

# ***New Jersey's Clean Energy Program™***

## **FISCAL YEAR 2022 PROGRAM DESCRIPTIONS AND BUDGETS**



### **DIVISION OF CLEAN ENERGY**

**Renewable Energy Programs,  
Energy Efficiency Programs,  
Distributed Energy Resources,  
and NJCEP Administration  
Activities**

**June 24, 2021**

## Table of Contents

Introduction.....	3
Energy Efficiency Programs.....	3
Energy Efficiency Program Transition.....	3
State Facilities Initiative.....	5
Acoustical Testing Pilot.....	6
Distributed Energy Resources.....	6
Microgrids.....	6
Renewable Energy Programs.....	7
Offshore Wind Program.....	7
Solar.....	11
Community Solar.....	12
Economic Development Authority.....	12
Clean Energy Manufacturing Fund.....	12
Evaluation/Analysis.....	13
Program Evaluation / Analysis.....	13
Energy Master Plan Rate Impact Study.....	15
Grid Modernization.....	15
Outreach and Education.....	16
Sustainable Jersey.....	16
NJIT.....	17
Clean Energy Conference.....	17
Workforce Development.....	17
Memberships.....	18
Planning and Administration.....	18
BPU Program Administration.....	18
Marketing.....	19
Clean Energy Program Website.....	19
Community Energy Grants.....	20
Energy Storage.....	20
Electric Vehicles.....	21
State Vehicle Fleet.....	21
Clean Fleet Program.....	21
EV Grid Assessment.....	22
Fiscal Year 2022 Program Budgets.....	22

## **Introduction**

The Fiscal Year 2022 (“FY22”) Compliance Filing provides program descriptions and budgets for the *New Jersey Clean Energy Program*<sup>™</sup> (“NJCEP”) administered by the New Jersey Board of Public Utilities (“BPU” or the “Board”) and its Division of Clean Energy (“DCE”).

NJCEP is a signature initiative of the BPU that promotes increased energy efficiency (“EE”); the use of clean, renewable sources of energy, including solar and wind (“RE”); and distributed energy resources (“DER”). The results for New Jersey are a stronger economy, less pollution, lower costs, and reduced demand for electricity. NJCEP offers financial incentives, programs, and services for residential, commercial, and governmental customers.

Additionally, in fiscal year 21 (“FY21”), the Office of Clean Energy Equity (“OCEE”) was added to the DCE. The OCEE is charged with overseeing the development and implementation of clean energy policies, technologies, and programs, including EE programs, to better serve New Jersey’s overburdened communities (“OBC”) and to ensure equitable participation in clean energy programs and distribution of related benefits. Working with other BPU teams, the OCEE will develop and implement programs through an equity lens, while leveraging the many existing DCE programs that aim to serve OBC.

## **Energy Efficiency Programs**

### Energy Efficiency Program Transition

In 2018, Governor Murphy signed into law the landmark legislation known as the Clean Energy Act (“CEA”).<sup>1</sup> The law called for a significant overhaul of New Jersey’s clean energy systems by augmenting existing EE, RE, and DER programs and building sustainable infrastructure in order to fight climate change and reduce carbon emissions. Reducing the rate of climate change and emissions will in turn create well-paying local jobs, grow the State’s economy, and improve public health, while ensuring a cleaner environment for current and future residents.

As part of this statewide undertaking, the Clean Energy Act required New Jersey’s investor-owned gas and electric utility companies to reduce their customers’ use of gas and electricity by set percentages over time. To help reach these targets, the BPU approved a comprehensive suite of efficiency programs that would transition the State to some of the highest energy savings in the country.

These “next generation” EE programs feature new ways of managing and delivering programs historically administered by NJCEP. While NJCEP will continue to offer

---

<sup>1</sup> Clean Energy Act, L. 2018, c. 17, [https://www.njleg.state.nj.us/2018/Bills/PL18/17\\_PDF](https://www.njleg.state.nj.us/2018/Bills/PL18/17_PDF)

some EE programs, all of the investor-owned gas and electric utility companies will now also offer complementary EE programs directly to their customers.

In January 2019, the BPU contracted with Optimal Energy to conduct an EE market potential study. Staff worked with the New Jersey Division of Rate Counsel, utilities, and other stakeholders and held four stakeholder meetings to advance the study.

On February 1, 2019, the BPU held a public meeting to solicit responses to twelve questions that would help guide the process and advance the design of the EE programs under the requirements of the CEA.

At the May 28, 2019 Board agenda meeting, the Board approved the following items to advance the goals of the CEA:

- The acceptance of the final “Energy Efficiency Potential in New Jersey” study;
- The adoption of the preliminary quantitative performance indicators related to electric and natural gas usage reduction targets; and
- The establishment of the Energy Efficiency Advisory Group (“Advisory Group”), whose members would provide insight on key elements of program implementation and evaluation for Staff’s use in the development of recommendations to the Board.

An extensive public stakeholder process continued in the late summer, fall, and winter, with ten additional stakeholder and technical working group meetings, as well as regular meetings with the Advisory Group. Significant stakeholder comment was received, reviewed, and incorporated, and stakeholder input helped to refine three straw proposals (Program Administration, Cost Recovery, and Utility Targets), as well as a full straw proposal which resulted in Staff recommendations to the Board for the next generation of EE programs. On June 10, 2020, the Board approved an expansive EE program which highlighted an enhanced role for utilities and addressed issues such as utility-specific energy usage and peak demand reduction targets, program structure, cost recovery, utility filing requirements, program timeframes, evaluation, and reporting requirements. Staff continues to work with New Jersey’s investor-owned utilities, the New Jersey Division of Rate Counsel, and other stakeholders to ensure that the new framework is put into place fully, properly, and with the least possible ratepayer impact. Utilities are preparing their filings for programs to start on July 1, 2021.

In FY22, Staff will continue to transition the EE programs, as well as advance the evaluation, measurement, and verification needed to ensure energy savings. Staff will continue to facilitate working groups to assist in the implementation of State and utility EE programs. Lastly, Staff will work to procure appropriate studies and evaluations to assist in the determination of energy savings, cost effectiveness, code compliance, EE baselines, and other relevant assessments.

The FY22 NJCEP proposal provides continuation of funding for programs for

residential, governmental, commercial, and industrial markets, including special incentives for OBCs, with a particular focus on outreach and education to ensure equity in access to EE and development of a diverse EE workforce.

The OCEE will play a key role in the EE transition by leading the Equity Working Group and Workforce Development Working Groups and other key EE initiatives focusing on equitable access and participation in EE programs. It will seek to ensure expansion of diversity in workforce development and help establish appropriate targets as necessary for clean energy programs to ensure equity.

### State Facilities Initiative

The State Facilities Initiative identifies and implements EE projects in State-owned facilities or State-sponsored projects with the objective of producing energy and cost savings. The Energy Capital Committee (“ECC”), consisting of members from the Department of Treasury (“Treasury”) and the BPU’s Division of State Energy Services (“SES”), coordinates these projects based on evaluation of capital costs and anticipated energy savings. SES works with agencies, the Office of Management and Budget, and the Division of Property Management and Construction (“DPMC”) to help identify the projects that are viable to move forward and impact energy consumption. The FY22 budget includes additional funding for State-sponsored projects to be identified and prioritized to achieve EE savings and equipment upgrades.

The BPU and Treasury first partnered through an MOU in February 2017 to upgrade the Hughes Justice Complex and the Department of Environmental Protection (“DEP”).<sup>2</sup> In November 2019, the Board entered into a Memorandum of Understanding (“MOU”) with DPMC to establish criteria for selecting and allocating funds on the designated priority list (“2019 MOU”).<sup>3</sup> This allowed for increased State facility projects and a prioritized pipeline of future upgrades. Projects will meet one or more of the following criteria: (a) improvements, upgrades, and replacements of air handling and movement systems; (b) lighting and equipment upgrades and replacements; (c) boiler, chiller, and HVAC replacements; (d) lighting and building controls; (e) RE and EE systems at all State facilities; and (f) injection of funding for State facility projects outside of the ECC domain that have an EE or RE component but are stalled due to lack of funding.

Following the guidelines established in the 2019 MOU, SES will continue to develop projects. Projects will be considered by the Board under separate Board Order.

---

<sup>2</sup> In re the Matter of a Memorandum of Understanding between the New Jersey Division of Property Management and Construction and the New Jersey Board of Public Utilities, BPU Docket No. Q017010075, Order Dated February 22, 2017.

<sup>3</sup> In re the Matter of the Memorandum of Understanding Between the New Jersey Division of Property Management and Construction, Department of Treasury and the New Jersey Board of Public Utilities Regarding the State Facilities Initiatives Program Budget, BPU Docket No. Q019101423, Order Dated November 13, 2019.

Included as an appendix is a chart that summarizes the FY22 Designated Project List (“DPL”). The DPL represents SES staff’s most current list and funding amounts making up the SFI budget line. The proposed funding levels for specific projects on the list reflects the current project status, recognizing that project start dates and milestones are dependent on DPMC coordinating the commitment and deployment of all project funds, including use of the Treasury line of credit. As with prior approved DPLs, including the one approved in 2019, SES staff will continue to identify potential future projects, or appropriate future projects, subject to the review and approval by the Board consistent with the orders referenced above.

### Acoustical Testing Pilot

The New Jersey Acoustical Testing Pilot Program is proposed in response to the Energy Master Plan (“EMP”) 3.1.3 goal which encourages the exploration of “new energy-saving opportunities in complementary sectors, such as the water sector.” Annual water and energy losses due to aging water infrastructure in New Jersey are significant, amounting to billions of gallons of water and multiple gigawatts of energy lost. This pilot incentive program allocates resources to facilitate the purchase or rental by water utilities of acoustic monitoring systems that employ permanent leak monitoring technology to enable them to more efficiently and effectively locate water leaks. This pilot program welcomes proposals from all New Jersey water utilities, but primarily seeks to address water and energy losses in urban and older inner suburban communities that have older infrastructure and address whose infrastructure issues would also result in benefits to OBC. The Board approved the release of the application in March 2021. Staff expects to award first round funding in early FY22 and recommends that a second Pilot year commence in FY22.

## **Distributed Energy Resources**

### Microgrids

The BPU learned from Superstorm Sandy that business as usual – with respect to the electric distribution system overall and backup generators at critical facilities – was inadequate for resilience. To address resilience at critical facilities, in 2014 the BPU provided funding to the New Jersey Institute of Technology (“NJIT”) to conduct a study of potential locations for Town Center Distributed Energy Resources (“TCDER”) microgrids in the Sandy-affected regions of the state. The 2015 EMP recommended an increase in the use of microgrid technologies, and in November 2016 the BPU issued a microgrid report that formed the basis for New Jersey’s initial microgrid program.

In fiscal year 2018, the BPU initiated Phase I of the microgrid program, through which interested applicants could submit requests to fund TCDER microgrid feasibility studies. The universe of program applicants was limited to local government entities or State agencies that own or manage critical facilities. The BPU awarded a total of

approximately \$2 million to 13 public entities consisting of municipalities, counties, and authorities to conduct the feasibility studies. The BPU reviewed the studies in fiscal year 2019 (“FY19”) and found 12 participants to be eligible for the next round of funding.<sup>4</sup>

In fiscal year 2020 (“FY20”), the BPU initiated Phase II of the program, which was open to all Phase I participants and which will provide incentives for detailed designs of TCDER microgrids. Of the 12 approved feasibility study participants eligible for Phase II incentives, 11 submitted applications in May 2020. In March 2021, the BPU awarded a total of \$4 million to eight (8) applicants. After the design and engineering phase is completed, TCDER applicants will decide whether to move forward with Phase III, which encompasses the construction and implementation of the TCDER microgrid projects. To investigate opportunities for financing, the BPU applied for and received a grant of approximately \$300,000 from the U.S. Department of Energy (“USDOE”) to conduct a study regarding financing microgrids. The study has the following objectives:

- Analyze existing best practices to inform the development of the procurement/financing models;
- Evaluate and track the TCDER microgrid applicants as they enter the procurement and financing process to derive “real-world” information that can further refine the models; and
- Produce a guide grounded in legal, economic, and regulatory realities to help jurisdictions in New Jersey and across the United States to better understand the process of procuring and financing advanced community microgrids.

No funding is requested for Microgrids for FY22.

## **Renewable Energy Programs**

### Offshore Wind Program

Executive Order 8<sup>5</sup> called upon all State agencies with responsibility under the Offshore Wind Economic Development Act (“OWEDA”) (statute amending L. 2007, c. 340 and L. 1999, c. 23) to work collaboratively towards achieving the goal of 3,500 MW of offshore wind (“OSW”) by 2030 and to establish a vibrant offshore wind market in New Jersey and in the region. Executive Order 92, maintaining the goal of establishing a vibrant offshore wind market, increased the goal to 7,500 MW by 2035.

---

<sup>4</sup> One (1) participant withdrew from further consideration.

<sup>5</sup> Executive Order No. 8.

In September 2018, the Board announced the opening of a competitive solicitation for 1,100 MW, at the time the largest single state solicitation in the nation and a framework for future solicitations. A Request for Quotation (“RFQ”) was also issued in FY19, for an offshore wind economic consultant to assist in the review and evaluation of the applications received in response to the first solicitation, consistent with OWEDA. The consultant’s scope was to evaluate the technical feasibility of proposals, the energy producing capacity underlying project economic performance, energy pricing, cost/benefit analysis, job creation, project financing, and the public subsidy requested. The Board awarded a contract in FY19, with costs to be recovered through the OSW applicants’ application fees, as allowed under OWEDA.

The first OSW competitive solicitation resulted in applications from three experienced offshore wind developers that represent multi-billion-dollar investments and hundreds of clean energy jobs for New Jersey. On June 21, 2019, the Board unanimously approved the 1,100 MW Ocean Wind Project to be developed 15 miles off the coast of Atlantic City before 2024 and projected to power an estimated 500,000 homes.

In FY19, the Board retained a consultant for the Offshore Wind Strategic Plan for a two-year term. The Offshore Wind Strategic Plan was started in August 2018 and includes establishing the framework for moving forward in consultation with stakeholders and strategic partners. The draft strategic plan was issued for public comment in the 5th Quarter (“Q5”) of FY20<sup>6</sup> and was adopted by the Board and released to the public in September 2020.

On February 28, 2020, the Governor announced a planned solicitation schedule for the full 7,500 MW to provide transparency to the industry and to show commitment to the development of wind in New Jersey. The solicitation schedule also allows for flexibility to make adjustments to the schedule to capture the best benefits for citizens of the State on issues of cost, development of transmission, supply chain establishment, federal tax credits, and more.

An RFQ for an offshore wind economic consultant was issued in FY20 for the development of the second offshore wind solicitation and the review and evaluation of offshore wind project proposals consistent with OWEDA. The review and evaluation will again include evaluating the technical feasibility of proposals, the energy producing capacity underlying project economic performance, energy pricing, cost/benefit analysis, job creation, project financing, and the public subsidy requested. The Board awarded a contract in FY20, with a significant portion of the costs to be recovered through the OSW applicants’ application fees, as allowed under OWEDA.

---

<sup>6</sup> On April 14, 2020, New Jersey Governor Phil Murphy signed into law a bill that extended the State’s FY20 to September 30, 2020. In order to align with the State’s fiscal year, the Board extended the NJCEP FY20 budget.

In September 2020, a second solicitation was issued for 1,200 to 2,400 MW of OSW (“Solicitation Two”). Evaluation of applications received from two developers in December 2020 is ongoing, with an expected award by the Board in June 2021.

Also, in 2020, the Board requested PJM include the State’s OSW goal into its regional transmission expansion planning under a PJM process known as the State Agreement Approach (“SAA”). The Board also issued an RFQ for a consultant to assist Staff with the SAA process and a contract was awarded to a qualified consultant.

A solicitation for OSW transmission solutions was issued by PJM on behalf of the Board in April 2021, with proposals expected in August 2021.

In FY21, the Board and the South Jersey Port Corporation (“SJPC”) entered into a MOU to support the development of critical, first-of-their-kind manufacturing facilities to support New Jersey’s growing offshore wind industry (“SJPC MOU”). The SJPC MOU will enable the transfer of \$1.8 million in Societal Benefits Charge (“SBC”) funding to the SJPC, which will directly aid in the development of the Paulsboro Marine Terminal.

In FY22, funding would also support the Board’s multi-year membership in the National Offshore Wind Research and Development Consortium, as well as establish a local consortium of New Jersey research institutions to support offshore wind research and scholarships for women, people of color, and low-income students pursuing degrees in offshore wind related disciplines.

Also in FY21, the Board entered into an MOU with the Economic Development Authority (“EDA”) to support a portion of the development and related expenses of the New Jersey Wind Port (“Wind Port”) (“EDA MOU”). The EDA MOU enabled the transfer of \$13.2 million in SBC funding, which will directly support the development of the Wind Port. The Wind Port is intended to be the first purpose-built location for marshalling and manufacturing and is expected to play a critical role in advancing the offshore wind industry in New Jersey, as well as being an economic engine for the State.

On August 16, 2019, Governor Phil Murphy signed Executive Order No. 79 and established a Council for the Wind Innovation and New Development (“WIND”) Institute, charged with developing and implementing a plan to create a regional hub for New Jersey’s burgeoning offshore wind industry and with building upon the Murphy Administration’s commitment to making New Jersey a national leader in offshore wind. The WIND Council includes representatives from the Office of the Secretary of Higher Education, the EDA, the BPU, the Department of Education, the DEP, and the Department of Labor and Workforce Development.

On April 22, 2020, the WIND Council released a report detailing plans for creating the WIND Institute, which will serve as a center for education, research, innovation, and workforce training related to the development of offshore wind in New Jersey and the Northeast and Mid-Atlantic region. The WIND Institute will coordinate and galvanize

cross-organizational workforce and innovation efforts to position New Jersey as a leader in offshore wind. A primary function of the WIND Institute will be to act as a centralized hub for offshore wind workforce development by coordinating across stakeholder groups and State agencies to support the development and delivery of programs and facilities that empower New Jersey students and workers to participate in the offshore wind industry. More specifically, a cross-governmental working group will collaborate with New Jersey's higher education institutions to identify opportunities for students to successfully enter the industry and execute initiatives that will cement these pathways into the industry (e.g., apprenticeships) and address potential barriers for New Jersey workers (e.g., expanding pool of qualified instructors).

While the process to establish the WIND Institute through legislation is ongoing, immediate action is needed to lay a cohesive groundwork for workforce development. In FY21, the BPU entered into an MOU with the EDA to provide funding that would support EDA initiatives, including execution of a competitive grant solicitation to develop a Global Wind Organization safety training program and facility in New Jersey; development of a best-in-class wind turbine technician training program; creation of a plan to establish pathways into the offshore wind industry for New Jersey students and workers, driven by a cross-governmental working group to be coordinated by EDA; and design and delivery of a workforce development seminar that will provide local stakeholder groups with insight into the industry's workforce development needs to empower these stakeholder groups to build relevant workforce solutions.

Together, these efforts will enable New Jersey to create a foundation for a targeted and coordinated offshore wind workforce development approach that creates job opportunities for a wide range of New Jersey students and workers.

The FY22 budget would provide continued funding support to EDA for the WIND Institute programs. The workforce and education programs that address key challenges will expand stakeholder engagement and understanding about workforce needs and opportunities. These programs would include overseeing grant challenges to New Jersey training providers in key skills gap areas such as offshore wind welding (specifically submerged arc welding), as well as one to two other areas such as marine transport, offshore wind marshalling, offshore wind power engineering, and/or environmental surveying and monitoring. Funding would also support the development of an offshore wind module to be included as part of STEM concentrations at New Jersey vocational schools, offshore wind seminars, and other engagement activities for businesses and other stakeholders interested in furthering offshore wind workforce development with a particular focus on driving diversity, equity, and inclusion and a workforce skills assessment to ascertain additional workforce development priority areas. In addition, funding would expand WIND Institute research and innovation programs that leverage New Jersey's higher education institutions' assets and expertise to spearhead research and innovation that unlocks market potential and/or specifically addresses challenges facing New

Jersey's offshore wind industry. Additional programming would support an industry-sponsored grant challenge with public matching funds to drive innovative research and development in the private sector. A portion of the funding would also be used for administrative and staffing costs to support the launch of the Wind Institute and to position the Wind Institute as a centralized information hub for offshore wind workforce development, education, research, and innovation and for other operational needs including a space assessment for a physical location for the Wind Institute.

We will also continue to work with our consultants on Solicitation Two and the SAA process.

FY22 funding will also allow the Rutgers Center for Ocean Observation Leadership to continue the work that it began for the Board in 2017 on oceanographic and atmospheric studies of the waters off of New Jersey's coast.

### Solar

In FY22, following a full year of implementation of the transition incentive program and stakeholder engagement on the development of a successor incentive program, Staff anticipates fulfilling mandates of the Clean Energy Act ("CEA") (L. 2018, c. 17) by launching a new long-term solar incentive program. In particular, the CEA mandated the Board study "how to modify or replace the SREC program to encourage the continued efficient and orderly development of solar renewable energy generating sources throughout the State." On January 7, 2021, the Board fulfilled this requirement by delivering the New Jersey Solar Transition Final Capstone Report to the Governor and Legislature. The Capstone Report summarized the findings of an extensive stakeholder process and provided recommendations based on these findings and solar market modeling specific to New Jersey.

On April 7, 2021, drawing from the Capstone Report findings, Staff issued a straw proposal which presented specific recommendations for the design of a successor solar incentive program ("Successor Program"). The straw proposal recommends that the Board employ two programs to provide incentives to solar electric generation facilities; an administratively-determined incentive; and a competitive solicitation program. Since the release of the straw proposal, Staff have conducted four formal stakeholder workshops and held a number of informal discussions with interested stakeholders. Additionally, Staff have worked closely with the program administrator to streamline the administrative tasks associated with continuing to process existing solar registrations and to determine the changes that will need to occur to successfully implement any new requirements under the Successor Program in FY22. The final details of the Successor Program, including the administratively-determined incentive levels, will be recommended to the Board based upon the public input solicited in the straw proposal. Staff anticipates recommending the procurement of the services of a competitive solicitation program administrator and conducting additional stakeholder outreach before this element of the program

design is finalized and implemented.

### Community Solar

The New Jersey Community Solar Energy Pilot Program was launched on February 19, 2019, pursuant to the CEA. The pilot program specifically aims to increase access to solar energy by enabling electric utility customers to participate in a solar generating facility that could be remotely located from their own residence or place of business. The BPU anticipates awarding at least 300 MW over the course of three years, at least 40% of which must be allocated to projects serving low- and moderate-income (“LMI”) communities.

On December 20, 2019, the Board granted conditional approval to 45 projects as part of Program Year 1 of the program, representing almost 78 MW. All 45 projects have committed to allocating at least 51% of project capacity to LMI subscribers. Following a stakeholder proceeding on recommendations to improve the program rules and regulations, the Board approved and released the Program Year 2 Community Solar Energy Pilot Program application form on October 2, 2020. The Program Year 2 pilot program application period closed on February 5, 2021. The Board is currently in the process of reviewing the 410 applications received by the deadline, representing approximately 800 MW.

On April 7, 2021, Staff issued a Staff Straw Proposal that included options and questions to stakeholders for the design of a permanent Community Solar Program. Staff anticipates adoption of a permanent program by the Board by February 2022.

## **Economic Development Authority**

### Clean Energy Manufacturing Fund

The EDA will continue to manage the Edison Innovation Clean Energy Manufacturing Fund (“CEMF”), which provides assistance in the form of low-interest loans and non-recoverable grants to companies manufacturing renewable energy, clean energy, and energy-efficiency products in New Jersey. The CEMF will ultimately provide New Jersey consumers with greater access to these products by developing manufacturing facilities in the state.

No new applications will be accepted and no new grants or incentives will be awarded in FY22. Instead, EDA will manage the existing portfolio of loans and grants previously awarded through the programs. Ongoing work may include, but is not limited to, paying incentives previously awarded, monitoring compliance with the funding agreements, and collecting loan repayments.

## **Evaluation/Analysis**

### Program Evaluation / Analysis

Evaluation and related research provides insights into and analysis of clean energy markets and programs. The BPU is the lead implementing agency for the development and implementation of the EMP and NJCEP. As such, the BPU is required to track and report on progress in meeting EMP goals, as well as to evaluate current and proposed NJCEP programs in terms of their rate impact and the cost versus benefits of specific programs operated through ratepayer funds. The BPU is also required to establish baselines related to EE, renewable energy generating sources, and emerging technologies, and to evaluate the market potential for current and emerging clean technologies.

The BPU has engaged Rutgers University's Center for Green Buildings ("RCGB") to manage program evaluation and the NJ Energy Data Center to perform cost-benefit analyses, and other related research activities, either directly or through subcontracts with third parties. The most recent Scope of Work ("SOW") has been revised from previous years to reflect the evolving role of RCGB given the Energy Efficiency Transition. Several of the tasks currently completed by RCGB will transition to other entities with the implementation of the Energy Efficiency Transition Order and establishment of the Evaluation, Measurement and Verification ("EM&V") Working Group. The current SOW has been modified to reflect this transition by dividing tasks in to Legacy, Transitional, Newly Convened, and Emergent Tasks.

Under Legacy and Transitional Tasks, RCGB will continue to (i) perform cost-benefit analyses for NJCEP Energy Efficiency Programs; (ii) support the development of the Protocols and other Avoided Cost Studies; (iii) manage the NJ Energy Data Center; and (iv) support evaluation and research studies planning and reporting. Under Newly Convened and Emergent Tasks, RCGB will (i) complete a cost-effectiveness analysis for amendments to the NJ Energy Code; (ii) co-facilitate the NJ Zero Energy Building Code Collaborative; (iii) support program planning; (iv) provide technical assistance to Staff as needed; and (v) complete other evaluation tasks as designated by the BPU. RCGB is also responsible for managing 3rd party evaluation research tasks, such as the ongoing Energy Code Compliance Study. Additionally, the current SOW includes a range of optional research tasks related to the Board's work in renewable energy, energy efficiency, and strategic electrification.

RCGB and other evaluation contractors will work with the DCE and its program administrator, as well as other relevant parties, to implement the contracted evaluations and support the overall clean energy evaluation activities of the BPU.

FY22 priorities for evaluation activities for the DCE include:

Fiscal Year	Evaluation Study Name <sup>7</sup>	To be Conducted by
FY22	<ol style="list-style-type: none"> <li>1. Legacy and Transitional Tasks               <ol style="list-style-type: none"> <li>a. NJCEP Energy Efficiency Program Benefit- Cost Analysis                   <ol style="list-style-type: none"> <li>i. Avoided Costs Inputs/Assumptions</li> <li>ii. Perform BCAs: Retrospective</li> <li>iii. Review BCAs: Prospective</li> </ol> </li> <li>b. Protocols Development and Support                   <ol style="list-style-type: none"> <li>i. Protocols for Estimating Program Impacts</li> <li>ii. Protocols for the Energy Efficiency Transition</li> <li>iii. Avoided Cost Studies</li> </ol> </li> <li>c. Energy Master Plan and NJ Energy Data Center</li> <li>d. Evaluation and Research Studies Planning and Reporting                   <ol style="list-style-type: none"> <li>i. Co-facilitate Evaluation Team Meetings</li> <li>ii. Provide Support to the EE WGs</li> <li>iii. Peer Benchmarking and Collaboration</li> </ol> </li> </ol> </li> </ol>	RCGB
	<ol style="list-style-type: none"> <li>2. Newly Convened and Emergent Tasks               <ol style="list-style-type: none"> <li>a. Energy Codes and Strategic Electrification                   <ol style="list-style-type: none"> <li>i. Cost-Effectiveness Analysis for Amendments to the NJ Energy Code(s)</li> </ol> </li> <li>b. Energy Codes Compliance Collaborative</li> <li>c. Program Planning</li> <li>d. Technical Assistance</li> <li>e. Other Evaluation Tasks as Designated by the BPU                   <ol style="list-style-type: none"> <li>i. Development of 3<sup>rd</sup> Party Studies: Scope, RFP, and Vendor Selection</li> <li>ii. Other Evaluation or Assessment</li> </ol> </li> </ol> </li> </ol>	RCGB
	3. Optional Evaluation Tasks	

<sup>7</sup> The timeline for completing the evaluations may vary. Evaluations started in FY22 may or may not be completed in the same fiscal year.

	<ul style="list-style-type: none"> <li>a. Energy Use Profile Development and Behavioral Pilot Studies</li> <li>b. Strategic Electrification Technical Feasibility and Potential Studies <ul style="list-style-type: none"> <li>i. District-level Electrification</li> <li>ii. NJ Electrification Potential Study</li> </ul> </li> <li>c. Training and Continuing Education</li> <li>d. Rate Impact Analysis Phase 2</li> </ul>	RCGB
	<ul style="list-style-type: none"> <li>4. Contract Administration and Managerial Tasks <ul style="list-style-type: none"> <li>a. Contract Administration</li> <li>b. Management of 3<sup>rd</sup> Party Studies</li> </ul> </li> </ul>	RCGB
	<ul style="list-style-type: none"> <li>5. 3<sup>rd</sup> Party Evaluation Research Tasks <ul style="list-style-type: none"> <li>a. Evaluation Research Tasks <ul style="list-style-type: none"> <li>i. Energy Code Compliance Study</li> <li>ii. Research in Support of EM&amp;V and/or Protocols Development</li> <li>iii. Energy Benchmarking</li> <li>iv. Solar Market Potential Study</li> <li>v. Residential and/or Commercial and Industrial Baseline Studies</li> </ul> </li> </ul> </li> </ul>	

Energy Master Plan Rate Impact Study

The 2019 EMP established a set of goals and pathways for New Jersey to reach 100% clean energy by 2050, as directed by Governor Murphy in Executive Order No. 28. The Board developed an Integrated Energy Plan (“IEP”), a long-term forecasting model, to better inform the strategies set forth in the EMP, specifically modeling several scenarios to identify the most strategic and least-cost pathways to achieve New Jersey’s 2050 clean energy and emissions targets. The IEP considered the costs and benefits of the full energy system under such scenarios but not the individual ratepayer impacts of a clean energy transition.

Staff will work with a consultant to supplement the 2019 EMP and IEP and analyze the ratepayer impacts of a series of possible scenarios, building off of preliminary analysis initiated by RCGB. The consultant will assist Staff with developing cost estimates for the various elements of implementing New Jersey’s clean energy goals, such as the Renewable Portfolio Standard, solar incentives, energy efficiency, electric vehicles, offshore wind, energy storage (“ES”) programs, and the Regional Greenhouse Gas Initiative.

Grid Modernization

New Jersey’s interconnection rules and processes require updating in order to achieve 100% clean energy by 2050. The Board has approved an RFP to engage a

contractor to work with Staff to update New Jersey’s interconnection rules so that they reflect national best practices and better enable the state to achieve its clean energy goals. Necessary updates to the State’s interconnection rules include but are not limited to: updates to the interconnection process; modernization of utility processes for studying interconnection requests; updates to technical interconnection study standards; updates necessary to coordinate interconnection requests with the regional transmission system; incorporation of updated Institute of Electrical and Electronics Engineers or other standards; and other changes that will facilitate New Jersey meeting its ambitious clean energy targets.

Current Request for Request for Quotations (“RFQ”)

Type	Description	Status
RFQ	Offshore wind transmission consulting services to assist Staff with the PJM State Agreement Approach Process.	Contract award approved by Board on 2/17/21
RFQ	Consulting services for the development, implementation, and evaluation of New Jersey’s Whole House Pilot Program.	Contract award approved by the Board on 4/7/21
RFQ	Contract for analyzing the rate impact of the 2019 Energy Master Plan.	Contract award approved by the Board on 5/5/21
RFQ	Consulting services to update New Jersey’s interconnection rules to reflect national best practices and better enable the state to achieve its clean energy goals.	Contract award approved by the Board on 5/19/21
RFQ	Contract to engage a Solar Successor Competitive Solicitation Administrator to assist in the design and administration of a competitive solicitation for the Solar Successor Program.	RFQ issued by the Board on 5/17/21

**Outreach and Education**

Sustainable Jersey

The BPU’s Sustainable Jersey contract supports NJCEP’s goals through a robust program that builds a base of local support for clean energy initiatives, implements targeted programs to increase EE and RE, and researches new programs and strategies to leverage local capacity to advance clean energy goals. These efforts assist in expanding the reach of NJCEP’s programs and include expanding offerings

related to EVs, community solar outreach, community energy planning grants, as well as the development of additional EE toolkits.

## NJIT

The NJIT Center for Building Knowledge (“CBK”) provides high-quality research, training, and technical assistance on EE in the state and on select aspects of NJCEP. In FY22, CBK will offer a series of activities designed to support and significantly expand the offerings of the Clean Energy Learning Center (“CELC”), which provides online education to the full range of stakeholders engaged with NJCEP.

Project activities for the CBK include but are not limited to: maintaining and expanding the CBK Advisory Group, updating and maintaining existing content and the CELC website, developing and adding new materials and content, and developing trainings and educational toolkits for various NJCEP program sectors, including commercial and industrial, residential, community solar, and workforce development.

## Clean Energy Conference

The DCE is planning the Clean Energy Conference for FY22, since it was delayed due to health concerns related to COVID-19. The conference will improve the visibility and exposure of NJCEP and advance the State’s clean energy goals by helping to educate the public about the benefits derived from NJCEP and the opportunities available through the program, thereby increasing program participation. The conference will deliver a platform that will inform industry stakeholders about upcoming changes and enhancements to New Jersey’s clean energy initiatives, thereby increasing New Jersey’s national recognition as a leader in clean energy.

## Workforce Development

As the clean energy economy continues to grow in New Jersey, we recognize that workforce development and training are key components of realizing our efficiency, generation, and energy equity goals while providing clean, green jobs to workers in New Jersey. To that end, NJCEP will launch a workforce development program, with a focus on community-based approaches that will build a more inclusive and representative clean energy workforce. This may consist of: a Workforce Development Grant Program, which will provide funding to nonprofits, community-based organizations, colleges/universities, technical training facilities, and high schools/vocational-tech schools located in or that serve OBC; an incentive-based mentorship/apprenticeship program with contractors; enhanced incentives for customers that hire local contractors and that are based in and serve their communities; and establishment and development of prioritization/weighting processes to support OBC and contractors in implementing EE programs. The development and implementation of these initiatives will be supported by the Workforce Development and Equity Working Groups established through the energy

efficiency transition.

## **Memberships**

This component of the budget includes funding for sponsoring the National Association of State Energy Offices and the Clean Energy State Alliance, which coordinates efforts among state energy offices, as well as other memberships key to ensuring collaboration and utilization of best practices from other states.

## **Planning and Administration**

### BPU Program Administration

The DCE is charged by the Board with the responsibility for administering NJCEP. As the administrator of NJCEP, the DCE is responsible for various program-related matters, including:

1. Developing recommendations to the Board regarding programs to be funded, budgets for those programs, and various matters related to the administration and implementation of the programs;
2. Drafting Board orders memorializing Board decisions and tracking compliance with such orders;
3. Administering the CEF to support all program activity, including:
  - a. Ensuring compliance with State policy and procedures regarding all payments to and from the CEF for program-related activities;
  - b. Coordinating with Treasury with regard to financial management and reporting of NJCEP and reconciliation of the CEF with the rest of the State financial system; and
  - c. Coordinating the activities of various working groups and stakeholder meetings, including soliciting input regarding programs, budgets, and program administrative matters;
4. Overseeing the activities of the program administrator and the utilities, coordinating with sister agencies such as EDA, and advancing education and outreach efforts, and other issues;
5. Developing reporting guidelines and providing the Board with regular updates regarding program activities;

6. Developing protocols for measuring energy savings and renewable energy generation;
7. Overseeing evaluation and related research activities;
8. Developing program goals, performance indicators, and minimum requirements for program management;
9. Monitoring program activity, reviewing evaluation results, and recommending modifications to programs and budgets as required;
10. Developing requests for proposals to engage program administrators and/or managers, evaluation contractors, consultants, and other contractors that assist with the administration of the programs, evaluating proposals received, and selecting contractors;
11. Facilitating resolution of issues related to program management and customer complaints;
12. Managing the Comprehensive Resource Analysis proceedings to set funding levels; and
13. Managing requests for proposals for program services and related program transition activities.

## **Marketing**

The NJCEP Marketing Plan is designed to enhance knowledge awareness among businesses, local government, and residents of energy efficiency and other clean energy initiatives and programs. The branding campaign, launched in April 2020, continues to build awareness among New Jerseyans and businesses of the clean energy resources available through the State of New Jersey, including rebates, Pay for Performance, Clean Energy incentives, and other NJCEP offerings, thereby increasing participation in all of NJCEP's offerings and programs.

In FY22, the marketing plan will look to communicate the State's overarching goals and ongoing efforts to foster long-term, resilient, clean energy options and to reduce energy consumption and emissions to create a more sustainable environment for all of New Jersey in alignment with the EMP.

## **Clean Energy Program Website**

NJCleanEnergy.com supports the NJCEP's goals by providing information to the public about all of the division's offerings. The redesigned website will increase

public awareness of the benefits of clean and efficient energy and of the incentives and financial assistance available to ratepayers. In addition, it will provide an easy-to-use and navigate platform to make applications more accessible and provide decision portals to allow customers to more easily find the most applicable programs.

### **Community Energy Grants**

Through the Community Energy Plan Grant Program, local governments identify which strategies of the EMP are most applicable in their communities, what obstacles may exist, what opportunities there may be, and which BPU incentive programs or other State programs may help them move towards the goals of the EMP.

Some municipalities are better able to, and are perhaps already engaged in, local energy master plan development and related activities. In order to further engage LMI and OBCs, Staff recommends redesigning the Community Energy Plan Grant Program to focus on removing barriers to participation, provide technical support, and engage the communities that are currently underserved. To that end, the Community Energy Plan Grant Program will prioritize OBCs through grants and technical assistance, while setting aside a smaller portion of the budget for non-OBCs, who could be eligible for smaller grants and a lower level of technical assistance.

Staff recommends that this program be housed under the OCEE to better ensure that those municipalities and communities most needing access and assistance are engaged. The next iteration of the program will prioritize municipalities that have significant percentage of their population identified as being in a qualifying census block group, as defined by the NJ Environmental Justice Law (L. 2020, c. 92). By focusing on the percentage of qualifying population within the identified OBCs, Staff aims to prioritize those municipalities that may be in most need of these grants and populations that could reap the most benefits from the grants.

### **Energy Storage**

In FY19, the Board retained Rutgers University to conduct an analysis of ES in New Jersey, pursuant to the CEA (L. 2018, c. 17). The contract for the requested analysis commenced on November 1, 2018, and the Board accepted the final report at its June 12, 2019 agenda meeting.

In FY21, the first phase of an ES program intended to meet the CEA goals was issued as part of the Solar Successor Straw Proposal. If approved by the Board, this Phase will comprise storage coupled with solar photovoltaic.

In FY22, Staff will develop the second phase of the ES program, which will be aimed at reaching CEA-mandated 2030 goals. Staff recommends funds be used for incentives to help achieve New Jersey's ES goals, to provide cost-sharing in order to

leverage USDOE ES funding, and to retain a consultant to assist Staff in these activities.

## **Electric Vehicles**

### State Vehicle Fleet

The Electric Vehicle (“EV”) Act established goals to encourage the electrification of the State’s non-emergency light-duty fleet vehicles. The EV Act calls for at least 25 percent of the fleet to be plug-in electric vehicles by 2025 and 100 percent by 2035. To achieve these goals, the BPU will establish a program in FY22 to assist in funding the increased up-front costs associated with the adoption of light-duty EVs for the State’s fleets. By making the switch to EVs, fleets can realize the benefits of decreased fueling and maintenance costs while also decreasing their emissions and acting as a role model for local residents.

### Clean Fleet Electric Vehicle Incentive Program

In FY20 and FY21, the BPU utilized USDOE funds to start a pilot program to incentivize EV adoption in local and State government fleets, referred to as the Clean Fleet Electric Vehicle Incentive Program (“Clean Fleet Program”). The primary goal of the Clean Fleet Program is to improve New Jersey’s air quality and assist local and State government authorities’ transition to electrically fueled fleets. The original iteration of the program launched on December 1, 2019, and has, to date, assisted over twenty-five entities to purchase a battery vehicle and/or charging equipment.

As this program directly impacts the goals set forth in the EV Act (L. 2019, c. 362), specifically promoting EV adoption in State and local government fleets, the Clean Fleet Program will continue in FY22 under the NJCEP. Eligible entities for this incentive will be municipalities, local schools, municipal commissions, State agencies or boards, State commissions, State universities, community colleges, and county authorities. Under the Clean Fleet Program, State Fleets will have a budget of \$6 million and local entities will have a budget of \$1 million.

Through a rolling application process, applicants may apply for a \$4,000 incentive for up to two (2) light-duty battery electric vehicles as well as an incentive for one EV charger in amount of \$1,500. The maximum grant amount per year for the Clean Fleet Program (two battery electric vehicles and one EV charger) is \$9,500. Grants will be reviewed by a committee, assessed, and awarded on a rolling basis contingent upon program funding, with priority given to applicants who would be adding their first EV to their fleet.

Awards shall be in the form of a reimbursement, based on proof of purchase of a new eligible battery electric vehicle and/or charging equipment. All applicants will be required to complete a Grant Reimbursement Form in order to receive their grant

award. The vehicle listed on the application is required to be the same year, make, and model listed on the Grant Reimbursement Form. Eligible vehicle(s) must be purchased and received in order to submit the Grant Reimbursement Form.

EV Grid Assessment

Staff proposes to recommend providing additional funding to expand an existing study by a consultant contracted through EDA to further develop information about EV grid impacts. By providing additional funds to an ongoing review, Staff believes we can gather critical additional information which will be important for the Board’s efforts on grid modernization.

**Fiscal Year 2022 Program Budgets**

The following table set out a detailed FY22 budget for programs managed by the DCE:

Program/Budget Line	Total Budget	Cost Category Budgets					
		Administration	Sales, Marketing, Website	Training	Rebates, Grants and Other Direct Incentives	Rebate Processing and QA	Evaluation
<b>Total NJCEP</b>	<b>246,291,216</b>	<b>36,595,544</b>	<b>3,141,150</b>	<b>16,217,500</b>	<b>162,096,838</b>	<b>0</b>	<b>28,240,184</b>
<b>Energy Efficiency Programs</b>	<b>85,573,942</b>	<b>14,004,296</b>	<b>0</b>	<b>0</b>	<b>71,569,646</b>	<b>0</b>	<b>0</b>
<i>Energy Efficiency Transition</i>	23,340,494	14,004,296	0	0	9,336,198	0	0
<i>State Facilities Initiatives</i>	57,733,448	0	0	0	57,733,448	0	0
<i>Acoustical Testing Pilot</i>	4,500,000	0	0	0	4,500,000	0	0
<b>Distributed Energy Resources</b>	<b>4,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,000,000</b>	<b>0</b>	<b>0</b>
<i>Microgrids</i>	4,000,000	0	0	0	4,000,000		0
<b>RE Programs</b>	<b>26,715,262</b>	<b>1,000,000</b>	<b>0</b>	<b>0</b>	<b>20,000,000</b>	<b>0</b>	<b>5,715,262</b>
<i>Offshore Wind</i>	26,715,262	1,000,000	0	0	20,000,000	0	5,715,262
<b>EDA Programs</b>	<b>15,359,085</b>	<b>341,585</b>	<b>0</b>	<b>12,717,500</b>	<b>0</b>	<b>0</b>	<b>2,300,000</b>
<i>Clean Energy Manufacturing Fund</i>	109,085	109,085	0	0	0	0	0
<i>NJ Wind</i>	11,500,000	45,000	0	9,155,000	0	0	2,300,000
<i>R&amp;D Energy Tech Hub</i>	3,750,000	187,500	0	3,562,500	0	0	0
<b>Planning and Administration</b>	<b>41,750,870</b>	<b>16,745,777</b>	<b>3,141,150</b>	<b>0</b>	<b>2,139,021</b>	<b>0</b>	<b>19,724,922</b>
<i>BPU Program Administration</i>	5,185,000	5,185,000	0	0	0	0	0
<i>Marketing</i>	13,601,927	11,560,777	2,041,150	0	0	0	0

<i>CEP Website</i>	<b>400,000</b>	<b>0</b>	<b>400,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Program Evaluation/Analysis</b>	<b>19,724,922</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,724,922</b>
<i>Program Evaluation</i>	19,724,922	0	0	0	0	0	19,724,922
<b>Outreach and Education</b>	<b>2,450,000</b>	<b>0</b>	<b>700,000</b>	<b>0</b>	<b>1,750,000</b>	<b>0</b>	<b>0</b>
Sustainable Jersey	1,000,000	0	0	0	1,000,000	0	0
NJIT Learning Center	750,000	0	0	0	750,000	0	0
Conference	700,000	0	700,000	0	0	0	0
<b>Memberships</b>	<b>389,021</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>389,021</b>	<b>0</b>	<b>0</b>
<b>BPU Initiatives</b>	<b>72,892,057</b>	<b>4,503,886</b>	<b>0</b>	<b>3,500,000</b>	<b>64,388,171</b>	<b>0</b>	<b>500,000</b>
<b>Community Energy Grants</b>	<b>1,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,000,000</b>	<b>0</b>	<b>0</b>
<b>Storage</b>	<b>20,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20,000,000</b>	<b>0</b>	<b>0</b>
<b>Electric Vehicles</b>	<b>47,392,057</b>	<b>3,503,886</b>	<b>0</b>	<b>0</b>	<b>43,388,171</b>	<b>0</b>	<b>500,000</b>
Plug In EV Incentive Fund	33,388,171	0	0	0	33,388,171	0	0
CUNJ	6,503,886	3,503,886	0	0	3,000,000	0	0
EV Grid Assessment (EDA)	500,000	0	0	0	0	0	500,000
State Vehicle Fleet	6,000,000	0	0	0	6,000,000	0	0
Municipal Clean Fleet	1,000,000	0	0	0	1,000,000	0	0
<b>Workforce Development</b>	<b>4,500,000</b>	<b>1,000,000</b>	<b>0</b>	<b>3,500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>