



**KATHY HOCHUL**  
Governor

**NY Power  
Authority**

**JOHN R. KOELMEL**  
Chairman

**JUSTIN E. DRISCOLL**  
President and Chief Executive Officer

January 31, 2025

The Honorable Kathy Hochul  
Governor, State of New York  
NYS State Capitol Building  
Albany, NY 12224

Dear Governor Hochul:

Enclosed for your information please find the New York Power Authority's Report on the Decarbonization Action Plans to the Governor, the Speaker of the Assembly, and the Temporary President of the Senate pursuant to Public Buildings Law § 91 (3).

Very truly yours,

*Lori A. Alesio*

Lori A. Alesio  
Executive Vice President / General Counsel

CC (Hand Delivery):

Hon. Andrea Stewart-Cousins, President Pro Tempore of the Senate  
Hon. Carl E. Heastie, Speaker of the Assembly



**NY Power  
Authority**

**Canal  
Corporation**

## **Report on Decarbonization Action Plans**

**A Report to the Governor, the President Pro Tempore of the Senate,  
and the Speaker of the Assembly on Preparing Decarbonization  
Action Plans for Fifteen of the Highest Emitting State-Owned  
Facilities Pursuant to Public Buildings Law § 91 (3).**

**New York Power Authority**

**Issued January 31, 2025**

## Table of Contents

Section A – Executive Summary .....	1
Section B – Background and Statutory Context .....	1
B.1 Overview .....	1
B.2 Funding Allocation and Cost Recovery .....	2
B.3 Labor and Domestic Content Requirements.....	3
B.4 Reporting Requirement.....	4
B.5 List of Facilities .....	4
B.6 Decarbonization Leadership Program Criteria .....	5
B.7 Status of Decarbonization Action Plans .....	6
Section C – Progress on the Decarbonization Action Plans .....	7
C.1 Program Team .....	7
C.2 Timeline and Progress .....	7
C.2.1 Prior Efforts .....	7
C.2.2 Decarbonization Plans Progress.....	8
C.2.3 Program Timeline .....	10
C.3 Difficulties in Preparing the Decarbonization Plans .....	11
C.4 Anticipated Delays in Completing the Decarbonization Plans .....	11

The Power Authority of the State of New York (“NYPA” or the “Power Authority”) hereby submits this Report on the Decarbonization Action Plans (the “Report”), detailing the progress made and challenges faced by NYPA in preparing decarbonization action plans for fifteen (15) of the highest emitting state-owned facilities in New York State. NYPA is pleased to report that it expects to complete the Decarbonization Action Plans on time by January 31, 2026. The Power Authority’s effort in developing the decarbonization action plans aligns with its mission to lead the State’s transition to a carbon-free, economically vibrant New York through customer partnerships, joint development opportunities, innovative energy solutions, green economy jobs and workforce training, and the responsible supply of affordable, clean and reliable energy.

## Section A – Executive Summary

The 2023-24 State Budget authorized and directed NYPA to lead the Decarbonization Leadership Program and prepare decarbonization action plans for fifteen of the highest emitting state-owned facilities in New York State. In response to this directive, the Program Team is developing energy and emissions profiles for the identified facilities, Task 1, and decarbonization action plans, Task 2. At the time of submission of this report, the Program team has either initiated or completed the Energy Demand and Usage Summary at each of the identified high-emitting state facilities. A total of nine (9) Task 1 reports are finalized, and the remaining six (6) are in draft form and under final review between NYPA and agency facility staff. At this time, NYPA expects to complete the Decarbonization Action Plans for all of the identified state facilities by January 31, 2026.

## Section B – Background and Statutory Context

### B.1 Overview

The 2023-24 State Budget authorized and directed NYPA to lead the [Decarbonization Leadership Program](#), which calls for (1) the development of energy and emissions profiles for State government’s largest carbon-emitting facilities and (2) decarbonization action plans that will guide state agencies on facility improvements that will reduce carbon emissions in support of the State’s nation-leading Climate Leadership and Community Protection Act (“CLCPA” or “Climate Act”).<sup>1</sup> The Decarbonization Leadership Program aligns with NYPA’s efforts over the past decade to support the State’s transition to clean green electricity, including upgrading the Authority’s hydropower projects, supplying the state with carbon-free electricity, and expanding New York’s transmission system, to name a few. The Decarbonization Leadership Program accompanied the 2023-24 State Budget enactment of significantly expanded NYPA authority under the Power Authority Act, pursuant to which:

---

<sup>1</sup> 2023-24 Enacted State Budget; Chapter 58 of the Laws of 2023, Transportation, Economic Development and Environmental Conservation (“TED”), Part RR.

- NYPA is authorized to develop, own and operate renewable energy generation projects to help meet the state’s clean energy targets.
- NYPA is working with the New York State Public Service Commission to establish the Renewable Energy Access and Community Help (“REACH”) program to provide renewable energy bill credits to low-income New Yorkers.
- NYPA is authorized to invest up to \$25 million annually in workforce training.
- NYPA will cease fossil fuel generation at its small natural gas power plants by 2030 if electric system reliability and environmental conditions allow.<sup>2</sup>

Relevant to this Report, the 2023-24 State Budget amended the Public Buildings Law to authorize and direct NYPA to develop decarbonization action plans for 15 of the highest greenhouse-gas emitting State facilities no later than January 31, 2026.<sup>3</sup> The enactment states that:

*The authority shall complete the decarbonization action plans no later than January thirty-first, two thousand twenty-six, provided that such date shall be extended for justifiable delay outside the control of the authority, including, but not limited to, previously planned or current major renovations or replacements to the facilities, delayed permitting or approval by building owners, local authorities, or other essential parties, external resource bottlenecks, pending or unresolved investigations into utility grid capacity or similar circumstances where crucial information is not yet available or determined. Such extension shall be limited to the time necessary to address the factors causing such delay.*<sup>4</sup>

## B.2 Funding Allocation and Cost Recovery

With respect to funding and cost recovery, the enactment states that:

*The authority is authorized to allocate up to thirty million dollars to prepare the decarbonization action plans. The owner or operator of state-owned facilities shall not be responsible for reimbursing the authority for the costs the authority incurs to establish the decarbonization action plans provided for in this section, provided that the authority is authorized to obtain reimbursement of such costs from any other available funding sources, and provided further, that nothing in this subdivision is intended to limit the authority from receiving compensation for any services it provides to any owner or operator of state-owned facilities, including services related to implementation of decarbonization plans and*

---

<sup>2</sup> Id., TED Part QQ; See PAL § 1005(27-a) - (27-d).

<sup>3</sup> Pub. Bldgs. Law, Art. 4-D.

<sup>4</sup> Pub. Bldgs. Law § 91(2).

*decarbonization projects, on such terms and conditions as the parties agree.*<sup>5</sup>

The enactment provides for assistance to NYPA from other agencies and state facility owners, stating:

*The authority may ask and shall receive from the state energy research and development authority, the office of general services, the state university of New York, the dormitory authority, the department of environmental conservation, and any owners and operators of state-owned facilities, any information or staff technical assistance necessary to carry out its powers and duties under this section.*<sup>6</sup>

### B.3 Labor and Domestic Content Requirements

The enactment establishes labor and domestic content requirements for any project, including a thermal energy project, funded as a result of a decarbonization action plan. Specifically, the enactment states that:

*Any project, including any thermal energy project, that may be funded as a result of a decarbonization action plan completed pursuant to this section shall: (a) be deemed a public work project subject to article eight of the labor law; (b) require that the component parts of any geothermal systems or any other heating or cooling systems are produced or made in whole or substantial part in the United States, its territories or possessions, subject to a waiver provision similar to the one contained in subdivision two of section sixty-six-s of the public service law; (c) contain a requirement that any public owner or third party acting on behalf of a public owner enter into a project labor agreement as defined by section two hundred twenty-two of the labor law for all construction work; and (d) require the payment of prevailing wage standards consistent with article nine of the labor law for building services work. Notwithstanding any provision of law to the contrary, all rights or benefits, including terms and conditions of employment, and protection of civil service and collective bargaining status of all existing public employees and the work jurisdiction, covered job titles, and work assignments, set forth in the civil service law and collective bargaining agreements with labor organizations representing public employees shall be preserved and protected.*<sup>7</sup>

To further address any displacement of currently employed workers, the enactment requires that:

[Any project, including a thermal energy project, funded as a result of a

---

<sup>5</sup> Pub. Bldgs. Law § 91(4).

<sup>6</sup> Pub. Bldgs. Law § 91(5). Separate from the decarbonization action plans, the enactment further provides that “The State University of New York is authorized to utilize up to thirty million dollars of the 2023-24 New York state urban development corporation capital appropriation for the replacement of absorption chillers in the central chiller plant of the state university of New York at Albany.” Pub. Bldgs. Law § 91(6).

<sup>7</sup> Pub. Bldgs. Law § 91(7).

decarbonization action plan] *shall not result in the: (i) displacement of any currently employed worker or loss of position (including partial displacement as such a reduction in the hours of non-overtime work, wages, or employment benefits) or result in the impairment of existing collective bargaining agreements; (ii) transfer of existing duties and functions related to maintenance and operations currently performed by existing employees of authorized entities to a contracting entity; or (iii) transfer of future duties and functions ordinarily performed by employees of authorized entities to a contracting entity.*<sup>8</sup>

## B.4 Reporting Requirement

The enactment requires NYPA to report its progress on the decarbonization action plans to the Governor and the Legislative Leaders, stating:

*The authority shall complete and submit a report, on or before January thirty-first, two thousand twenty-five, and annually thereafter, to the governor, the speaker of the assembly, and the temporary president of the senate, and shall post such report on the authority's website so that it is accessible for public review. Such report shall include, but not be limited to: (a) the progress of the decarbonization action plans; (b) any difficulties in preparing the decarbonization action plans; and (c) any anticipated delays in completing the decarbonization action plans by January thirty-first, two thousand twenty-seven.*<sup>9</sup>

This Report fulfills the above-stated reporting requirement for 2024.

## B.5 List of Facilities

Pursuant to the Decarbonization leadership program, NYPA has initiated the Plans for decarbonization efforts at the following 15 state-owned facilities that are among the highest emitters of greenhouse-gases:

- The Empire State Plaza
- The W. Averell Harriman State Office Building Campus
- The State University of New York at Albany
- The State University of New York at Binghamton
- The State University of New York at Buffalo

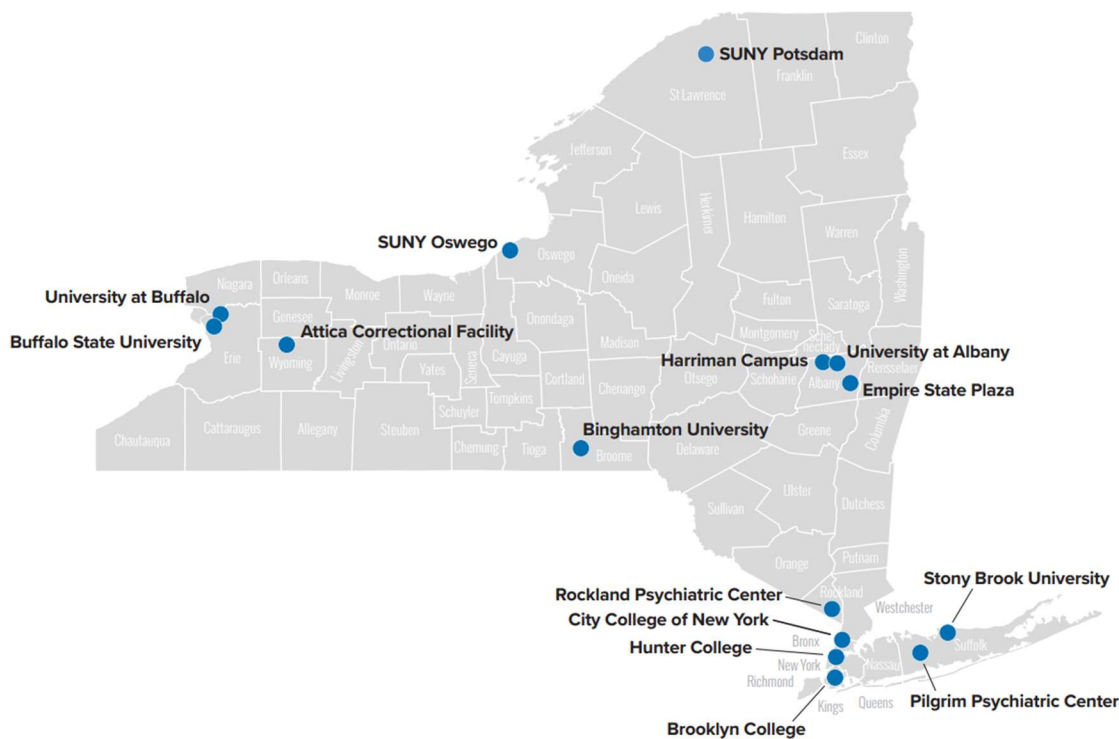
---

<sup>8</sup> Id.

<sup>9</sup> Pub. Bldgs. Law § 91 (3) The enactment also states that “[t]he authority shall complete the decarbonization action plans no later than January thirty-first, two thousand twenty-six, provided that such date shall be extended for justifiable delay outside the control of the authority, including, but not limited to, previously planned or current major renovations or replacements to the facilities, delayed permitting or approval by building owners, local authorities, or other essential parties, external resource bottlenecks, pending or unresolved investigations into utility grid capacity or similar circumstances where crucial information is not yet available or determined. Such extension shall be limited to the time necessary to address the factors causing such delay.” Pub. Bldgs. Law § 91 (2).

- The State University of New York at Potsdam
- The State University of New York at Oswego
- The State University of New York at Stony Brook
- Buffalo State University
- Brooklyn College
- The City College of New York
- Hunter College
- Attica Correctional Facility
- Pilgrim Psychiatric Center
- Rockland Psychiatric Center

The locations of these facilities across New York can be seen in the figure below.



## B.6 Decarbonization Leadership Program Criteria

The Decarbonization Leadership program will enable State entities to identify impactful projects and programs to electrify and decarbonize the identified 15 facilities. The future decarbonization projects will create clean energy jobs and will include innovative new technologies, such as thermal energy networks, that would connect multiple buildings to carbon-free energy sources.



The enactment requires the decarbonization action plans to address the following criteria at a minimum:

- (a) A comprehensive accounting and analysis of all energy uses at the facilities.*
- (b) Greenhouse gas and other harmful emissions (e.g., NOx, SOx, particulate matter) resulting from the on-site and source energy usage of the facilities.*
- (c) Analysis of the feasibility of using thermal energy and thermal energy networks at the facility, including any anticipated limitations on the use of thermal energy networks, along with a characterization of any such limitations, including whether they are permanent, temporary, or resolvable on a cost-effective basis.*
- (d) Identification and analysis of energy efficiency measures that could be designed and constructed in later decarbonization project phases.*
- (e) An analysis of the availability and/or feasibility of providing clean energy through electrification technologies and associated electrical upgrades to meet the facility energy needs, as demonstrated by the reduced load profiles determined to be practicable based on the energy efficiency measures identified, either through on-site generation and/or other procurement.*
- (f) Investigation of the resiliency and redundant capacity of the existing critical infrastructure, such as heating, cooling and backup electrical power systems.*
- (g) Identification of any parts of the facilities that cannot be decarbonized, with explanations.*
- (h) Geotechnical investigations into the on-site potential for clean energy sources, including drilling test geothermal wells as needed.*
- (i) Determination of the feasibility and advisability of gathering, combining, or expanding any clean energy sources or central thermal energy networks with neighboring or nearby related state facilities.*
- (j) Investigation of the infrastructure, planning and funding needed to electrify transportation resources regularly used to serve the facilities, such as public transit, vehicle fleets or employee/resident/student electric vehicle charging stations.*
- (k) An economic and feasibility analysis based upon the potential to decarbonize the facility, considering among other things the net present value of the life cycle cost of the thermal systems and other systems proposed, inclusive of the social cost of carbon, capital expenses for initial implementation and major equipment replacements, and operational expenses, including labor costs.<sup>10</sup>*

## B.7 Status of Decarbonization Action Plans

The Power Authority's progress on the Decarbonization Action Plans is discussed in detail in Section C.2 below, and includes the tasks planned to address the above-listed matters. At this time, the Decarbonization Action Plan tasks are progressing on a timely basis and NYPA expects

---

<sup>10</sup> Pub. Bldgs. Law § 91(1).

to complete the Plans for the identified state facilities by January 31, 2026. NYPA is working closely with the identified state facility owners and operators, and plans to consult periodically with the other New York State agencies for information and technical assistance that may be necessary to develop the Decarbonization Action Plans.

## Section C – Progress on the Decarbonization Action Plans

### C.1 Program Team

The Decarbonization Leadership Program and the development of the Decarbonization Action Plans are supported by NYPA Staff members who bring expertise in evaluating energy efficiency and decarbonization opportunities and deploying solutions. The NYPA Staff Team includes engineers, licensed professional engineers, and /professionals with experience in the fields including sustainability, energy efficiency, renewable energy, and project management.

Additionally, NYPA has contracted with engineering firms qualified to conduct Energy Demand and Usage Summaries and Geothermal Test Wells at each of the state-owned facilities and develop the Decarbonization Plans. NYPA has also contracted with an engineering firm to serve as a Program Manager. Among the other tasks, the Program Manager (1) develops data collection forms and report templates, (2) plans, tracks and develops reporting on deliverables, (3) provides status updates, and (4) assesses the need to amend the timeline.

### C.2 Timeline and Progress

#### C.2.1 Prior Efforts

NYPA offers a full range of services to its customers and assists them in meeting their clean energy goals. Thus, NYPA is authorized

*“... to finance and design, develop, construct, implement, provide and administer energy-related projects, programs and services for any public entity, any independent not-for-profit institution of higher education within the state, and any recipient of the economic development power, expansion power, replacement power, preservation power, high load factor power, municipal distribution agency power, power for jobs, and recharge New York power programs administered by the authority.”<sup>11,12</sup>*

NYPA offers its customers services ranging from audits to a clean energy master plan whereby

---

<sup>11</sup> PAL § 1005, Tenth Undesignated Paragraph, § 1005(17)(a).

<sup>12</sup> PAL § 1005(17)(b) (2) states that “Energy-related projects, programs and services” “means energy efficiency projects and services, clean energy technology projects and services, and high performance and sustainable building programs and services, and the construction, installation and/or operation of facilities or equipment done in connection with any such projects, programs or services.”

NYPA reviews the customer's building data, infrastructure and energy usage – and pairs them with the customer's goals and available incentives – to arrive at a cost/benefit analysis and opportunity assessment. NYPA provides customized assessments in all areas of clean energy – from energy efficiency upgrades and LED street lighting to renewables, solar + storage, community solar, EV charging infrastructure and digital energy management. As a trusted advisor to its customers, NYPA provides the information and guidance to develop the best plan to meet the needs of the customer organizations.

In May 2024, NYPA and the Office of General Services released an Energy Master Plan focused on Decarbonization of the Empire State Plaza.<sup>13</sup> The Energy Master Plan identified viable pathways including fuel switching from natural gas to electricity for the cooling system, energy efficiency gains in the buildings, and beneficial electrification for heating (via ground source heat pumps, wastewater heat pumps, and/or industrial heat recovery). The Plan report concluded that the full decarbonization of the Plaza is possible through long term plans, stakeholder alignment, sufficient funding, and a phased implementation Plan. The Empire State Energy Master Plan will serve as the prototype for the Program Team's development of the Decarbonization Plans for the 15 State-owned facilities listed in the section B.5 above.

## C.2.2 Decarbonization Plans Progress

During the First and Second quarter of 2024, the Program Team developed and shared a request for information with all of the fifteen high greenhouse gas-emitting state-owned facilities, to initiate gathering of the data needed for the Decarbonization Action Plans. During the second quarter of 2024, the Program Team held kickoff meetings with each of the identified state-owned facility owners or operators and a separate meeting with a select group of stakeholders. At the kickoff meetings, the Program Team was introduced to the customers and engaged in a discussion regarding the tasks and schedule for the Energy Demand Usage Summary and the Decarbonization Plans. Additionally, the Program Team discussed the potential for geothermal test wells, any constraints, and information that the customers must consider.

- Task 1 - Energy Demand and Usage Summaries are conducted to identify major energy systems, developing annual and seasonal demand profiles, collecting historical utility billing data, assessing the potential for distributed energy resources, and summarize the environmental impacts of each system. Additionally, the audits include developing a replacement schedule for major energy systems, summarizing current energy sources, and identifying backup power generation systems and their fuel types.

This task meets the statutory directive for:

- A comprehensive accounting and analysis of all energy uses at the facilities.

---

<sup>13</sup> Empire State Plaza Energy Infrastructure Masterplan, May 20, 2024, published at <https://ogs.ny.gov/system/files/documents/2024/08/esp-energy-infrastructure-master-plan-report-06-05-2024-redacted.pdf>.

- Greenhouse gas and other harmful emissions (e.g., NO<sub>x</sub>, SO<sub>x</sub>, particulate matter) resulting from the on-site and source energy usage of the facilities.
- Task 2 - Decarbonization Plans will be developed with a focus on detailed large energy investigations, analysis of energy efficiency measures, and the feasibility of using clean energy and thermal energy networks. The assessments will also involve evaluating the condition of existing systems, identifying barriers to implementation, and considering the impact on maintenance costs and customer operations. Additionally, the assessments explore decarbonization measures, such as electrifying transportation resources and installing on-site distributed energy resources. This task meets the statutory directive for:
  - Analysis of the feasibility of using thermal energy and thermal energy networks at the facility, including any anticipated limitations on the use of thermal energy networks, along with a characterization of any such limitations, including whether they are permanent, temporary, or resolvable on a cost-effective basis.
  - Identification and analysis of energy efficiency measures that could be designed and constructed in later decarbonization project phases.
  - An analysis of the availability and/or feasibility of providing clean energy through electrification technologies and associated electrical upgrades to meet the facility energy needs, as demonstrated by the reduced load profiles determined to be practicable based on the energy efficiency measures identified, either through on-site generation and/or other procurement.
  - Investigation of the resiliency and redundant capacity of the existing critical infrastructure, such as heating, cooling and backup electrical power systems.
  - Geotechnical investigations into the on-site potential for clean energy sources, including drilling test geothermal wells as needed.
  - Identification of any parts of the facilities that cannot be decarbonized, with explanations.
  - Determination of the feasibility and advisability of gathering, combining, or expanding any clean energy sources or central thermal energy networks with neighboring or nearby related state facilities.
  - Investigation of the infrastructure, planning and funding needed to electrify transportation resources regularly used to serve the facilities, such as public transit, vehicle fleets or employee/resident/student electric vehicle charging stations.
  - An economic and feasibility analysis based upon the potential to decarbonize the facility, considering among other things the net present value of the life cycle cost of the thermal systems and other systems proposed, inclusive of the social cost of carbon, capital expenses for initial implementation and major equipment replacements, and operational expenses, including labor costs.
- Task 3 - Geothermal Test Wells involves providing services for borehole thermal testing at the identified state-owned facilities to understand the geotechnical and thermal

characteristics of the site. It includes identifying ideal locations and depths for test wells, drilling a thermal test well and performing thermal testing within the drilled well. Sites determined infeasible for geothermal and sites where test wells were completed previously may not receive the service.

At the time of the filing of this report, the Program Team has provided the facility owners clarity regarding the potential for Geothermal Wells, and information about borehole thermal testing at the identified state-owned facilities to understand the geotechnical and thermal characteristics of the site. The Program Team also completed the identification of geothermal test well locations and submission of campus building assessments for Harriman, Empire State Plaza (and associated buildings), Brooklyn College, and City College.

### C.2.3 Program Timeline

At the time of submission of this report, the task for Energy Demand and Usage Summary has either been initiated or completed at each of the identified high-emitting state facilities. Overall, the Decarbonization Action Plan tasks appear to be on time and NYPA anticipates completion of the Plans for all the identified state facilities by January 31, 2026. Specific facility progress is as noted below:

Facility	Site Kickoff Date	Status
The Empire State Plaza	5/14/2024	Energy Demand and Usage Summary - Complete
The W. Averell Harriman State Office Building Campus	5/14/2024	Energy Demand and Usage Summary - Complete
The State University of New York at Albany	5/14/2024	Energy Demand and Usage Summary - Complete
The State University of New York at Binghamton	6/25/2024	Energy Demand and Usage Summary – In Progress
The State University of New York at Buffalo	7/11/2024	Energy Demand and Usage Summary – In Progress
The State University of New York at Potsdam	6/24/2024	Energy Demand and Usage Summary - Complete
The State University of New York at Oswego	6/28/2024	Energy Demand and Usage Summary - Complete
The State University of New York at Stony Brook	5/22/2024	Energy Demand and Usage Summary – In Progress

Buffalo State University	6/26/2024	Energy Demand and Usage Summary - Complete
Brooklyn College	5/13/2024	Energy Demand and Usage Summary - Complete
The City College of New York	5/13/2024	Energy Demand and Usage Summary - Complete
Hunter College	5/13/2024	Energy Demand and Usage Summary - Complete
Attica Correctional Facility	6/18/2024	Energy Demand and Usage Summary – In Progress
Pilgrim Psychiatric Center	6/5/2024	Energy Demand and Usage Summary – In Progress
Rockland Psychiatric Center	6/11/2024	Energy Demand and Usage Summary – In Progress

### C.3 Difficulties in Preparing the Decarbonization Plans

Completion of the Decarbonization Action Plans in a timely manner requires close coordination among the Program Team and the owners and operators of the identified State-owned facilities. The Program Team has developed a standardized approach for data collection, validation, analysis, and reporting for each of the facilities. For test well drillings at the selected facilities, the Program Team may have to establish site access and address site security requirements, which may introduce additional delays to the planned timeline. Although the 15 state-owned facilities are closely coordinating with the Program Team and are cooperative in sharing the data needed in preparing the Decarbonization Action Plans, it is important to highlight the complexity and time intensive nature of this effort.

### C.4 Anticipated Delays in Completing the Decarbonization Plans

At this time, NYPA, with assistance and input from the contracted engineering firms, and close collaboration with the owners and operators of the State-facilities that are subject to the Decarbonization Action Plans, is on schedule for completing all the tasks necessary for completing the Decarbonization Action Plans by January 31, 2026. The Program Team has also included a “buffer” within the anticipated timeline to safeguard against the unanticipated setbacks. Nevertheless, the planned tasks for the Energy and Demand Summary and Decarbonization Plans may potentially uncover challenges that are presently unanticipated. Such challenges may disrupt the timeline and require restructuring of the timeline. Any such circumstances that arise subsequent to the filing of this report, will be addressed in the next annual filing of this Report.