CLEAN ENERGY & CLIMATE POLICY IN THE GARDEN STATE



Kathleen Frangione
Chief Policy Advisor
Office of Governor Philip D. Murphy

Governor Murphy's Commitments

- 100% Clean Energy by 2050 Energy Master Plan
- Regional Greenhouse Gas Initiative
- 3,500 MW Offshore Wind by 2030
- Climate Alliance
- Ban Offshore Oil Drilling
- Zero-Emission Vehicle MOU

Clean Energy Legislation

- Renewable Portfolio Standard
- Community Solar
- Energy Efficiency
- Offshore Wind
- Energy Storage
- Zero-Emission Credits

Energy Master Plan

- 10-year plan for energy production, distribution, consumption, and conservation
- Executive Order No. 28:
 - Update Energy Master Plan
 - Blueprint for conversion to 100% clean energy by 2050
 - Energy Master Plan Committee:
 - Board of Public Utilities
 - Economic Development Authority
 - Department of Environmental Protection
 - Department of Health
 - Department of Human Services
 - Department of Community Affairs
 - Department of Transportation
 - Treasury
- Due June 1, 2019

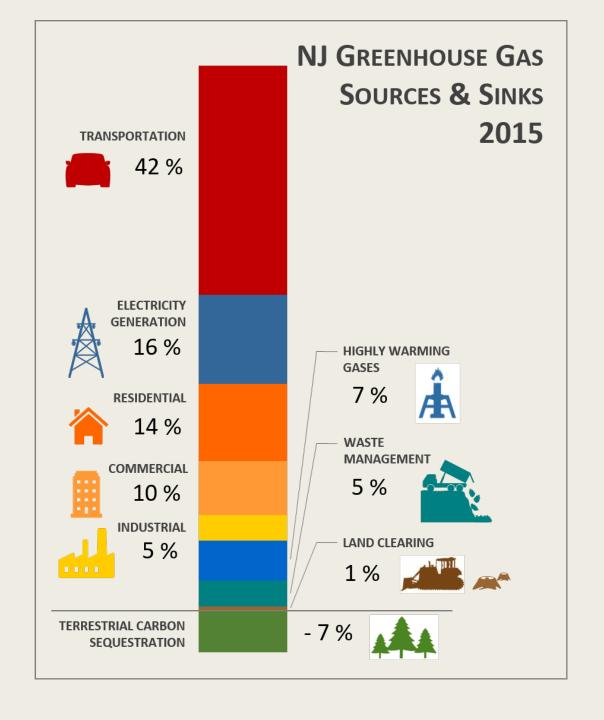
Deep Dive: RGGI



Global Warming Response Act

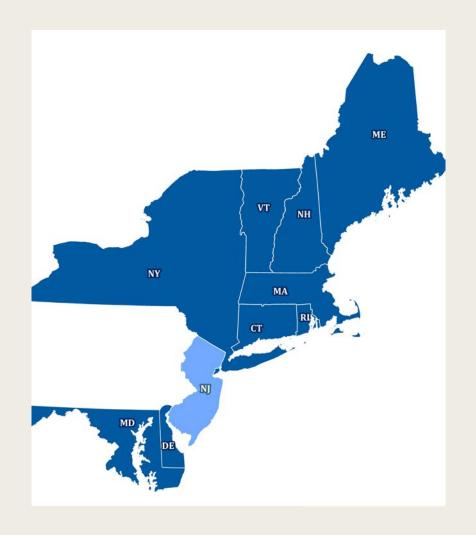
- Enacted July 6, 2007
- Calls for 80% reduction in Greenhouse Gas (GHG) emissions from baseline year
 2006 by 2050
 - Regional Greenhouse Gas Initiative
 - Renewable Energy Portfolio
 - Offshore Wind
 - Zero-Emission Vehicles

New Jersey GHG Profile



Regional Greenhouse Gas Initiative

- Cap and Trade program
 - Establishes Regional Cap on CO2
 - States offer allowances for sale in quarterly auction
 - Electric Generating Units purchase allowances to equal emissions for 3-year control period
 - States receive revenues from quarterly auctions to invest in energy efficiency and GHG reductions



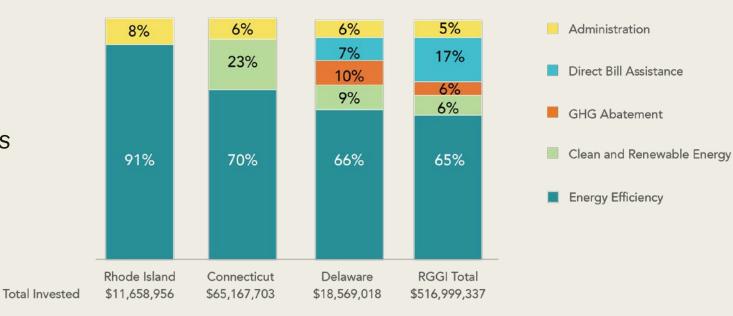
How RGGI Works

- RGGI Regulates Utility Fossil Fuel
 Electric Generating Units at or above
 25 MW capacity
- New Jersey:
 - 38 Power Plants
 - 103 Electric Generating Units

Period Year	RGGI Cap Million Tons of CO ₂
2009-2011	188
2012-2013	165
2014	91
2015	88
2016	86
2017	84

Investing RGGI Proceeds

- Consumer Benefits Programs:
 - Energy efficiency
 - Renewable energy
 - Direct bill assistance
 - GHG abatement programs
- Investment Results:
 - Reducing energy bills
 - Supporting energy reliability
 - Job growth

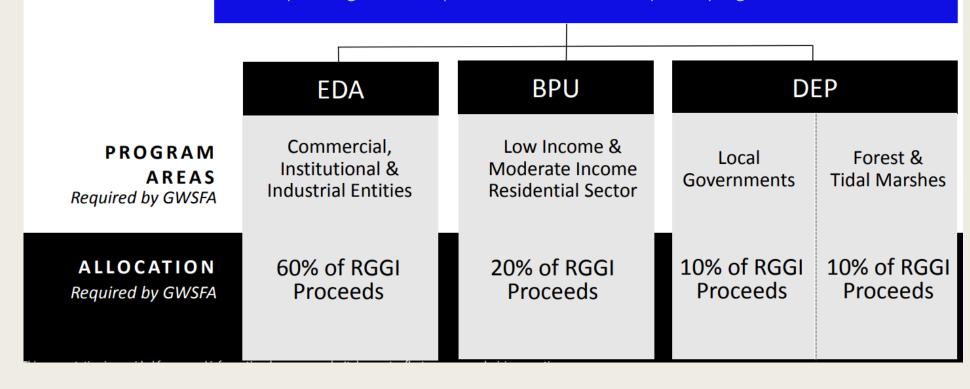


New Jersey and RGGI

GLOBAL WARMING SOLUTIONS FUND ACT (GWSFA)

N.J.S.A 26:2C-52

- Enacted in 2008
- Allocates funding by percentages to three NJ Agencies
- Requires Agencies to spend RGGI funds within specific program areas



Primary Considerations for RGGI Funds

Agencies are Required to Select Programs & Projects Based on 6 Primary Considerations

GWSFA § 26:2C-52. Guidelines and priority ranking system for allocation of funds -

Result in Net Reduction in GHG Emissions

- GHG emissions in the State
- GHG emissions from electricity produced out of the State, but consumed in NJ
- Net sequestration of carbon

Relative Cost

Result in significant reductions in GHG relative to the cost of the project/program

- The reduction of impacts on ratepayers attributable to the implementation
- Contribute to achievement of the 2050 GWRA limit, relative to the cost of the program or project

Reduction in Energy Use

Direct investment in low to moderate income residential sector

- Energy audits
- Efficiency measures
- Financial assistance to electricity customers
- Urban area focus

Co-Benefits

Job creationReduction of air

pollutants

- Reduce Consumer Energy Costs
- Improve local grid reliability
- Contribute to regional GHG reductions
- And others

Responsive to Recommendations Submitted to the Legislature

Actions for future impact by sector: NJGWRA Recommendations Report 2009

- Electric generation
- Industrial
- Residential & Commercial
- Waste Management
- Highly Warming Gases
- Terrestrial Seguestration
- Transportation & Land Use
- Environmental & Economic Analysis

Executive Order 7

Alleviate Conditions Faced by Impacted Communities

"...Serve communities
that are
disproportionately
impacted by the
effects of
environmental
degradation and
climate change,

and which will
alleviate negative
effects on
human health and
the
environment..."

Roadmap to Re-enter RGGI



Offshore Wind



Executive Order #8

• 3,500 MW by 2030

Interagency approach

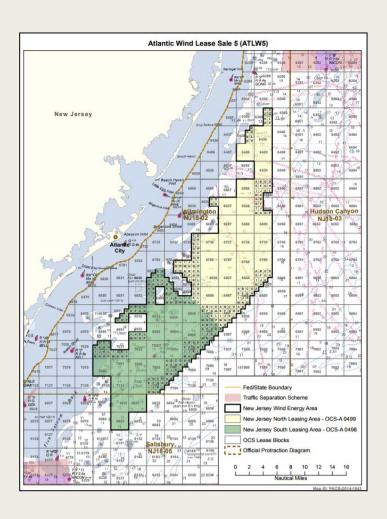
• Offshore Wind Strategic Plan

• Offshore Renewable Energy Certificate (OREC) program & funding mechanism

• Initial 1,100 MW solicitation

Regional collaboration

Overview of NJ Offshore Wind Lease Areas



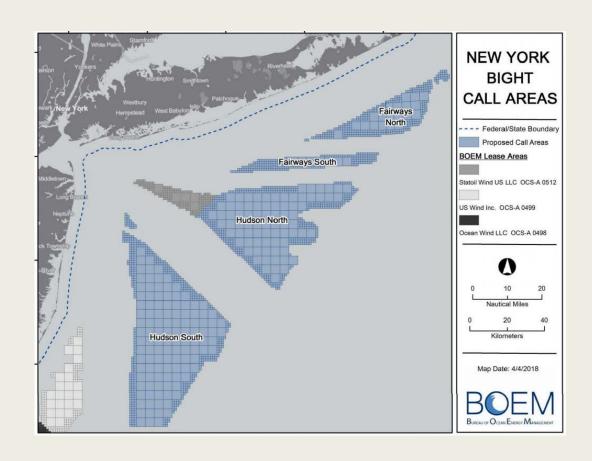
New Jersey lease areas present some of the most favorable conditions for offshore wind development which will <u>help lower costs</u>.

- Relatively close to shore (10 nm out to 21nm);
- Water depths throughout the lease area are generally shallow (under 30m);
- Wind speeds are fairly strong (Avg. Annual Wind Speed 8.5 m/s but significantly higher during peak hours);
- 344,000 acres directly offshore of New Jersey. Each Lease supports at least 1,100 MWs
- Designed for Utility Scale Development
- ORSTED (Ocean Wind) and US Wind
- Deepwater Wind (DE) and Statoil Lease (NY)

Next Step: Consider Additional Lease Areas to Support 3,500 MW Goal

New York Bight

- BOEM Call for Information on potential new lease areas
- Challenges:
 - Commercial and recreational fishing
 - Navigation and safety
 - Wildlife
- Comment period extended to July 30, 2018



BOEM Offshore Lease Process

Planning Construction Site Leasing & Analysis & Operations **Assessment** 1-2 Years 5 Years 2 Years (+25) 2 Years Publish Leasing Notices Site Characterization Construction and Intergovernmental Task Force Operations Plan (COP) Conduct Auction Site Assessment Plan (SAP) Request for Information Facility Design Report Issue Lease(s) (RFI) / Call for Information (FDR) and Fabrication & & Nominations (Call) Installation Report (FIR) Area Identification Decommissioning Environmental Reviews

Offshore Wind Strategic Plan

The Offshore Wind Strategic Plan will focus on critical components of offshore wind development, including:

- achieving scale to reduce costs
- job growth
- supply-chain businesses
- workforce development
- data collection
- appropriate siting of facilities
- shall ensure that natural resources are protected throughout the development and operational stages of offshore wind energy production.

OREC Process-Funding Offshore Wind

BPU released an Offshore Wind Renewable Energy Certificate (OREC) Funding Mechanism rulemaking straw proposal on April 27^{th.}

BPU conducted a Public Hearing on the straw proposal on May 8th

Public comments were due by May 18th.

Next Step: Draft Rule Proposal for Board Consideration

Thank You!

