

Rhode Island Office of Energy Resources 2015 Annual Report

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LETTER FROM THE COMMISSIONER

To Governor Gina M. Raimondo, Senate President Teresa Paiva Weed, House Speaker Nicholas A. Mattiello, Senate Majority Leader Dominick J. Ruggiero, House Majority Leader John J. DeSimone, House Minority Leader Brian C. Newberry, and Senate Minority Leader Dennis L. Algiere:

In accordance with the provisions of RIGL Section 39-2-1.2(k), I am pleased to provide you with the 2015 Annual Performance and Financial Report of the Office of Energy Resources (OER).

Rhode Island is poised to enhance its status as a national leader on innovative clean energy programs and energy-saving initiatives. The Ocean State was ranked third in the nation by the American Council for an Energy-Efficient Economy (ACEEE) in 2014 for its overall suite of energy efficiency policies and programs, and has ranked in the top ten of all states for the past seven years. More importantly, the state's electric and natural gas efficiency programs have fostered new investment and job growth opportunities in our clean energy economy. For instance, in 2014, ratepayer-funded energy efficiency programs supported more than 600 full-time equivalent employees. This year's energy efficiency plan is projected to generate more than \$330 million in economic benefits for local consumers. These benefits can be achieved while meeting local electric supply needs at a fraction of the cost of traditional supply resources; for instance, the 2015 energy efficiency plan will meet approximately 2.5 percent of total load at just 5.6 cents per lifetime kilowatthour (kWh), compared to the residential standard offer rate of more than 10 cents per kWh (as of March 2015).

Rhode Island's robust renewable energy policies – such as the Renewable Energy Growth Act – continue to support strategic investments in local distributed clean energy resources and our local clean energy economy. In 2015, OER will partner with Commerce RI to conduct a comprehensive clean energy jobs report to further explore and benchmark the employment impacts that such policies are having, and identify new job growth opportunities.

While these local initiatives are critical to the state, OER recognizes that Rhode Island's economy and its energy system are intricately linked to those of the entire New England region. Our agency has taken a leadership role in regional engagement on numerous energy issues. In particular, OER looks forward to advancing your vision and improving the state's economic competitiveness by working with our New England counterparts to identify cost-effective energy infrastructure projects that offer the potential to reduce long-term energy costs; diversify our energy supply portfolio; enhance system reliability; achieve important environmental goals; and position Rhode Island to attract new investment and job growth opportunities for local businesses and our workforce.

These on-going efforts – which take a balanced, short- and long-term view of our energy system and leverage local and regional strategies – serve as a



strong foundation to grow our economy and achieve a secure, cost-effective, and sustainable energy future. However, under your leadership, we know that more can be accomplished. OER is committed to working with the Administration to implement sound strategies that leverage new financing tools to enable Rhode Island to go broader and deeper with energy efficiency and renewable investments. In particular, OER is excited to apply such principles to the public sector, which will expand the reach of our successful Rhode Island Public Energy Partnership Initiative. Such tools offer the real potential to significantly reduce energy consumption and consumer costs; spur new economic development and job growth opportunities; and enhance the quality of life and environment so important to the Ocean State.

In the coming year and beyond, I look forward to working with you and the General Assembly to advance our state's energy, economic, and environmental goals. Please do not hesitate to contact me should you have any questions.

Sincerely,

Marion S. Gold, Ph.D. Commissioner

EXECUTIVE SUMMARY

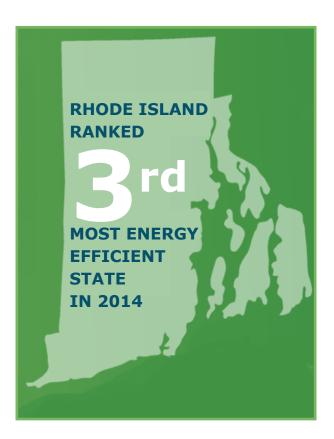
The Rhode Island Office of Energy Resources (OER) is the state's lead energy policy agency established pursuant to Rhode Island General Law (RIGL) §42-140. OER's mission is to lead Rhode Island to a secure, cost-effective, and sustainable energy future. Housed within the Executive Branch, OER is led by a Commissioner of Energy Resources – Dr. Marion S. Gold – and a staff of committed professionals dedicated to advancing the energy, economic, and environmental interests of the Ocean State. Operating at the nexus of the many on-going efforts to grow and transform Rhode Island's energy system, OER core functions include, but are not limited to:

- Developing, administering, and monitoring a variety of programs designed to promote energy efficiency, renewable energy, alternative fuels, and energy assurance;
- Offering technical assistance and funding opportunities for end-users including residents, businesses, and municipalities;
- Providing policy expertise and support related to strategic energy planning, energy assurance, and clean energy workforce development; and
- Leveraging, coordinating, and aligning interagency, public-private, regional, and federal efforts to reach and exceed energy goals.

To create consistent and unified energy policies, OER works with state and quasi-state agencies; stakeholder-driven groups (including the Distributed Generation Board and the Energy Efficiency and Resource Management Council); and other private and non-profit stakeholders to advance common interests.

OER is required by law (§42-140-8) to submit an annual report to the Governor and General Assembly each year. OER believes that 2014 marked a year of incredible achievement, while presenting new opportunities to further reduce energy consumption and costs; expand costcompetitive clean energy solutions; and collaborate with the other New England states to advance common energy and economic interests.

Rhode Island continued its upward climb among national leaders in energy efficiency innovation and effectiveness. In 2014, the American Council for an Energy Efficient Economy (ACEEE) ranked Rhode Island third in the nation for overall energy efficiency policy and program efforts. The 2014 Energy Efficiency Plan – which was collaboratively developed by OER, National Grid, the Rhode Island Energy Efficiency and Resource Management Council (EERMC), and other stakeholders – will help save ratepayers \$416.7 million on their electric and gas bills, support more than six hundred (600) full-time equivalent jobs, and produce \$476.8 million in economic benefits.



In 2014, OER continued its strong commitment to reducing public sector energy consumption and resulting energy costs – through the Rhode Island Public Energy Partnership (RIPEP). Last year, more than two dozen school districts, a dozen communities, and ten state agencies were engaged through RIPEP, while 593 public sector buildings were benchmarked and 68 energy cost-saving projects were implemented. Looking forward, OER believes strongly that we can cut local and state energy costs exponentially by leveraging new financing tools and further reducing administrative and other programmatic barriers facing municipalities and other public sector entities looking to invest in robust energy efficiency and clean energy solutions. Such investments offer the promise of new economic and job growth opportunities for the Ocean State's burgeoning clean energy economy.

OER also made great strides in 2014 with jumpstarting Rhode Island's burgeoning renewable energy market. OER, in collaboration with the Distributed Generation Board (DG Board), National Grid, and other stakeholders, developed the program parameters for the new Renewable Energy Growth Program (REG). The REG Program will promote the deployment of 160 megawatts of new local renewable distributed generation projects by 2019. OER also took important steps to support Rhode Island's growing solar industry through active stakeholder engagement and implementation of the Renewable Energy Professional licensing law. Finally, OER accelerated efforts to expand access to renewable energy while testing new ways of reducing customer and utility costs through a suite of initiatives: streamlining permitting; providing zoning guidance; developing a solar system reliability pilot; and, most notably, launching the "Solarize Rhode Island" program.

Energy security and resiliency are also important components of OER's mission. OER is the lead

state energy agency that provides staffing support to the Rhode Island Emergency Management Agency (EMA) during severe weather-related events. OER staffed the Emergency Operation Center at the EMA headquarters in Cranston. In 2014, OER also oversaw a series of efforts to explore new and innovative ways to enhance energy security throughout the state, including: identifying and prioritizing critical energy infrastructure; proposing a microgrids pilot; and collaborating with the newly-established Executive Climate Change Coordinating Council (EC4).

In 2014, OER also initiated important work in several new key program areas, including financing, clean heat, and clean transportation. For example, OER worked with the EERMC to retain expert consultant assistance and organized a collaborative, stakeholder-driven effort to evaluate how new and existing financing strategies could potentially support Rhode Island's public policy of investing in all cost-effective energy efficiency. OER also convened a Thermal Working Group, which cooperatively developed a report with recommendations to extend the full benefits of energy efficiency to oil and propane customers. Finally, OER launched a stakeholder-based Zero Emission Vehicle (ZEV) Working Group to further expand access to electric and fuel cell vehicle infrastructure; encourage the purchase and lease of these highly-fuel efficient vehicles; reduce up-front consumer costs for adoption of alternative clean transportation solutions; remove barriers to deployment; and provide policy recommendations to the state.

As part of a highly-complex and integrated regional energy system, Rhode Island must also work with its New England counterparts to advance common energy, economic, and environmental goals. OER is proud to have advanced state interests on numerous regional energy matters throughout 2014. Perhaps most significant is OER's continued commitment to exploring and implementing - in a cost-effective manner – critically-needed energy infrastructure projects that offer the potential to reduce longterm energy price volatility and consumer costs; improve the economic competitiveness of Rhode Island and all of New England; strengthen energy system reliability; and advance important environmental goals. Rhode Island's leadership on these issues was enhanced by passage of the Affordable Clean Energy Security (ACES) Act (§39-31) in 2014. ACES enables Rhode Island state agencies and the major distribution utility to work with other states and issue joint competitive solicitations to identify (and share the costs of) viable natural gas capacity expansion and/or clean energy and related electric transmission projects. If such projects are initially deemed to advance the economic interests of the state and its

ratepayers, ACES establishes a transparent and thorough regulatory review process requiring Public Utilities Commission approval prior to any final agreement. In 2015, OER will continue to explore all viable opportunities related to costeffective regional energy infrastructure, and work to advance other important state energy interests on a regional basis as appropriate.

When considered holistically, these efforts and accomplishments – along with other positive developments detailed throughout this report – support Rhode Island's position as a national leader on clean energy issues. OER looks forward to continuing its work on behalf of the Administration, in collaboration with the General Assembly and other important stakeholders, to advance Rhode Island's energy, economic, and environmental priorities.

RHODE ISLAND STATE ENERGY PLAN

In 2013 and 2014, OER staff led efforts to develop a ten-year update to the Rhode Island State Energy Plan ("Energy 2035", or "the Plan"). OER worked in partnership with a twentymember Advisory Council, stakeholder groups, and a consultant team to guide and inform this comprehensive endeavor. The final draft Plan incorporates the results of primary research, as well as feedback received at over a dozen meetings with stakeholders from state and local government, utilities and regulators, private sector and industry, and consumer and environmental advocates.

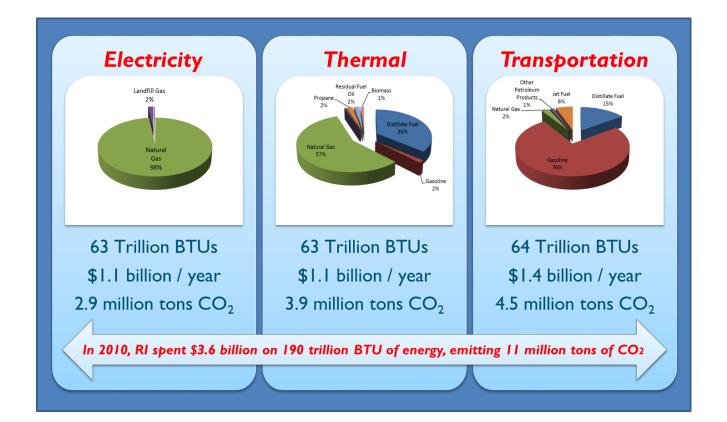
Energy 2035 represents Rhode Island's first data -driven energy planning and policy document laying out a long-term, comprehensive energy strategy for the state. The vision of the Plan is to provide energy services across all sectors – electricity, thermal, and transportation – using a secure, cost-effective, and sustainable energy system. The Plan takes an economy-wide view of Rhode Island's energy use from today through 2035, highlighting areas and sectors of greatest impact and opportunity. The Plan uses the best available data and analysis to develop ambitious but achievable goals and performance measure targets for transforming Rhode Island's energy system. Finally, the Plan proposes stateof-the-art policies and strategies which could be adopted or implemented to achieve those goals.

The Plan contains three main sections, each addressing a key question central to energy planning in Rhode Island:

- Part 1: Overview of Energy in Rhode Island: What does Rhode Island's energy system look like today?
- Part 2: Goals and Performance Measure Targets: What do we want our energy system to look like in 2035?
- Part 3: Policies and Strategies: How can Rhode Island achieve its vision of a secure, cost-effective, and sustainable energy future?

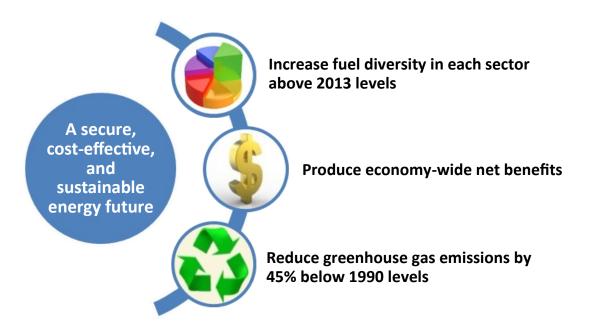
PART 1: OVERVIEW OF ENERGY IN RHODE ISLAND

This section presents information on energy use in Rhode Island – the types, amount, cost, and environmental effects of major fuels and energy resources used in all sectors of Rhode Island's economy. The results demonstrate that Rhode Island's economy has experienced significant transformations over the past twenty years. Yet, during this time, the applications and sources of energy in the state have remained remarkably similar. The state continues to rely on energy for three main purposes – electricity, thermal, and transportation. Fossil fuels, such as natural gas and petroleum, still supply virtually all of the energy needs in each sector. In contrast, patterns of energy consumption, expenditure, and emissions have changed markedly over time. During the past decade, energy costs have risen sharply in real terms, carbon dioxide emissions have fallen, and demand has grown in some sectors while decreasing in others. The Plan's findings show that Rhode Island's economy-wide energy consumption totals nearly 190,000 trillion BTU. Rhode Islanders spend approximately \$3.6 billion on electricity and fuels to meet thermal and transportation energy needs, with total carbon dioxide emissions of more than eleven (11) million metric tons, as noted in the chart below:



PART 2: GOALS AND PERFORMANCE MEASURE TARGETS

This section sets goals and performance measure targets for Rhode Island's energy future. They are quantifiable, yet inspiring; visionary, yet realistic; bold, yet built on consensus. The Plan goals sketch a vision for an energy system that advances the human, economic, and environmental well-being of the people, communities, and natural resources of Rhode Island. Through the goal- and performance measure target-setting process, the Project Team conducted detailed research and data-driven analysis to examine tradeoffs associated with alternative energy futures. The results are striking: not only can Rhode Island achieve dramatic transformations of existing energy systems, but there are feasible ways that the State can concurrently address the three primary themes of the Rhode Island Energy 2035 Vision – energy security, costeffectiveness, and sustainability. Overall, this section of the Plan sets three performance measure targets for a secure, cost-effective, and sustainable energy future: Rhode Island can increase sector fuel diversity, produce net economic benefits, and reduce greenhouse gas emissions by forty-five (45) percent by 2035:

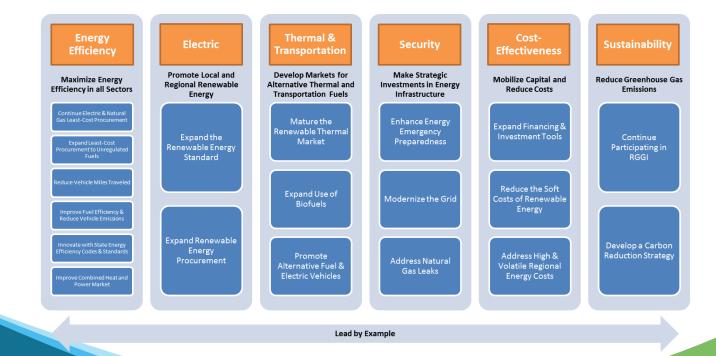


PART 3 : POLICIES AND STRATEGIES

This section examines how Rhode Island can achieve its energy vision of a secure, costeffective, and sustainable energy future. This section presents a comprehensive suite of policies and strategies that can assist the State with meeting the energy security, costeffectiveness, and sustainability goals and performance measure targets established in the Plan, and are meant to provide decision makers with a complete picture of the near- and longterm actions Rhode Island should consider in each sector of the economy – electric, thermal, and transportation.

A dramatic transformation of Rhode Island's existing energy systems requires commensurately ambitious action at the state and local levels. To achieve the goals and performance measure targets laid out in the Plan, Energy 2035 recommends an "all-of-theabove" clean energy framework. This framework centers on strategic investments that provide long-term energy, economic, and environmental benefits, setting Rhode Island firmly on a path to a lower-risk, lower-cost, and lower-impact energy future: maximize energy efficiency in all sectors; promote local and regional renewable energy; develop markets for alternative thermal and transportation fuels; make strategic investments in energy infrastructure; mobilize capital and reduce costs; and reduce greenhouse gas emissions.

When viewed holistically, the Plan's findings send a clear message: Rhode Island cannot afford a business-as-usual course of action that increases energy security risks to the state, costs more than viable alternative paths, and fails to meet our obligation to mitigate the worst consequences of global climate change. Because the impact of long-term planning and investment choices will reverberate for decades to come, Rhode Island must be especially prudent and strategic as it addresses the energy policy decisions that face us today.



REGIONAL AND NATIONAL COLLABORATION

OER takes an active role in collaborating with the New England states, ISO-NE, and other regional stakeholders to protect local energy consumer interests and advance a secure, cost-effective energy system consistent with established state policy goals.

Rhode Island works closely with its sister states through the New England States Committee on Electricity (NESCOE), of which OER Commissioner Gold is Chairperson. NESCOE helps foster daily communication among the six New England states on a variety of dynamic, electricity-related initiatives. This entity exemplifies the many benefits of regional coordination and cooperation, allowing the states to share ideas and technical resources on matters of significant consequence to New England citizens. Through this collaboration, the states often speak with one voice as the region seeks to fulfill common energy goals and policy mandates. Some of the key issues undertaken with and advanced through NESCOE in 2014 included:

- Supporting the New England Governors' Energy Infrastructure Initiative and its goal of facilitating the identification of cost-effective energy infrastructure projects (natural gas capacity and electric transmission for no-tolow carbon resources) that can mitigate the high and volatile energy prices impacting state and regional economic competitiveness;
- Supporting multi-state competitive clean energy procurement processes that offer the potential to reduce consumer costs by leveraging regional economies of scale;
- Working to ensure that state-level investments in clean energy solutions, such as energy efficiency and renewable distributed generation, are properly accounted for in New England's wholesale markets and regional system planning processes;
- Representing the policy and economic interests of state and regional consumers

before the Federal Energy Regulatory Commission (FERC), the United States Department of Energy (DOE), and other regional/national entities on numerous electric wholesale market issues; and

 Improving regional electric transmission project cost estimating processes to mitigate consumer exposure to excessive costs, while facilitating the consideration of alternative means to satisfy energy infrastructure objectives in a way that best meets the shared economic and policy interests of the New England states.

OER has worked tirelessly to advance state interests and work with its neighbors to reduce long-term consumer energy costs and enhance economic competitiveness through the identification and advancement of cost-effective regional energy infrastructure solutions. The state's passage of the Affordable Clean Energy Security (ACES) Act in 2014 demonstrates Rhode Island's strong leadership and commitment to moving forward on a regional basis to address New England's shared energy infrastructure challenges, which have driven unsustainable (and uncompetitive) levels of energy price volatility. The statute enables the state and/or its electric/ gas distribution utility to participate in regional (or multi-state) competitive procurement processes to identify - and share the costs of cost-beneficial energy infrastructure projects, including natural gas pipeline and capacity expansion projects, and transmission to facilitate the delivery of no-to-low carbon energy resources into New England. ACES also establishes a transparent regulatory process to ensure that any preferred regional infrastructure project is consistent with state economic, energy, and environmental goals. Under the leadership of Governor Raimondo and the General Assembly, Rhode Island stands ready to work with the other New England states to advance energy infrastructure projects that will provide net economic benefits for Ocean State consumers.

ENERGY EFFICIENCY

Rhode Island Public Energy Partnership

In October 2012, OER was awarded a 3-year competitive grant from the United States Department of Energy to establish the Rhode Island Public Energy Partnership (RIPEP). RIPEP is a precedent-setting collaborative effort involving OER, National Grid, the EERMC, and the University of Rhode Island Outreach Center to achieve deep energy savings in state and municipal facilities

To achieve its goals, RIPEP is working to:

- Establish the country's first comprehensive public sector energy data inventory using EPA EnergyStar Portfolio Manager;
- Achieve 20% energy reductions in at least 100 public facilities;
- Build a targeted, streamlined infrastructure, making it easier for the entire public sector to take advantage of energy efficiency programs; and
- Develop and implement solutions to overcome longstanding barriers to energy savings in the public sector.

At the end of 2014, energy consumption and cost baselines were completed for 738 facilities, representing an estimated forty (40) percent of the public sector facilities in the State. Thirtyfour energy assessments were completed in



addition to many more prescriptive walkthroughs in cases where full assessments were not necessary. As a result, energy efficiency retrofit projects have been completed in seventy-seven (77) facilities, generating average energy reductions of twenty-five (25) percent. OER and National Grid have provided approximately \$750,000 in incentives and approximately \$675,000 in on-bill repayment funds to public sector entities, resulting in annual cost savings of over \$1 million and annual energy savings of approximately 32,000 MMBTUs. Moreover, as of April 1, 2015, an additional 35 projects have been initiated or are planned for completion in coming months, representing the potential for an additional \$450,000 in energy cost savings for public sector facilities.

In 2014, a series of stakeholder working group meetings was held to identify and explore solutions to barriers to implementing energy efficiency measures in the public sector. The groups identified three barrier categories: capital and procurement, motivation and capacity. In 2015, RIPEP will work to address the solutions that are expected to have the greatest impact.

Residential and Commercial & Industrial Energy Efficiency Programs

OER supports the development and implementation of energy efficiency programs for Rhode Island residents and businesses in several ways. First, the 2014 Regional Greenhouse Gas Initiative (RGGI) Allocation Plan earmarked \$3.63 million for the residential, income eligible, and commercial and industrial energy efficiency programs managed and delivered by National Grid. Support for these programs is consistent with Least Cost Procurement mandates; helps achieve lowestcost, carbon-free energy savings; and supports local economic investment and job growth. As important, these dollars were leveraged with funds derived from ratepayers through the system benefit charge to help ratepayers save more than \$416 million on their electric and gas bills, support six hundred (600) full-time equivalent jobs, and produce \$476.8 million in economic benefits.

Low-to-Moderate Income Energy Efficiency Programs

In 2014, OER and the Energy Efficiency and Resource Management Council (EERMC) partnered with National Grid to increase the effectiveness of the programs they offer to lowincome Rhode Islanders through the Community Action Programs (CAPs). Preliminary program evaluation shows that all National Grid incomeeligible programs achieved over 120 percent of annual energy savings goals. OER also continues to partner with the Department of Human Services (DHS) to help the state best leverage the energy efficiency and weatherization funds they manage (Weatherization Assistance Program and LIHEAP) with programs offered by National Grid.

OER participated in a working group with National Grid, the EERMC, and the Green and Healthy Homes Initiative focused on continuous improvement in efficiency programs for the multifamily sector. This working group was able to leverage outside funding (matched with funding from National Grid) to support a benchmarking pilot for up to four hundred (400) low-income multifamily buildings. The working group also conducted outreach with relevant local and national stakeholders on program design and was able to incorporate changes in the definition of multifamily into National Grid's programs that increase eligibility for relevant buildings. Multifamily programs performed at well over 120 percent of their energy-savings goals for 2014.

In 2014, OER identified an emerging trend that was absent in Rhode Island in building energy rating and labeling and set up a working group to scope out how to pursue this initiative over the next twelve months. Participants in the working group include the Acadia Center, Northeast Energy Efficiency Partnerships, National Grid residential & commercial strategy teams, and the consulting team to the Energy Efficiency and Resource Management Council. The working group will focus on developing pilot programs for launch in late 2015.

Energy Expo at the Rhode Island Home Show

In the face of unpredictable energy prices, it is critical that Rhode Islanders have access to all of the programs, products, and services that can help keep their utility bills manageable while improving the comfort of their homes. For the second consecutive year, OER, EERMC, and National Grid sponsored the Energy Expo at the Rhode Island Home Show, which was held on March 5-8, 2015 at the Rhode Island Convention Center. The goal of the Energy Expo was to bring practical and affordable energy saving solutions to Rhode Island families.



Students meeting U.S. Congressman James Langevin at the Expo.

At the Energy Expo, a record number of attendees connected with more than one hundred (100) energy vendors and organizations offering energy-saving products and services for homes and businesses. The Expo also offered local residents free seminars on how to lower their energy bills by making cost-effective improvements to their homes; available (and highly-efficient) home heating options; opportunities for implementing renewable distributed generation, such as solar power; alternative, clean transportation solutions, such as electric vehicles; and educational displays regarding insulation and lighting comparisons, blower door testing, infrared cameras, DIY air sealing, and other energy-reducing solutions.

The Energy Expo featured the Clean Energy Future Awards Ceremony, during which Senator Jack Reed, Congressman James Langevin, General Treasurer Seth Magaziner and other state leaders presented awards to six extraordinary Rhode Island clean energy trailblazers from municipalities, schools, nonprofits, and private businesses. Awardees included Providence-based Utilidata for its leadership in clean energy innovation, the City of East Providence for its leadership in municipal renewable energy projects, the Chariho School District Green Squads for their leadership in student-led energy conservation, Newportbased Church Community Housing Corporation for its leadership in energy, environment, and affordable housing, West Warwick-based Arpin Group, Inc. for its leadership in sustainable energy practices, and Newport's Bob Morton, Owner of Newport Biodiesel, for his leadership in sustainable transportation. The event also acknowledged the winners of a K-12 student poster contest and National Grid's Find Your Four energy efficiency video contest.



Representatives of Utilidata accepting their Clean Energy Future Award at the Energy Expo.

RENEWABLE ENERGY Distributed Generation Standard Contracts Program

The Distributed Generation Standard Contracts (DGSC) Program concluded in 2014. The DGSC Program was launched in December 2011 with a goal of awarding forty (40) megawatts of local renewable energy capacity over a four (4) year period. As of the end of 2014, the DGSC program had awarded 37 megawatts of capacity to Rhode Island-based wind, solar, anaerobic digestion and small scale hydropower projects. In the process, the DGSC advanced important state energy and environmental policy goals, while creating new economic development and job growth opportunities in the state's burgeoning clean energy economy. Overall, the DGSC saw renewable energy projects awarded in more than a dozen municipalities and experienced a gradual decline in the ceiling prices provided for renewable energy projects, thereby reducing overall consumer cost impacts. Moreover, the success of the DGSC provided Rhode Island policymakers and stakeholders with a solid foundation to expand state support for these important local no-to-low carbon generation resources, ultimately leading to the consideration and passage of the Renewable Energy Growth Program in 2014.

Renewable Energy Growth Program

Capitalizing on the success of the Distributed Generation Standard Contracts Program (DGSC), the General Assembly passed the Renewable Energy Growth Program (REG) in 2014. The REG transformed the existing contract-based distributed generation program into a more impactful and sustainable tariff-based program which will support 160 megawatts of new local renewable distributed generation projects by 2019. OER, in collaboration with the Distributed Generation Board (DG Board), National Grid, and

other stakeholders, developed the 2015 REG Program through the end of 2014. The DG Board filed its recommendations to the Rhode Island Public Utilities Commission (PUC) in December, 2014, and the PUC approved the program parameters in March 2015. The REG Program will provide a new, more dynamic suite of incentives to Ocean State residents, businesses, and municipalities interested in installing renewable energy projects, while driving investment and job growth in our clean energy economy. The REG will offer twenty-five (25) megawatts of available project capacity throughout 2015, supporting eligible technologies including solar, wind, anaerobic digestion and small-scale hydropower. Looking forward, an additional forty (40) megawatts of annual nameplate renewable capacity will become available in 2016, 2017, and 2018, with the balance available in 2019. OER, in coordination with the electric distribution utility and Rhode Island stakeholders, will continue to support this innovative program and report on its successes in future Annual Reports.

Tiverton and Little Compton System Reliability Solar Distributed Generation Pilot

Energy efficiency and renewable energy provide a suite of well-known energy, economic, and environmental benefits, including the potential for significant cost savings for consumers and businesses who reduce or avoid their on-site energy use. What is not yet fully understood is how these clean energy technologies can potentially produce additional savings by deferring (or possibly eliminating) the need for investment in more-costly utility infrastructure to meet growing energy demand.

OER is spearheading a cutting-edge pilot to help answer this question: to what extent can renewable distributed generation – in particular, solar power – reduce the need for electric distribution grid infrastructure while delivering long-term consumer cost savings. The pilot focuses on the towns of Tiverton and Little Compton, where National Grid projects the need for a new substation feeder estimated to cost \$2.9 million. Through the pilot, OER aims to deploy enough new distributed solar generation to meet 250 kW of summer peak load. A "Solarize" community-based, grouppurchasing program as well as a separate RFP process will be used to encourage adoption of a mix of small rooftop and larger ground-mounted systems in the towns. The solar systems will complement energy efficiency and demand response measures installed through an ongoing National Grid "System Reliability Procurement" pilot in the same area.

United States Department of Energy SunShot Initiative Rooftop Solar Challenge II

In Fall 2013, OER was the recipient of funding from the United States Department of Energy's SunShot Initiative Rooftop Solar Challenge II program. Through this effort, OER joined a consortium of five New England states to collaborate on the reduction of soft costs associated with the installation of rooftop solar energy. In March 2015, funding period 2 was approved by DOE for continuing work in this effort through March 2016.

Compared to its regional neighbors, Rhode Island's rooftop solar market was in its infancy at the start of 2014. OER worked with the state's local solar industry community to identify barriers to market entry and growth; these barriers included restrictive licensing around solar installation; variation and confusion around local permitting and zoning policies in state municipalities; and project requirements for qualification for incentives available through the state's Renewable Energy Fund. In response to these industry and stakeholder discussions, OER partnered with the Renewable Energy Fund to create a database of all of the electric and building permit information for each Rhode Island municipality. OER has also been tracking the on-line permitting program being piloted by the Office of Management and Budget and Office of Digital Excellence, while leveraging the experiences and best practices identified in other states (particularly Massachusetts and Connecticut) to encourage solar development in Rhode Island cities and towns. As a result of these efforts, OER has made model zoning ordinances and guidance available to municipalities, and has reviewed zoning ordinances and guide plans for several municipalities to foster alignment with state energy goals.

OER has also partnered with Commerce RI to hold quarterly meetings with Rhode Island's solar industry and stakeholder community to create an open dialogue around state programs and policies. This dialogue has generated valuable industry feedback for consideration by OER and Commerce RI as it seeks to establish and drive innovative, growth-oriented programs and incentives that advance state economic, energy, and environmental policy goals. In fact, this continued engagement has already led to beneficial adjustments to existing programs; for example, the state has removed project minimums for the Renewable Energy Fund and is effectively implementing community-based Solarize campaigns that are creating new opportunities for the local clean energy industry and its workforce.

Solarize Rhode Island

In 2014, OER partnered with the Renewable Energy Fund at Commerce RI and non-profit SmartPower to launch a three-town Solarize pilot in Rhode Island. Solarize is a targeted marketing and education campaign aimed at increasing the adoption of small-scale solar across the state. It does this by both educating residents and small businesses about solar and its benefits, as well as through a four-pronged strategy to reduce prices and drive participation. This strategy involves partnerships with individual municipalities and community-driven outreach; limited time offers; competitivelyselected solar installers; and a tiered pricing structure that lowers the price as participation increases. Solarize has been a successful model in other states – more than ninety (90) municipalities have participated in Massachusetts and Connecticut alone.

Rhode Island's first Solarize campaign took place in North Smithfield between October and December 2014. During that period, eighty-four (84) local residents and small business signed contracts representing 623 kW of solar capacity. During the first quarter of 2015, an additional two communities – Little Compton and Tiverton - launched Solarize campaigns of their own. OER's Solarize program will work in coordination with National Grid's System Reliability Program to provide additional incentives for homes and small businesses that can orient their systems such that they help produce energy when it is needed most (summer peak). Through this innovative collaboration of state- and utilityadministered programs, there is real potential to defer (or eliminate) the need for more costly



"During that period, eighty-four local residents and small business signed contracts representing 623 kW of solar capacity."

infrastructure investments in the local grid, which are ultimately paid for by electric customers throughout Rhode Island.

Renewable Energy Professionals

During the 2014 legislative session, the General Assembly passed S2692 A/H8200 A, amending An Act Relating to Businesses and Professionals -Electricians and Plumbers. The amendment updated the electrical and plumbing licensing laws and created a new type of contractor: the Renewable Energy Professional (REP). The new rules clarify the roles of electricians, plumbers, and REPs in renewable energy system installation work. OER and the Department of Labor and Training (DLT) were tasked with developing protocols for obtaining the license. With consultation from staff at the Renewable Energy Fund, OER and DLT were able to launch the license on September 10, 2014. As of April 1, 2015, there were eight (8) Renewable Energy Professional licenses issued to individuals and companies.

State Offshore Wind Project

The thirty (30) megawatt Block Island offshore wind project secured all of its necessary state and federal permits in 2014. The project is scheduled to start construction in Summer 2015 with the installation of five (5) separate jacket foundation systems for the direct-drive (nongearbox) wind turbines. Wind turbines are projected to be installed in Summer 2016, and the system is scheduled to be commercially operational by the end of 2016. This will be the first offshore wind installation in the country.

ENERGY SECURITY

Rhode Island – geographically situated along the Atlantic Ocean with forty (40) miles of general coastline and three-hundred and eighty-four (384) miles of tidal shoreline – is no stranger to powerful nor'easters and hurricanes. In fact, the Ocean State has experienced a number of severe weather-related events over the last five years, including floods, blizzards, extended heat waves, extreme cold snaps, and hurricanes. These events pose significant financial and energy security risks to the state; endanger life and property; create barriers to economic growth; and threaten our shared quality of life and environment.

The most direct energy security impacts of major storm events include power outages and disruptions to liquid fuel supplies. For example, during Blizzard Nemo in February 2013, all of Rhode Island's major fuel terminals lost electrical power and were unable to provide fuel (including gasoline, diesel, heating oil, and jet fuel) from terminal loading racks to delivery trucks that service gas stations; homes and businesses; airports; and other critical facilities. The Blizzard also resulted in 1,434 power outage events and 238,611 electric customer interruptions. Similarly, January 2015's Blizzard Juno resulted in 27 outage events and 3,642 customer interruptions. Beyond weathereffected power outages, extended low temperatures have resulted in freezing and ice accumulation across significant portions of Narragansett Bay and nearby coastal areas. Such conditions cause delays and disruptions in delivering fuel supplies into Rhode Island.

The likelihood that future extreme weather events will occur and impact Rhode Island is high. Without preemptive efforts to address critical infrastructure energy resiliency, the state could face disastrous consequences, including



"January 2015's Blizzard Juno resulted in 27 outage events and 3,642 customer interruptions."

loss of life and significant economic damage. To plan for this future, state agencies – including OER – have worked diligently to identify opportunities for more effective and comprehensive energy assurance coordination and greater system resiliency.

Related planning and preparation began in 2012 when OER commissioned a state Energy Assurance Plan (EAP), with support from the American Recovery and Reinvestment Act (ARRA), to provide guidance on energy deficiency preparation, monitoring, and mitigation of disruptions across the electric, natural gas, and petroleum sectors. The document describes, in detail, relevant legal authority, stakeholder input processes, strategic response measures, communication plans, and vulnerability and risk assessments regarding the management of Rhode Island's critical energy infrastructure and sector vulnerabilities. Also, OER's ten-year update to the State Energy Plan (SEP) identifies policy opportunities and goals associated with system reliability, and grid hardening/ modernization.

State agencies have been actively working to gather existing and new sources of information regarding the state's energy infrastructure vulnerabilities to assist the Rhode Island Emergency Management Agency (EMA) in the

¹U.S. Census Bureau, Statistical Abstract of the United States: 2012. Geography & Environment, table 364, page 225.

development of a state-specific Critical Infrastructure Protection Plan for the energy sector. This initiative involves two steps for each sector: (1) establish definitive criteria for prioritizing critical infrastructure assets for each sector, and (2) use the criteria to identify priority critical assets in each sector. As part of this effort, OER has convened key stakeholders with subject matter expertise to develop asset criteria and identify critical energy infrastructure in Rhode Island. State agencies will soon advance their collaboration in order to assess risk and identify interdependencies with other sectors; develop a sector plan/annex to the **Rhode Island Critical Infrastructure Protection** Plan; and measure progress in resiliency efforts and goals, while managing sector-specific responsibilities.

OER is also exploring new and innovative ways to enhance energy security throughout the state's most vulnerable communities, particularly those situated along the coast. In Fall 2014, OER was awarded Hurricane Sandy Community Development Block Grant Disaster Recovery (CDBG-DR) funds to implement a proposed "Energy Resilience Project" centered on the use of resilient microgrids for critical services. This award will allow the state to assess the opportunity, costs, and benefits associated with the development of local microgrids – a first for Rhode Island – and develop recommendations for designing an initial pilot in areas impacted by Hurricane Sandy, including those with vulnerable populations.

Also, in 2014, the Rhode Island House of Representatives passed House Resolution 8227 requiring OER to report on energy security and improvement opportunities that may affect state energy infrastructure assets in light of recent significant weather-related events and disruptions. This energy-security specific report will provide state policymakers with a more comprehensive understanding of the aforementioned complexities, as well as identify initiatives now underway in Rhode Island to protect our collective economic, energy and environmental interests.

Lastly in 2014, the Resilient Rhode Island Act, enacted in July 2014, establishes the Executive Climate Change Coordinating Council (EC4) and directs that interagency body to develop a comprehensive approach to address the potential threats from climate change to the state's environment, economy, and its people. The law also sets specific greenhouse gas reduction targets; establishes an advisory board and a science and technical advisory board to assist the Council; and incorporates consideration of climate change impacts into the powers and duties of all state agencies. Rhode Island state departments are directed to "lead by example" and to optimize effectiveness and efficiency through coordination, among themselves and with others. The law emphasizes the concept of resilience, building on our collective strength to develop practical solutions that allow us to "weather the storm." Among the top priorities of the EC4 are assessing the vulnerability of key infrastructure to extreme weather events and risks associated with climate change, and then developing adaptation and mitigation strategies to mitigate risks.

At a more granular level, OER works in coordination with the Division of Public Utilities and Carriers (DPUC) to monitor the fuel terminals in Providence and Tiverton that supply gasoline, diesel, heating oils, and jet fuel to Rhode Island and other states in the region. Legislation related to fuel inventory data passed during the 2013 legislative session, which now allows OER to track fuel supplies of the major fuel terminals in the event of any pending storm related events. OER also staffs the Emergency Operation Center (EOC) at the Rhode Island Emergency Management Agency (EMA) center during significant storm events.

FINANCING

Rhode Island's economic health depends on affordable and manageable energy costs. Today, however, Rhode Islanders face high and burdensome energy costs on the order of approximately \$3.6 billion each year. OER's State Energy Plan identified the expansion of financing and investment tools as a key element in Rhode Island's suite of strategies to reduce costs by unlocking a new clean energy marketplace.

In 2014, OER worked with the EERMC to commission a study by Dunsky Energy Consulting on energy efficiency financing in Rhode Island. The purpose of the study was to evaluate how new and existing financing strategies could potentially support Rhode Island's public policy of investing in all cost-effective energy efficiency. The desired outcome of the study was to advance an understanding of the role that financing might play in expanding the reach of efficiency programs, lowering their overall costs, and otherwise supporting the wider and hastened adoption of efficient and clean energy technologies throughout the Ocean State.

To assist in this effort, OER convened a group of energy efficiency and finance stakeholders to work with Dunsky over the course of five months to explore the following research objectives:

- Defining the purpose of an expanded focus on financing
- Clarifying terminology related to financing
- Reviewing how Rhode Island currently uses financing
- Learning what other jurisdictions have done regarding financing
- Discussing which financing methods make sense for Rhode Island
- Understanding the benefits and costs of financing

- Specifying how Rhode Island would smooth the way for expanded use of financing
- Exploring wider financing opportunities

Dunsky's final research findings helped advance an understanding of how Rhode Island's existing energy efficiency financing offers are performing and interacting, as well as the potential to introduce new financing options into the marketplace. The study highlighted financing success stories and opportunities for improvements in the residential, commercial/ industrial, and municipal sectors. The recommendations of the study fell under three broad themes:

- Ensuring the sustainability of Rhode Island's current energy efficiency financing programs by addressing key process barriers;
- Filling gaps in the current suite of energy efficiency financing offers and expanding the resulting energy savings delivered by offering new financing options and accessing deeper savings; and
- Increasing the effective use of ratepayer money within available financing offers.

The full version of the Dunsky study can be found at: <u>www.rieermc.ri.gov/finance%20study/</u>. The findings of the study will be used to inform ongoing discussions about how financing opportunities can support Rhode Island's commitment to maximizing cost-effective energy efficiency, while spreading benefits equitably, investing more broadly and deeply, and leveraging ratepayer funding most effectively.

CLEAN HEAT

One-third of Rhode Island's statewide energy consumption goes to heating and thermal energy use. Annually, approximately \$1.1 billion is spent on thermal-related energy costs, consuming 63 trillion BTUs of energy and releasing 3.9 million tons of CO2 into the atmosphere. Natural gas and petroleum-based deliverable fuels (primarily heating oil and propane) supply nearly onehundred (100) percent of fuel use in this sector. Throughout 2014, OER launched new efforts to develop strategies for expanding access to energy efficient and clean energy solutions in the heating sector. Existing and emerging alternative heating technologies offer the promise of reducing thermal consumption and long-term consumer costs; easing the thermal sector's impact on the environment; and creating new business opportunities for industry.

Thermal Working Group

Delivered fuels – chiefly oil and propane – play a central role in the thermal sector of Rhode Island's energy economy. Nearly forty (40) percent of the state's heating needs are supplied by delivered fuels. Despite the prevalence of these fuels, little dedicated energy efficiency program funding exists to serve delivered fuel customers even though the state currently ranks as a national leader in energy efficiency. This gap creates recurring uncertainty in funding availability and scope, and precludes the ability to plan and offer energy efficiency services for delivered fuel customers at levels comparable with "Least-Cost Procurement" electric and gas programs.

To address these challenges, OER established a Thermal Working Group in 2014 with the purpose of evaluating how the state can better extend the full benefits of energy efficiency to delivered fuel heating customers. The Thermal Working Group conducted three informationgathering efforts in support of developing a plan to achieve a cleaner and more efficient delivered fuels sector: (1) a market assessment and estimate of energy efficiency potential; (2) a jurisdictional comparison to examine other state best practices; and (3) an analysis of policy and funding options to raise long-term funding for investing in delivered fuels efficiency.

The Working Group's research culminated in a report intended to inform future policy and programs for investing in all cost-effective delivered fuel energy efficiency in Rhode Island. The Working Group's research revealed the following conclusions:

- Significant energy efficiency potential exists in Rhode Island's delivered fuels sector. Investing in this efficiency is projected to provide substantial consumer, economic, and environmental benefits that outweigh the costs;
- There are examples of many other states in the region that provide energy efficiency services for delivered fuels customers, supported by a variety of funding sources; and
- Several viable options exist for securing sustainable funding sources for delivered fuels efficiency, yet none will be easy to establish. Future plans to help scale delivered fuels energy efficiency should involve a close partnership with the Rhode Island fuel dealer industry, who can be valuable partners to help achieve the state's vision of a secure, cost-effective, and sustainable energy future.

CLEAN TRANSPORTATION

Transportation is the costliest energy sector in Rhode Island, accounting for nearly forty (40) percent of statewide energy expenditures. It is also a sector with major implications for longterm environmental sustainability and remains heavily dependent on petroleum-based fuels. Annually, approximately \$1.4 billion is spent on transportation-related energy costs, consuming 64 trillion BTUs of energy and releasing 4.5 million tons of CO2 into the atmosphere. Nearly all of this energy consumption is derived from petroleum-based fuels sourced from outside of our state. Throughout 2014, OER undertook many new efforts related to increasing and promoting the use of alternative, cleaner transportation solutions that offer the potential to reduce overall energy consumption and longterm consumer costs; partially ease the transportation sector's impact on our environment; and create new opportunities for industry growth.

Zero Emission Vehicle Working Group

In December 2014, OER launched a stakeholderbased Zero Emission Vehicle (ZEV) Working Group. The ZEV Working Group was formed to further expand access to electric and fuel cell vehicle infrastructure; encourage the purchase and lease of these highly-fuel efficient vehicles; reduce up-front consumer costs for adoption of alternative clean transportation solutions; remove barriers to deployment; and provide policy recommendations to the state. Overall, the work of the ZEV working group will advance state economic, energy, and environmental policy goals, thereby creating new opportunities for growth in our local clean energy economy.

The working group is split into three subcommittees to address ZEV Marketing & Outreach; State, Municipal, Consumer & Business Incentives for ZEV adoption; and Infrastructure, Planning & Regulatory Issues. Each subcommittee, and the working group as a whole, is made up of a diverse group of stakeholders, including representatives from state agencies and local private and non-profit entities.

ZEV WORKING GROUP

STEERING COMMITTEE

MARKETING & OUTREACH

STATE MUNICIPAL, CONSUMER, & BUSINESS INCENTIVES

INFRASTRUCTURE, PLANNING & REGULATORY ISSUES

National Drive Electric Week

In September 2014, OER – in partnership with Ocean State Clean Cities - hosted the first National Drive Electric Week event at Garden City Center, Cranston. The event was the largest of its kind held in the Northeast, with more than 150 people and 37 electric vehicles in attendance. Local dealerships and electric vehicle supply equipment (EVSE) providers showcased the latest electric vehicles (EVs) and charging technology. Ride-and-drive opportunities were also made available, and representatives from Hyundai USA were on hand with their new hydrogen-fueled Tucson SUV. In addition, assembled guests heard comments from Senators Jack Reed and Sheldon Whitehouse, Congressmen Jim Langevin and David Cicilline, and Cranston Mayor Allan Fung, while state Division of Motor Vehicles (DMV) Administrator Anthony Silva announced the availability of Rhode Island's new Electric Vehicle license plate. At the end of the event, participating members who brought their EVs lined up in a procession and drove out together in a show of solidarity. Overall, the event was extremely successful in recognizing state leadership on clean energy transportation issues and OER looks forward to planning Drive Electric Week 2015.

New Rhode Island Electric Vehicle License Plate

OER worked closely with the Department of Motor Vehicles (DMV) and the Town of North Smithfield on the creation of an Electric Vehicle/ Hybrid Electric (EV) license plate. The plate was announced in September 2014 to coincide with a Drive Electric Week event held in Cranston. The plate was developed to help first responders quickly identify electric/hybrid vehicles, which require special consideration during rescue efforts due to the high voltage lines running throughout the cars. The new license plate design has also become a way for electric vehicle owners to differentiate themselves and take pride in their utilization of alternative clean transportation solutions. Through this effort, Rhode Island becomes the fourth state in the nation to institute an EVspecific plate, joining Massachusetts, Hawaii, and Illinois.



The new Electric/Hybrid vehicle license plate keeps the familiar wave pattern but changes the color to a subtle green and replaces "Ocean State" with "Electric/Hybrid".

Electric Vehicle Registration Data Collaboration

In 2014, OER commenced an important important collaboration with the Department of Motor Vehicles (DMV) to collect electric vehicle registration data as part of ongoing efforts to track EV adoption rates. The process involved culling through thousands of lines of data to match Vehicle Identification Numbers (VINs) with key vin strings to properly identify if a vehicle is a plug-in electric (PEV). To date, OER and DMV have identified 415 PEVs registered in Rhode Island, and is now monitoring the growth rate in EV adoption on a monthly basis. OER is also working with DMV to identify vehicles that have been registered incorrectly as an EV or hybrid and replace them with the correct fuel type.



RHODE ISLAND ENERGY RESOURCES ACT

RIGL Title 42 Chapter 140-3

The Rhode Island Energy Resources Act outlines the purposes and responsibilities of the Office:

- Develop and put into effect plans and programs to promote, encourage, and assist the provision of energy resources for Rhode Island in a manner that enhances economic well-being, social equity, and environmental quality;
- (2) Monitor, forecast, and report on energy use, energy prices, and energy demand and supply forecasts, and make findings and recommendations with regard to energy supply diversity, reliability, and procurement, including least-cost procurement;
- (3) Develop and put into effect plans and programs to promote, encourage and assist the efficient and productive use of energy resources in Rhode Island, and to coordinate energy programs for natural gas, electricity, and heating oil to maximize the aggregate benefits of conservation and efficiency of investments;
- (4) Monitor and report technological developments that may result in new and/or improved sources of energy supply, increased energy efficiency, and reduced environmental impacts from energy supply, transmission and distribution;
- (5) Administer the programs, duties, and responsibilities heretofore exercised by the state energy office, except as these may be assigned by executive order or the general laws to other departments and agencies of state government;
- (6) Develop, recommend and, as appropriate, implement integrated and/or comprehensive strategies, including regional and federal level strategies, to secure Rhode Island's

interest in energy resources, their supply and efficient use, and as necessary to interact with persons, private sector, non-profit, regional, federal entities and departments and agencies of other states to effectuate this purpose;

- (7) Cooperate with agencies, departments, corporations, and entities of the state and of political subdivisions of the state in achieving its purposes;
- (8) Cooperate with and assist the state planning council and the division of state planning in developing, maintaining, and implementing state guide plan elements pertaining to energy and renewable energy;
- (9) Coordinate the energy efficiency, renewable energy, least cost procurement, and systems reliability plans and programs with the energy efficiency resource management council and the renewable energy coordinating board;
- (10) Participate in, monitor implementation of, and provide technical assistance for the lowincome home energy assistance program enhancement plan established pursuant to § 39-1-27.12;
- (11) Participate in and monitor the distributed generation standard contracts program pursuant to chapter 39-26-2;
- (12) Coordinate opportunities with and enter into contracts and/or agreements with the economic development corporation associated with the energy efficiency, leastcost procurement, system reliability, and renewable energy fund programs;
- (13) Provide support and information to the division of planning and the state planning council in development of a ten (10) year Rhode Island Energy Guide Plan, which shall be reviewed and amended if necessary every five (5) years;
- (14) Provide funding support if necessary to the renewable energy coordinating board and/

or the advisory council to carry out the objectives pursuant to chapter 42-140-3;

- (15) Advise and provide technical assistance to state and federally funded energy program to support:
 - (i) The federal low-income home energy assistance program which provides heating assistance to eligible lowincome persons and any state funded or privately funded heating assistance program of a similar nature assigned to it for administration;
 - (ii) The weatherization assistance program which offers home weatherization grants and heating system upgrades to eligible persons of low-income;
 - (iii) The emergency fuel program which provides oil deliveries to families experiencing a heating emergency;
 - (iv) The energy conservation program, which offers service and programs to all sectors; and

- (16) Advise the economic development corporation in the development of standards and rules for the solicitation and award of renewable energy program investment funds in accordance with § 42-64-13.2;
- (17) Develop, recommend, and evaluate energy programs for state facilities and operations in order to achieve and demonstrate the benefits of energy-efficiency, diversification of energy supplies, energy conservation, and demand management; and
- (18) Advise the governor and the general assembly with regard to energy resources and all matters relevant to achieving the purposes of the office.



SYSTEM BENEFIT CHARGE

OER receives a majority of its funding for staffing through the System Benefit Charge (SBC), which was part of the energy restructuring legislation within the enacted FY2013 State Budget. OER received \$729,168 from the SBC in 2014 for staffing activities associated with the development, implementation, and evaluation of least-cost energy efficiency and clean energy programs; system reliability; energy security; and regional energy system activities. In addition, these funds support OER's engagement in regulatory proceedings and other actions pertaining to the purposes, powers, and duties enumerated in the Rhode Island Energy Resources Act.

As of April 1, 2015, OER is staffed with ten (10) full time state employees, and the SBC funding provides between 55 to 80 percent of annual salaries, with the balance contributed from other limited restricted receipt and federal funds.

This invaluable funding resources has supported the numerous activities and accomplishments detailed throughout this Annual Report, including, but not limited to:

- Oversight and development of the state's nation-leading energy efficiency programs;
- OER's engagement on regional energy infrastructure issues, working in collaboration with the New England states, ISO-NE, and other stakeholders;
- Development of the new Rhode Island State Energy Plan;

- Development and implementation of the Municipal Streetlight Investment Act;
- Development and implementation of programs that support our local clean energy economy through the expansion of clean energy solutions, such as the 2015 Renewable Energy Growth Program and Distributed Generation Standard Contracts program;
- Active participation in important regulatory proceedings necessary to implement state mandates and policy goals, such as leastcost procurement activities (including energy efficiency programs), renewable distributed generation programs, and municipal streetlight ownership;
- Implementation and coordination of energy cost saving opportunities for public sector entities through the Rhode Island Public Energy Partnership;
- Designing and implementing a distributed generation pilot program in coordination with the System Reliability program in Tiverton and Little Compton;
- Staffing the Emergency Operation Center during severe weather related events at the Rhode Island Emergency Management Agency;
- Expanding energy efficiency and renewable energy programs to the state's agriculture sector; and
- Supporting the adoption of and market opportunities for alternative clean transportation solutions.

