



2018 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

July 2020

This document may be downloaded from the State Energy Office website

**ENERGY.SC.GOV/Reports**

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# Background

## State Energy Office

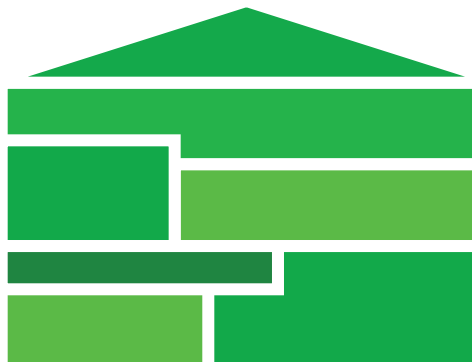
The 1992 South Carolina Energy Efficiency Act established the State Energy Office (Energy Office) to serve as the principal energy planning entity for the state. In 2015, the Energy Office was established within the South Carolina Office of Regulatory Staff. The Energy Office carries out the state policy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

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

Manufactured homes are defined as homes built in a factory and transported to the site under a federal code administered by the U.S. Department of Housing and Urban Development. The federal standards went into effect in 1976. It should be noted that modular homes, also built in a factory, are constructed to state or regional building codes in the areas where they will be located.

According to the U.S. Census American Community Survey, 16.5 percent of South Carolinians were estimated to live in mobile homes (or “other” housing) in 2016. Further, the Survey reported that southeastern states (Alabama, Florida, Georgia, Kentucky, Mississippi, the Carolinas, and Tennessee) accounted for 37 percent of manufactured home sales in 2016. 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 \$30,000, versus a national median of \$50,300. About 75 percent of manufactured home households earn less than \$50,000.”<sup>1</sup>



<sup>1</sup>U.S. Census Bureau; 2015 American Housing Survey; generated by Darcy Jones; using AHS Table Creator; <<https://www.census.gov/programs-surveys/ahs/data/interactive/ahstablecreator.html>>; (16 August 2018).

# South Carolina Energy Efficient Manufactured Homes Programs

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## Energy Efficient Labeling Program

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 two percent in state sales tax.

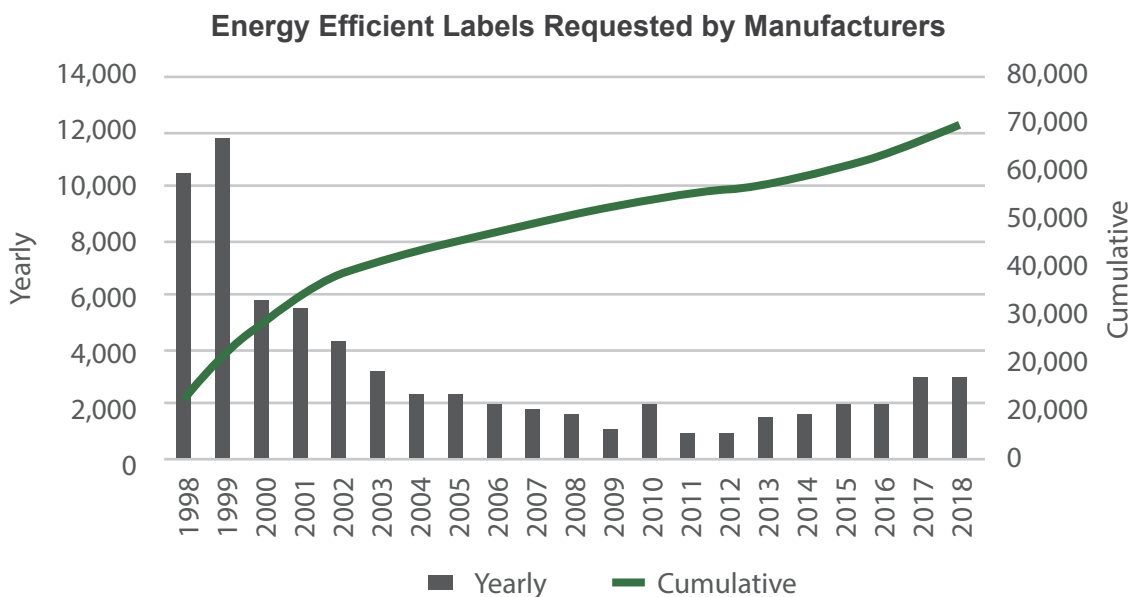
The program was originally managed by the SC Department of Labor, Licensing and Regulation. In 1998, the Energy Office assumed responsibility for managing the program. Initially, approximately 16 percent of all purchased manufactured homes met the more stringent energy efficiency criteria established by state legislation. In 2012, between 70 and 80 percent of homes sold met these higher-level criteria (Manufactured Housing Institute of SC).

**1998:** 16% met energy efficiency criteria  
**2012:** 70-80% met energy efficiency criteria

**Table 1:** Energy Efficient Labels Requested by Manufacturers 1998-2018

Year	Labels Requested
1998	10,349
1999	11,722
2000	5,860
2001	5,595
2002	4,180
2003	3,182
2004	2,360
2005	2,331
2006	2,000
2007	1,820
2008	1,660
2009	1,175
2010	1,935
2011	941
2012	860
2013	1,446
2014	1,610
2015	2,064
2016	2,015
2017	2,999
2018	2,991
<b>Total</b>	<b>69,095</b>

Since 1998, 69,095 labels have been distributed to manufacturers. Participation was high during the first several years of the program, but the number of labels requested had declined in subsequent years. Since 2013, the number of labels requested has been increasing. Table 1 summarizes the number of energy efficient labels requested by manufacturers each year since 1998.



## Energy Efficient Manufactured Homes Incentive Program

In 2001, the DOE and the US Environmental Protection Agency (EPA) 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:

- 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 of the 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, 2024.

To implement the Energy Efficient Manufactured Homes Incentive Program, the Energy Office created dealer 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 dealers and a form to certify the purchase that would be simple for homebuyers to complete.

Dealers that sell ENERGY STAR® manufactured homes are required to certify that energy-saving measures have been installed in accordance with guidelines. The dealer 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 EPA and DOE. In addition, dealers 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 the homebuyer has received the ENERGY STAR® certification from the dealer, 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 and Fiscal Impact

Based on applications received by the Energy Office for the \$750 tax credit, incentives have encouraged savings that average approximately \$550 per homeowner per year, or an average of approximately \$16,490 over the lifetime of the home (at current energy prices). Sixty-two applications approved for the \$750 tax credit were received for homes purchased in 2018. This equates to an overall energy savings for these 62 homebuyers of approximately \$1,022,402 over the expected life of the homes, with an investment of only \$46,500 by the state. This also equates to an overall energy savings of 27,598 million British Thermal Units (MMBTU) for the 62 homes over their expected useful life. Between 2010 and 2018, the Energy Office has approved 527 tax credit applications, representing an investment by the state of \$395,250 and cost savings to homeowners of \$11,015,561 over the lifetime of the home. In addition, the ENERGY STAR® homes for which tax credits have been requested to date for 2018 will collectively save over 5.92 million pounds of carbon dioxide (CO<sub>2</sub>) over the estimated 30-year lifetime.

See Table 2 below for a summary of the ENERGY STAR® Manufactured Homes Tax Credit impact. It is important to note the data for this year's report has been calculated using data updated in the 2016 report and sourced from the DOE's Energy Information Administration, DOE, and EPA for SC energy rates; lifetime of a manufactured home; and CO<sub>2</sub> saved, respectively.

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. The discrepancy between homes sold and tax credit applications can be attributed to mobile home dealers who are unaware of the program, homebuyers who are retired and may not file state tax returns, or homebuyers who do not have sufficient tax liability to take advantage of the credit.



Data from the Systems Building Research Alliance (Alliance),<sup>2</sup> the entity which tracks ENERGY STAR® manufactured homes for the federal government, indicates that approximately 2,135 ENERGY STAR® homes were produced for sale or installation in South Carolina in 2018. The Alliance also reports that a total of 4,035 homes were shipped to the state by the end of 2018. This figure indicates that ENERGY STAR® homes shipped to South Carolina dealers represent approximately 53 percent of the market, a 1 percent increase from 2017. Only 1,185 of the 2,135 ENERGY STAR® manufactured homes produced for South Carolina dealers had been sited and certified by the end of 2018.

<sup>2</sup> Koch, Gywnne. 'Manufactured Home statistics for SC'. Email, 2019.

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

	2010	2011	2012	2013	2014	2015	2016*	2017	2018	Total to Date
Estimated total ENERGY STAR® labeled homes certified/ sited by SC retailers <sup>2</sup>	230	229	179	275	422	834	1,424	1,205	1,185	5,983
Tax credit applications	43	59	84	48	35	52	75	69	62	527
Estimated energy savings per year (MMBTU)	602	786	1,160	642	481	716	988	1,026	920	7,321
Expected cost savings per year (\$)	\$18,620	\$24,315	\$35,896	\$22,413	\$17,584	\$22,170	\$36,613	\$37,995	34,080	\$249,686
Estimated energy savings over life of homes (MMBTU)	33,089	43,209	63,790	35,315	26,462	39,399	29,650	30,769	27,598	329,281
Expected cost savings over life of homes (\$)	\$1,024,102	\$1,337,312	\$1,974,260	\$1,232,711	\$967,125	\$1,219,398	\$1,098,389	\$1,139,862	\$1,022,402	\$11,015,561
Estimated CO <sub>2</sub> savings per year (lbs)	228,618	298,538	440,727	243,994	182,829	272,215	212,162	220,173	197,485	2,296,741
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	6,364,872	6,605,193	5,924,543	110,575,279

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

\*According to ENERGY STAR®, homes earning the ENERGY STAR label use 15-30 percent less energy than typical new homes. The Energy Office used a conservative assumption of 15 percent savings to determine expected energy savings. Additionally, calculations are based on 214 lb. CO<sub>2</sub>/MMBTU (EPA 2014 eGrid data); the average statewide cost of electricity of \$0.1264/kWh (EIA March 2017 data); the estimated lifetime of a manufactured home of 30 years based on a 2016 DOE Manufactured Home Standard Technical Support Document; and EIA Table CE1.4 mobile home energy consumption per square foot.

# Conclusion

Approximately 16 percent of South Carolinians live in manufactured housing – one of the highest percentages in the nation. Customers who purchase an energy-efficient manufactured home in South Carolina may pay reduced or no sales tax. State law places a \$300 cap on sales tax on homes meeting state energy efficiency requirements and eliminates sales tax on homes meeting or exceeding ENERGY STAR® requirements.

State law also provides a \$750 nonrefundable state income tax credit for eligible homebuyers. The Energy Office approved 62 applications for the \$750 tax credit for homes in 2018. This total equates to an overall energy savings for these homebuyers of approximately \$1,022,402 over the expected life of the homes with an investment of \$46,500 by the state. To date, the Energy Office has approved 527 tax credit applications.

**2018:                    62 requests for the \$750 tax credit**

**2018 Lifetime Energy Savings**  
**\$1,022,402**

**ENERGY STAR® Manufactured Home Tax Credit  
Program Totals, 2010-2018:**

**527 tax credit applications**  
**\$395,520 in state investment**  
**\$11.01 million 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

Applicantname: \_\_\_\_\_

(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)

Applicantemail: \_\_\_\_\_

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

Applicantfax: \_\_\_\_\_

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

Applicantphone: \_\_\_\_\_

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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