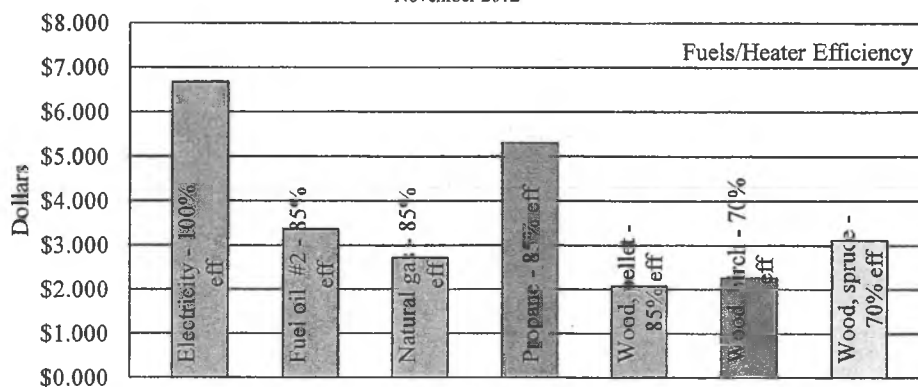
**SOURCE:** Golden Valley Electric Association, Inc. (GVEA), LEED Accredited Professional Energy End Use Specialist and SNAP Program Tech, Todd Hoener, *Heating Fuel Comparison, November 2012*, and FNSB Community Research Center, 2012.

**NOTE:** A British Thermal Unit (BTU) is the amount of heat energy needed to raise the temperature of one pound of water by one degree F. This is the standard measurement used to state the amount of energy that a fuel has as well as the amount of output of any heat generating device.

A common index of the cost of heat is "dollars per 100,000 BTUs of useful heat." In order to calculate useful heat (heat actually delivered to

### COMPARISON PRICE PER 100,000 BTUs OF USEFUL HEAT

Fairbanks, Alaska  
November 2012



## **Residential. Commercial Conversion Costs**

Table 16 shows three sets of cost estimates for residential conversion to gas. The estimates vary considerably, depending on the extent of the conversion. At the low end, FNG (2005) gives a conversion cost of \$1,000–\$1,500 to replace an oil-fired gun with a gas-fired gun. At the high end, Laabs (2012) provided cost estimates for a complete replacement, reaching upwards of \$12,000–\$20,000 for a boiler replacement, chimney upgrade (or replacement) and other hydronic (or forced air) connections.

**Table 16. Cost Estimates for Residential Conversion to Natural Gas**

<b>Source</b>	<b>Notes</b>	<b>Cost Estimate (\$)</b>
Fuhs (2010)	Space heater with flush mount exhaust, on-demand hot water heater, and 250 gallon buried tanks—to be refilled about once per month, depending on season	3,000
Fairbanks Natural Gas (2005)	Replacement of gun, residential	1,000–1,500
Laabs (2012)	Furnace replacement, mobile home	6,000–8,000
	Chimney replacement (if needed), mobile home	500–700
	Furnace replacement, residential	8,000–15,000
	Chimney replacement (if needed), residential	2,500–5,000
	Boiler replacement or conversion from oil to gas, residential	12,000–20,000
	Burner conversion with boiler brushed out, residential	3,500–6,500

Source: Northern Economics, Inc. from sources noted.

The cost for converting commercial systems is specific to the structure that is being converted and sources could not provide a reliable number of commercial structures. For modeling purposes, the average per square foot cost of converting a residential structure was applied to the average size of commercial buildings as determined from the Assessor's data base.

## **Natural Gas Sales in High and Medium Density Areas**

Total natural gas sales (market demand) for residential, commercial, and industrial consumers in the piped distribution area in 2021 is estimated at approximately 10.8 Bcf (See Table 6). Conversion rates for residential structures transitioning from other fuels to natural gas in the high density zone are expected to occur over five years at the following rates:

- 10 percent
- 25 percent
- 25 percent
- 25 percent
- 12 percent

If the delivered price of natural gas plus conversion costs is less than or equal to 90 percent of the fuel oil price 97 percent of the residential structures are anticipated to switch to gas and 100 percent of commercial users. Similar percentages apply to conversions from wood heat if the gas price plus conversions costs is less than or equal to 110 percent of the wood cost.

## Estimated Savings by Weatherization Type

The following shows the estimated average annual savings in energy costs by type of weatherization improvement.

Weatherization Improvement	Percent of Savings
More Efficient furnaces, boilers	52 percent of savings
More insulation: walls, doors	14 percent of savings
Sealed air leaks	14 percent of savings
Insulation: ceiling, foundation	10 percent of savings
Replace water heaters	6 percent of savings
Replace, fix windows	5 percent of savings

Source: Northern Economics estimates. FNSB gas distribution system analysis

## Determining the efficiency of your furnace, boiler

By CCHRC staff

*The "Ask a Builder" series is dedicated to answering some of the many questions Fairbanks residents have about building, energy and the many other parts of home life.*

### Q: What is AFUE, and what does it mean for my furnace or boiler?

A: AFUE stands for Annual Fuel Utilization Efficiency and is listed on the energy tags for furnaces and boilers. AFUE is meant to provide an average of the space heating efficiency you can expect from the heating appliance during the year. If you are in the market for a furnace or boiler or you are wondering about the efficiency of an appliance you own, the AFUE is a good starting point. However, it is important to understand how it is measured, because it might not provide an accurate assessment of the efficiency of your home's heating system.

There are several different types of efficiencies that are used to describe combustion and electric furnaces and boilers. There is the combustion efficiency, which measures how effective the heating appliance is at converting fuel into heat. A heating contractor can measure combustion efficiency in the field: the test involves measuring the concentrations of different gases, such as carbon dioxide, in the exhaust. Often, a contractor will measure the combustion efficiency during a routine maintenance check-up.

Another efficiency is the steady-state efficiency, which is the efficiency of the appliance when it is fired continuously after it has warmed up. You can think of this efficiency like the gas mileage of your car driving on the highway.

In contrast, the AFUE is the seasonal efficiency, so it represents the efficiency of the appliance including when it is cycling off and on to provide heat during the winter. You might liken AFUE to your average gas mileage including when you are driving in stop-and-go traffic. For this reason, the AFUE always will be less than the steady-state efficiency of the appliance.

AFUE is determined in a lab, using a procedure established by the American Society of Heating, Refrigeration and Air-Conditioning Engineers Inc. Since all furnaces and boilers that use fuel oil, natural gas or electricity as fuel undergo the same test to determine AFUE, ASHRAE had to design the procedure so that it compared each appliance under conditions commonly encountered in the United States — in other words, under conditions much warmer than our climate in Alaska. The procedure also assumes averaged parameters for when the appliance will cycle on and cycle off, what the room temperature is and how oversized the appliance is (many houses have heating appliances that can provide more heat than the house needs). For this reason, AFUE is an indication of the seasonal efficiency of a furnace or boiler installed in an average house in America.

Unfortunately, your house might not be like the average American home (for one, in Alaska, houses are in a much colder location than average).

Still, AFUE is a good number to look at when you want to compare different models of furnaces or boilers. The test to determine AFUE provides a "level playing field" for these appliances, so their seasonal fuel use can be compared. It does not, on the other hand, predict the efficiency of any appliance in a particular installation.

That efficiency is affected by the distribution, the control system, how often the appliance is maintained, and other case-specific variables. Consequently, it is important to install properly and maintain your own system, in addition to choosing an efficient appliance, to achieve a high seasonal efficiency.

**Ask a Builder articles promote home awareness for the Cold Climate Housing Research Center. If you have a question, contact us at [info@cchrc.org](mailto:info@cchrc.org) or 457-3454.**

### ASK A BUILDER

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March 11, 2011



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**Memo to:** Honorable Luke Hopkins, Mayor  
Fairbanks North Star Borough

**From:** Bob Dulla and Frank Di Genova

**Subject:** Emission Reduction Benefits of Natural Gas Displacing Conventional Heating Fuels in Fairbanks

For a variety of reasons, including poor dispersion, low temperatures, and limited fuel mix, Fairbanks has poor wintertime air quality and frequently exceeds the National Ambient Air Quality Standard for PM<sub>2.5</sub>. A recent inventory of emissions shows that space heating, and particularly heating with wood, is responsible for the vast majority (74%) of the direct wintertime PM<sub>2.5</sub> emissions (and an even higher percentage of nuisance smoke complaints). By contrast, oil burning provides roughly the same amount of heating as wood (BTU basis) but contributes only about 1% of direct PM<sub>2.5</sub> emissions. However, distillate oil burning for space heating contributes about 42% of (gaseous) sulfur dioxide emissions, and these and other gaseous emissions can convert in the atmosphere to secondary PM<sub>2.5</sub>, adding significantly to the total PM<sub>2.5</sub> burden. Displacement of wood burning and, to a lesser extent, displacing of oil burning, with much cleaner natural gas can significantly reduce these direct and indirect PM<sub>2.5</sub> emissions.

Based on EPA emission factor data, switching from a conventional wood stove to natural gas reduces direct PM emissions by 99.7%, and switching from residential distillate oil burning to natural gas reduces direct PM by 38.6%. In addition, the fuel oil to gas switch reduces emissions of (gaseous) sulfur dioxide by 99.7%.

According to the 2000 Census, there are 25,583 households in the Fairbanks PM<sub>2.5</sub> nonattainment area. Shifting 12,000 homes to natural gas would largely eliminate directly emitted PM from almost 50% of the homes in the nonattainment area and substantially reduce the secondary PM burden as well. No other option has been identified to date that can produce reductions of this magnitude and significantly move the Borough towards attainment in a cost effective manner.

cc. Glenn Miller  
Jim Conner



**CITY OF FAIRBANKS**

Jerry Cleworth, Mayor

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January 18, 2013

Representative Tammie Wilson  
Alaska State Legislature  
State Capitol, Room 415  
Juneau, AK 99801-1182

Re: House Bill 35

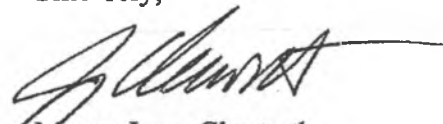
Dear Representative Wilson:

Thank you for introducing HB35. This bill accomplishes two important goals; it is an important tool for the mitigation of air quality violations, and greatly helps to set in place the infrastructure to utilize natural gas.

Residents are quite knowledgeable about the air quality problems that face our area, but simply do not have resources that could exact a change. The bill will enable residents with limited means to be able to convert to natural gas and greatly reduce their energy costs. It also helps to make the gas trucking project viable economically. The plan for trucking LNG is dependent on a rapid build-out to maximize use.

This bill is a fundamental component of the energy legislation that is before Representatives in Juneau this year and addresses the issue through loans and not grants. If we can be of further help, please let us know.

Sincerely,



Mayor Jerry Cleworth



## Fairbanks North Star Borough Mayor's Office

809 Pioneer Road PO Box 71267 Fairbanks, Alaska 99707-1267 (907)459-1300 FAX 459-1102

February 6, 2013

Representative Tammie Wilson  
State Capitol, Room 412  
Juneau, Alaska 99801-1182

Dear Representative Wilson,

On behalf of the Fairbanks North Star Borough I would like to thank you for efforts to address the high cost of heating homes and businesses in Interior Alaska with HB35. As you well know, The Council for Community and Economic Research in its report last summer listed Fairbanks having the highest utility costs among urban areas nationwide, 112 percent more than the typical urban resident in 2011. The second most-expensive city was Juneau, where residents paid 64 percent more than the average.

Many areas of the U.S. and Southcentral Alaska are benefiting from low prices in natural gas, which is the most common energy source in most areas - but not yet in Fairbanks. The Borough through its Interior Natural Gas Utility in conjunction with other entities both public and private, is working to expand and build the natural gas distribution system in the borough.

House Bill 35, will allow many of our residents to utilize a low interest loan program to convert their home heating systems to a more efficient unit. Specifically, this legislation will be very important when natural gas becomes readily available to our residents. For this reason, I support passage of HB 35.

Sincerely,

Luke Hopkins, Mayor



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

Department of  
Health and Social Services

ALASKA COMMISSION ON AGING

P.O. Box 110693  
Juneau, Alaska 99811-0693  
Main: 907.465.3250  
Fax: 907.465.1398

February 8, 2013

Representative Tammie Wilson  
Alaska Capitol, Room 412  
Juneau, AK 99801-1182

**Subject: Support for HB 35, Low Interest Loan Program for Home Heating System Improvements**

Dear Representative Wilson:

The Alaska Commission on Aging (ACoA) is pleased to offer our support for HB 35, a bill sponsored by you and Representatives Thompson, Higgins, Isaacson, and Kreiss-Tomkins to establish a low-interest loan program for all homeowners, regardless of income, that allows them to convert to an energy efficient heating system at an affordable cost. HB 35 is also co-sponsored by Representatives Kawasaki, Peggy Wilson, and Kerttula.

The high cost of energy is a statewide problem. The price of heating fuel is expensive but especially hard felt by Alaskans on a fixed income. During the winter, older people often spend much of their day at home. They typically experience cooler body temperatures than younger people. Many seniors live in older homes, which are often poorly insulated, and have inefficient heating systems. In order to save money, some seniors turn down their thermostats way low and may even resort to closing off rooms during the winter or more dangerous practices such as using their kitchen stoves for heat. They also cut back on food and prescription medication expenditures in order to afford energy to heat their homes. These cost-cutting measures can compromise senior health and quality of life, which can be avoided, by replacing the old furnace with a new cost-efficient heating system.

ACoA supports passage of HB 35 and believes that this program will help all Alaskans with their heating bills, especially older Alaskans on a fixed income. Many low-income seniors do not have the cash reserves to afford the purchase and installation of a new, energy efficient heating system. HB 35 provides an affordable means for all Alaskans to purchase heating systems to address escalating heating costs. We thank you for your sponsorship and support of this bill. Please feel free to contact Denise Daniello, ACoA's executive director, by phone (465-4879) or email ([denise.daniello@alaska.gov](mailto:denise.daniello@alaska.gov)) should you have questions or require additional information.

Sincerely,

Handwritten signature of Paula Pawlowski in black ink.

Paula Pawlowski  
Chair, Alaska Commission on Aging

Sincerely,

Handwritten signature of Denise Daniello in black ink.

Denise Daniello  
ACoA Executive Director



February 7, 2013

Representative Tammie Wilson  
State Capitol, Room 412  
Juneau, AK 99801

Re: HB 35 – Home Heating Conversion Loans

Dear Representative Wilson:

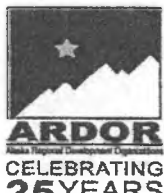
Southeast Conference is the State's regional development organization (ARDOR) whose mission is to undertake activities that promote strong economies, healthy communities and a quality environment in Southeast Alaska. For over a dozen years our energy committee has worked with the State, local governments and utilities toward reducing and someday, eliminating the use of diesel as a primary fuel source for both the generation of electricity and especially space heat – especially in our more rural communities where the extremely high cost of energy has devastated the local economies.

House Bill 35 can be an effective tool to assist Alaskans in lowering the cost of energy in their homes by utilizing a low interest loan program to convert inefficient heating systems to much more efficient units.

Southeast Conference supports HB 35 and requests full consideration and support as this legislation makes its way through the public process. Thank you for your considerable work on this legislation and we look forward to its passage and enactment. Feel free to contact me or Southeast Conference Energy Coordinator, Robert Venables regarding our support for HB 35.

Sincerely,

Shelly Wright  
Executive Director





Representative Tammie Wilson

State Capital Room 415

Juneau, Alaska 99801

Dear Representative Wilson:

I am writing to express my appreciation for your work in introducing HB 35, that would create a low interest loan program to encourage and assist homeowners in converting from more expensive, less efficient home heating systems to other means of heat, including natural gas, propane and where available, District Heat.

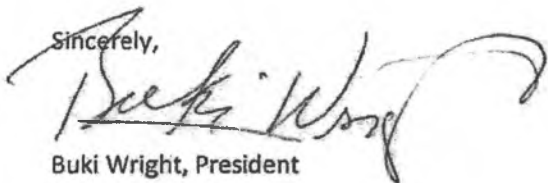
As you know, Aurora Energy sells heat and electricity from its Chena Power Plant in downtown Fairbanks. The coal-fired cogeneration plant produces steam, which is then used to generate electricity and to power Aurora's Hot Water and Steam distribution systems providing clean, hassle-free, reliable, inexpensive heat throughout the core area of Fairbanks. In fact, a home connected to the Aurora District Heat system produces virtually zero emissions, because the heat source is at the power plant, where the plant operations and emissions are constantly monitored and fully regulated. When a new home is added to the system, the oil or gas boiler or furnace at that location is taken out of service, thus eliminating that emission source, and in the case of oil heat, eliminating the need for a fuel oil storage tank on the property.

Additionally, for well over ten years, Aurora Energy's hot water and steam District Heat have been the lowest cost heat alternative available, lower than either oil heat or natural gas heat. The impediment to more residences connecting to the Aurora system has been the relatively high cost of connecting to the system. Since the heat is generated at the power plant, the heat is distributed to customers through pipes in the streets. It can be costly to connect, and for smaller residences, the cost is sometimes prohibitive, compared to the savings brought about by the conversion. The loan program envisioned by HB 35 can be a tremendous help to those small homeowners and others.

As long as District Heat is treated on an equivalent basis with other alternative heat sources eligible for the loan program, Aurora Energy supports the concept of the loan program. We look forward to working with you to ensure a solid bill that will provide much needed help to the homeowners in Alaska, while continuing to improve the quality of the air we all breathe.

Thank you again, and we look forward for your work in this vital area.

Sincerely,

A handwritten signature in black ink, appearing to read "Buki Wright". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Buki Wright, President

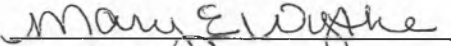
Aurora Energy, LLC.



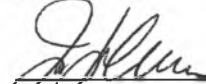
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PASSED AND ADOPTED by the Homer City Council this 11th day of February, 2013.

CITY OF HOMER

  
MARY E. WYTHE, MAYOR

ATTEST:

  
JO JOHNSON, CMC, CITY CLERK

Fiscal Note: N/A



February 11, 2013

The Honorable Tammie Wilson  
Alaska House of Representatives  
State Capitol Building  
Juneau, Alaska 99811

Subject: House Bill 35

Dear Representative Wilson:

Thank you for sponsoring House Bill 35, an Act creating a low-interest loan program for homeowners who improve home heating systems.

The Alaska State Home Building Association (ASHBA) Board of Directors has reviewed and discussed your bill, and would like to offer this statement of support. We see the challenges of high costs for energy and housing, and support helping families find affordable means to upgrade their heating systems.

As the Legislature works to resolve these issues during the session in Juneau, we encourage the Legislature to look at House Bill 35 as means to put potential solutions and opportunities on the table. Funding for a low interest loan program should be considered along with all of the requests for state subsidies to help lower the cost of energy.

Again, thank you for this opportunity to comment on behalf of our members.

Sincerely,

A handwritten signature in cursive script that reads "Jess Hall".

Jess Hall President  
Alaska State Home Building Association

P.O. Box 91444 • Anchorage, Alaska 99509  
Phone (907) 644-4190 • FAX (800) 732-1401  
Website: [www.buildersofalaska.com](http://www.buildersofalaska.com)  
E-mail: [alaskastatehomebuildingassoc@gmail.com](mailto:alaskastatehomebuildingassoc@gmail.com)

CITY OF KACHEMAK  
KACHEMAK, ALASKA  
RESOLUTION 2013-04

A RESOLUTION OF THE KACHEMAK CITY COUNCIL, EXPRESSING SUPPORT FOR HOUSE BILL 35, AN ACT CREATING A LOW-INTEREST LOAN PROGRAM FOR HOMEOWNERS WHO IMPROVE OR REPLACE THEIR HOME HEATING SYSTEMS

WHEREAS, The City of Kachemak is constructing a natural gas distribution line throughout the City of Kachemak; and

WHEREAS, the gas distribution line will be paid for by assessments on real property in the Local Improvement District; and

WHEREAS, natural gas is estimated to be about 50% less expensive than fuel oil to heat with, as well as being a cleaner and more environmentally friendly fuel; and

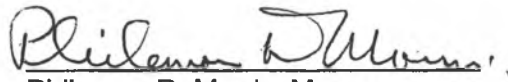
WHEREAS, in addition to the property assessment, there will be other costs incurred to be able to realize the savings of natural gas such as the service connection, service meter, and installing or retrofitting heaters and appliances for natural gas; and

WHEREAS, House Bill 35 will make it possible for more Alaskans to take advantage of the savings of natural gas or other energy sources by allowing them to receive a low interest loan to improve or replace their heating systems; and

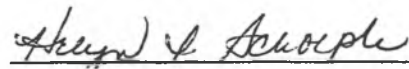
NOW, THEREFORE, BE IT RESOLVED that the Kachemak City Council hereby expresses its strong support for House Bill 35, as it will enable Alaskans to take advantage of less expensive and cleaner forms of energy to heat their homes. .

PASSED and APPROVED by a duly constituted quorum of the City of Kachemak this 13<sup>th</sup> day of February, 2013.

CITY OF KACHEMAK

  
Philemon D. Morris, Mayor

ATTEST:

  
Helyn I. Schoepke, City Clerk

# CITY OF SEWARD

P.O. Box 167  
410 Adams Street  
Seward, Alaska 99664-0167



- Main Office (907) 224-4050
- Police (907) 224-3338
- Harbor (907) 224-3138
- Fire (907) 224-3445
- City Clerk (907) 224-4046
- Community Development (907) 224-4049
- Utilities (907) 224-4050
- Fax (907) 224-4038

February 5, 2013

Honorable Representative Wilson, Co-sponsors, and Members of the Energy Committee,

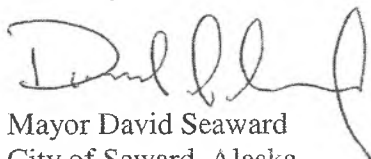
The City and citizens of Seward share your concerns about the high cost of energy in Alaska, and its effect on family budgets. We also share a desire to find solutions that will help residents reduce those costs, regardless of what their fuel source may be.

The low cost loan proposed in HB 35 will be a significant positive step, allowing families to adapt their homes to cleaner and more efficient heating systems in an affordable way and reduce the amount of fuel consumed. The bill also makes the program available to families utilizing a newly available fuel source to them when they might not otherwise be able to afford the new equipment.

The safeguards incorporated into the legislation would determine and quantify cost savings for the homeowner, and prevent abuse for the loan fund and the State.

We appreciate your bringing this bill forward, believe it to be in the best interest of the State, and urge adoption by the Legislature.

Sincerely,



Mayor David Seaward  
City of Seward, Alaska



AARP Alaska  
3601 C Street  
Suite 1420  
Anchorage, AK 99503

T 1 866-227-7447  
F 907 341-2270  
www.aarp.org/ak

February 25, 2013

The Honorable Tammie Wilson  
State Capitol, Room 412  
Juneau, Alaska 99801-1182

RE: HB 35, HOME HEATING CONVERSION LOANS - Support

Dear Representative Wilson,

On behalf of the more than 94,000 members of AARP Alaska, we are pleased to offer our support for HB 35, sponsored by you and eight other members of the House, which would create low interest loans to improve or replace home heating systems where inspections have determined a potential improvement in energy efficiency or cost savings as a result. The broad bi-partisan support for the bill attests to the many Alaska homeowners who could upgrade their heating systems with such a loan program.

HB 35 is important to older people for a number of reasons. The most obvious is cost savings. Given Alaska's escalating energy costs, and their severe impact on persons with a fixed income, it is urgent to provide relief in a variety of ways. HB 35 offers homeowners the opportunity to hold energy costs down by increasing efficiency, and it does so in a very affordable manner with a 1% loan. Older people tend to be at home more, stay indoors more, and need the thermostat set a little higher to feel warm enough. These are common issues of growing older that are natural, but often problematic. Combined with weatherization programs, home energy cost assistance (LEAP), and personal responsibility, HB35 adds one more item on the list of ways an individual can keep a rein on their heating bills.

While no part of Alaska is exempt from energy cost concerns, some parts of the state experience the problem to a greater degree. Likewise, some parts of the state would benefit more from improved or modified energy heating systems that result in improved air quality. Clean air is important to people of all ages, but the likelihood of chronic respiratory problems increases with age. A more efficient heating system that uses a less polluting fuel will help to create healthier communities overall.

We are pleased to offer our support for HB35, and welcome any questions or concerns you might have.

Best wishes for the success of this important legislation.

Sincerely,

Ken Helander, Advocacy Director  
AARP Alaska  
723-1087  
[khelander@aarp.org](mailto:khelander@aarp.org)

Marie Darlin, Coordinator  
AARP Capitol City Task Force  
586-3637

CC: Representatives Thompson, Higgins, Isaacson, Kreiss-Tomkins, Kawasaki, P. Wilson, Kerttula, Costello

**HOUSE BILL NO. 35**

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-EIGHTH LEGISLATURE - FIRST SESSION

**BY REPRESENTATIVES TAMMIE WILSON, THOMPSON, HIGGINS, ISAACSON, AND  
KREISS-TOMKINS, Kawasaki, Peggy Wilson, Kerttula**

**Introduced: 1/16/13**

**Referred: House Special Committee on Energy, Finance**

**A BILL**

**FOR AN ACT ENTITLED**

1 **"An Act creating a low-interest loan program for homeowners who improve or replace**  
2 **their home heating systems; and providing for an effective date."**

3 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

4 **\* Section 1.** AS 18.56 is amended by adding a new section to read:

5 **Article 6A. Home Heating Improvement Loan Program.**

6 **Sec. 18.56.870. Home heating improvement loan program.** (a) The  
7 corporation shall establish a program under which the owner of a home that is eligible  
8 under (b) and (c) of this section may apply for a loan to improve or replace a home  
9 heating system.

10 (b) To qualify for a loan under the program established in (a) of this section,  
11 the homeowner shall obtain an inspection performed by an energy rater approved  
12 under regulations adopted by the corporation or by a registered mechanical contractor.

13 The energy rater or contractor shall, under regulations adopted by the corporation,

14 (1) perform an on-site inspection of the home;

1 (2) determine whether improving or replacing the primary heating  
2 system of the home would increase the energy efficiency of the home; and

3 (3) provide the homeowner with an estimate of the cost savings and  
4 change in energy efficiency of the home as a result of improving or replacing the  
5 primary heating system of the home.

6 (c) Under this section, a home is eligible if the corporation determines it is a  
7 substantially complete, owner-occupied, single-family dwelling or duplex used as a  
8 permanent residence by the loan applicant and is located in the state. A home is not  
9 eligible if

10 (1) the home is to be destroyed, abandoned, or converted to another  
11 purpose within 12 months after an inspection performed under (b) of this section;

12 (2) the energy source fueling or powering the improved or replaced  
13 heating system is not available;

14 (3) a loan for the home was previously received under this program; or

15 (4) more than 25 percent of the gross floor area of the home is devoted  
16 to commercial use.

17 (d) A loan made under this program

18 (1) shall have an interest rate of one percent;

19 (2) shall be repaid over a term of 10 years;

20 (3) may not be subject to income limitations;

21 (4) may not exceed, for a home, the lesser of

22 (A) the cost, including materials and labor, of the  
23 improvements to or replacement of the heating system that will be used as the  
24 primary heating method for the home plus the cost of the inspection required  
25 under (b) of this section; or

26 (B) \$15,000.

27 (e) As a condition of the loan, a homeowner who receives a loan under this  
28 section shall agree, in writing, to improve or replace the heating system in accordance  
29 with applicable building and housing codes and obtain all required permits.

30 (f) The corporation shall use repayments of principal on a loan made under  
31 this section for the purposes of providing loans under this section or paying the

1 administrative costs related to providing loans under this section. Interest paid on  
2 loans made under this section shall be deposited in the general fund and may be  
3 appropriated for the loan program under this section or for any other public purpose.

4 (g) In making loans under this section, the corporation is exempt from the  
5 requirements of AS 46.11.050(b).

6 (h) In this section, "building and housing codes" includes a law, ordinance, or  
7 governmental regulation concerning fitness for habitation or the construction,  
8 maintenance, operation, occupancy, use, or appearance of a premises or dwelling unit.

9 \* **Sec. 2.** This Act takes effect immediately under AS 01.10.070(c).