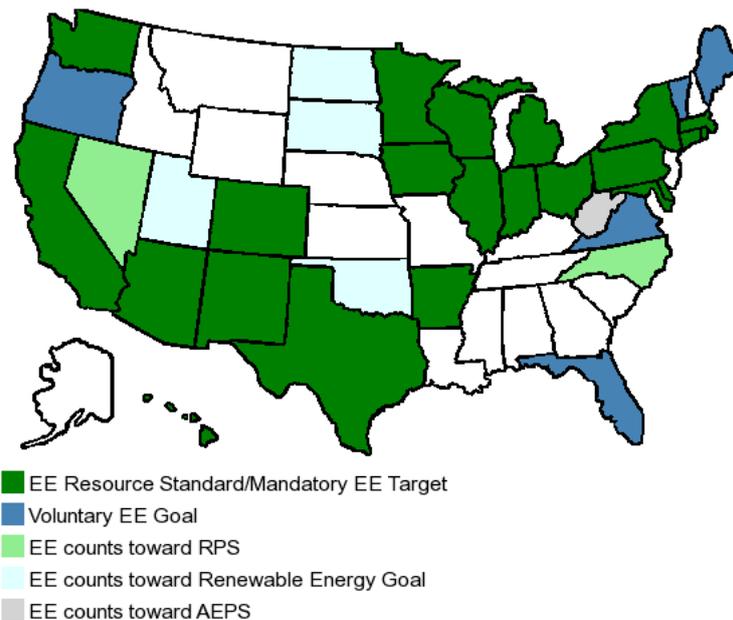


Energy Efficiency Standards and Targets



An Energy Efficiency Resource Standard (EERS) or energy efficiency target is a mechanism to encourage more efficient generation, transmission, and use of electricity. An EERS is similar in concept to a Renewable Portfolio Standard (RPS) or Alternative Energy Portfolio Standard (AEPS), in that an EERS requires utilities to reduce energy use by a specified and increasing percentage or amount each year. There are a variety of ways an EERS policy can be implemented. Some states have a separate EERS and RPS, while other states combine the mechanisms by allowing energy efficiency to meet part or all of an RPS. Efficiency reduction requirements or targets may also be established by state public utility commissions. In some states, public utility commissions determine savings requirements through a collaborative process with utilities. Electricity savings requirements for utilities may include flexibility to achieve the standard through a market-based trading system of energy savings certificates. All EERS include end-use energy savings. In some cases, distribution system efficiency improvements, combined heat and power (CHP) systems and other high-efficiency distributed generation systems are also included. Penalties for non-compliance vary by state.

Arizona

On August 10, 2010, the Arizona Corporation Commission adopted Article 24, "Electric Energy Efficiency Standards" in Title 14, Chapter 2 of the Arizona Administrative Code. The article requires utilities to achieve cumulative annual energy savings equivalent to 22 percent of its retail electric energy sales (measured in kilowatt hours, kWh) from the previous year by December 31, 2020. For calendar years prior to 2020, individual annual targets for cumulative energy savings are specified as follows:

2011	1.25%
2012	3.00%
2013	5.00%
2014	7.25%
2015	9.50%
2016	12.00%
2017	14.50%
2018	17.00%
2019	19.50%
2020	22.00%

Utilities can meet savings requirements through demand side management incentives, peak demand reductions, building codes, combined heat and power, self-direction, and old demand side management programs that achieved energy savings between 2004 and 2011.

Arizona Administrative Code - Title 14, Chapter 2, Article 24

Arkansas

In December 2010, the Arkansas Public Service Commission (APSC) announced annual incremental energy savings targets for electric utilities. These targets were released through the APSC Sustainable Energy Resources (SER) Action Guide, and the Commission issued orders that provide guidance for individual utilities. The schedule for incremental annual energy savings are based on 2010 sales in terms of megawatt hours (MWh) and specified as follows:

2011 0.25 percent
2012 0.50 percent
2013 0.75 percent

Major utilities must submit annual energy efficiency program filings, which must be reviewed and approved by the APSC.

California

The California Public Utilities Commission (CPUC) established formal energy savings targets for the state's investor-owned utilities in September 2004. Decision 04-06-09 set savings targets from 2004 through 2013. In 2013, the savings targets are 23 billion kilowatt-hours (kWh) with peak demand reductions of 4.9 million kilowatts (kW).

In September 2009, the CPUC released a 2010-2012 Plan with revised savings targets because utilities outperformed earlier targets. The new targets reflect an updated assessment of energy savings potential available to utilities and call for nearly 1,500 Megawatts (MW) of peak savings and 7,000 gigawatt-hours (GWh) of electricity savings over the three-year period.

CPUC Press Release

Colorado

HB 07-1037, signed by Governor Bill Ritter on May 22, 2007, requires the Colorado Public Utilities Commission (CPUC) to establish energy savings targets for retail electric utilities. The bill calls on the CPUC to provide financial incentives for utilities that implement cost-effective energy-saving programs, but there are no penalties for non-compliance.

Plans were recently approved for Xcel Energy and Black Hills, which have 2009 target reductions of 0.53 percent of electricity sales and cumulative reductions of 11.5 percent of energy sales by 2020.

Colorado's Renewable Portfolio Standard allows recycled energy projects, including some combined heat and power plants (CHP) to count toward renewable energy targets.

Connecticut

In June 2005, Connecticut expanded its renewable portfolio standard (RPS) to include new Class III requirements that cover energy efficiency and combined heat and power plants (CHP). Under the new Class III requirements, electricity suppliers must meet 1% of their demand through efficiency and CHP by 2007, 2% by 2008, 3% by 2009, and 4% by 2010. After 2010, electricity suppliers must meet 4% of their demand through efficiency and CHP in all years. Distribution utilities and other power distributors are required to meet these targets, and third-party providers can also earn savings certificates and sell these to utilities with Class III obligations. Electric providers that fail to meet efficiency requirements during an annual period must pay \$0.55 per kWh to the state Department of Public Utility Control (DPUC).

On June 4, 2007 Governor M. Jodi Rell signed HB 7432, the Electricity and Energy Efficiency Act, which strengthened these requirements through complementary policies. HB 7432 also added energy savings from waste heat recovery as a Class III source under the state's RPS.

Delaware

On July 29, 2009, Governor Jack Markell signed SB 106. SB 106 established an Energy Efficiency Resource Standard (EERS) and set consumption and peak demand savings targets for electric utilities. The targets are 15% consumption and peak demand savings for electric utilities and 10% consumption savings for natural gas utilities by 2015. Energy providers are required to report savings to the State Energy Coordinator on an annual basis. If energy providers fail to demonstrate compliance with the 2015 goal then the State Energy Office will assess a penalty equal to the amount it determines is necessary for the Sustainable Energy Utility to meet 150% of the unrealized energy savings. The legislation also calls for an eleven member Workgroup of representatives of affected interests to assist in developing the regulations necessary to administer the program and monitor its success. This Workgroup will be chaired by the State Energy Coordinator and is due to release a study of its findings no later than December 31, 2010.

SB 106 also requires utilities to consider energy efficiency before obtaining new supply-side resources.

Florida

Originally passed in 1980, the Florida Energy Efficiency and Conservation Act (FEECA) emphasized reducing the growth rates of peak demand and controlling the growth of energy consumption. FEECA authorizes Florida's Public Service Commission to set appropriate energy goals for its utilities. Utilities have been required to submit demand-side management (DSM) plans in recent years. The overall objective of the DSM goals is to reduce summer and winter peak demand, as well as annual electricity use from 2010 to 2019 to levels approved by the Commission. The Commission's cumulative goals for all utilities to use conservation to meet:

Summer Peak Demand Goal: 3,023 megawatts

Winter Peak Demand Goal: 1,937 megawatts

Annual Energy Goal: 7,843 gigawatt hours

Activities Pursuant to the Florida Energy Efficiency and Conservation Act - 2011

Florida Statutes Section 366.82

Hawaii

Hawaii's Renewable Portfolio Standard (RPS), which was significantly expanded by legislation in 2009, lists efficiency technologies including CHP as eligible sources for "renewable electrical energy." The RPS requires a 10% reduction in net electricity sales by the end of 2010, 15% by 2020, and 40% by 2030. The state Public Utilities Commission may assess penalties against a utility for failing to meet these goals, unless the failure is beyond the reasonable control of the utility.

HB 1464, signed by Governor Linda Lingle in 2009, establishes a separate energy efficiency portfolio standard (EEPS) for electric utilities designed to achieve energy savings of 4,300 gigawatt hours (GWh) by the year 2030. The Public Utilities Commission must establish interim standards for 2015, 2020, and 2025 and may adjust the 2030 standard to maximize cost-effective energy efficiency programs and technologies. After 2015, electric energy savings brought about by renewable displacement or offset technologies, which are eligible sources under the RPS, will no longer count toward the RPS and instead will fulfill EEPS requirements. The Commission may establish incentives and penalties based on performance in achieving the EEPS by rule or order.

Illinois

Signed into law on August 28, 2007, SB 1592 requires utilities to implement cost-effective energy efficiency programs to meet escalating savings targets that reach 2% of energy delivered in 2015. The measure also requires a reduction in peak demand of 0.1% each year from 2008 to 2018. Requirements can be modified if implementation costs more than 2% of total utility revenues per year. Utilities can face fines up to \$665,000, or \$335,000 for small utilities, if they fail to meet these standards. Additionally, if a utility fails to meet savings requirements over any three-year period, the Illinois Power Agency will take over the responsibility of administering energy efficiency programs.

Indiana

On December 9, 2009, the Indiana Utility Regulatory Commission issued Cause No. 42693, establishing an energy efficiency standard for electricity. Electric utilities are required to use demand-side management (DSM) programs to achieve an annual energy savings goal of 2% within ten years. Annual electric savings goals are specified below and are applied to the average of electricity sales over the prior three years:

2010	0.3%
2011	0.5%
2012	0.7%
2013	0.9%
2014	1.1%
2015	1.3%
2016	1.5%
2017	1.7%
2018	1.9%
2019	2.0%

DSM programs can include home energy audits, low-income weatherization programs, residential lighting programs, energy efficiency schools programs, and commercial and industrial efficiency programs.

Press Release

Iowa

On May 6, 2008, SB 2386 was signed into law, requiring consumer-owned electric utilities to establish both energy efficiency targets and a plan to achieve these targets. Subsequently, the Iowa Utilities Board (IUB) issued an order in 2008 asking the state's Investor Owned Utilities (IOU) to establish plans that achieve an annual 1.5% improvement in demand-side energy efficiency.

The IUB issued a report to the General Assembly in January 2009 estimating that savings from the three investor-owned utilities in Iowa, including Interstate Power and Light Company and Black Hills Corporation (formerly Aquila), would reach 1.4% of retail electric sales by 2013. The IUB most recently approved MidAmerican Energy Company's Energy Efficiency Plan for 1.5% electricity savings by 2010. Although not specified in the legislation, once the Board approves a utility plan, the targets are binding.

Maine

On June 12, 2009, the Maine legislature passed the Act Regarding Maine's Energy Future, establishing the Efficiency Maine Trust. Efficiency targets established by the Act included:

- Weatherizing 100% of residences and 50% of businesses by 2030
- Reducing peak-load electric energy consumption by 100 megawatts by 2030
- Reducing the state's consumption of liquid fossil fuels by at least 30% by 2030
- Achieve electricity and natural gas savings of at least 30% and heat fuel savings of at least 20% by 2020

In April 2010, the Efficiency Maine Trust released its first

Maryland

On April 24, 2008, Governor Martin O'Malley signed SB 205 into law setting a statewide target of reducing per capita electricity consumption and peak energy demand by 15% by 2015 based on 2007 electricity consumption. The legislation specifies that the Public Service Commission shall adopt regulations or issue orders that each company must provide cost-effective energy efficiency and conservation programs to achieve at least 10% of the savings by 2015. Electric companies should submit plans to the Commission regarding their savings intentions and in turn the Commission will submit reports to the Governor and the General Assembly. The Maryland Energy Administration (MEA) is responsible for the remaining 5%.

Massachusetts

The Green Communities Act enacted in 2008 directs utilities to invest in energy efficiency measures to meet increased electricity demand whenever doing so is more cost-effective than buying new power or constructing additional power plants.

On January 28, 2010, the Massachusetts Department of Public Utilities approved the three-year plans submitted by individual utilities to achieve the state-wide electricity savings target of 2,625,083 megawatt hours (MWh) between 2010 and 2012 (Order on Electric Three-Year Energy Efficiency Plans, 2010-2012 (D.P.U. 09-116 through D.P.U. 09-120)).

The Green Communities Act also contains an Alternative Energy Portfolio Standard that requires 5% of the state's electric load to be met with alternative energy, which includes combined heat and power (CHP), by 2020.

Michigan

The Clean, Renewable, and Efficient Energy Act (SB 213) became law in September 2008 and establishes an Energy Efficiency Resource Standard (EERS), which mandates energy savings in increments over several years. By 2011, electricity providers must save 0.75% of prior-year sales. The standard will increase in 2012 and 2013 to 1.0% and 0.75%, respectively. There is no penalty for failing to achieve savings targets, but there are incentives for outperforming the targets.

Energy efficiency and energy conservation projects can also count toward 10% of a utility's target in Michigan's Renewable Energy Standard.

Minnesota

In May 2007, the Minnesota legislature passed the New Generation Energy Act of 2007 (Minnesota Statutes 2008 § 216B.241). The Act sets energy-saving targets of 1.5% of annual retail sales for the state's electric utilities. Included under these targets are savings from energy conservation programs, rate design, energy codes, appliance standards, market transformation programs, programs to change human behavior, improvements to utility infrastructure, and waste heat recovery. The law allows a utility to request a lower savings target (based on historical experience, an energy conservation potential study, and other factors), but in no case lower than 1% per year. The Commissioner of Commerce must ensure that all utilities and associations are operating under an energy-savings plan by 2010.

Nevada

Nevada's Renewable Portfolio Standard (RPS), established in 1997, was revised in 2005 to increase the portfolio requirement to 20% by 2015 and allow energy efficiency programs to help meet RPS targets. In 2009, SB 358 further increased the state's RPS to 25% by 2025 and capped energy efficiency contributions at a quarter of the total standard in any one year. The Public Utilities Commission of Nevada (PUCN) has established a program to allow energy providers to buy and sell portfolio energy credits (PECs) in order to meet energy portfolio requirements.

New Mexico

On February 27, 2008, Governor Bill Richardson signed HB 305 into law. HB 305 added to the 2005 Efficient Use of Energy Act consensus amendments from utility stakeholders that require investor-owned utilities to achieve a 5% reduction from 2005 electricity sales by 2014, and a 10% reduction by 2020 from demand-side management (DSM) programs. These amendments were negotiated after Governor Richardson adopted goals to reduce per capita energy use by 10% by 2012 and 20% by 2020. Public utilities are required to submit an annual report to the Commission that detail

planned actions to comply with the standards. If the Commission determines that a utility cannot achieve the energy savings requirements through all cost-effective energy efficiency and load management resources available then it may lower the requirements for that facility.

New York

In June 2008, the New York Public Service Commission (PSC) issued an order establishing the Energy Efficiency Portfolio Standard (EEPS). The order adopts specific, interim, three-year targets for megawatt-hour (MWh) reductions with a forecast trajectory that will achieve a 15% energy savings goal by 2015 (relative to projected use). The targets begin in 2008 at 0.5% savings relative to 2007 forecast sales and ramp up by a little over 2% each year through 2015. The final goal, 15% by 2015, is derived from Governor Eliot Spitzer's policy goal announced in April 2007. The order also approves specific "fast track" energy efficiency programs for immediate implementation. The new programs will be administered by the state's investor-owned utilities and the New York State Energy Research and Development Authority (NYSERDA). Additionally, New York's investor-owned utilities are directed to use the existing System Benefits Charge (SBC) for supplemental funding for the EEPS through 2011.

On March 20, 2012, the PSC released a revision to the mechanism for awarding incentives to utilities administering efficiency programs, while affirming the 15% energy savings goal by 2015.

North Carolina

In August 2007, the North Carolina legislature created a combined renewable energy and energy efficiency portfolio standard (REEPS) in Senate Bill 3. Under the REEPS, public electric utilities must obtain 3% of prior-year electricity sales in 2012 from a combination of renewable energy and energy efficiency savings, increasing to 12.5% in 2021 and thereafter. Energy efficiency is capped at 25% of the 2012-2018 targets and at 40% of the 2021 target. Cooperatives and municipal utilities are allowed to use demand side management or energy efficiency to satisfy the standard without limitation. Beginning in 2009, each power supplier is required to file a compliance report detailing actions taken to meet the REEPS requirements. Under the North Carolina Utility Commission's (NCUC) final rules there are no specific penalties for noncompliance.

North Dakota

In March, 2007, the North Dakota legislature signed HB 1506, which established a voluntary Renewable Portfolio objective of 10% by 2015. Recycled energy systems producing electricity from currently unused waste heat from combustion or other processes which do not use an additional combustion process are eligible sources for meeting this objective.

HB 1506

Ohio

Signed into law on May 1, 2008, SB 221 sets an energy efficiency requirement for the state. Starting in 2009, electric distribution utilities must achieve 0.3% savings from a baseline that is the average of the total kilowatt-hours sold in the preceding three years. Savings requirements increase gradually and hit 1% per year in 2014 and then 2% per year in 2019 and thereafter. Cumulative savings in excess of 22% will be achieved by 2025. The legislation also requires electric distribution utilities to reduce peak demand (from a baseline that is the utility's average peak demand in the preceding three years) by 1% in 2009 and to continue to achieve an additional 0.75% reduction per year until 2018.

Utilities will forfeit funds if they fail to comply with either the energy efficiency or peak demand reduction requirements. The amount of forfeiture will either be determined by the legislature or will be equal to the amount of the existing market value of one renewable energy credit per megawatt-hour (MWh) of under-compliance or non-compliance.

Ohio also allows energy efficiency measures to count toward its Alternative Energy Resource Standard.

Oklahoma

On May 27, 2010, Oklahoma enacted a bill (HB 3028) creating a renewable energy goal. The goal calls for 15 percent of the electricity generated in Oklahoma to be derived from renewable sources by 2015. Eligible resources include wind, solar thermal, solar PV, anaerobic digesters, biomass, landfill gas, hydro, and fuel cells. Up to 25% of the goal can be met using energy efficiency.

Oregon

In the 2009 Strategic Plan, the Energy Trust of Oregon laid out energy savings goals between 2010 and 2014 of 2,242 GWh of electricity. The electric targets are equivalent to 0.8% of 2009 electric sales, ramping up to 1% in 2013 and 2014.

Pennsylvania

In October 2008, Pennsylvania enacted Act 129 establishing an energy efficiency resource standard (EERS). This Act requires that each electric distribution company with at least 100,000 customers reduce energy consumption by at least

1% by May 31, 2011 (as a percent of 2009-2010 electricity sales), phasing to 3% by May 31, 2013. Peak demand must also be reduced by 4.5% by May 31, 2013. The Public Utilities Commission (PUC) is required to set targets beyond 2013.

Failure to achieve either consumption or peak demand reduction targets subject the utility to a penalty of not less than \$1M and not to exceed \$20M.

Additionally, the Alternative Energy Portfolio Standards (AEPS) Act, adopted in 2004, mandated that renewable energy must account for 8% of the power sold in the state after 15 years of implementation. Under the law, ?tier 2? resources, which include energy efficiency, hydropower, waste coal, and municipal solid waste generation, must account for an additional 10% of power sold in the 15 year period.

Rhode Island

On June 23, 2006 the Rhode Island legislature passed the Comprehensive Energy Conservation, Efficiency, and Affordability Act of 2006. Among the key provisions, the Act requires utilities to submit energy efficiency procurement plans annually and triennially with savings targets. Additionally, utilities have to provide a status report on the implementation of least-cost procurement, including the achieved percentages for efficiency, distributed generation, demand response measures, combined heat and power, and renewable sources, on or before February 1, 2009. Plans must be approved by the state Public Utilities Commission. However, there are no penalties for non-compliance.

Further Information on the Comprehensive Energy Conservation, Efficiency, and Affordability Act of 2006

South Dakota

On February 21, 2008, Governor Mike Rounds signed into law HB 1272, which established a voluntary Renewable Portfolio objective of 10% by 2015. Recycled energy systems that produce electricity from currently unused waste heat from combustion or other processes which do not use an additional combustion process are eligible sources of renewable electricity and recycled energy.

HB 1272

Final Rules

Texas

In 1999, Texas became the first state to establish an Energy Efficiency Resource Standard (EERS) requiring utilities to use end-use efficiency to reduce load growth by 10%. On June 15, 2007, Governor Rick Perry signed HB 3693, an omnibus energy efficiency bill, which increased this standard to 15% of load growth by December 31, 2008 and 20% of load growth by December 31, 2009. On July 30, 2010, the Public Commission of Texas (PUC) established procedures for meeting energy efficiency targets from 2011 to 2013 (Substantive Rule 25.181 (Energy Efficiency Rule)). The rule specifies demand reduction targets as follows:

2011: 20% reduction in annual demand growth

2012: 25% reduction in annual demand growth

2013: 30% reduction in annual demand growth

On May 28, 2011, Governor Rick Perry signed SB 1125, the latest energy efficiency legislation in Texas, which was the first state to establish an Energy Efficiency Resource Standard (EERS) in 1999. Beginning in 2013, investor-owned utilities must achieve demand reductions equivalent to 30% of the electric utility's growth in demand. However, this requirement might change depending on this size of the utility's electric demand growth.

Texas Energy Efficiency

Utah

On March 18, 2008, Governor Huntsman signed SB 202, which established a voluntary Renewable Portfolio goal of 20% by 2025. The bill requires utilities pursue renewable energy to the extent that it is cost effective. The bill requires utilities pursue renewable energy to the extent that it is cost effective. Waste heat capture or recovery is an approved energy source for meeting the Renewable Portfolio goal.

SB 202

Vermont

The Vermont Legislature and the Vermont Public Service Board (PSB) established Efficiency Vermont (EV) in 2000 as the first statewide provider of energy efficiency services. EV is required to achieve specific energy (kWh) and peak demand (kW) savings targets.

By the end of 2008, savings had cumulatively met over 9% of the state's electricity requirements. In its draft annual plan for 2009-2011, EV projects kWh savings equal to about 6% of 2008 sales ? 360 million total annual kWh including 52.2

total summer peak MW, and 54 total winter peak MW.

On December, 20, 2011, EV proposed energy savings targets for 2012-2014, which are awaiting approval by the PSB. The 2012 Annual Plan proposed electric efficiency savings of 320,000 MWh for 2012-2014.

EV is run by a competitively selected contractor under a performance-based contract with the PSB; there is a holdback in compensation for the contractor pending confirmation that contractual goals for savings and other performance indicators have been achieved.

Virginia

On April 11, 2007 Virginia adopted HB 3068, which set a reduction target for retail electric energy consumption of 10% from 2006 to 2022. In November 2007, the Virginia State Corporation Commission followed up with a report that this goal is attainable. A mix of programs, including demand-side management, conservation, energy efficiency, load management, real-time pricing, and consumer education, may be implemented to achieve this goal. Dominion Power, the main utility in Virginia, recently started to implement nine energy efficiency pilot programs.

Washington

Washington voters approved Initiative 937 in November 2006. This initiative established a Renewable Portfolio Standard (RPS) and required utilities to pursue all available conservation measures that are cost-effective, reliable, and feasible. Under the conservation section, by January 1, 2010 qualifying utilities (those with more than 25,000 customers) must determine their achievable cost-effective conservation potential through 2019 and establish and meet biennial targets for conservation. High-efficiency cogeneration is included as an eligible part of conservation efforts. If a utility fails to meet the energy conservation or renewable energy target they will pay a \$50/MWh penalty to the state.

West Virginia

On June 17, 2009, Governor Manchin of West Virginia signed HB 103, the Alternative and Renewable Energy Portfolio Act, mandating that electric utilities (excluding municipal utilities, rural electric cooperatives, and utilities serving fewer than 30,000 residential customers) obtain 25 percent of their electricity from alternative or renewable energy sources by 2025. The bill sets interim targets of 10 percent by 2015 and 15 percent by 2020. Eligible alternative resources include combined heat and power plants (CHP) and demand-side management programs. The bill also directs the WV Public Service Commission to consider applying both the Alternative and Renewable Energy Standard to utilities not currently covered.

Wisconsin

In March 2006, Wisconsin enacted Act 141 (2005), which requires the commission to revise goals, priorities, and measurable targets for energy efficiency programs every 4 years.

An Order issued by the Public Service Commission (PSC) in November 2010 set annual targets for electricity reductions for the first 4-year planning period (2011-2014). Funding is provided by ratepayers to the utilities' statewide energy efficiency program (Focus on Energy) in order to achieve these goals, with the funding levels increasing each year. Each year, the target is a percentage reduction of projected sales or load for that year.

The electricity targets require a 0.75% reduction from projected sales in 2011, ramping up to a 1.5% reduction in 2014.