



2015 Annual Report  
**Implementation of Energy  
Efficient Manufactured  
Homes Incentive Program**

*Section 48-52-870, Code of Laws of South Carolina*

# **Annual Report on the Implementation of Energy Efficient Manufactured Homes Incentive Program**

Pursuant to Section 48-52-870, South Carolina Code of Laws

**December 2016**

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This document may be downloaded from the State Energy Office website

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South Carolina Office of Regulatory Staff

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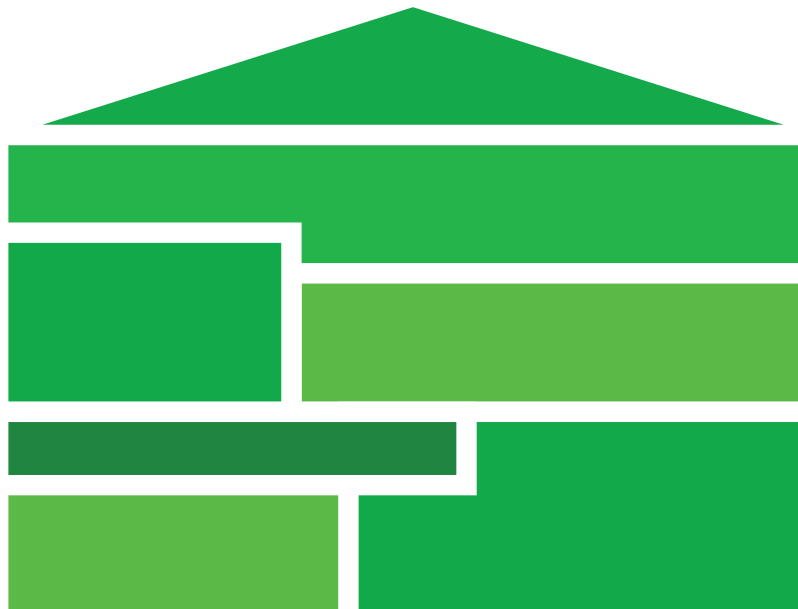
# Background

## State Energy Office

The 1992 South Carolina Energy Efficiency Act established the State Energy Office within the South Carolina Budget and Control Board to serve as the principal energy planning entity for the state. In 2015, the Budget and Control Board was dissolved and the State Energy Office was established within the Office of Regulatory Staff (ORS). The ORS State Energy Office (Energy Office) carries out the state policy and programs mandated by the General Assembly and also administers the State Energy Program funded by the US Department of Energy.

**Approximately  
20 percent of  
South Carolinians live in  
manufactured housing,  
one of the highest  
percentages in  
the nation.**

According to the Corporation for Enterprise Development, "Owners of manufactured homes are disproportionately low-income: in 2013, the median annual household income for those living in manufactured housing was \$28,400, versus a national median of \$51,939. About 75% of manufactured home households earn less than less than \$50,000." The Energy Office actively promotes measures that reduce energy use.



# South Carolina Energy Efficient Manufactured Homes Programs

## Energy Efficient Labeling Program

Manufactured housing has been regulated by the US Department of Housing and Urban Development since 1976 under Federal Manufactured Housing and Construction Standards (24 CFR 3280). In 1992, the South Carolina General Assembly passed legislation designed to increase energy efficiency in manufactured homes sold in the state. Sections 12-36-2110(B) and 40-29-360 of the South Carolina Code of Laws specify criteria for energy efficient manufactured homes. Manufacturers constructing homes that meet the criteria may order labels from the Energy Office and affix the labels to the more energy efficient homes. Individuals who purchase these energy efficient homes would pay no more than \$300 in state sales tax on the home. Buyers of homes that do not meet the energy efficient criteria would pay an additional 2% in state sales tax.

The program was originally managed by the SC Department of Labor, Licensing and Regulation. In 1998, the Energy Office assumed responsibility of managing the program. Initially, approximately 16 percent of all purchased manufactured homes met the more stringent energy efficiency criteria established by state legislation. After 11 years, between 70 and 80 percent of homes sold met these higher level criteria (Manufactured Housing Institute of SC, 2008). The Energy Office estimates that these energy efficiency standards may have saved South Carolinians as much as \$130 million over the expected life of homes purchased, based on an estimated annual savings of \$152 for a standard manufactured home and \$252 in annual savings for a doublewide home. However, as industry standards have improved, the amount of savings that can reasonably be attributed to the labeling program have decreased.

**1998:** 16% met criteria  
**2008:** 70-80% met criteria

### Annual Savings per home

Standard	<b>\$152</b>
Doublewide	<b>\$252</b>

**\$130 million saved**  
 over expected life of homes  
 purchased

**Table 1:** Energy Efficient Labels Requested by Manufacturers 1998-2014

Years	Labels Requested
1998	10,349
1999	11,722
2000	5,860
2001	5,595
2002	4,180
2003	13,076
2004	2,360
2005	2,331
2006	2,000
2007	1,795
2008	1,610
2009	1,200
2010	1,935
2011	941
2012	840
2013	1,386
2014	1,710
2015	1,914
<b>Total</b>	<b>70,804</b>

Since 1998, more than 70,000 labels have been distributed to manufacturers; distribution peaked in 2003 with 13,076 labels and reached a low of 840 for 2012. The decline in labeled homes may be attributed to the overall decline in the residential market, as well as the move to [ENERGY STAR®](#) labeled homes by some manufacturers. Nonetheless, the energy efficiency labeling program continues to be beneficial. **Table 1** summarizes the number of energy efficient labels requested by manufacturers each year since the Energy Office began managing the program in 1998.

## Energy Efficient Manufactured Homes Incentive Program

In 2001, the US Department of Energy and the US Environmental Protection Agency created standards for [ENERGY STAR®](#) manufactured homes, which are at least 15 percent more energy efficient than homes meeting the minimum energy code. In general, [ENERGY STAR®](#) qualified homes include features and appliances that make them as much as 30 percent more efficient than most recently constructed manufactured or site-built homes. Factors contributing to increased efficiency include the following:

Factors contributing to increased efficiency include:

- Effective insulation in walls and floors
- High performance windows, including protective coatings and improved frame assemblies
- Tight construction and ducts so that cracks and holes are sealed to reduce drafts, dust and moisture problems
- High efficiency heating and cooling equipment
- [ENERGY STAR®](#) qualified lighting and appliances

In 2008, the Energy Efficient Manufactured Homes Incentive Program was established under Section 48-52-870 South Carolina Code of Laws. It was passed to create more significant incentives for ENERGY STAR® labeled homes. Section 48-52-870 requires the Energy Office to “adopt rules pursuant to this article to develop tax credit applications and administer the issuance of tax credits and must track and report on the fiscal and energy impacts.” This incentive includes a \$750 nonrefundable state income tax credit for eligible homebuyers. In addition, Section 12-26-2110 eliminates any state sales tax on ENERGY STAR® manufactured homes (but not optional furniture or drapes) from July 1, 2009 to July 1, 2019. ...

To implement the Energy Efficient Manufactured Homes Incentive Program, the Energy Office created retailer instructions (see Appendix A) and an application form (see Appendix B) for the \$750 tax credit. The Energy Office worked with the South Carolina Department of Revenue and the Manufactured Housing Institute of South Carolina to develop instructions for retailers and a form to certify the purchase that would be simple for homebuyers to complete.

Retailers that sell ENERGY STAR® manufactured homes are required to certify that energy-saving measures have been installed in accordance with guidelines. The retailer is required to return this certification to the manufacturer of the home. The manufacturer files the certification with the entity responsible for tracking ENERGY STAR® home sales nationally, on behalf of the US Environmental Protection Agency and US Department of Energy. In addition, retailers that sell ENERGY STAR® homes must supply the homebuyer with an Energy Office application form. The homebuyer must complete the application form and provide it to the Energy Office.

The Energy Office reviews the application form, ensures that the homebuyer has received the ENERGY STAR® certification from the retailer, and signs and returns the application form to the homebuyer. The homebuyer(s) must include these documents in their tax filing to claim the \$750 state income tax credit.

# Energy Savings & Fiscal Impact

Based on applications received by the Energy Office for the \$750 tax credit, the incentives have encouraged savings that average approximately \$384 per homeowner per year, or an average of approximately \$19,220 over the lifetime of the home – at current energy prices. Fifty-two requests for the \$750 tax credit have been received for homes purchased in 2015. This equates to an overall energy savings for these 52 homebuyers of approximately \$1,219,398 over the expected life of the homes given an investment of \$39,000 by the state. This also equates to a savings of 39,399 MMBtu in overall energy savings for all 52 homes over their expected useful life. To date, the Energy Office has approved 321 tax credit applications that represent an investment by the state of \$240,750 and result in energy savings of \$7,754,908.

In addition, the ENERGY STAR® homes for which tax credits have been requested to date for 2015 will collectively save over 14.9 million pounds of CO<sub>2</sub> over their estimated 55-year lifetime. See **Table 2** below for a summary of the Energy Star Manufactured Homes Tax Credit.

The Energy Office continues to work with the Manufactured Housing Institute of South Carolina to raise awareness of the program and to encourage dealers to give the tax credit application and the site installation checklist to the buyer, thus increasing the likelihood of the buyer applying for the tax credit.

However, as shown in **Table 2**, there is a noticeable difference between the number of ENERGY STAR® labeled homes sold and the number of tax credit applications received.

Data from the Systems Building Performance Alliance, the entity which tracks ENERGY STAR® manufactured homes for the federal government, indicates that approximately 817 ENERGY STAR® homes were produced for sale or installation in South Carolina in 2015. The Manufactured Housing Institute of South Carolina states that a total of approximately 2,240 homes were shipped to the state by the end of 2015, meaning that ENERGY STAR® homes shipped to South Carolina retailers represent approximately 36 percent of the market, a drop over 2014 levels which indicated a market share of 44 percent. **Table 3** shows the location and expected savings for those homes for which tax credit approvals have been sought through April 15, 2016.



**Table 2: ENERGY STAR® Manufactured Homes Tax Credit Summary**

	Jan-Dec 2010	Jan-Dec 2011	Jan-Dec 2012	Jan-Dec 2013	Jan-Dec 2014 <sup>1</sup>	Jan-Dec 2015	Total to Date
Estimated total ENERGY STAR® labeled homes sold to SC residents <sup>2</sup>	230	229	179	275	422	817	2152
Tax credit applications	43	59	84	48	35	52	321
Estimated energy savings per year (MMBtu)	602	786	1160	642	481	716	4387
Expected cost savings per year (\$)	\$18,620	\$24,315	\$35,896	\$22,413	\$17,584	\$22,170	\$123,414
Estimated energy savings over life of homes (MMBtu)	33,089	43,209	63,790	35,315	26,462	39,399	241,264
Expected cost savings over life of homes (\$)	\$1,024,102	\$1,337,312	\$1,974,260	\$1,232,711	\$967,125	\$1,219,398	\$7,754,908
Estimated CO <sub>2</sub> savings per year (lbs)	228,618	298,538	440,727	243,994	182,829	272,215	1,666,921
Estimated CO <sub>2</sub> savings over life of home (lbs)	12,573,962	16,419,563	24,240,029	13,419,681	10,055,617	14,971,819	91,680,671

<sup>1</sup> Corrected for applications submitted after December 2014

<sup>2</sup> Data provided by Systems Building Research Alliance

**Table 3:** 2015 ENERGY STAR® Tax Credit Request Summary

	Expected Energy Savings (MMBtu/year)	Expected Cost Savings (based on energy costs of 10.56/kWh)	Expected Energy Savings over 55 yr life of home MMBtu	Expected Cost Savings over 55 yr life of home	CO <sub>2</sub> Savings/year (380 lbs CO <sub>2</sub> /MMBtu)	CO <sub>2</sub> Savings life of home
Aiken	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Batesburg	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Batesburg	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Blacksburg	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Blackstock	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Bradley	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Columbia	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Duncan	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Eastover	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Edgefield	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Florence	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Gilbert	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Gilbert	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Graniteville	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Hopkins	16.8	\$520.88	925.7	\$28,648.48	6,395.4	351,747
Hopkins	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Johnston	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Kershaw	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Leesville	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Leesville	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Leesville	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Leesville	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,710.5
Leesville	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Lexington	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Lexington	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Lexington	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Lexington	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Lexington	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Lugoff	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Moncks Corner	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
North	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Orangeburg	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Pelion	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Pelion	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Pelion	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Pelion	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070

	Expected Energy Savings (MMBtu/year)	Expected Cost Savings (based on energy costs of 10.56/kWh)	Expected Energy Savings over 55 yr life of home MMBtu	Expected Cost Savings over 55 yr life of home	CO <sub>2</sub> Savings/year (380 lbs CO <sub>2</sub> /MMBtu)	CO <sub>2</sub> Savings life of home
Rock Hill	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Rock Hill	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Sellers	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
St. Stephen	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
St. Stephen	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Summerville	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Timmons ville	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Timmons ville	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Trenton	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Wagener	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
W. Columbia	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
West Union	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
Williamston	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070
Williston	14.1	\$435.46	773.9	\$23,950.34	5,346.6	294,063
Winnsboro	15.4	\$474.92	844.0	\$26,120.68	5,831.1	320,711
York	12.3	\$380.68	676.5	\$20,937.39	4,674.0	257,070

### Notes:

- Calculations are based on the most recent US Energy Information Agency data (2005) for residential energy use based on square footage of homes. The SEO made the very conservative assumption that the ENERGY STAR® home would save only 15 percent of the energy used by the average home of approximately the same square footage.
- Cost savings are based on an average cost per kWh of electricity in September, 2014, as reported by the US Energy Information Agency.
- The expected lifetime of new manufactured homes is conservatively estimated at 55 years, based on information supplied by the Systems Building Research Alliance, the organization which tracks ENERGY STAR® manufactured homes on behalf of the federal government. Their assumption is based in part on a report entitled *Manufactured Home Life, Existing Housing Stock Through 1997*, an update of a study entitled *Manufactured Home Life by Dr. Carol B. Meeks, May 1995*, University of Georgia.
- Calculations are based on an estimated 380 pounds of CO<sub>2</sub> emitted per MMBtu of energy used.

# Conclusion

As previously mentioned, approximately 20 percent of South Carolinians live in manufactured housing, one of the highest percentages in the nation. Legislation enacted in South Carolina has established incentives that include a full state sales tax exemption on ENERGY STAR® manufactured homes as well as a \$750 nonrefundable state income tax credit for eligible home buyers. Fifty-two requests for the \$750 tax credit were received for homes purchased in 2015. This equates to an overall energy savings for these 52 homebuyers of approximately \$1,219,400 over the expected life of the homes given an investment of \$39,000 by the state. To date, the Energy Office has approved 321 tax credit applications, an investment of \$240,750, resulting in energy savings of \$7,754,908 for low- to moderate-income South Carolinians.

**2015: 52 requests for the \$750 tax credit**

**2015 Overall Energy Savings  
\$1,219,400**

**Energy Office Program To Date:**

**321 tax credit applications**  
**\$240,750 in state investment**  
**\$7,754,908 in energy savings**

# APPENDIX A

**ENERGY STAR® Incentives for  
Manufactured Homebuyers and Dealers**





## **ENERGY STAR® Incentives for Manufactured Homebuyers and Dealers**

### **Customer's \$750 Income Tax Credit**

*In order for your customers to claim the \$750 non-refundable\* state income tax credit on their state tax returns, the following items must be completed:*

- Step 1.** Provide the customer with a copy of the **ENERGY STAR®** Tax Credit Application Form (available on the web at either [www.ENERGY.SC.GOV](http://www.ENERGY.SC.GOV) or [www.mhisc.com](http://www.mhisc.com)).
  
- Step 2.** Verify that the *Site Installation Checklist* provided by the manufacturer and shipped with the home is completed and signed (the gray **ENERGY STAR®** quality assurance label affixed inside the home should also be signed). Return a copy of the signed *Site Installation Checklist* to the manufacturer.
  
- Step 3.** Give the customer two copies of the bill of sale (clearly showing date of sale) and two copies of the signed *Site Installation Checklist* (must include customer's name and home address). The customer must forward one copy of each of these documents to the Energy Office along with the **ENERGY STAR®** *Tax Credit Application Form*. The address is on the application form.
  
- Step 4.** The Energy Office will approve the request and return the form to the customer. The customer must retain the form along with other income tax records, and must include a copy with his/her income tax filing if filing a paper form.

*\*Non-refundable tax credits cannot reduce the tax owed to less than zero.*

### **Sales Tax Elimination**

South Carolina law eliminates sales tax on homes meeting **ENERGY STAR®** requirements. State law requires retailers to maintain records on each **ENERGY STAR®** manufactured home sold. In lieu of a special form, the State Energy Office will require that retailers simply retain copies of the *Site Installation Checklist*, which must include the customer's name and home address. By law, these records must be retained for three years and must be made available for inspection upon request of the Department of Consumer Affairs or the Energy Office.





# APPENDIX B

Tax Credit Approval Form





# Energy Efficient (ENERGY STAR®) Manufactured Home \$750 Tax Credit Application Form

Please follow instructions carefully and submit to:

**South Carolina Energy Office**  
**Attn: ENERGY STAR® Manufactured Home Credit**  
**1401 Main St. Suite 900 Columbia, SC 29201**

**Applicant name:** \_\_\_\_\_

*(Note: Applicant name must match name on bill of sale)*

**Applicant Social Security Number\* or Tax Identification Number (if not an individual):** \_\_\_\_\_

**Address of home for which \$750 tax credit is sought:** \_\_\_\_\_

**Applicant mailing address, if different than above:** \_\_\_\_\_

*(Note: If neither fax nor email is included, your form will be returned via US Mail)*

**Applicant email:** \_\_\_\_\_

*(Needed only if you prefer to receive your approved application via email)*

**Applicant fax:** \_\_\_\_\_

*(Needed only if you prefer to receive your approved application via fax)*

**Applicant phone:** \_\_\_\_\_

**Date of sale:** \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

*(Note: You must attach a copy of your bill of sale and ENERGY STAR® Site Installation Checklist)*

**Description of home:**      \_\_\_ Single      \_\_\_ Double      \_\_\_ Triple

**Approximate square footage:** \_\_\_\_\_

**I certify the above information is correct, and that I am the owner of the ENERGY STAR® home for which a bill of sale and Site Inspection Checklist is attached.**

\*Social Security Privacy Act : It is mandatory that you provide your social security number on this tax form. 42 USC 405(c)(2)(C)(i) permits a state to use an individual's social security number as means of identification in administration of any tax. SC Regulation 117-201 mandates that any person required to make a return to the SC Department of Revenue shall provide identifying numbers, as prescribed, for securing proper identification. Your social security number is used for identification purposes.

\_\_\_\_\_  
*(Signature)*

\_\_\_\_\_  
*(Please print name)*

-----**Energy Office Approval – Do not write below this line**-----

\_\_\_\_\_  
*(Name)*

\_\_\_\_\_  
*(Title)*

\_\_\_\_ / \_\_\_\_ / \_\_\_\_  
*(Date)*





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