

## EXECUTIVE SUMMARY

# 2013 STATE ENERGY EFFICIENCY SCORECARD

### November 2013

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Conversations about energy use in the United States often revolve around the need to support the growth of our national economy through expanding the energy supply. There is, however, a resource that is cleaner, cheaper, and quicker to deploy than building new supply—energy efficiency. Energy efficiency improvements help businesses, governments, and consumers meet their needs by using *less* energy, saving them money, driving investment across all sectors of the economy, creating much needed jobs, and reducing the myriad of environmental impacts of the energy production system.

Governors, legislators, regulators, and citizens are increasingly recognizing that energy efficiency is a crucially important state resource. In fact, a great deal of the innovation in policies and programs that promote energy efficiency originates in states. The *2013 State Energy Efficiency Scorecard* captures this activity through a comprehensive analysis of state efforts to support energy efficiency.

In this seventh edition of ACEEE's *State Energy Efficiency Scorecard*, we rank states on their policy and program efforts, and provide recommendations for ways that states can improve their energy efficiency performance in a variety of policy areas. The *State Scorecard* serves as a benchmark for state efforts on energy efficiency policies and programs each year, encouraging states to continue strengthening their efficiency commitments as a pragmatic and effective strategy for promoting economic growth, securing environmental benefits, and increasing their communities' resilience in the face of the uncertain costs and supplies of the energy resources on which they depend.

### Key Findings

- **Massachusetts** retained the top spot in the *State Energy Efficiency Scorecard* rankings for the third year in a row, having overtaken California in 2011, based on its continued commitment to energy efficiency under its Green Communities Act of 2008. Among other things, the legislation spurred greater investments in energy efficiency programs by requiring utilities to save a large and growing percentage of energy every year through efficiency measures.
- Joining Massachusetts in the top five are **California, New York, Oregon, and Connecticut**. These states continue to comprise the group of truly leading states that have made broad, long-term commitments to developing energy efficiency as a state resource. This is the first year that Connecticut has placed in the top five since 2009.
- **Rhode Island, Vermont, Washington, Maryland, and Illinois** rounded out the top tier. This is the first year that Illinois has broken into the top ten.
- This year's most improved states were **Mississippi, Maine, Kansas, Ohio, and West Virginia**. Most-improved states made large strides in both points gained and overall ranking. These five states have made strides in a variety of areas. In 2013, the Mississippi legislature passed laws setting a mandatory energy code for commercial and state-owned buildings, and began implementing enhanced lead by example programs. Efforts to ramp up utility programs to meet energy efficiency resource standard (EERS) targets resulted in dramatically increased electricity savings in Ohio (even despite significant pushback efforts). Both Kansas and West Virginia committed to improving building codes, significantly increasing their scores in that policy area. Maine's rise in the ranks is due to legislation passed in June 2013 that returned full funding to Efficiency Maine for implementation of energy efficiency programs after several years in which programs had been under-funded.

- Other states have also made recent concentrated efforts related to energy efficiency. **Arkansas, Indiana, and Pennsylvania** continued to reap the benefits of their EERS policies, which led to substantially higher electricity efficiency program spending and savings compared to what we reported in the *2012 State Energy Efficiency Scorecard*. **Connecticut** also passed a major energy bill in June 2013, calling for the benchmarking of state buildings, expanding combined heat and power (CHP) programs, and doubling funding for energy efficiency programs.
- The leading states in utility-sector energy efficiency programs and policies, which are covered in Chapter 2, were **Massachusetts, Vermont, and Rhode Island**. All three of these states have long records of success and continued to raise the bar on the delivery of cost-effective energy efficiency programs and policies.
- Annual budgets for utility-sector natural gas efficiency programs totaled \$1.3 billion nationally in 2012, an 18% increase over the previous year. Electric program budgets rose slightly to \$5.98 billion in 2012.
- Savings from electric efficiency programs in 2011 totaled approximately 22.9 million MWh, a 20% increase over the previous year. Gas savings are reported for the first time at 232.3 million therms (MMTherms).
- Twenty-six states have adopted and adequately funded an EERS, which sets long-term energy savings targets and drives investments in utility-sector energy efficiency programs. The states with the most aggressive savings targets included **Arizona, Massachusetts, New York, and Rhode Island**.
- The leading states in building energy codes and compliance—covered in Chapter 4—were **California, Washington, and Rhode Island**. During the past year, seven states adopted the latest iteration of building energy codes.
- **California and New York** led the way in energy-efficient transportation policies. California's requirements for reductions in greenhouse gas (GHG) emissions have led it to identify several strategies for smart growth, while New York is one of the few states in the nation to have a concrete vehicle miles traveled reduction target.
- Twenty states fell in the rankings this year, due to both changes in our methodology and substantive changes in their performance. **Idaho** fell the furthest, by nine spots, largely because it did not keep up with peer states in utility efficiency spending and savings. **Wisconsin** dropped six spots due to a significant drop in energy savings realized by the state's efficiency program.

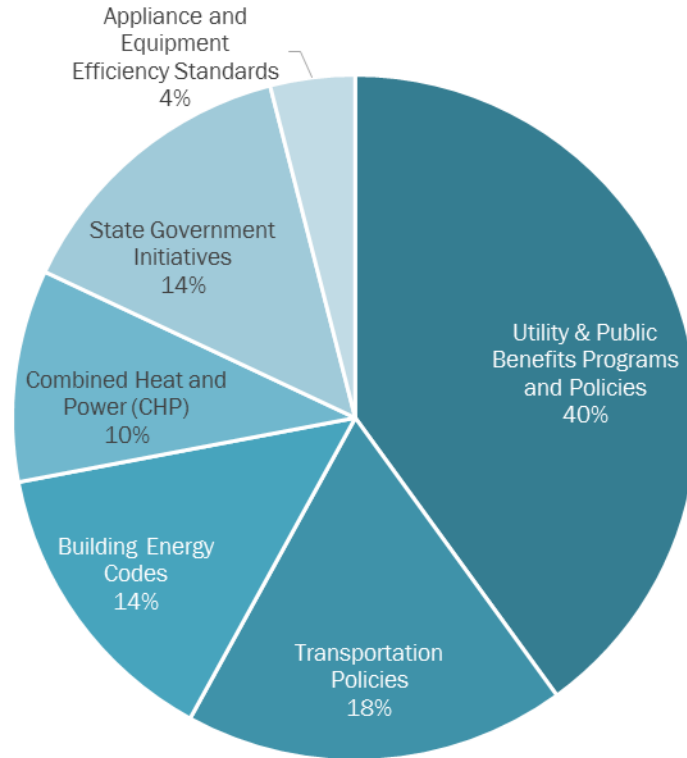
## Methodology

The *2013 State Energy Efficiency Scorecard* provides a broad assessment of policies and programs that improve energy efficiency in our homes, businesses, industries, and transportation systems. The *State Scorecard* examines the six policy areas in which states typically pursue energy efficiency: utility and “public benefits” programs and policies; transportation policies; building energy codes and compliance; CHP policies; appliance and equipment standards; and state government-led initiatives around energy efficiency. Figure ES-1 provides a percentage breakdown of the points assigned to each policy area.

The baseline year against which we assessed policy and program varies by policy area. Most scores were based on policies in place as of August 2013. In Chapter 2, Utility and Public Benefits Programs

and Policies, however, we scored states based on data from 2012 and 2011, the latest years in which data were available for our metrics.

**Figure ES-1. Percentage of Total Points by Policy Area**



We reached out to each state utility commission to review spending and savings data for the customer-funded energy efficiency programs presented in Chapter 2. In addition, state energy officials were given the opportunity to review the material in ACEEE’s State Energy Efficiency Policy Database (ACEEE 2013) and to provide updates to the information scored in Chapters 3 (Transportation), 4 (Building Codes), and 6 (State Government–Led Initiatives).

This year we updated the scoring methodology in three policy areas to better reflect potential energy savings, economic realities, and changing policy landscapes. In Chapter 2, Utility and Public Benefits Programs and Policies, we found that the median budget for both electricity and natural gas efficiency programs had risen significantly this year, and we updated our allocation of points to reflect this increase in spending. We similarly increased the stringency of our scoring for electricity savings, reflecting the rising savings targets of many states as they ramp up their efficiency programs. Notably, we also scored states on their natural gas savings this year as these programs continue to make up a larger portion of efficiency portfolios.

We have adjusted our scoring criteria for building energy codes in Chapter 4 to reflect ACEEE’s increased effort to collect data on compliance activities. As in the past, five (5) points were awarded for code stringency. This year, the remaining two (2) points were awarded for specific compliance activities, including policy drivers for compliance such as a strategic compliance plan, and performance metrics such as completion of a baseline study, presence of an active stakeholder advisory group, and utility involvement in compliance.

In Chapter 6, State Government–Led Initiatives, we included an additional category for laws requiring disclosure of buildings’ energy use. In the past, we scored disclosure laws in combination with

financial incentives for energy efficiency. To account for an increased emphasis on building energy disclosure by policymakers, we chose to score disclosure laws independently from other state-offered incentives, and reallocated points accordingly. This year, one (1) point was awarded to states with commercial and residential disclosure rules. States could receive up to two and one-half (2.5) points for customer financial incentive programs. Data on research and development at the state level are inconsistent, so we removed one-half (0.5) point from this category, awarding states with at least three research and development programs one and one-half (1.5) points.

## Results

Figure ES-2 shows states' rankings in the 2013 State Energy Efficiency Scorecard, dividing them into five tiers for ease of comparison. Table ES-1 provides details of the scores for each state. States could score a maximum of 50 points, allocated across six policy areas. An identical ranking for two or more states indicates a tie (e.g., New Jersey, Arizona, Michigan, and Iowa all rank 12<sup>th</sup>). Although we provide individual state scores and rankings, the difference between states is both easiest to understand and most instructive in tiers of roughly ten states, as the point differential between groups of states is generally much larger than between individual states.

Figure ES-2. 2013 State Scorecard/Rankings Map

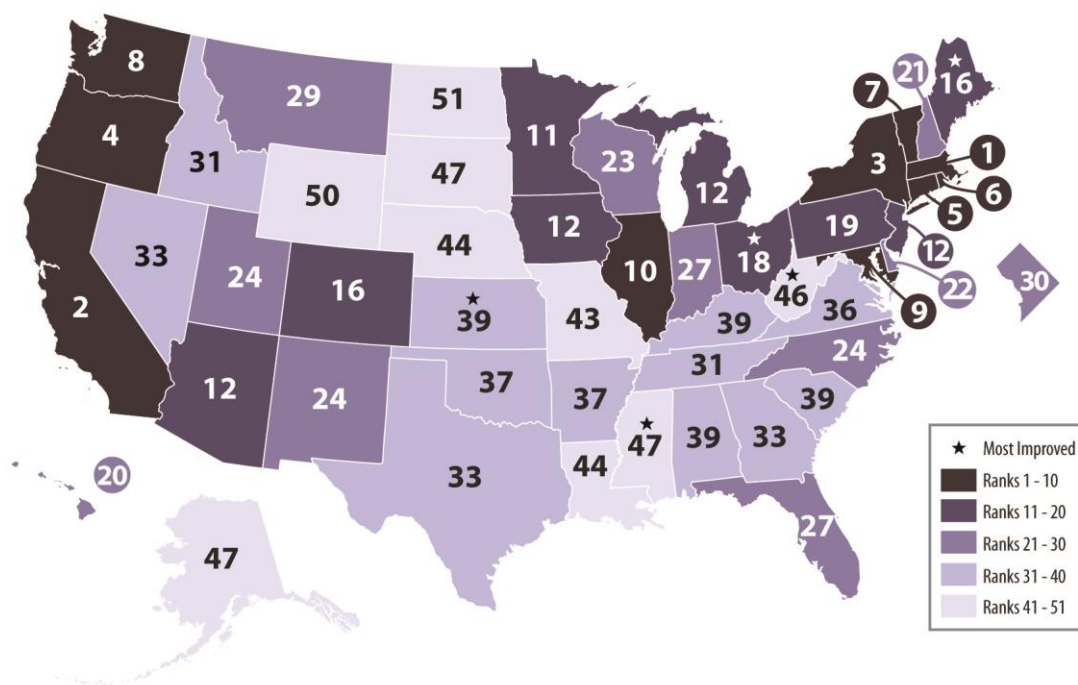


Table ES-1. Summary of States' Total Scores

Rank	State	Utility & Public Benefits Programs & Policies (20 pts.)	Transportation Policies (9 pts.)	Building Energy Codes (7 pts.)	Combined Heat & Power (5 pts.)	State Government Initiatives (7 pts.)	Appliance Efficiency Standards (2 pts.)	TOTAL SCORE (50 pts.)	Change in rank from 2012	Change in score from 2012
1	Massachusetts	19	7.5	5.5	4.5	5.5	0	42	0	-1.5
2	California	15	7.5	7	3	6.5	2	41	0	0.5
3	New York	16	8	5.5	2.5	6	0	38	0	-1
4	Oregon	14.5	7	5.5	3.5	5.5	1	37	0	-0.5
5	Connecticut	14	5.5	5.5	4	6	1	36	1	1.5
6	Rhode Island	18.5	5.5	6	2	3	0.5	35.5	1	2.5
7	Vermont	18.5	4.5	5.5	2	4	0	34.5	-2	-1
8	Washington	13	7	6	2.5	4.5	0.5	33.5	0	1.5
9	Maryland	8.5	6	5.5	2	5	0.5	27.5	0	-2.5
10	Illinois	9.5	4	5.5	2	5	0	26	4	1
11	Minnesota	15	2	3	1	4.5	0	25.5	-2	-4.5
12	New Jersey	8.5	6	4	2.5	3.5	0	24.5	4	0
12	Arizona	12	2.5	3.5	2.5	3.5	0.5	24.5	0	-1
12	Michigan	11	3	4	2	4.5	0	24.5	0	-1
12	Iowa	12	2	5.5	1.5	3.5	0	24.5	-1	-2
16	Maine	10.5	6	2.5	2	2	0	23	9	4
16	Colorado	10.5	2	4.5	1.5	4.5	0	23	-2	-2
18	Ohio	11	0	4	3.5	4	0	22.5	4	3
19	Pennsylvania	6	6	4	1.5	4.5	0	22	1	0.5
20	Hawaii	10	2.5	4	0.5	3.5	0	20.5	-2	-1.5
21	New Hampshire	8.5	1	4.5	1.5	4	0.5	20	-3	-2
22	Delaware	2.5	5.5	4.5	1.5	4.5	0	18.5	5	0
23	Wisconsin	7.5	1	3.5	2	4	0	18	-6	-4.5
24	New Mexico	7	2	4	1.5	3	0	17.5	3	-1
24	North Carolina	4.5	2.5	4	2	4.5	0	17.5	-2	-2
24	Utah	7.5	0.5	4.5	1.5	3.5	0	17.5	-3	-2.5
27	Indiana	8.5	0	3.5	1.5	2	0	15.5	6	1.5
27	Florida	2.5	4.5	4.5	1	3	0	15.5	2	-2
29	Montana	6	1	4	0.5	3.5	0	15	-4	-4
30	District of Columbia	3.5	3.5	3.5	1	2	0.5	14	-1	-3.5
31	Tennessee	2	2.5	2.5	1	5.5	0	13.5	1	-1.5
31	Idaho	5.5	0	4.5	0	3.5	0	13.5	-9	-6
33	Georgia	1.5	3	4	0.5	3.5	0.5	13	0	-1
33	Texas	2	1	4	2	3.5	0.5	13	0	-1
33	Nevada	5	0	4.5	1	2.5	0	13	-2	-3.5
36	Virginia	1	2.5	4	0.5	4.5	0	12.5	1	-0.5
37	Oklahoma	4	0.5	4	0	3.5	0	12	2	1
37	Arkansas	6	0	3.5	0.5	2	0	12	0	-1
39	Kansas	0.5	1	4	1	5	0	11.5	6	3
39	Alabama	2.5	0	4	0.5	4.5	0	11.5	1	1
39	South Carolina	3	1	4	0.5	3	0	11.5	1	1
39	Kentucky	3.5	0	3.5	0	4.5	0	11.5	-3	-2
43	Missouri	4	0	3	0.5	3	0	10.5	0	1.5
44	Louisiana	2.5	1	3.5	0.5	2	0	9.5	-1	0.5
44	Nebraska	1	0	5	0	3.5	0	9.5	-2	0
46	West Virginia	1	1.5	4	1	1.5	0	9	3	3
47	Mississippi	1	0.5	3	0	3.5	0	8	4	5.5
47	Alaska	0	1	1.5	0.5	5	0	8	-1	0
47	South Dakota	4	0	1	1	2	0	8	-1	0
50	Wyoming	2	0	2	0	1.5	0	5.5	-2	-1
51	North Dakota	0.5	1	1.5	0.5	0	0	3.5	-1	-0.5

## Strategies for Improving Energy Efficiency

**Put in place, and adequately fund, an energy efficiency resource standard or similar energy savings target.** These policies establish specific energy savings targets that utilities or independent statewide program administrators must meet through customer energy efficiency programs. They serve as an enabling framework for cost-effective investment, savings, and program activity. EERS policies can have a catalytic effect on increasing energy efficiency and its associated economic and environmental benefits.

*Examples:* Massachusetts, Arizona, Hawaii, Vermont

**Adopt updated, more stringent building energy codes, improve code compliance, and enable the involvement of efficiency program administrators in code support.** Buildings consume more than 40% of total energy in the United States, making them an essential target for energy savings. Mandatory building energy codes are one way to ensure a minimum level of energy efficiency for new residential and commercial buildings.

*Examples:* California, Rhode Island, Illinois, Mississippi

**Adopt stringent tailpipe emissions standards for cars and trucks, and set quantitative targets for reducing vehicle miles traveled.** Like buildings, transportation consumes a substantial portion of total energy in the United States. Although new federal fuel economy standards have been put in place, states will realize greater energy savings and pollution reduction if they adopt California's more stringent tailpipe emissions standards (a proxy for reducing energy use).

*Examples:* California, New York, Massachusetts, Oregon

**Treat CHP as an energy efficiency resource equivalent to other forms of energy efficiency.** Many states list CHP as an eligible technology within their EERSs or renewable portfolio (RPS) standards, but they relegate it to a bottom tier. ACEEE recommends that CHP be given equal footing, which requires the state to develop a specific methodology for counting energy savings attributed to the utilization of CHP. If CHP is allowed as an eligible resource, EERS target levels should be increased to take into account the CHP potential.

*Example:* Massachusetts

**Expand state-led efforts and make them visible.** Efforts may include putting in place sustainable funding sources for energy efficiency incentive programs; leading by example by incorporating energy efficiency into government operations; and investing in energy efficiency-related research, development, and demonstration centers. States have many opportunities to lead by example, including reducing energy use in public buildings and fleets, demonstrating the market for energy service companies that finance and deliver energy-saving projects, and funding research centers that focus on breakthroughs in energy-efficient technologies.

*Examples:* New York, Maryland, Alaska