



2012 ANNUAL REPORT

Recognizing that a strong and well-managed state energy program is critical to Rhode Island's economic future, Governor Chafee and the Rhode Island General Assembly led an effort to restructure and stabilize funding for the RI Office of Energy Resources (OER) in 2012. R.I.G.L. Section 39-2-1.2, which became effective on January 1, 2013, strengthens the duties and responsibilities of the OER and allocates forty percent of demand-side management funds to the Office. The legislation requires that the OER provide state leadership for Rhode Island's energy efficiency, renewable energy and energy assurance programs and oversee regulatory proceedings, contested cases, and other actions pertaining to energy issues in the state. See Appendix A for a complete list of OER responsibilities.

R.I.G.L. Section 39-2-1.2 (k) also requires that the OER submit an annual performance and financial report to the General Assembly and the Governor. Although the OER did not begin receiving demand-side management funding until January 1, 2013, the OER is pleased to provide this report as a summary of the Office's accomplishments in 2012.

RESTRUCTURING OF THE STATE OFFICE OF ENERGY RESOURCES

Governor Chafee nominated Dr. Marion Gold to serve as Commissioner of Energy Resources in June 2012. Gold was confirmed on March 5, 2013, marking the first time the position has been filled since 2009. Working with the leadership of the Department of Administration, Commissioner Gold has put in place a strong team of energy specialists to carry out the duties of the OER. Commissioner Gold also has overseen the transfer of the Low Income Heating Assistance and Weatherization Programs, including 7 staff positions, from the OER to the Department of Human Services¹.

¹ The transfer of programs from the OER to DHS was accomplished in February 2013. To ensure continuity of services, the OER has continued to provide financial administrative support through April 2013. In the future, the OER and DHS will work collaboratively on energy policies relating to limited-income communities, e.g. those in the greatest need of energy assistance.

The mission of the OER is to lead Rhode Island to a reliable, cost-effective, and sustainable energy future. To create consistent and unified energy policies, the OER will work with state agencies, groups such as the Energy Efficiency and Resource Management Council, the Renewable Energy Coordinating Board and Advisory Council, and the Distributed Generation Board, as well as private and non-profit stakeholders. For more information on the OER's new programs and policies, visit the updated OER website at www.energy.ri.gov.

STATE ENERGY PLAN

A top priority of the OER is to update the state energy plan, which was last reviewed in 2002. OER launched the planning process during the Fall of 2012 and expects to complete the work by March 2014 when it will be adopted as part of the RI State Guide Plan (Element 781). The goal of the plan is to provide a coherent, comprehensive, and coordinated vision for providing energy services for Rhode Island. The plan will lay out specific strategies to develop a clean energy economy that creates jobs and industry growth, protects against price volatility, increases reliability, and improves environmental quality. As part of the planning effort, the OER will gather data, set goals, and recommend action regarding near- and long term plans for managing Rhode Island's energy system. An Advisory Council, including representatives from major energy stakeholder groups, businesses and state agencies is participating in the planning process.

REGIONAL AND NATIONAL COLLABORATION

With Governor Chafee serving as the 2013 Chair of CONEG (Coalition of Northeastern Governors), another priority for the OER is to provide technical support for his leadership in regional and national energy planning and policy. The Governor has asked the OER to advance policies to provide electricity at the lowest possible price over the long term, while maintaining reliable electric service and environmental quality. He also has charged the OER to explore opportunities to procure electricity from large scale hydropower as a potential source of clean, renewable and cost-effective energy. The OER is researching and evaluating opportunities as part of the State Energy Planning process and is working closely with the regional policy group known as NESCOE (the New England States Committee on Electricity). In July, 2012, NESCOE was authorized by the Governors to investigate opportunities for coordinated procurement of renewable energy, including large scale hydropower. NESCOE is also investigating challenges related to gas shortages during periods of winter peak demand. On a national level, the RI Energy Commissioner serves on the Board of the National Association of State Energy

Officers (NASEO). In this capacity, RI has the opportunity to participate in the development of national energy policy and to receive regular briefings and updates from the Department of Energy and other federal offices involved in energy management.

ENERGY EFFICIENCY

Energy Efficiency Performance in 2012

In 2012, Rhode Island once again ranked in the top ten nationally for energy efficiency. RI's efficiency programs and policies provide innovative opportunities for residents, businesses, and manufacturers to reduce energy use and save money on their energy bills. In 2012, RI's energy efficiency programs reached 213,330 participants and saved 1.25 billion kWh of electricity and 3.2 million MMBTUs of gas. For every \$1 invested in energy efficiency, RI received electric and natural gas system benefits valued at nearly \$2.50 for a total program economic benefits of \$183.55 million. Efficiency measures will also avoid 793,000 metric tons of greenhouse gas emissions.

RI efficiency programs are administered by National Grid and overseen by the RI Energy Efficiency and Resource Management Council (EERMC). The OER Energy Commissioner serves as the Executive Director and Secretary of the EERMC. A full performance and financial report on the RI energy efficiency program is provided in the 2012 Annual Report of the EERMC. The report has been submitted under separate cover to the General Assembly and the Governor and is available on the OER website at www.energy.ri.gov.

Job Creation from Energy Efficiency

In 2012, the job impacts of the RI efficiency program were measured for the first time. The study, conducted by the New England Clean Energy Council, quantifies the number of full time equivalent (FTE) workers employed in Rhode Island in any aspect of energy efficiency—from independent contractors and plumbers, to rebate processors and engineers. According to the study, over 528 RI FTEs are supported with efficiency dollars. The full report is available at www.nationalgridus.com/EnergyEfficiencyReports.asp.

Rhode Island Public Energy Partnership (RIPEP)

In October 2012, the OER was awarded a three-year, \$700,000 competitive grant from the U.S. Department of Energy to implement the Rhode Island Public Energy Partnership (RIPEP). RIPEP is a

collaborative effort to achieve deep energy savings in state and municipal facilities and build a sustained, effective infrastructure for ongoing savings.

RIPEP brings together key state agencies, municipal governments, utilities, and state university partners to: (1) Create a comprehensive inventory of energy consumption in the public sector; (2) Implement energy efficiency measures in approximately 100 facilities to attain an average of 20% energy reduction; and (3) Identify and mitigate barriers to efficiency improvements in the public sector.

Better Building Challenge

In a related effort, the OER, on behalf of the State of Rhode Island, signed on to the DOE Better Buildings Challenge in 2012 and is committed to reducing energy consumption in state facilities by 20% below 2009 levels by 2020. In partnership with the University of Rhode Island, an initial inventory and baseline of approximately 18 million square feet will be compiled using the U.S. EPA's Portfolio Manager energy monitoring tool. Once the baseline has been established, the OER will partner closely with National Grid to provide highly skilled technical assistance and well-coordinated business approaches to help state facilities managers prioritize and carry out energy efficiency projects.

Industrial Energy Efficiency - Combined Heat & Power

Legislation passed in 2012 directs National Grid to increase support for Combined Heat and Power (CHP) projects through tariff amendments, special incentives and streamlined technical assistance. The nation-leading legislation specifies that the following criteria be factored into the utility's CHP plan: 1) economic development benefits in Rhode Island; 2) energy and cost savings for customers; 3) energy supply costs; 4) greenhouse gas emissions standards and air quality benefits; and 5) system reliability benefits. CHP projects will reduce energy costs for large energy users across the state and generate additional benefits in the form of job creation and air emission reductions.

RENEWABLE ENERGY

Renewable Energy Generation in 2012

The Distributed Generation Standard Contracts (DG) program, created by R.I.G.L. Section 32-2.1 has supported the development of over 17 MW of in-state renewable energy generation projects over the last two years, a significant increase from previous years. Both private and municipal projects have been proposed at locations in sixteen of Rhode Island's thirty nine cities and towns.

The OER and a Distributed Generation Board (pending appointment) are responsible for developing ceiling prices for each renewable technology and submitting the prices to the PUC annually. In 2012, the OER expanded the list of eligible renewable technologies for 2013 from just wind and solar to include anaerobic digestion projects. There will be three enrollment periods in 2013 held in March, July, and September.

Renewable energy projects in Rhode Island have benefited from the drop in hardware costs as the renewable markets have matured. The RI program, launched as a pilot, also has been successful in stimulating the local market and simultaneously driving down prices. Given the success of the pilot, opportunities to extend and expand RI's DG Program are being explored.

Renewable Energy Fund – Economic Development Corporation

Under the leadership of the General Assembly and the Governor, more funds are available for renewable energy projects at Rhode Island homes and businesses, and for financial support to energy innovation companies. The FY13 State Budget revised the Renewable Energy Fund (REF) program, removing a number of out-of-date provisions and establishing a residential renewable energy program. The OER worked closely with the Economic Development Corporation (EDC) to draft new REF regulations (the regulations were last updated in 2009). The new REF regulations establish funding programs for residential, municipal, and commercial sectors including financial assistance for feasibility studies, direct installations, and innovative technology development. The EDC Board approved the new REF program in December 2012. Further information on the REF is available on the RI EDC web site: <http://riedc.com/business-services/renewable-energy>

Federal Offshore Wind Development

Federal offshore wind activities have progressed significantly over the last several months, including the release of the proposed auction and leasing process for the Area of Mutual Interest (AMI) federal waters between Massachusetts and Rhode Island. The OER has been working in coordination with the Governor's Office, the Coastal Resource Management Council, the Department of Environmental Management, and the Congressional Delegation to monitor the proposed auction leasing process with the federal Bureau of Ocean Energy Management (BOEM) and the Department of Interior (DOI). BOEM and DOI are currently proposing to auction the AMI blocks and sell them to the highest bidder. The OER

and Governor Chafee have expressed verbal and written comments to BOEM and DOI officials regarding amending the auction and leasing process with the request that Rhode Island's economic, environmental, and stakeholder interests be given proper weight. The OER anticipates that the federal auction will occur sometime within the next six to eight months. The OER will continue to monitor the auction process with the Governor and the Congressional Delegation.

Block Island Wind Project

The 30 megawatt Block Island wind farm project is undergoing its final permit review by the Coastal Resource Management Council and the Army Corp of Engineers. The OER anticipates that the review will be complete in the Summer, 2013. The OER is monitoring the negotiations between Deepwater Wind and the Town of Narragansett regarding the connection of the project to the mainland. If the project proceeds as scheduled, the OER anticipates that construction will begin in 2014 and commercial operation will start in 2015.

Renewable Energy Coordinating Board

The Renewable Energy Coordinating Board (RECB) and the RECB Advisory Council are new state entities created by R.I.G.L. 42-140.3 passed in 2011. The purpose of the RECB is to provide the organizational structure needed to "effectively implement renewable energy policies to ensure efficient use of state resources" (R.I.G.L. 42-140.3-2(3)). The membership of the RECB includes state agencies with policy development and implementation responsibilities for aspects of renewable energy development including the Director of Administration (DOA), the Commissioner of the Office of Energy Resources, the Executive Director of the Economic Development Corporation, the Director of the Department of Environmental Management, and the Director of the Coastal Resources Management Council. The RECB also appointed a fifteen member Advisory Council to advise the RECB on renewable energy matters as required by statute. The RECB and Advisory Council meets on a regular basis (monthly or bimonthly) to review and coordinate state renewable energy policy. Minutes and presentations from all RECB meetings are posted on the RI Secretary of State web site.

An additional requirement of the RECB enabling legislation is to hold joint meetings with the Energy Efficiency and Resource Management Council. The first joint RECB/EERMC meeting was held on November 27, 2012. The focus of the meeting was a proposal by the OER to integrate geotargeted renewable energy with the energy efficiency and demand response programs underway as part of the

National Grid System Reliability Project (SRP). The goal of the SRP is to defer costly transmission upgrades by implementing demand reduction programs. The OER will build on the SRP by deploying solar renewable energy in the same load zone to further reduce the load on the system. This innovative approach to integrating energy efficiency and renewable energy programs to achieve environmental benefits while lowering costs to ratepayers will be implemented in 2013.

AMERICAN RECOVERY & REINVESTMENT ACT

State Energy Program

As part of the 2009 American Recovery and Reinvestment Act (ARRA), the OER was awarded \$23,960,000 under the State Energy Program (SEP). This grant ends on September 30, 2013, at which time a comprehensive final report will be prepared to document overall job creation, energy savings, and greenhouse gas emission reductions. Below is an illustrative list of some of the types of projects funded by ARRA SEP:

- Funding to eight local governments—Warwick, West Warwick, South Kingstown, East Providence, Westerly, NBC, New Shoreham and Smithfield—to perform energy efficiency upgrades at wastewater treatment facilities and to administer technical assessments. Projects included the purchase and installation of turbo blowers, new dissolved oxygen sensors, pumping system improvements, replacement of VFDs and lighting retrofits;
- Funding to Veterans Auditorium, Providence Health Center, RI Indian Council and the Urban League to perform LED lighting retrofits;
- Funding to National Grid to audit and implement energy efficiency measures in homes heated with deliverable fuels (and therefore not eligible for many efficiency measures). National Grid conducted 3,885 audits, retrofitted 1,786 homes with appropriate energy measures, replaced 1,260 heating systems and completed 526 weatherization projects;
- Funding for twenty seven residential renewable energy projects (wind, solar and geothermal) throughout the State;
- Funding support for the Providence Green and Healthy Homes Initiative to provide minority contractors with technical assistance to develop expertise and build capacity for delivering comprehensive weatherization retrofits, weatherization of homes in a targeted neighborhood and education and outreach;
- Funding to the University of Rhode Island for the Renewable Energy Siting Partnership, which provided technical expertise about the effects renewable energy may have on its people, wildlife and natural resources of RI. Based on the best available science, and through an extensive public engagement process, a URI team of skilled professionals in the fields of

energy, research and planning developed guidelines that can be used by RI's cities and towns to site and manage this new activity. The RESP also developed a comprehensive online energy database: RI Energy.org (www.rienergy.org);

- Funding to University of Rhode Island Coastal Resource Center/Rhode Island Sea Grant to provide ongoing technical support to the State of Rhode Island and the Coastal Resource Management Council to improve and accelerate the installation of offshore renewable energy infrastructure and implement the plan's policy framework;
- Funding to the RI Building Commission to conduct a baseline study demonstrating State Energy Conservation Code compliance, education training and other related work.
- Funding for thirteen businesses, community-institutional renewable energy projects (wind, solar and geo-thermal) – Toray, Bio-Detek, Hodges Badge Company, NorthPaws Veterinary Center, Sandywood Homes, RI Historical Society, Fishermans Memorial, NEIT, Block Island Recue, URI, Gem Plumbing, Organic Farm, Milhaus;
- Funding to DEM for eight renewable energy projects (solar and wind) at State beaches, parks and facilities – East Matunuck State Beach, Burlingame, Fishermen's State Park, Lafayette Fish Hatchery, Dawley Park, Scarborough Beach, Misquamicut Beach, Prudence Island and Urban Edge Farm;
- Funding to EDC for six commercial renewable energy projects (Tiffany, Toray, Newport Biodiesel, GWH PH II, Tyde Farm and Solect Energy Development), three municipal site assessments (Town of Jamestown, City of East Providence and WCRPC), and a study on corporate sustainability and behavior.

Programs and projects administered by the Office of Energy Resources provided benefits in the form of job creation, energy cost savings, and environmental benefits by reducing energy consumption and developing diverse renewable resources in the state.

The OER continues to work on new initiatives using the remaining ARRA funds including electric vehicle charging station infrastructure, a revolving loan fund for energy efficiency, renewable energy and transportation projects, Property Assessed Clean Energy Program, purchase of electric, CNG (compressed natural gas) and hybrid vehicles for the state fleet, and a property value and acoustic study of existing wind turbines.

Energy Efficiency & Conservation Block Grant Program

The Energy Efficiency and Conservation Block Grant (EECBG) Program is part of the 2009 American Recovery and Reinvestment Act. Under this program, the Office of Energy Resources was awarded

\$9,593,500 to implement, develop, promote, and manage energy efficiency and conservation projects throughout the State. This grant will end on June 13, 2013. EECBG funds were deployed in all thirty-nine cities and towns within the state to implement new energy-efficient initiatives and/or projects. Some illustrative examples of the work completed include:

- Solar thermal hot water systems
- High-efficiency boiler installations
- Energy-Star compliant equipment purchases
- High-efficiency window and door retrofits
- LED street & building lighting
- Multiple building energy audits

ENERGY ASSURANCE

Emergency Management

The OER maintains an active role in the state's energy security matters. The OER works in coordination with the Division of Public Utilities and Carriers (DPUC) and is responsible for monitoring the state's six fuel terminals that supply gasoline, diesel, heating oils, and jet fuel to RI and also to other states in the region. Since Hurricane Sandy and Winter Storm Nemo, the OER has performed a review of energy security and emergency management protocol and refined standard operating procedures. The OER will staff Rhode Island Emergency Management Agency (RIEMA)-related storm events at the RIEMA headquarters in partnership with the DPUC.

Energy Assurance Plan

The OER received American Recovery Reinvestment Act funds to prepare an Energy Assurance Plan (EAP). The EAP assessed the state's energy infrastructure and identified specific areas of potential vulnerability. One prime concern identified by the EAP is the State and regional reliance on natural gas for electric generation as well as for home heating. The OER is working with other states in the region to explore opportunities to improve and diversify the state's energy resource mix through large-scale hydropower, offshore wind, and/or distributed generation.

REGIONAL GREENHOUSE GAS INITIATIVE (RGGI)

The Regional Greenhouse Gas Initiative (RGGI) is the nation's first mandatory, market-based cap and trade program to reduce emissions of carbon dioxide (CO₂), the principal greenhouse gas that

contributes to climate change. Under the program, which began in 2009, participating RGGI states - RI, CT, DE, MA, MD, ME, NH, NY, VT (and NJ which withdrew last year)—established a regional cap on CO₂ emissions from fossil fuel-fired electric generating facilities, and required these power plants to possess a tradable CO₂ allowance for each ton of CO₂ they emit. Under RGGI, CO₂ allowances are distributed through quarterly allowance auctions.

States invest the proceeds from the RGGI CO₂ allowance auctions in a variety of consumer benefit programs, including energy efficiency, renewable energy, direct energy bill assistance, and other greenhouse gas reduction programs. Each RGGI participating state directs its own strategy for the investment of CO₂ allowance auction proceeds. The allowable use of auction proceeds in Rhode Island is governed by §23-82-6 of the Rhode Island General Laws. Rhode Island primarily invests CO₂ allowance proceeds in energy efficiency and conservation, and renewable energy technologies.

The public hearing for the *2012 Plan for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds (Plan)* was held on April 23, 2013. The Plan allocates the proceeds from the 2011 auctions - \$2,780,097. The proposed plan allocates funding to RGGI, Inc., DEM and OER for administrative purposes, funding to implement energy efficiency projects at RI state and municipal buildings and public water treatment facilities, funding for energy efficiency projects at existing community buildings and funding for a pilot project to evaluate the costs and benefits of deploying renewable distributed generation in conjunction with the National Grid System Reliability Plan. A copy of the 2012 RGGI Annual Report was submitted in January 2013 and is available on the OER website at www.energy.ri.gov.

ENERGY LEGISLATION

The OER is supporting the following energy legislation in the 2013 legislative session:

- Regional Greenhouse Gas Initiative (RGGI) – The OER, in coordination with the Department of Environmental Management (DEM), is recommending a change to the *Implementation of the Regional Greenhouse Gas Initiative Act*. The OER and DEM propose that the allowed use of the RGGI administrative funds be expanded to all administrative responsibilities pertaining to climate change, energy efficiency, and renewable energy. This change will provide flexibility for the OER, which is funded solely with federal and ratepayer funds.

- Distributed Generation Standard Contracts Program – The OER is recommending several changes to the *Distributed Generation Standard Contracts (DG) Program* statute, including: lowering the operating cost of the program (which will benefit ratepayers), increasing program transparency, increasing program oversight by the OER, providing flexibility in the renewable energy system output requirements within each DG contract and increasing the timeframe within which small-scale hydropower projects must be operational from eighteen to thirty-six months.
- Renewable Energy Fund – The OER supports Governor Chafee’s FY2014 State Budget that proposes the transfer of the Renewable Energy Fund (REF) program from the Economic Development Corporation (EDC) to the OER. The transfer will not change existing REF program regulations. Housing the REF program within the OER will simplify access for businesses, municipalities, and home owners by creating a “one-stop-shop” for all energy related programs (i.e.: technical assistance, loans and grant financial assistance). The primary focus of the REF program at the OER will continue to be economic development and job creation. The OER will maintain a strong working relationship with EDC to leverage the REF dollars with economic development opportunities.
- Property Assessed Clean Energy – The OER is recommending legislation to create an innovative financial program for homeowners to pursue energy efficiency and renewable energy upgrades for their properties. The Property Assessed Clean Energy (PACE) program will be funded entirely with federal dollars without the need for general revenues or ratepayer funds. This legislation will enable municipalities to opt-in to a PACE program, allowing their residents to finance energy upgrades through a lien on their property paid back annually on the property tax bill. This innovative PACE program will remove the upfront financial barriers that homeowners have traditionally encountered when pursuing energy upgrades on their property, particularly renewable energy installations.

APPENDIX A

RIGL Title 42 Chapter 140-3. Purposes

Rhode Island Energy Resources Act

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

- (1) 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 low-income 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, least-cost 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 low-income 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.