

# AHFC Energy Programs

## Rebate, Weatherization, Revolving Loan

# LEGISLATIVE REPORT

10/22/2010

# Overview

- \$200 million for weatherization  
(income-based, no-cost program)
- \$100 million for rebates  
(for those NOT qualifying for weatherization program:  
rebates for eligible improvements - ratings required)
- \$60 million additional for rebates 9/2008  
(to carry program into next calendar year)
- Large training component for both programs

# Allocations

	<b>Rebate</b>	<b>Weatherization</b>
Anchorage Region	\$26 million	• \$34 million
Southcentral Region	\$16 million	• \$24 million
Fairbanks Region	\$17 million	• \$29 million
Interior Region	\$2 million	• \$12 million
Juneau Region	\$4 million	• \$12 million
Southeast Region	\$5 million	• \$14 million
Northern Region	\$4 million	• \$18 million
Western Region	\$5 million	• \$20 million
Southwest Region	\$2 million	• \$12 million



# Weatherization

## PROGRAM

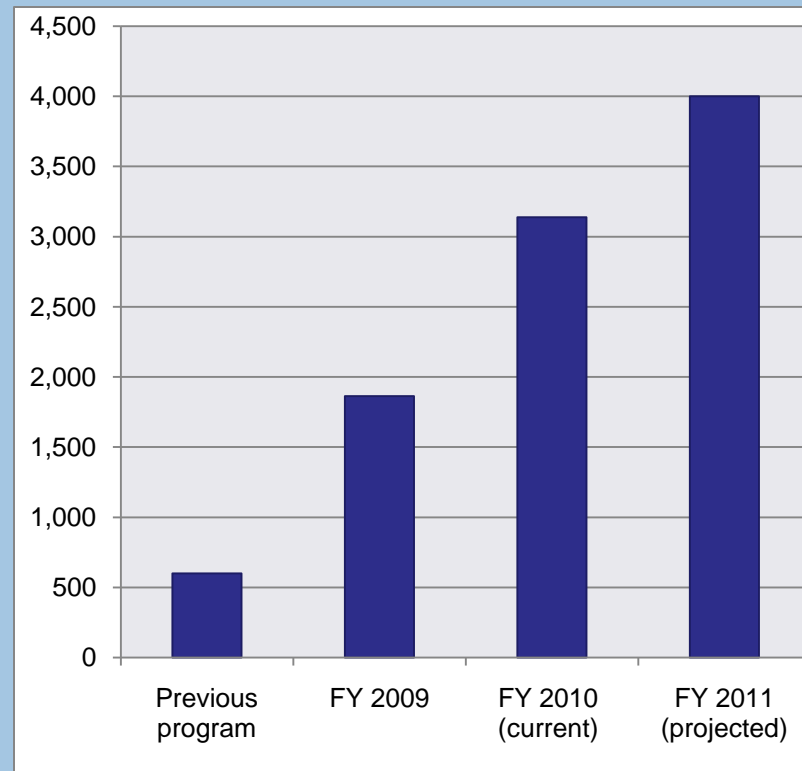
**\$200 Million**

Encumbered:  
2008-2009= \$70 million  
2010= \$60 million

# **Weatherization** PROGRAM

## Homes Weatherized

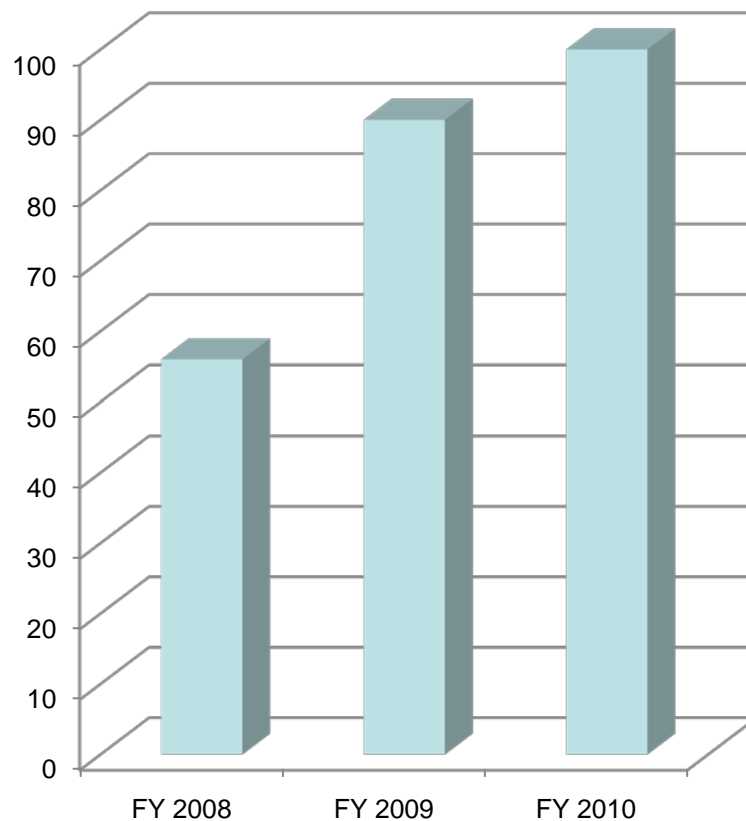
- Previous program: **600**
- FY 2009: **1864**
- FY 2010: **3139** (current)
- FY 2011: **4000** (projected based on funding)
- Statewide weatherization providers and housing authorities have now achieved a sustainable capacity.



# **Weatherization** PROGRAM

## Communities/Areas Served

- FY 2008: **56**
- FY 2009: **90**
- FY 2010: **100+**





# Home Energy Rebate

PROGRAM

**\$160 Million**

Funds Fully Encumbered  
Expended: \$72.8 million

# **Home Energy Rebate** PROGRAM

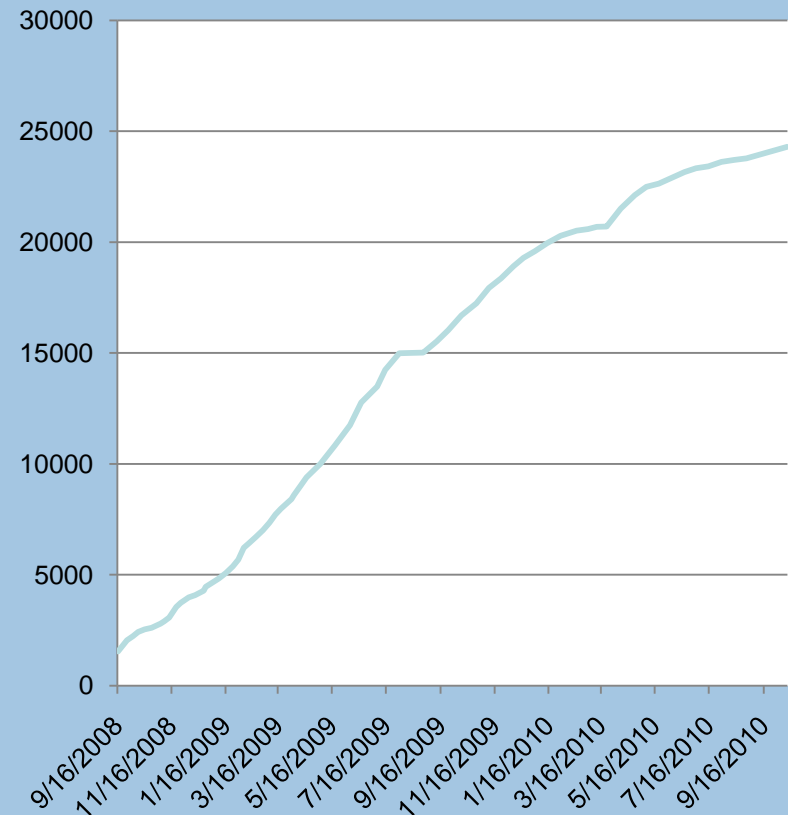
As-Is Ratings Paid : 24,292\*

## **Existing Homes\***

- **9,142** rebates paid
- **\$6,258** average
- 18 month deadline
- **63.5%** participation rate

## **New 5 Star Plus Homes**

- **822** rebates paid

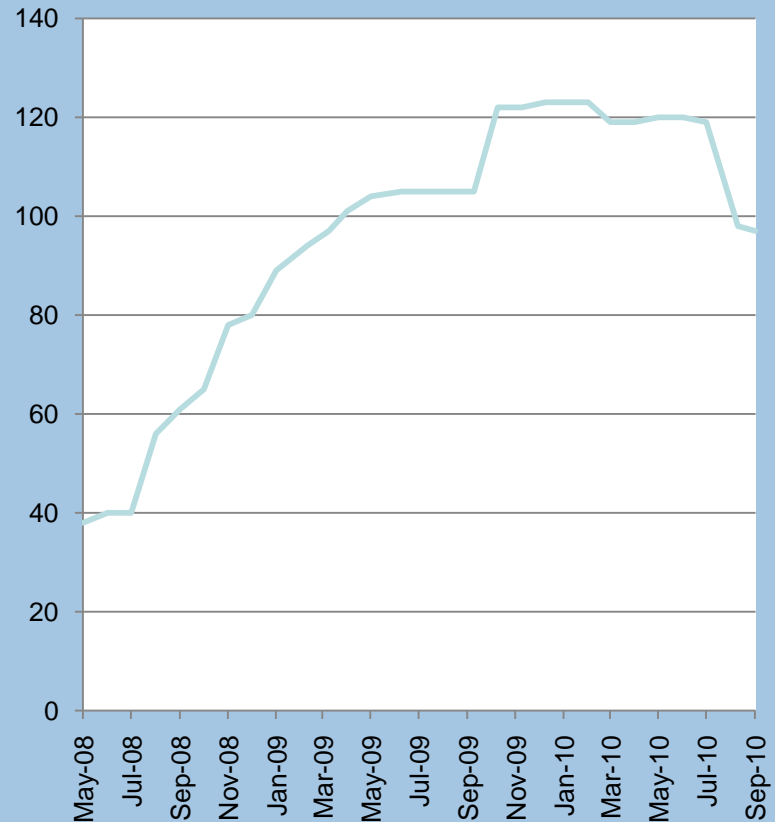




# **Home Energy Rebate** PROGRAM

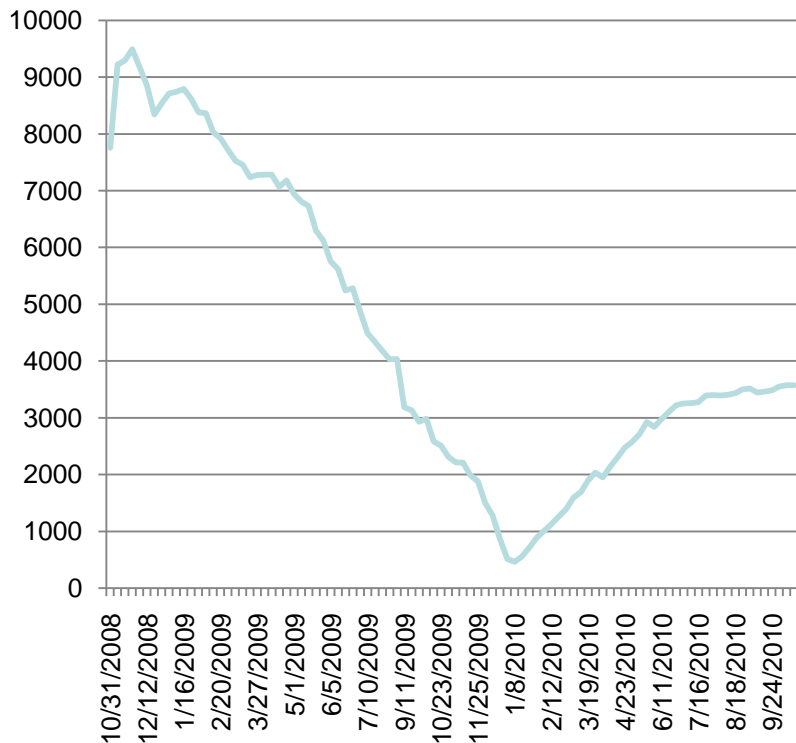
## Raters Available

- Raters
  - 38 at program start
  - 123 at peak
  - 97 currently listed
- Roving rater program
- Centralized sign-up list
  - [www.akrebate.com](http://www.akrebate.com) or call 1-877-AK-REBATE



# **Home Energy Rebate** PROGRAM

## Wait List



**Statewide: 3,575**

**Anchorage: 1,583**

**Fairbanks: 326**

**Juneau: 182**

**Total Ratings Dispatched  
Statewide : 30,081**

# **Home Energy Rebate** PROGRAM

## Program Snapshot

Approximate Costs of Sampled Homeowners

### ***AHFC Rebate Amount***

**\$6200** average rebate

### ***Homeowner Paid Costs***

**\$10,800** average spent

**-\$6200** average rebate

**=\$4600** homeowner investment

\$1580 annual energy savings  
3 year payback

# **Home Energy Rebate** PROGRAM

## Energy & CO2 Impacts

HOMES	Before	After	Total Saved	Per Home
6998				
<b>Energy Cost</b>	\$38,104,164	\$27,061,010	\$11,043,154	<b>\$1,586 / year</b>
CO2 lbs/year	304,449,069	218,531,869	85,917,199	12,341 lbs / yr
Rating Stars	2+	4		3 steps
BTUS			679 Billion	97 Million

Average energy use reduced 32.58%

Equivalent energy savings:    117,184 barrels of crude oil  
   4.9 million gallons of fuel oil  
   700 gallons of fuel oil per home

# **Home Energy Rebate** PROGRAM

## Average Savings per Home by Fuel Type

Fuel Type	Average Saved
Electric	748 kwh
Natural Gas	978 ccf
#2 Oil	650 gallons
Propane	84 gallons
Wood	2.2 cords

6998 sampled homes

Projected average energy cost reduced 29%

# Second Mortgage for Energy Conservation

- 2<sup>nd</sup> Mortgage up to \$30,000
  - 15 Year Loan at the Taxable Rate
  - Loans Paid Off: **84**
  - Active Loans: **34**

# Home Energy Rebate & Weatherization *Comparison Snapshot*

**BEFORE\***  
**1996 - March 2008**

**AFTER**  
**April 2008 – October 15, 2010**

- |               |        |        |
|---------------|--------|--------|
| • Ratings     | 25,557 | 34,283 |
| • Rebates     | n/a    | 9142   |
| • 5+ Homes    | 2,345  | 822    |
| • Weatherized | 10,704 | 5003   |

14,967 homes now more energy efficient since 2008

# Alaska Energy Efficiency Revolving Loan Fund (AEERLF)

**“Alaska Sustainable Energy Act” - \$250 million revolving loan fund**

- Energy efficiency improvements for
  - Regional Educational Attendance Areas (REAAAs)
  - University of Alaska
  - State facilities
  - Municipal facilities
- Guaranteed savings from energy efficiency improvements are used to pay off the loan
- Requires Retrofit Energy Assessment for Loan (REAL)

***In final development phase***



# Retrofit Energy Assessment for Loan (REAL)

Prior to applying for the loan...

- **Initial Project Evaluation**
  - Energy benchmark
- **Energy Audits**
  - Audits by Certified Energy Auditor (CEA) or Certified Energy Manager (CEM) certification through the Association of Energy Engineers (AEE), or an AHFC-approved equivalent.
- **Energy Performance Contracts (EPCs)**
  - Energy Service Companies (ESCOs) pre-qualified by Alaska Housing Finance Corporation (AHFC) and Alaska Department of Transportation and Public Facilities (DOT/PF) may be used.

Retrofits may be managed by qualified Energy Service Companies (ESCOs), or the facility owner (if under \$250,000).

# Retrofit Energy Assessment for Loan (REAL) Process

REAL application/benchmark to AHFC

AHFC reviews application for eligibility

Initial assessment performed by qualified energy auditor (CEA/CEM) to allow for benchmarking and AHFC prioritization of projects

Investment Grade Audit (IGA)

Loan application to AHFC for approval

# Energy Efficiency Revolving Loan (EERL) Process

**Loan approved by AHFC**



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graph TD; A[Loan approved by AHFC] --> B[Upgrades accomplished either through Energy Performance Contract (EPC) with an Energy Service Company (ESCO) , or overseen by facility owner (if less than $250,000)]; B --> C[Loan repaid according to projected energy savings (term depends on payback of project; less than or equal to 15yrs; interest based on rate in effect at time of application)]; C --> D[Technical assistance available]; D --> E[Long term energy savings];
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**Loan repaid according to projected energy savings** (term depends on payback of project; less than or equal to 15yrs; interest based on rate in effect at time of application)

**Technical assistance available**

**Long term energy savings**

# Two ways to get the work done

## Path 1

ESCo does IGA

ESCo manages project, performs work through EPC

## Path 2

Certified Energy Auditor or Certified Energy Manager does IGA

Facility owner manages project (if less than \$250,000)