IEI ISSUE BRIEF | NOVEMBER 2015

# Electric Utility Customer-Funded Energy Efficiency Savings, Expenditures, and Budgets (2014)

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## HIGHLIGHTS

- Electric efficiency (EE) programs saved 155 TWh in 2014 – enough to power 14.7 million U.S. homes for one year – and avoided the generation of 107 million metric tons of carbon dioxide.[1]
  - 28 TWh of the 155 TWh saved are from new programs or new participants in existing programs.
  - The remaining 127 TWh saved in 2014 are due to past program participation that continue to provide energy savings.
- U.S. customer-funded electric efficiency expenditures totaled nearly $7.3 billion in 2014, a 13 percent increase from 2013 levels.
- In 2014, seven states and the District of Columbia increased their electric efficiency program expenditures by 50 percent or more relative to 2013 – Delaware, Kentucky, Massachusetts, Michigan, Nebraska, Utah, and Virginia.
- Electric utilities are by far the largest providers of EE in the U.S., responsible for 90 percent of the total customer-funded electric efficiency expenditures nationwide.
- States with regulatory frameworks that support utilities in their efforts to pursue electric efficiency as a sustainable business tend to be leaders in electric efficiency expenditures, budgets, and savings.
- Over the past eight years, U.S. customer-funded electric efficiency budgets nearly tripled, increasing from $2.7 billion in 2007 to $7.3 billion in 2014.
- With energy efficiency resource standards established in half of all U.S. states, covering two-thirds of the nation's population, and the fact that several of these standards have scheduled increases, IEI believes that customer-funded electric efficiency budgets are highly likely to exceed $14 billion by 2025.

1. Environmental Protection Agency Greenhouse Gas Equivalencies Calculator; http://www.epa.gov/cleanenergy/energy-resources/calculator.html

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## EXECUTIVE SUMMARY

Electric utility customer-funded electric efficiency (EE) programs (i.e., both energy efficiency and demand response programs such as load control and price-responsive demand) saved 155 terawatt-hours (TWh) of electricity in 2014 up 10 percent from 140 TWh in 2013.

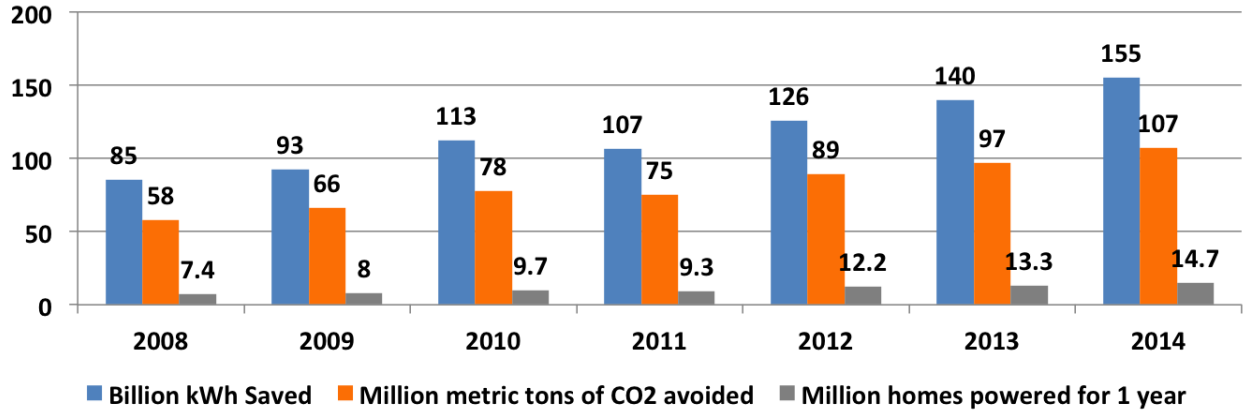
As shown in Figure 1, electric efficiency programs saved 155 TWh in 2014, enough to power 14.7 million homes for one year, and avoided the generation of 107 million metric tons of carbon dioxide.[2]

Roughly 80 percent of the 155 TWh saved are due to customer participation in prior year programs that continue to produce energy savings, with the remaining 20 percent from new participation in existing programs and new programs. This distinction is an important one when energy efficiency is used in resource planning or as a compliance mechanism to meet emission targets because such a large percentage of savings are due to existing programs continuing to produce savings year-after-year.

In 2014, expenditures on electric efficiency programs totaled about $7.3 billion, a 13 percent increase over 2013 nationwide (see Table 1). In seven states (Delaware, Kentucky, Massachusetts, Michigan, Nebraska, Utah, and Virginia) and the District of Columbia expenditures increased by 50 percent or more relative to 2013 levels. Overall, 37 states and the District of Columbia realized an increase in expenditures. Thirteen states had expenditures below 2013 levels, ranging from a four percent to a 78 percent reduction in expenditures.

Electric efficiency programs are a very cost-effective way to transform how electricity is managed and used by households, businesses, and industries across the U.S. In fact, a 2015 report from Lawrence Berkeley National Lab found that during 2009-2013 electric utility customer-funded efficiency programs delivered energy savings at a cost of roughly 2 cents per kilowatt-hour (kWh) saved over the lifetime of the investment.[3] EE programs are incredibly cost-effective!

**Figure 1: U.S. Electric Efficiency Impacts (2008-2014)**




2. Ibid.
3. The Total Cost of Saving Electricity through Utility Customer-Funded Energy Efficiency Programs: Estimates at the National, State, Sector, and Program Level. LBNL. April 2015.

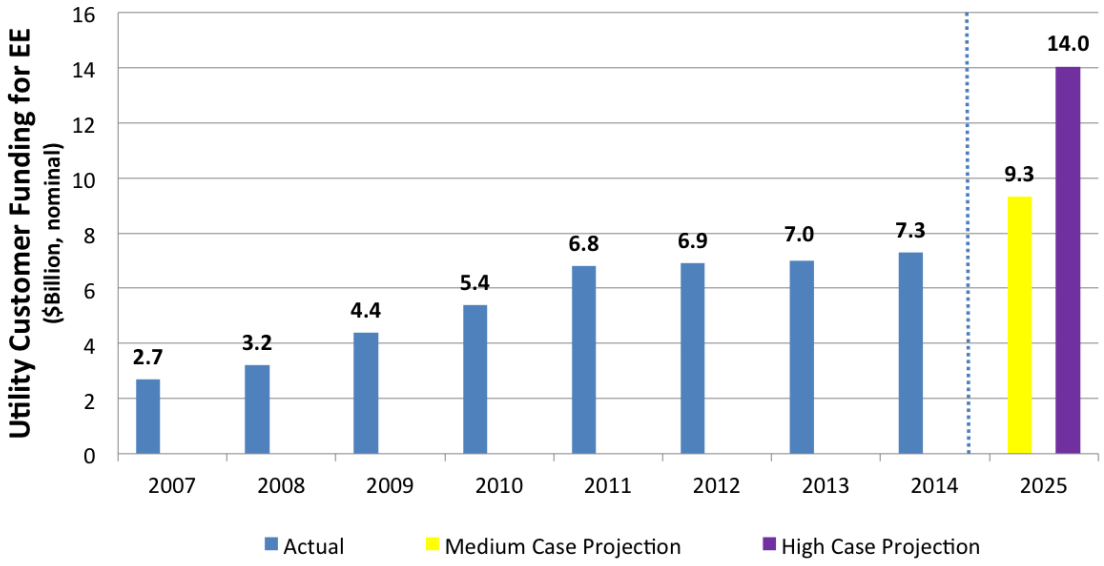
As shown in Figure 2, electric utility customer-funded EE program budgets total $7.3 billion in 2014.

This report provides IEI's best estimate of electric utility customer-funded EE savings, expenditures, and budgets in 2014. The findings in this report are based on data from the U.S. Energy Information Administration's (EIA) Form 861 Annual Electric Power Industry Report for 574 U.S. organizations – 564 electric and combined utilities and 10 non-utility energy efficiency administrators, and data collected by the Consortium for Energy Efficiency (CEE), and IEI.

**Table 1: U.S. Customer-Funded Electric Efficiency Expenditures (2008-2014)**

| | Total | Utility | Non-Utility | Utility Share of Total | Percent Increase |
|---|---|---|---|---|---|
| **2008** | **$3,395,273,063** | $3,009,521,643 | $385,751,420 | 89% | |
| **2009** | **$3,776,011,406** | $3,312,287,327 | $458,110,923 | 88% | 11% |
| **2010** | **$4,831,868,289** | $4,271,690,924 | $560,177,365 | 88% | 28% |
| **2011** | **$5,711,276,703** | $4,914,350,762 | $796,925,941 | 86% | 18% |
| **2012** | **$5,861,218,593** | $5,244,287,814 | $616,930,779 | 89% | 3% |
| **2013** | **$6,440,303,000** | $5,811,865,000 | $628,438,000 | 90% | 10% |
| **2014** | **$7,285,637,000** | $6,589,178,000 | $696,459,000 | 90% | 13% |

**Figure 2: U.S. Electric Efficiency Budgets (2007-2014) and 2025 Forecast**



## 2014 ELECTRIC EFFICIENCY SAVINGS

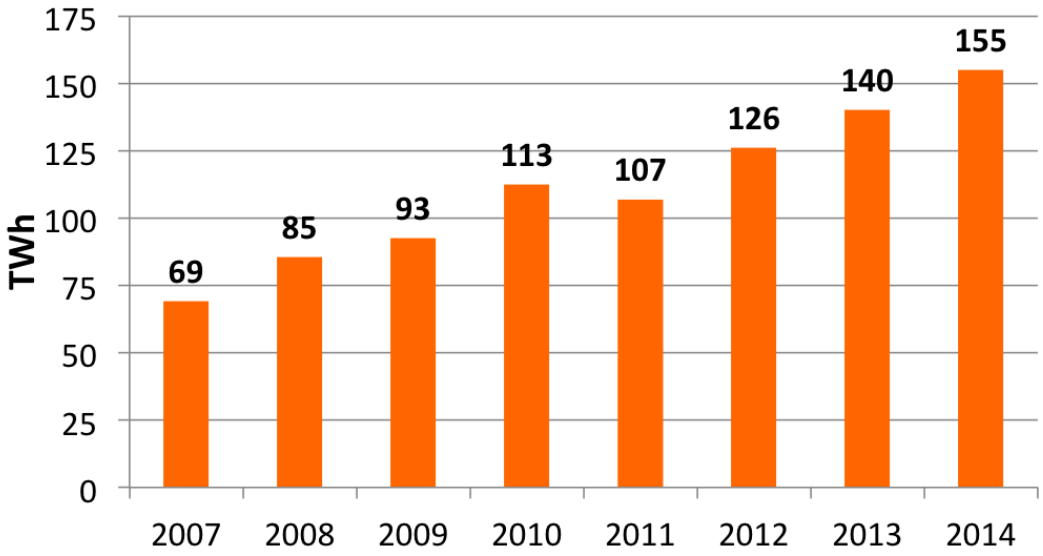
As shown in Figure 3, electric utility customer-funded electric efficiency (EE) programs (i.e., both energy efficiency and demand response programs such as load control and price-responsive demand) saved 155 TWh of electricity in 2014. Electric efficiency programs are cost-effective ways for transforming how electricity is managed and used by households, businesses, and industries across the U.S. In fact, a 2015 report from Lawrence Berkeley National Lab finds that electric utility customer-funded efficiency programs that reported results during 2009-2013 delivered energy savings at a cost of roughly 2 cents per kilowatt-hour (kWh) saved over the lifetime of the investment.[4]

Overall, electric efficiency programs saved 155 TWh in 2014, enough to power 14.7 million homes for one year, and avoided the generation of 107 million metric tons of carbon dioxide.[5]

The goal of electric efficiency programs is to produce capacity and energy savings that benefit end customers, utilities, and society as a whole. For several decades, utilities have supported their customers' interest in being energy efficient by providing incentives and information that lower the cost of purchasing energy efficient devices and encourage practices that enable sound energy management. The focus of energy efficiency programs is to reduce energy consumption while increasing energy input productivity (e.g., fewer kilowatt-hours in exchange for equal or improved output). Utilities also offer demand response (DR) programs to their customers to reduce peak energy demand when the wholesale price of electricity is relatively high or for power system reliability reasons.

In 2015, the U.S. Energy Information Administration (EIA) released customer-funded electric efficiency program savings and expenditures data for

**Figure 3: U.S. Electric Efficiency Savings (2007-2014)**




4. Ibid.
5. Environmental Protection Agency Greenhouse Gas Equivalencies Calculator; http://www.epa.gov/cleanenergy/energy-resources/calculator.html.

2014. This dataset covers 574 utility and non-utility program administrators in the U.S. – 564 electric and combined utilities and 10 non-utility energy efficiency administrators. From this dataset and past IEI survey efforts, IEI estimated 'aggregate' energy savings in 2014 based on three types of energy savings:

- Energy savings due to **past program participation** which continue to deliver measurable and verifiable savings (e.g., install of high efficiency refrigerator in 2011 saves energy in 2014).
- Energy savings due to customer **participation in new programs** (e.g., in 2014, a utility offers a brand new LED product rebate and a customer purchases and installs an LED lamp in 2014).
- Energy savings due to **new participants in an existing program** (e.g., in 2014, the same utility as in the top bullet continues to offer rebates for high efficiency refrigerators and a customer utilizes the rebate to purchase an eligible refrigerator).

Table 2 shows that customer-funded electric efficiency programs achieved over 155 TWh of aggregate energy savings in 2014 in the U.S., 15 TWh greater than in 2013. As a share of total end use electricity consumption in 2014, aggregate savings was 4.1%. The largest savings (43%) occurred in the Western Census region.

Table 3 shows that nearly 28 TWh of incremental energy savings occurred in 2014 from either (1) new programs or (2) new participants in existing programs. Savings from participation in prior program years that persist in 2014 are not counted in the incremental savings estimate. As a share of total end use electricity consumption in 2014, incremental savings was 0.7%. The largest savings (31%) occurred in the Midwest and Western regions.

**Table 2: Aggregate Electric Efficiency Savings (MWh) by U.S. Census Region (2014)**

| Region | Total | Share |
|---|---|---|
| MW | **38,094,405** | 25% |
| NE | **26,462,694** | 17% |
| S | **23,256,703** | 15% |
| W | **66,742,840** | 43% |
| **Total U.S.** | **154,556,642** | |

**Table 3: Incremental Electric Efficiency Savings (MWh) by U.S. Census Region (2014)**

| Region | Total | Share |
|---|---|---|
| MW | **8,764,939** | 31% |
| NE | **5,394,835** | 19% |
| S | **5,151,415** | 18% |
| W | **8,590,481** | 31% |
| **Total U.S.** | **27,901,670** | |

***Overall, electric efficiency programs saved 155 TWh in 2014, enough to power 14.7 million homes for one year, and avoided the generation of 107 million metric tons of carbon dioxide.***

## 2014 ELECTRIC EFFICIENCY EXPENDITURES

Electric utilities, encompassing investor-owned, municipal, cooperative and federal utilities, are the largest providers of electric efficiency in the U.S., with program related expenditures of $6.6 billion, comprising 90 percent of expenditures nationwide. Table 4 shows aggregate electric efficiency program expenditures of nearly $7.3 billion in the U.S. in 2014, a 13 percent increase over 2013.[6] IEI believes that the increase in expenditures can be partially attributed to households and businesses becoming more concerned with long-run energy costs, improved marketing and delivery of EE services to end customers, upticks in energy savings goals associated with state energy efficiency resource standards, and more states with regulatory frameworks that support utility investments in EE.

Figure 4 shows the ten states with the largest 2013 electric efficiency expenditures. These ten states account for 59 percent of U.S. electric efficiency expenditures in 2014. California leads the states with $1.4 billion in expenditures, with Massachusetts second and New York third. In 2014, Pennsylvania joined the top ten, displacing Ohio.

In 2014, seven states and the District of Columbia increased their electric efficiency program expenditures by 50 percent or more relative to 2013 – Delaware, Kentucky, Massachusetts, Michigan, Nebraska, Utah, and Virginia.

**Table 4: U.S. Customer-Funded Electric Efficiency Expenditures (2008-2014)**

| | Total | Utility | Non-Utility | Utility Share of Total | Percent Increase |
|---|---|---|---|---|---|
| **2008** | **$3,395,273,063** | $3,009,521,643 | $385,751,420 | 89% | |
| **2009** | **$3,776,011,406** | $3,312,287,327 | $458,110,923 | 88% | 11% |
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| **2013** | **$6,440,303,000** | $5,811,865,000 | $628,438,000 | 90% | 10% |
| **2014** | **$7,285,637,000** | $6,589,178,000 | $696,459,000 | 90% | 13% |

6. Program expenditures were primarily provided in calendar year format. In some instances the program administrator was unable to provide expenditures for the calendar year and program/fiscal year expenditures were used as a proxy. State of the Efficiency Program Industry: Budgets, Expenditures and Impacts 2014. Consortium for Energy Efficiency. May 2015.

To provide some sense of relative magnitude, it is important to consider spending on electric efficiency in both absolute terms and in relation to the state's share of the nation's total population and electricity consumption. Table 5 shows 2014 electric efficiency expenditures, 2014 budgets, population by state, and the state's relative share of U.S. electric efficiency expenditures, budgets, population, and electricity consumption.

Seven states – California, Connecticut, Hawaii, Maryland, Massachusetts, Minnesota, Rhode Island, Vermont – and the District of Columbia have 2014 electric efficiency expenditure shares that are at least double their share of U.S. electricity consumption. Electric efficiency programs in these states have delivered substantial cumulative energy savings, thus lowering the per-capita consumption of electricity.

***In 2014, seven states and the District of Columbia increased their electric efficiency expenditures relative to 2013 by 50 percent or more.***

**Figure 4: 2014 Electric Efficiency Expenditures–Top Ten States**

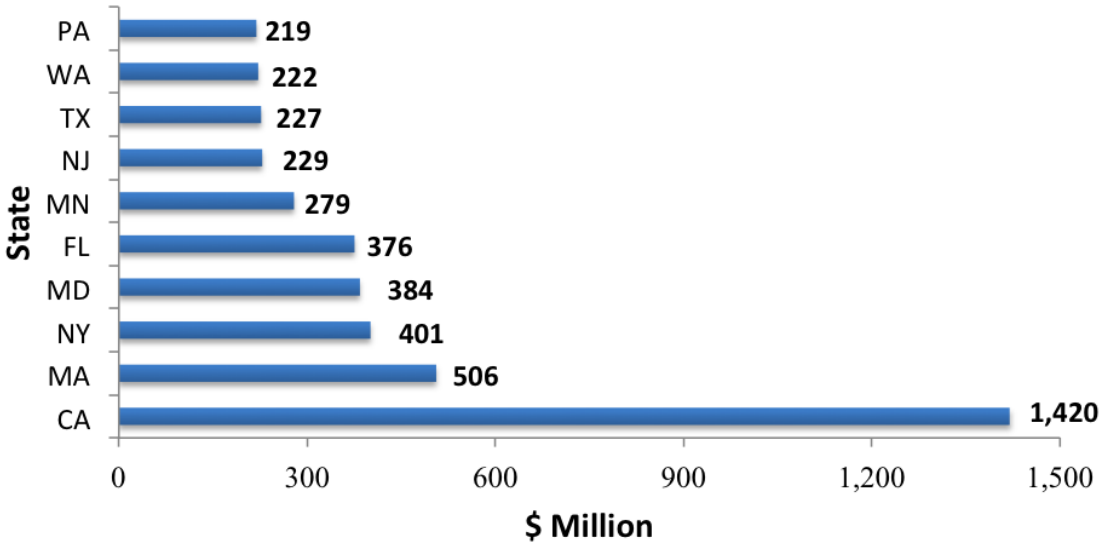


**Table 5: Summary of U.S. Customer-Funded Electric Efficiency Efforts, by State**

| State/ Region | 2014 Electric Efficiency Expenditures ($Millions) | 2014 Electric Efficiency Budgets ($Millions) | Population (2010 U.S. Census) | % of Total 2014 U.S. EE Expenditures | % of Total 2014 U.S. EE Budgets | % of U.S. Population | % of 2014 U.S. Electricity Consumption |
|---|---|---|---|---|---|---|---|
| AK | $0.1 | $0.0 | 710,231 | 0.0% | 0.0% | 0.2% | 0.2% |
| AL | $63.0 | $40.0 | 4,779,736 | 0.9% | 0.5% | 1.5% | 2.4% |
| AR | $107.7 | $70.0 | 2,915,918 | 1.5% | 1.0% | 0.9% | 1.3% |
| AZ | $126.9 | $152.9 | 6,392,017 | 1.7% | 2.1% | 2.1% | 2.0% |
| CA | $1,419.7 | $1,451.0 | 37,253,956 | 19.5% | 19.9% | 12.1% | 7.0% |
| CO | $122.8 | $96.6 | 5,029,196 | 1.7% | 1.3% | 1.6% | 1.4% |
| CT | $175.4 | $158.9 | 3,574,097 | 2.4% | 2.2% | 1.2% | 0.8% |
| DC | $44.2 | $17.6 | 897,934 | 0.6% | 0.2% | 0.3% | 0.3% |
| DE | $18.1 | $0.0 | 601,723 | 0.2% | 0.0% | 0.2% | 0.3% |
| FL | $375.6 | $544.9 | 18,801,310 | 5.2% | 7.5% | 6.1% | 6.0% |
| GA | $56.2 | $60.5 | 9,687,653 | 0.8% | 0.8% | 3.1% | 3.6% |
| HI | $42.3 | $39.7 | 1,360,301 | 0.6% | 0.5% | 0.4% | 0.3% |
| IA | $157.7 | $146.1 | 3,046,355 | 2.2% | 2.0% | 1.0% | 1.3% |
| ID | $47.3 | $39.2 | 1,567,582 | 0.6% | 0.5% | 0.5% | 0.6% |
| IL | $194.9 | $223.0 | 12,830,632 | 2.7% | 3.1% | 4.2% | 3.8% |
| IN | $130.3 | $174.8 | 6,483,802 | 1.8% | 2.4% | 2.1% | 2.8% |
| KS | $9.0 | $1.5 | 2,853,118 | 0.1% | 0.0% | 0.9% | 1.1% |
| KY | $68.2 | $60.9 | 4,339,367 | 0.9% | 0.8% | 1.4% | 2.1% |
| LA | $4.6 | $5.1 | 4,533,372 | 0.1% | 0.1% | 1.5% | 2.4% |
| MA | $505.8 | $509.2 | 6,547,629 | 6.9% | 7.0% | 2.1% | 1.4% |
| MD | $384.2 | $275.3 | 5,773,552 | 5.3% | 3.8% | 1.9% | 1.6% |
| ME | $20.9 | $22.7 | 1,328,361 | 0.3% | 0.3% | 0.4% | 0.3% |
| MI | $183.6 | $162.0 | 9,883,640 | 2.5% | 2.2% | 3.2% | 2.7% |
| MN | $279.1 | $131.9 | 5,303,925 | 3.8% | 1.8% | 1.7% | 1.8% |
| MO | $72.5 | $58.2 | 5,988,927 | 1.0% | 0.8% | 1.9% | 2.2% |
| MS | $37.3 | $7.2 | 2,967,297 | 0.5% | 0.1% | 1.0% | 1.3% |

**Table 5: Summary of U.S. Customer-Funded Electric Efficiency Efforts, by State**

| State/ Region | 2014 Electric Efficiency Expenditures ($Millions) | 2014 Electric Efficiency Budgets ($Millions) | Population (2010 U.S. Census) | % of Total 2014 U.S. EE Expenditures | % of Total 2014 U.S. EE Budgets | % of U.S. Population | % of 2014 U.S. Electricity Consumption |
|---|---|---|---|---|---|---|---|
| **MT** | $12.6 | $0.3 | 989,415 | 0.2% | 0.0% | 0.3% | 0.4% |
| **NC** | $159.1 | $131.9 | 9,535,483 | 2.2% | 1.8% | 3.1% | 3.5% |
| **ND** | $24.0 | $0.7 | 672,591 | 0.3% | 0.0% | 0.2% | 0.5% |
| **NE** | $28.0 | $5.2 | 1,826,341 | 0.4% | 0.1% | 0.6% | 0.8% |
| **NH** | $26.0 | $18.9 | 1,316,470 | 0.4% | 0.3% | 0.4% | 0.3% |
| **NJ** | $228.5 | $269.0 | 8,791,894 | 3.1% | 3.7% | 2.8% | 2.0% |
| **NM** | $33.7 | $43.1 | 2,059,179 | 0.5% | 0.6% | 0.7% | 0.6% |
| **NV** | $48.0 | $61.2 | 2,700,551 | 0.7% | 0.8% | 0.9% | 0.9% |
| **NY** | $401.1 | $729.5 | 19,378,102 | 5.5% | 10.0% | 6.3% | 3.9% |
| **OH** | $217.5 | $138.2 | 11,536,504 | 3.0% | 1.9% | 3.7% | 4.0% |
| **OK** | $67.2 | $76.9 | 3,751,351 | 0.9% | 1.1% | 1.2% | 1.6% |
| **OR** | $131.2 | $126.4 | 3,831,074 | 1.8% | 1.7% | 1.2% | 1.3% |
| **PA** | $219.2 | $259.4 | 12,702,379 | 3.0% | 3.6% | 4.1% | 3.9% |
| **RI** | $81.1 | $81.6 | 1,052,567 | 1.1% | 1.1% | 0.3% | 0.2% |
| **SC** | $116.2 | $36.6 | 4,625,364 | 1.6% | 0.5% | 1.5% | 2.2% |
| **SD** | $8.9 | $1.9 | 814,180 | 0.1% | 0.0% | 0.3% | 0.3% |
| **TN** | $89.8 | $64.4 | 6,346,105 | 1.2% | 0.9% | 2.1% | 2.7% |
| **TX** | $226.7 | $231.8 | 25,145,561 | 3.1% | 3.2% | 8.1% | 10.4% |
| **UT** | $81.7 | $65.8 | 2,763,885 | 1.1% | 0.9% | 0.9% | 0.8% |
| **VA** | $44.8 | $0.9 | 8,001,024 | 0.6% | 0.0% | 2.6% | 3.0% |
| **VT** | $43.2 | $43.7 | 625,741 | 0.6% | 0.6% | 0.2% | 0.1% |
| **WA** | $222.1 | $211.5 | 6,724,540 | 3.0% | 2.9% | 2.2% | 2.4% |
| **WI** | $111.3 | $75.9 | 5,686,986 | 1.5% | 1.0% | 1.8% | 1.8% |
| **WV** | $10.9 | $12.1 | 1,852,994 | 0.1% | 0.2% | 0.6% | 0.9% |
| **WY** | $5.4 | $4.9 | 563,626 | 0.1% | 0.1% | 0.2% | 0.5% |
| **Total** | **$7,285.6** | **$7,284.1** | **308,745,538** | | | | |

Notes: 2014 Total budget includes Bonneville Power Authority and Northwest Energy Efficiency Alliance program efforts in ID, MT, OR, & WA. Other efforts in those states are reported separately by state.

## 2014 ELECTRIC EFFICIENCY BUDGETS

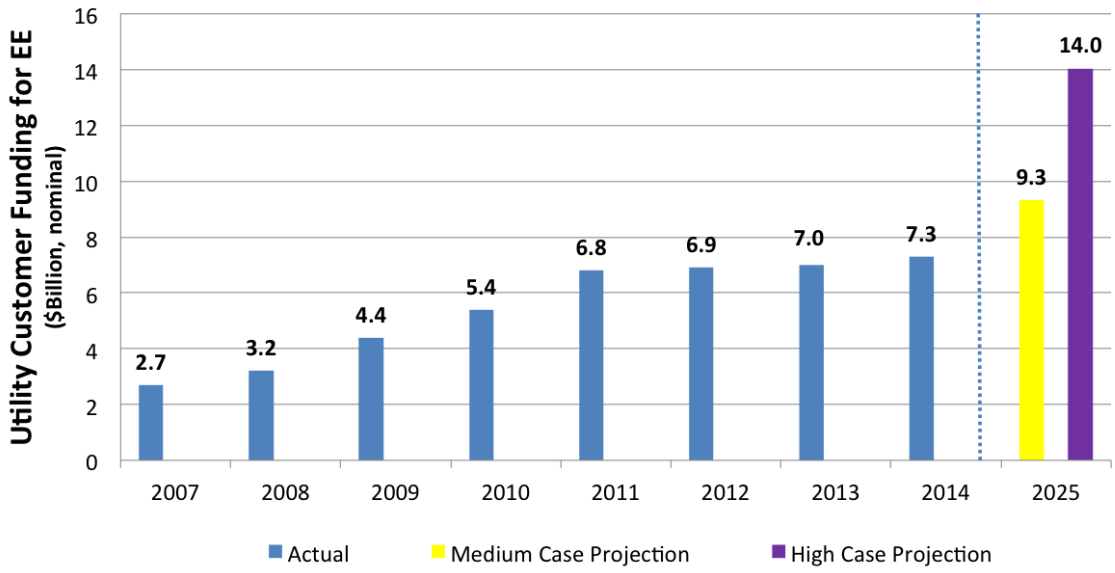
Over the past eight years, U.S. customer-funded electric efficiency budgets nearly tripled, increasing from $2.7 billion in 2007 to $7.3 billion in 2014. As shown in Figure 5, U.S. customer-funded electric efficiency budgets totaled $7.3 billion in 2014 – including energy efficiency; load management/demand response; and evaluation, measurement, and verification.[7] The rapid rate of growth is a result of more state regulatory policies supporting customer-funded energy efficiency programs as well as state energy efficiency goals and targets which tend to increase over time.

A 2013 report by Lawrence Berkeley National Laboratory (LBNL) forecasted $12.2 billion in customer-funded energy efficiency by 2025 under its "high case" scenario and $8.1 billion under its "medium case" scenario.[8] The LBNL report does not include load management programs, while this report does. For consistency, this report makes a simple calculation, based on 2014 budget information, where DR programs account for 15 percent of budgets, that produces a projection of $14 billion budgeted for electric efficiency in 2025 for the "high case" and $9.3 billion for the "medium case."

We believe that with energy efficiency resource standards in half of all U.S. states and more states with regulatory frameworks that support utility investments in EE, budgets are likely to exceed $14 billion by 2025.

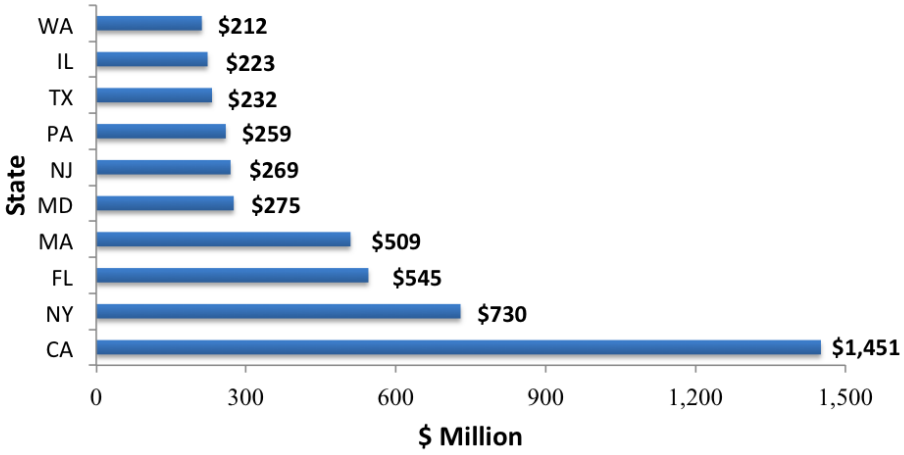
Figure 6 presents the ten states with the largest 2014 electric efficiency budgets. These ten states account for 65 percent of U.S. electric efficiency budgets in 2014. As with expenditures, California, New York, and Florida have the highest EE budgets.

**Figure 5: U.S. Electric Efficiency Budgets (2007-2014) and 2025 Forecast**




7. State of the Efficiency Program Industry: Budgets, Expenditures and Impacts 2014. Consortium for Energy Efficiency. May 2015.
8. The Future of Utility Customer-Funded Energy Efficiency Programs in the United States: Projected Spending and Savings to 2025. LBNL – 5803E. January 2013.

**Figure 6: 2014 Electric Efficiency Budgets – Top Ten States**




## ENERGY EFFICIENCY REGULATORY FRAMEWORK

The regulatory environment in each state is a major factor in determining the size of customer-funded energy efficiency programs. Over the past several years, state regulatory frameworks have changed significantly in support of energy efficiency programs. As shown in Table 6, 33 states allow for some type of fixed cost recovery (either decoupling or a lost revenue adjustment mechanism) and 29 states have performance incentives.[9] In addition, 24 states have enacted long-term (3+ years) energy efficiency savings targets known as Energy Efficiency Resource Standards (EERS).[10] Table 7 presents state regulatory mechanisms and EERS information ordered by budget.

***States with regulatory frameworks that support utilities in their efforts to pursue electric efficiency as a sustainable business tend to be the leaders in annual electric efficiency expenditures, budgets, and savings.***

**Table 6: Summary of U.S. State Regulatory Frameworks (December 2014)**

| Energy Efficiency Incentive Mechanisms | | Number of States | Pending |
|---|---|---|---|
| **Fixed-Cost Recovery Mechanisms** | Lost Revenue Recovery | 19 | 0 |
| | Revenue Decoupling | 14 | 1 |
| **Performance Incentives** | | 29 | 2 |

9. State Electric Efficiency Regulatory Frameworks. IEI. December 2014.
10. State Energy Efficiency Resource Standards (EERS). ACEEE. April 2015.

## CONCLUSION

In light of EPA's proposed Clean Power Plan to reduce carbon emissions from the power sector, the role of demand-side resources continues to expand in the nation's power mix. Electric utilities are well positioned to ensure that electric efficiency continues to grow as a smart business solution that delivers broad-based benefits to customers and to utilities. IEI believes that EE budgets, expenditures, and savings will continue to grow over the next decade, and that budgets will exceed $14 billion by 2025, up from $7.3 billion in 2014.

While 2014 was a banner year in terms of energy savings, expenditures, and budgets, challenges persist. Recent legislative efforts to either repeal or freeze energy efficiency resource standards create market uncertainty for customers that rely on electric efficiency programs to help manage energy costs. Low natural gas prices and the growth of distributed energy resources like rooftop solar impose new market dynamics and challenge the ability of regulators and program administrators to develop and deliver electric efficiency programs under current planning paradigms and cost-effectiveness tests.

Historically a product of public policy with varying levels of participation, electric efficiency programs are now viewed by the electric power sector as an essential element in an ever expanding set of service offerings – high efficiency lighting, smart thermostats, dynamic rates, renewable power options, storage, and more – meant to keep up with and stay connected to the expectations of electric customers that live in an on-demand, service centric world. For customers, this is the beginning of a new era of choice and control over their energy supply and use that's unlike anything seen before.

Increasingly, customers are gaining access to technology that gives them the ability to tailor energy use to their personal needs and wants.

The key issue facing not just electric efficiency program administrators but the industry as a whole is whether utilities, technology companies, and regulators can collaborate to help customers take advantage of new service offerings and unlock value in those service offerings. Utilities can be instrumental in not just closing the energy efficiency investment gap, but in providing energy services customers want through expanded service offerings. The regulatory frameworks that have supported utility investments in electric efficiency programs and have served customers well are a foundation to the next iteration of electric utility regulation.

***Electric efficiency programs are now viewed by the electric power sector as an essential element in an ever expanding set of service offerings – high efficiency lighting, smart thermostats, dynamic rates, renewable power options, storage, and more.***

**Table 7: Regulatory Framework and 2014 Electric Efficiency Budgets (Sorted by Budget)**

| Rank | State/Region | 2014 Electric Efficiency Budgets ($Millions) | Fixed Cost Recovery | | Performance Incentives | Energy Efficiency Resource Standard |
|---|---|---|---|---|---|---|
| | | | Decoupling | Lost Revenue Mechanism | | |
| 1 | CA | $1,451.0 | Yes | | Yes | Yes |
| 2 | NY | $729.5 | Yes | | Yes | Yes |
| 3 | FL | $544.9 | | | | |
| 4 | MA | $509.2 | Yes | | Yes | Yes |
| 5 | MD | $275.3 | Yes | | | Yes |
| 6 | NJ | $269.0 | | | | |
| 7 | PA | $259.4 | | | | Yes |
| 8 | TX | $231.8 | | | Yes | Yes |
| 9 | IL | $223.0 | | | | Yes |
| 10 | WA | $211.5 | Yes | | | Yes |
| 11 | IN | $174.8 | | Yes | Yes | |
| 12 | MI | $162.0 | | | Yes | Yes |
| 13 | CT | $158.9 | Yes | Yes | Yes | Yes |
| 14 | AZ | $152.9 | | Yes | Yes | Yes |
| 15 | IA | $146.1 | | | | Yes |
| 16 | OH | $138.2 | Yes | Yes | Yes | |
| 17 | MN | $131.9 | | | Yes | Yes |
| 18 | NC | $131.9 | | Yes | Yes | Yes |
| 19 | OR | $126.4 | Yes | | | Yes |
| 20 | CO | $96.6 | | Yes | Yes | Yes |
| 21 | RI | $81.6 | Yes | | Yes | Yes |
| 22 | OK | $76.9 | | Yes | Yes | |
| 23 | WI | $75.9 | Yes | | Yes | Yes |
| 24 | AR | $70.0 | | Yes | Yes | Yes |
| 25 | UT | $65.8 | | | | Voluntary |
| 26 | TN | $64.4 | | | | |

**Table 7: Regulatory Framework and 2014 Electric Efficiency Budgets (Sorted by Budget)**

| Rank | State/Region | 2014 Electric Efficiency Budgets ($Millions) | Fixed Cost Recovery | | Performance Incentives | Energy Efficiency Resource Standard |
|---|---|---|---|---|---|---|
| | | | Decoupling | Lost Revenue Mechanism | | |
| 27 | NV | $61.2 | | Yes | | Yes |
| 28 | KY | $60.9 | | Yes | Yes | |
| 29 | GA | $60.5 | | | Yes | |
| 30 | MO | $58.2 | | Yes | Yes | Voluntary |
| 31 | VT | $43.7 | Yes | | Yes | Yes |
| 32 | NM | $43.1 | | Yes | Yes | Yes |
| 33 | AL | $40.0 | | Yes | Yes | |
| 34 | HI | $39.7 | Yes | | Yes | Yes |
| 35 | ID | $39.2 | Yes | | | |
| 36 | SC | $36.6 | | Yes | Yes | |
| 37 | ME | $22.7 | | | | Yes |
| 38 | NH | $18.9 | | | Yes | |
| 39 | DC | $17.6 | Yes | | Yes | |
| 40 | WV | $12.1 | | | Pending | |
| 41 | MS | $7.2 | | Pending | Pending | |
| 42 | NE | $5.2 | | | | |
| 43 | LA | $5.1 | | Yes | Yes | |
| 44 | WY | $4.9 | | Yes | | |
| 45 | SD | $1.9 | | Yes | Yes | |
| 46 | KS | $1.5 | | Yes | | |
| 47 | VA | $0.9 | | | | Voluntary |
| 48 | ND | $0.7 | | | | |
| 49 | MT | $0.3 | | Yes | Pending | |
| 50 | AK | $0.0 | | | | |
| 51 | DE | $0.0 | Pending | | | Voluntary |

## APPENDIX
## METHODOLOGY

Note that there is diversity in how utilities estimate and report EE savings, largely influenced by filing requirements of their respective regulatory bodies.[11]

- Not all utilities maintain EE 'aggregate' or 'annual' program results. In fact, in 2015 EIA and CEE limited the scope of their survey efforts to track and publish only 'incremental' and 'lifecycle' impacts. Incremental savings only capture the impacts of new programs and new participants in existing programs for a one year period (e.g., 2014). Lifecycle savings extend incremental savings over the anticipated useful life of the portfolio of program measures.
- Utilities may report energy impacts in "net" or "gross" terms. Gross savings are defined as the total change in energy consumption that results from program-promoted actions taken by program participants regardless of the extent or nature of program influence on their actions. Net savings are defined as the change in energy consumption attributable only to the EE program efforts, separating out exogenous influences on energy consumption, such as consumer self-interest, program free riders, and program spillover. This report primarily includes gross energy savings.

To account for differences across the collected information, IEI employs a simple methodology to develop an aggregate estimate of energy savings in 2014. First, a basic decay rate is applied to 2013 aggregate energy savings by major census region to approximate the effect of past program measures reaching the end of their useful life. Second, 2014 incremental savings by region are added.

- 2014 aggregate energy savings *equals* 2013 aggregate energy savings by region, *less* the product of the decay rate, *plus* 2014 incremental savings.

The ratio of 1 over the weighted average life of the 2014 portfolio of measures serves as a proxy decay rate. IEI calculates a weighted average life by Census Region ranging from 9.9 to 10.8 years. Based on this information, roughly one-tenth of the 2013 aggregate energy savings (13 TWh of 140 TWh) was estimated to expire. In other words, we assume the useful life of past measures is similar to recent measures.

## DATA, LIMITATIONS, AND INTERPRETATIONS

Due to changes in the type of information collected by CEE and EIA this report uses new estimation techniques and available data sources to arrive at 2014 program expenditures, 2014 program impacts, and 2014 budgets. Information on program expenditures, impacts, and budgets are in calendar year format.

All results were voluntarily provided and the total reported figures should be considered conservative. Where using CEE data, the analysis is IEI's alone.

We encourage participation from all program administrators, their staff, and the respective state commissions. We kindly request that comments or questions regarding the findings contained in this report be sent to Adam Cooper, Director, Research and Strategic Alliances at the Institute for Electric Innovation, acooper@edisonfoundation.net.

11. For additional details on the diversity in how states report energy savings, see "Examining the Net Savings Issue: A National Survey of State Policies and Practices in the Evaluation of Ratepayer-Funded Energy Efficiency Programs". ACEEE. January 2014.

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