New Jersey's Clean Energy Program™

FISCAL YEAR 2021 PROGRAM DESCRIPTIONS AND BUDGETS



DIVISION OF CLEAN ENERGY

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

February 23, 2021

Table of Contents

Introduction

The Fiscal Year 2021 ("FY21") Compliance Filing provides program descriptions and budgets for the *New Jersey Clean Energy Program*[™] ("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; 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.

DCE Renewable Energy Programs

Offshore Wind Program

Established in 2018, the Interagency Taskforce on Offshore Wind ("OSW") was developed to implement Executive Order 8, which called upon all State agencies with responsibility under the Offshore Wind Economic Development Act ("OWEDA") (statute amending <u>P.L.</u> 2007, <u>c.</u> 340 and <u>P.L.</u> 1999, <u>c.</u> 23) to work collaboratively towards the establishment of a vibrant offshore wind market in New Jersey and in the region. In Fiscal Year 2019 ("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 Fiscal Year 2020 ("FY20").

Additionally, a Request for Quotation ("RFQ") for an offshore wind economic consultant was issued in FY19 for the review and evaluation of offshore wind project proposals, consistent with OWEDA, specifically regarding 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 all costs to be recovered through the OSW applicants' application fees, as allowed under OWEDA.

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. The competitive solicitation resulted in applications from three experienced offshore wind developers that represent multibilion-dollar investments and hundreds of clean energy jobs for New Jersey. In December 2018, the Board adopted the OREC Funding Mechanism Rules, which established a new and innovative funding structure reducing risk for investors. 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, scheduled to begin delivering

energy to the State in 2024 and projected to power an estimated 500,000 homes.

On November 19, 2019, Governor Murphy signed Executive Order 92, which increased the State's offshore wind goals to 7,500 MW, estimated to bring enough wind energy to provide power for half the State's needs by 2035. 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.

In FY21, Board staff ("Staff") will continue its efforts towards advancing the goals of generating 7,500 MW by the year 2035 from offshore wind through the release of the Draft Offshore Wind Strategic Plan, the adoption of the Final Offshore Wind Strategic Plan, and the release of Solicitation 2. Additionally, the Rutgers' Department of Marine and Coastal Sciences will continue assisting with offshore wind modeling.

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 include 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. The contract awarded in FY20 also includes review and development of options for a transmission solution for OSW power to the New Jersey transmission and distribution grid to determine how transmission will be addressed in future solicitations.

The Board and the South Jersey Port Corporation ("SJPC") entered into a Memorandum of Understanding ("MOU") to support the development of critical, first-of-their-kind, manufacturing facilities to support New Jersey's growing offshore wind industry. The 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.

Finally, Board staff anticipates recommending the Board enter 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. The MOU will enable the transfer of \$13.2 million in SBC funding, which will directly support the development of the 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.

<u>Solar</u>

In FY21, following on the heels of the development and implementation of the transition incentive program, Staff continued work to develop the solar successor program as required by the Clean Energy Act ("CEA"). The CEA (P.L. 2018, c. 17) obligates the Board to meet solar mandates at an affordable cost. In furtherance of this, Staff issued a straw proposal in the first quarter of FY21 which presented recommendations for the design of a permanent Successor Solar Incentive Program ("Successor Program"). Although the precise details of the Successor Program will be determined by the Board at a later date after extensive public input, Staff anticipates need for additional consultative assistance in designing and implementing key elements of the program.

Community Solar

The New Jersey Community Solar Energy Pilot Program was launched on February 19, 2019, pursuant to the CEA (<u>P.L.</u> 2018, <u>c.</u> 17). 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. On January 17, 2019, the Board approved the Community Solar Energy Pilot Program following substantial public input and launched it on February 19, 2019 upon the publication of rules in the New Jersey Register. 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 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 low- and moderateincome 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 applications received by the deadline and has indicated that it expects to approve applications representing approximately 150 MW. Pursuant to the CEA, the Pilot Program will be replaced within three years by a permanent Community Solar Program.

<u>NJWIND</u>

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 build 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 New Jersey Economic Development Authority ("EDA"), the BPU, the Department of Education, the Department of Environmental Protection, 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). Funds will be used to develop a pathway plan between training and jobs, implement that plan, develop a wind turbine technician training program, develop a Global Wind Organization ("GWO") safety training program and facility in New Jersey, and launch a WIND Institute workforce seminar. The seminar will provide local stakeholder groups – including labor unions, comprehensive high schools, vocational technical schools, colleges, and universities - with insight into the State's plan for offshore wind and details around industry jobs, including expected job numbers, timing, skills, and required credentials. This information will enable the State's workforce development effort to effectively plan and launch solutions that will prepare local students and workers for participation in the offshore wind industry.

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 will provide funding under an MOU with the EDA to support EDA initiatives including execution of a competitive grant solicitation to develop a GWO 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.

DCE Energy Efficiency Programs

State Facility Initiatives

The State Facilities Initiatives 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, consisting of members from Treasury and the BPU's Division of State Energy Services, coordinates and recommends approval of these projects based on evaluation of capital costs and anticipated energy savings. The FY21 budget includes additional funding for State-sponsored projects to be identified and prioritized to achieve EE savings and equipment upgrades. In November 2019, the Board, through a Board Order (Docket No. 0019101423), entered into an MOU with the Department of Treasury's Division of Property Management and Contracting ("DPMC") to establish criteria for selecting and allocating funds on the designated priority list. 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) renewable energy ("RE") and EE systems all at 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, the ECC will continue to develop projects until funding is exhausted. The Clean Energy Fund can appropriate additional funds to support these efforts as needed.

Community Energy Grants

The Board created the Community Energy Grants Program in FY19. The FY21 budget includes funding for Phase 1 of the program, which was approved by the Board at its May 8, 2019 agenda meeting. The program helps communities to leverage existing complementary programs, as well as, encourage other energy saving behavior modifications, with the goal of reducing energy usage as a whole. The grants assist communities, municipalities, and counties to identify their own needs, benchmark energy usage and emissions, and create their own community energy plans to reach goals that are in line with the Energy Master Plan ("EMP") and Governor Murphy's goals to fight climate change.

Details regarding the program and Phase 1 can be found in the program requirements and application previously approved by the Board. Staff will manage the program with maximum grant awards determined according to the size of the community applying for the grant but not to exceed \$25,000 per grant.

Acoustical Testing Pilot

The New Jersey Acoustical Testing Pilot Program is proposed in response to the 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 gigawatts of energy lost. This pilot incentive program allocates resources to facilitate water utilities purchasing or renting 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 with older infrastructure, and that would also result in benefits to overburdened communities.

DCE Distributed Energy Resources Programs

Energy Storage

In FY19, the Board retained Rutgers University to conduct an analysis of energy storage ("ES") in New Jersey pursuant to the CEA. 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 the Q5 of FY20, the BPU initiated a proceeding to establish a process and mechanism for achieving the State's energy storage goals, focusing on achieving 2,000 MW of energy storage by 2030 and strategically adding storage as expeditiously as possible. The Board will continue efforts to develop a program to meet the goals of the CEA.

Microgrid Development

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 FY18, 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 (municipalities, counties, and authorities) to conduct the feasibility studies. The BPU

reviewed the studies in FY19 and found 12 participants to be eligible for the next round of funding (one participant withdrew from further consideration).

In FY20, the BPU initiated Phase II of the program, 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. The BPU will review the applications and consider awards in FY21.

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 assist towns to advance projects into Phase III, the BPU applied for and received a grant of approximately \$300,000 from the U.S. Department of Energy 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.

The BPU is not limiting TCDER microgrids to the feasibility study participants. Any local entity can move forward with design, development, and construction of a TCDER without the approval of the BPU if financing options are available to them.

Electric Vehicles

On January 17, 2020, Governor Murphy signed into law <u>P.L.</u> 2019, <u>c.</u> 362, which set goals for the State related to transportation electrification. The law established the "Plug-in Electric Vehicle ("EV") Incentive Fund," that directed the Board establish and implement an incentive program for light-duty plug-in EVs and granted the Board the authority to establish and implement an incentive program for in-home (residential) EV charging equipment. The Board will utilize SBC funds to further encourage EV adoption and achieve the goals set forward in the law, which include the following:

• 330,000 light-duty, plug-in EVs shall be registered in New Jersey by December 31, 2025, and at least 2 million EVs shall be registered in New Jersey by December 31, 2035;

- At least 85% of all new light-duty vehicles sold or leased in New Jersey shall be plug-in EVs by December 31, 2040;
- At least 25% of State-owned non-emergency light-duty vehicles shall be plug-in electric vehicles by December 31, 2025;
- At least 400 DC fast chargers shall be available for public use at no fewer than 200 charging locations in the state by December 31, 2035;
- At least 1,000 Level 2 EV chargers shall be available for public use across the state by December 31, 2025; and
- The Department of Environmental Protection, in consultation with the Board, shall establish goals for vehicle electrification and infrastructure development for medium and heavy duty vehicles by December 31, 2020.

In order to achieve these goals, the State is implementing an incentive program that advances transportation electrification while decreasing greenhouse gas emissions. The Charge Up New Jersey program is funded by the Plug-in Electric Vehicle Incentive Fund. The BPU contracted with the Center for Sustainable Energy ("CSE") to administer three stages to achieve the goals of the law. During Stage One, which launched on May 27, 2020, applicants will apply for rebates post-purchase or post-lease directly to CSE, which will process them on a first-come, first-served basis and issue them to eligible applicants in single payments via check. Stage Two, regarding incentives available at point-of-sale, is anticipated to launch in the Summer of 2021, further simplifying the process for applicants and increase achievement of goals. The incentive will be applied directly at the time of purchase or lease, and all paperwork will be facilitated by the salesperson or representative. All incentives are subject to availability of funds. Stage Three, expected to be developed in FY21, will establish a charger incentive program.

In addition to the Charge Up New Jersey program, which offers incentives for lightduty personal vehicles, the DCE received a grant in FY20 from the U.S. Department of Energy to establish an Electric Vehicle Program to support the purchase and use of zero-emissions vehicles and infrastructure for government entities, as well as to support establishment of a low-income ride share program. This program will be continued in FY21.

In order to fully address the goals established by <u>P.L.</u> 2019, <u>c.</u> 362, the Board must also establish standards and guidelines concerning the EV charging infrastructure necessary to ensure increased EV adoption. On May 18, 2020, the Board released the New Jersey Electric Vehicle Infrastructure Ecosystem 2020 Straw Proposal to guide the establishment of minimum filing requirements for electric utilities to support light duty EV charging. The Board held a stakeholder meeting on June 3, 2020 on the Straw Proposal. In FY21, Staff anticipates advancing a rule proposal establishing the minimum requirements for light duty vehicles and to establish a similar Straw Proposal process for medium and heavy duty vehicles and charging infrastructure.

BPU Program 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 Clean Energy Trust Fund to support all program activity, including:
 - a. Ensuring compliance with State policy and procedures regarding all payments to and from the Clean Energy Trust Fund for program-related activities;
 - b. Coordinating with the Department of Treasury with regard to financial management and reporting of NJCEP and reconciliation of the Clean Energy Trust Fund 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, as well as, the utilities, EDA, and DCE itself with regard to 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.

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.

Economic Development Authority

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 FY21. 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 New Jersey 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 costs 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 energy technologies.

The BPU has engaged Rutgers University's Center for Green Buildings ("RCGB") to manage program evaluation and the NJ Energy Data Center and to perform costbenefit analyses and other related research activities either directly or through subcontracts with third parties. RCGB will continue to: (i) develop evaluation and related research plans; (ii) solicit input on DCE plans, assist in the development of analyses to advance the EE transition, and participate in working groups and stakeholder meetings as needed; and (iii) implement the final plans approved by DCE.

Once evaluation plans are approved, RCGB will either perform the evaluation and research activities or develop the technical components of RFPs to engage outside contractors to perform the evaluations. RCGB will work with DCE staff to perform annual tasks and additional, one-time evaluation activities related to specific priorities for FY21, as detailed in the table below. RCGB will also work with the DCE to subcontract certain tasks related to RCGB activities through an RFP issued by Rutgers. RCGB's technical experience will also support other, larger evaluation activities of the DCE, procured through Treasury. In certain cases, the DCE will procure and directly manage additional evaluations.

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.

During FY21, the Evaluation and Related Research budget component consists of the following subcomponents:

1. Program Evaluation Contractors

This portion would fund the above-described contract to provide overall program evaluation management services, track progress towards EMP goals, and perform cost benefit analyses using the services of the RCGB. It would also fund additional evaluation activities, as procured by Treasury.

To be Fisca conducted **Evaluation Study** 1 bv: Name¹ Year 1. Annual Evaluation Tasks a. NICEP Energy Efficiency Program Cost Benefit Analysis i. Avoided Costs Inputs/Assumptions Report ii. CBAs: Retrospective and Prospective iii. NICEP Protocols for Estimating Energy Savings RCGB iv. Peer Benchmarking/Process Evaluation b. Energy Master Plan and NJ Energy Data Center **Develop & Maintain EMP Goal Metrics** i. ii. NJ EMP Performance iii. Manage & update NJ Energy Data Center c. NICEP Research Plan d. Facilitation of Evaluation Meetings and other Contract Activities e. Management of 3rd Party Studies f. Contract Management and Administration FY21 (October 2. FY20 One-Time Priorities 1,2020 to a. Review of CBA Methods, including Net-to-Gross and RCGB Iune Non- Energy Benefits, and Code Compliance 30 **Attribution Best Practices** 2021 b. Code Compliance Study c. Energy Efficiency Behavioral Pilot Study) d. Strategic Energy Management (SEM) Pilot 3. FY20 One-Time Priorities 3rd Party a. Code Compliance Study b. Energy Benchmarking Program Study Subcontracto c. NJCEP Program Development Evaluations r, Procured d. NJCEP Impact and Process Evaluations by RCGB 4. 3rd Party Studies 3rd Party a. Solar Transition Study Contractor b. Electric Vehicle Opportunities and Impacts Study , Procured c. Feasibility Study of Clean Energy for NJ Transit Facilities d. Building & Equipment Baseline Studies by e. Emerging Technologies Studies Treasury f. Marketing Study g. Other Clean Energy Evaluations h. Statewide Evaluator i. Whole-House Study

FY21 priorities for evaluation activities for the DCE include:

¹ The timeline for completing the evaluations may vary. Evaluations started in FY21 may or may not be completed in that same fiscal year.

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 consulting firm to supplement the EMP and IEP and analyze the ratepayer impacts of a series of possible scenarios, building off of preliminary analysis initiated by RCGB.

Grid Modernization

New Jersey's interconnection rules and processes require updating in order to achieve 100% clean energy by 2050. Staff will engage a contractor to update New Jersey's interconnection rules to 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 IEEE or other standards; and other changes that will facilitate New Jersey meeting its ambitious clean energy targets.

R&D Energy Tech Hub

Building on our innovation ecosystem, the NJCEP intends to partner with EDA to support research and development of cutting edge clean energy technology. The BPU will partner with EDA to strengthen the state's cleantech ecosystem and encourage the continued development and growth of the green workforce and economy focusing on innovation. Through a public engagement process, the joint BPU-EDA team is recommending support for two cleantech innovation-related initiatives.

- The first program will be a seed grant program to support the research and development ("R&D") activities for very early-stage, New Jersey-based cleantech companies. These grants will aim to enable businesses to continue their work into the proof of concept and prototyping stages, at which point they can more readily attract outside investors and, in some cases, begin to generate revenue.
- The second program will focus on a cleantech R&D asset mapping and a voucher initiative to increase awareness, access, and utilization of the state's physical cleantech innovation-related assets. This initiative would launch an effort to inventory the relevant R&D assets and help facilitate greater third party access by encouraging more standardized approaches to pricing,

certifications/training, and usage agreements. Additionally, the initiative will develop a platform to make relevant asset-sharing information readily accessible to interested individuals and businesses in order to increase access to technology such as testing equipment and specialized fabrication equipment. EDA would help stimulate the asset-sharing marketplace by subsidizing the cost of a third party's access to specific R&D assets through a voucher program.

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 renewable energy, and researches new programs and strategies to leverage local capacity to advance clean energy goals. The efforts assist in expanding the reach of NJCEP's programs, and includes expanding offerings related to EVs, community solar outreach, community energy planning grants, and the development of additional EE toolkits.

New Jersey Institute of Technology

The NJIT Center for Building Knowledge ("CBK") provides high-quality and training on EE in the state and on select aspects of NJCEP. In FY21, CBK will offer a series of activities designed to support and significantly expand the Clean Energy Learning Center ("CELC") offerings in four core education programs: residential, commercial and industrial, microgrids, and community solar.

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, developing trainings and educational toolkits for various NJCEP programs, and completing an annual report.

Clean Energy Conference

The DCE will reschedule the planned Clean Energy Conference, which 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, the 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, communitybased organizations, colleges/universities, technical training facilities, and high schools/vocational-tech schools located in or that serve overburdened communities; 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/weighing processes to support overburdened communities and contractors in implementing EE programs. The development and implementation of these initiatives will be guided and supported by the Workforce Development and Equity Working Groups established through the energy efficiency transition.

Marketing

The NJCEP Marketing Plan is designed to spread awareness among businesses, local government, and residents of the NJCEP's incentives and programs. The branding campaign, launched in April 2020, will provide information on what resources are available, including rebates, incentives, and other offerings, in order to increase participation in all of NJCEP's programs.

In FY21, the Marketing Plan will look to communicate the State's overarching goals and ongoing efforts, established in New Jersey's EMP, 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.

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 better find the most applicable programs.

Fiscal Year 2021 Program Budgets

The following tables set out a detailed FY21 budget for programs managed by the Division of Clean Energy:

Program/Budget Line	Total Budget	Administration	Sales, Marketing, Website	Training	Rebates, Grants and Other Direct Incentives	Rebate Processing and QA	Evaluation
Total NJCEP	111,290,707	8,931,632	8,718,006	8,937,500	65,507,992	5,301,044	13,894,533
EE Programs	26,438,782	1,500,000	0	0	24,938,782	0	0
State Facilities Initiatives	24,938,782	0	0	0	24,938,782	0	0
Acoustical Testing Pilot	1,500,000	1,500,000	0	0	0	0	0
Distributed Energy Resources	5,301,044	0	0	0	0	5,301,044	0
Microgrids	5,301,044	0	0	0	0	5,301,044	0
RE Programs	19,534,749	0	0	0	15,000,000	0	4,534,749
Offshore Wind	19,534,749	0	0	0	15,000,000	0	4,534,749
EDA Programs	130,393	130,393	0	0	0	0	0
Planning and Administration	24,037,854	3,555,000	8,718,006	0	2,405,064	0	9,359,784
BPU Program Administration	3,555,000	3,555,000	0	0	0	0	0
Marketing	7,568,006	0	7,568,006	0	0	0	0
CEP Website	400,000	0	400,000	0	0	0	0
Program Evaluation/Analysis	9,359,784	0	0	0	0	0	9,359,784
Outreach and Education	2,767,518	0	750,000	0	2,017,518	0	0
Sustainable Jersey	988,435	0	0	0	988 <i>,</i> 435	0	0
NJIT Learning Center	1,029,083	0	0	0	1,029,083	0	0
Conference	750,000	0	750,000	0	0	0	0
Memberships	387,546	0		0	387,546	0	0
BPU Initiatives	35,847,885	3,746,239	0	8,937,500	23,164,146	0	0
Community Energy Grants	560,000	0	0	0	560,000	0	0
Storage	0	0	0	0		0	0
Electric Vehicles	25,037,885	2,433,739	0	0	22,604,146	0	0
Charge Up NJ Program	2,433,739	2,433,739	0	0	0	0	0
Plug In EV Incentive Fund	22,604,146	0	0	0	22,604,146	0	0
NJ Wind	4,500,000	250,000	0	4,250,000	0	0	0
R&D Energy Tech Hub	1,250,000	62,500		1,187,500			
Workforce Development	4,500,000	1,000,000	0	3,500,000	0	0	0