

Solar Power Progress Report: Analysis of Local Law 99 Solar Energy Goals

Executive Summary

The City of New York has taken deliberate steps to expand its solar photovoltaic (PV) energy capacity on City-owned buildings and properties, culminating in the passage of [Local Law 99](#) in 2024. This law mandates that the City install 100 megawatts (MW) of solar PV capacity across its properties by 2030 and 150 MW by 2035. This is part of the broader climate goals citywide and statewide to reduce greenhouse gas emissions by expanding renewable energy capacity and reducing reliance on fossil fuels. Additionally, New York City has made progress towards helping meet citywide and statewide solar PV capacity targets—[1 gigawatt](#) (GW; 1 GW = 1,000 MW) of capacity citywide and [10 GW](#) statewide by 2030.

In this report, the Independent Budget Office (IBO) assesses the City's progress toward reaching the solar PV targets set by Local Law 99. IBO also examines citywide and statewide progress in increasing solar capacity, trends in installation costs over time, and growth in the city's solar workforce. Solar capacity on City-owned properties is on course to meet its 2035 capacity mandate, though the pace of growth is below what is needed to meet the 2030 mandate. Citywide and statewide solar capacity have also advanced, reflecting progress toward broader solar targets across New York City and State. Moreover, the unit cost of installing solar PV capacity in the City decreased, supporting further deployment. More solar PV firms and jobs have also entered the market, though average wages have decreased amid this expansion. Looking ahead, recent federal policy changes that reduce solar incentives and restrict certain solar components may impede future progress.

See IBO's [explainer](#) report for more information about solar related tax credits and the datasets used in this report.

Introduction

Enacted in 2024, [Local Law 99](#) established benchmarks for New York City's efforts to reduce greenhouse gas emissions from government operations. The law requires the installation of 100 megawatts (MW) of solar capacity on City-owned buildings and properties by 2030, and 150 MW by 2035. (All years refer to city fiscal years, unless otherwise specified.). This codifies a commitment established by the de Blasio Administration in its [One City: Built to Last](#) report. It complements the mandate previously set forth under Local Law 97 of 2019 to reduce City government emissions by 50% by 2030.

The City's emphasis on transitioning to renewable forms of energy such as solar electric power reflect a statewide effort to expand solar capacity, curb greenhouse gas emissions, and

mitigate the impact of energy sources that contribute to climate change. The U.S. Energy Information Administration’s [electricity data](#) indicates that in New York State, electric power generation from renewable sources has risen by 72% from 2020 through 2025, and solar electric power generation in 2025 was almost triple what it was in 2020.

Solar photovoltaic (PV) systems generate renewable energy by converting sunlight into electric power. Solar PV does not produce greenhouse gases or air pollutants, making it a key component of emissions reduction from power generation and air quality improvement. PV systems also reduce reliance on other energy sources such as fossil fuels, which have a greater negative impact on the environment. Additionally, solar PV can contribute to enhanced grid resilience through the use of batteries to store excess electricity for periods of peak demand, or to power critical infrastructure during power outages.¹

In the City’s 2025 [Climate Budgeting Report](#), the Office of Management and Budget noted \$733 million in planned capital funding for renewable energy projects in the City’s Ten-Year Capital Strategy. This includes \$295 million to expand solar capacity on City-owned properties, which directly contributes to the primary objective of Local Law 99. (To learn more about Climate Budgeting, see IBO’s [report](#) on the City’s progress.) Beyond this, in 2025, the State announced the [Sustainable Future Program](#) as part of its fiscal year 2026 Budget, which is a \$1.0 billion climate investment, including \$200 million related to renewable energy expansion and grid modernization.

These investments are all steps towards meeting the citywide target of generating [1 gigawatt](#) (GW) of solar capacity by 2030 and statewide target of [10 GW](#) of capacity by 2030. One gigawatt equals 1,000 megawatts (MW) or 1 million kilowatts (kW). The de Blasio and Hochul administrations created these goals, but they are not codified in local or state law. Recent removal of federal tax credits for solar installations, as well as restrictions on the use of foreign-manufactured solar panels, may bring new obstacles to future efforts City and State’s progress.

In this report, the Independent Budget Office (IBO) assesses recent expansion of municipal solar capacity, as well as the required pace to meet Local Law 99 targets. IBO also examined the development of the solar industry in New York City, including changes in the costs of solar installations, the related workforce, and capacity progression across the city and state.

Solar Readiness Assessment

The City’s Department of Citywide Administrative Services (DCAS) is required by local law to produce the Solar Readiness Assessment every other year (DCAS is the City agency tasked with executing Local Law 99). The Assessment gauges the compatibility of solar PV installations with City-owned buildings larger than 10,000 gross square feet and determines if they are “solar-ready.” Solar-ready buildings have a roof in stable condition and installed within the past 10 years, and are oriented in a way that would capture sunlight and not be shadowed by other buildings. This reporting began with the passage of [Local Law 24](#) of 2016, which has now been superseded by Local Law 99, passed in 2024.

In its [2024 report](#), DCAS noted that 13% of surveyed sites were deemed suitable for solar PV system installations.² While this is up from the 10% of sites deemed suitable in its [2022 Assessment](#), it underscores the need for substantial investments in site refurbishments to expand solar capacity. Local Law 99 partially addresses this by requiring that DCAS establish standards to improve solar readiness throughout the City’s building portfolio, which DCAS plans to include in the 2026 Local Law 99 report.

Solar PV on City-Owned Properties

Capacity Trend and Projections for New York City Municipal Properties

In pursuit of Local Law 99 mandates, in recent years, the City has extensively expanded its solar capacity installed on City-owned properties. Using DCAS [Clean Energy Generation data](#), IBO examined both the rate and scale of this growth.

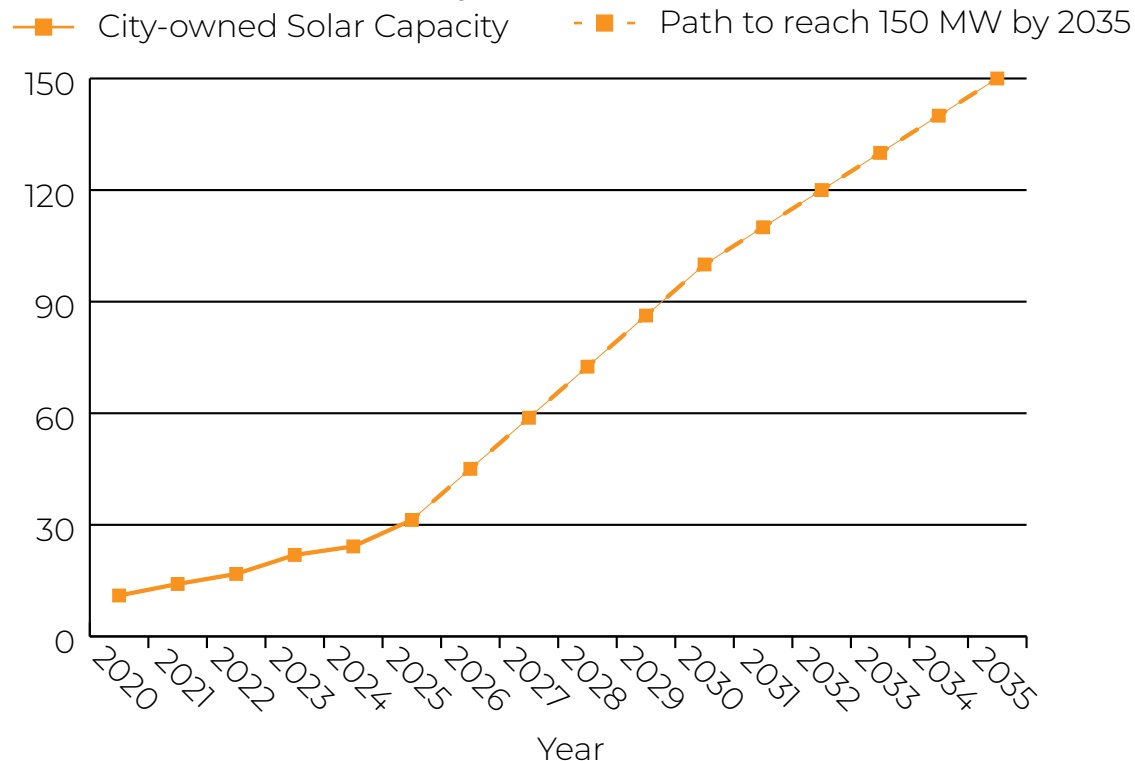
From 2020 through 2025, municipal solar capacity nearly tripled, increasing from 11.0 MW to 31.3 MW. A MW is a measure of capacity, or the amount of power an energy system can generate at a point in time. The largest year-over-year gain occurred from 2022 through 2023, when capacity grew by 31% (from 16.8 MW to 21.9 MW).³ Coinciding with this capacity expansion was an increase in megawatt-hours (MWh) from 13,000 MWh in 2020 to 36,000 MWh in 2025. MWh measures the amount of electricity an electric power system produces over time. In 2025, the solar electric power generated across 197 municipal sites was enough to power the equivalent of 440 median-sized City government buildings for an entire year, compared to 160 in 2020.⁴ For reference, typical City government buildings of this size include New York City Police Department precincts and New York City Fire Department firehouses. If the City reaches 100 MW of municipal capacity—the City’s solar PV goal for 2030—it could generate approximately 116,000 MWh of electric power, which is more than twice the amount needed to power all police precincts and firehouses in New York City for a year.

The City has not presented any further plans for solar installations beyond meeting the requirements set forth by Local Law 99. From 2020 through 2025, the City added about 23% more solar PV capacity to its properties every year, on average.⁵ If the City continues adding to its supply at its current pace, IBO estimates that municipal solar capacity would reach 89.2 MW by 2030. To reach the Local Law 99 target of 100 MW by 2030, the City will need to add 26% more capacity each year, on average, from 2025 through 2030. Figure 1 shows the City’s capacity progress through 2025 and the required annual growth needed to reach both Local Law 99 targets.

The pace that the City needs to increase solar PV capacity to reach the 2035 goal is more moderate. Starting from the 2025 capacity, to meet the 2035 goal of 150 MW, the City would need to increase capacity by 17% each year, on average. This is below the rate that DCAS has maintained for the previous five years, and so, while the City would need to ramp up its rate of adding capacity to meet 2030 benchmarks—the current annual rate of capacity expansion is sufficient to meet the longer term 2035 benchmark. Regardless of the timeline, to comply with Local Law 99, the City will have to continue its efforts to expand the inventory of solar-ready buildings.

FIGURE 1

City Properties Solar PV Capacity - Recent Progress and Growth Needed to Reach 150 MW by 2035



SOURCE: IBO analysis of Department of Citywide Administrative Services data
NOTE: The solid lines (2020-2025) represent actual annual capacity, while the dashed lines (2026-2035) show required annual capacity.

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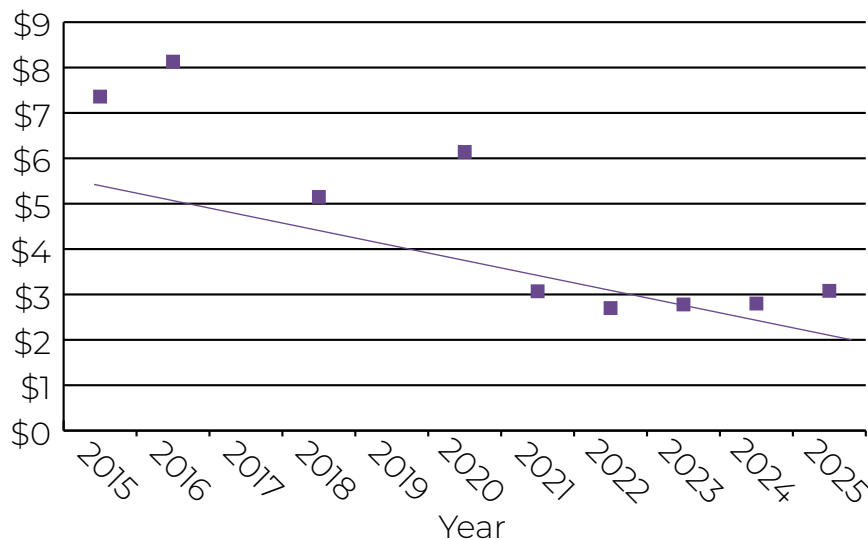
Solar PV Installation Costs for City-Owned Buildings

IBO examined how municipal solar installation labor and material costs have changed over time to as part of its analysis of the city's efforts to bolster capacity. Using [data](#) from the New York State Energy Research and Development Authority's (NYSERDA) Solar Electric Programs, IBO identified solar installations subsidized by NYSERDA on City-owned properties and their associated costs. This dataset includes solar installations that NYSERDA subsidizes through its [NY-Sun Program](#), which provides financial incentives to contractors to increase affordability of solar projects in New York State.⁶ While NYSERDA effectively subsidizes all municipal solar projects through either direct or indirect incentives, this dataset captures 80% of the City's municipal solar capacity through 2025.

Within this subset, IBO found that per-watt installation costs for municipal projects have decreased markedly over the last decade. The median project cost per watt fell from \$7.36 in 2015 to \$3.08 in 2025, a 58% decline. This indicates that solar installations on City-owned properties have become more cost-effective over time. Figure 2 depicts the median cost per watt installed of NYSERDA-subsidized DCAS solar projects within the subset during this

FIGURE 2

Municipal Per-Watt Project Cost, 2015-2025



SOURCE: IBO analysis of New York State Energy Research and Development and Department of Citywide Administrative Services data

NOTE: No municipal projects received NYSEERDA incentives in 2017, and no municipal projects were completed in 2019.

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period.⁷ At the 2025 median per-watt cost, reaching 100 MW of municipal solar will cost \$211.3 million, and reaching 150 MW will cost \$365.1 million.

Citywide and Statewide Solar

Capacity Trends and Projections for New York City and State Solar PV

Using [NYSEERDA data](#) on solar projects statewide, IBO found that solar PV capacity throughout all of New York City and State has grown in pursuit of their respective targets of 1 GW and 10 GW by 2030. Through 2025, 641.5 MW of solar capacity has been installed citywide, 2.4 times

the city's 264.8 MW 2020 capacity. The largest single-year increase citywide occurred from 2020 through 2021 when capacity grew by 24% (from 264.7 MW to 329.2 MW). This surge likely reflected an increase in NYSEERDA solar incentives by the New York Public Service Commission in May 2020 and the resumption of non-essential construction in June 2020 following the onset of the COVID-19 pandemic.

In 2025, citywide solar generation reached 714 GWh—enough to power 82,800 median-sized residential buildings or 12,900 median-sized commercial buildings each year. A median-sized residential building is roughly equivalent to a multi-family walk-up in Queens or Brooklyn, while a median-sized commercial building is roughly the size of a corner store in the Bronx or Manhattan.

New York City properties added 19% more capacity every year, on average, from 2020 through 2025. Increasing capacity by 9% each year from 2025 through 2030 (equivalent to an additional 72 MW per year) would put New York City on track to meet its 1 GW capacity goal.

Statewide, 7.1 GW has been installed through 2025, a 2.8-fold increase from the 2.5 GW of capacity installed through 2020. The largest annual growth at the state level took place from 2021 through 2022, with capacity rising from 3.2 GW to 4.1 GW, or by 29%. Statewide, properties generate 7,800 GWh through solar PV.

New York State has expanded solar PV capacity 23% annually, on average, from 2020 through 2025. To reach 10 GW by 2030, statewide capacity must increase by 7% annually, on average, which is equal to approximately 589.9 MW each year.

Figure 3 shows solar PV capacity growth from 2020 through 2025 and how much annual capacity would need to be added to meet citywide and statewide targets by 2030. In contrast to the municipal trajectory, both citywide and statewide growth rates from 2020 through 2025 are more than twice as high as what will be required going forward to meet their 2030 benchmarks.

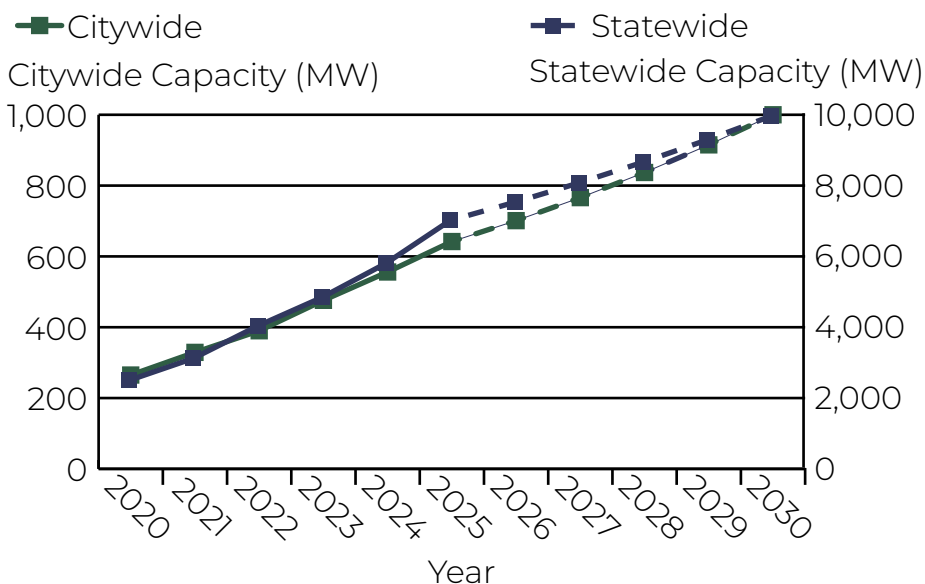
Solar PV Installation Costs Citywide and Statewide

As it did for municipal solar projects, IBO examined how solar PV installation material and labor costs have changed citywide and statewide from 2015 through 2025 using NYSEERDA Solar Electric Programs [data](#). This NYSEERDA dataset captures about 90% of citywide capacity and 80% of statewide capacity through 2025. From 2015 through 2025, the costs of these projects have trended similarly to municipal costs.

The median project cost per watt installed in the city decreased from \$6.55 in 2015 to \$4.50 (a decrease of 31%) in 2025; the median cost per watt installed in the state dropped from \$6.33 to \$3.86 (a decrease of 39%) over the same timeframe.

FIGURE 3

Citywide and Statewide Capacity, Recent Progress and Growth Needed to meet 2030 Targets



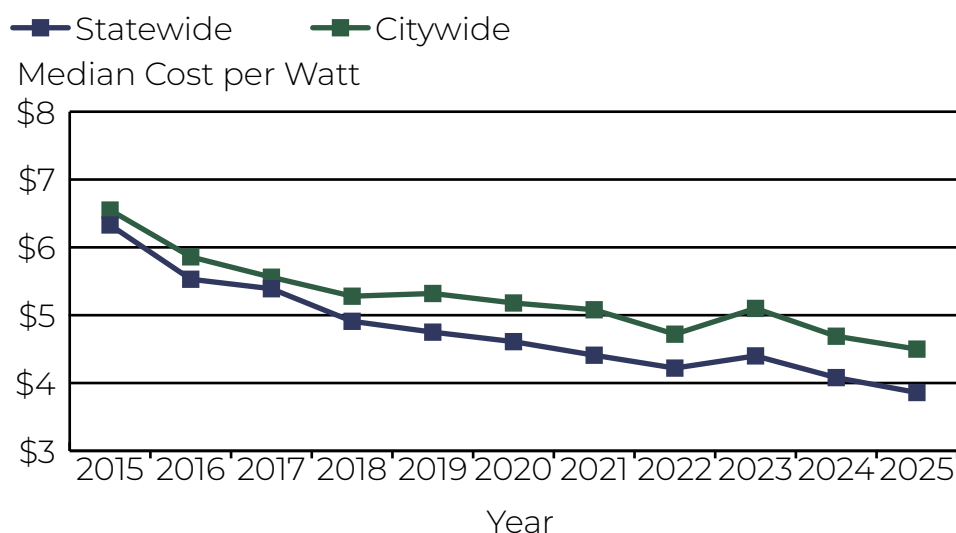
SOURCE: IBO analysis of NYSEERDA data

NOTE: The solid lines (2020-2025) represent actual annual capacity, while the dashed lines (2026-2030) show required annual capacity. Lines are scaled to different axes; visual overlap reflects similar proportional trajectories.

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FIGURE 4

Citywide and Statewide Per-Watt Project Cost, 2015-2025



SOURCE: IBO analysis of NYSEERDA data

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This suggests that financing solar projects throughout all of New York, beyond strictly City government projects, has become more affordable on a per-watt basis. Figure 4 visualizes the annual change in median cost per watt installed.

Solar Workforce in New York City

Establishments, Employment, and Wages

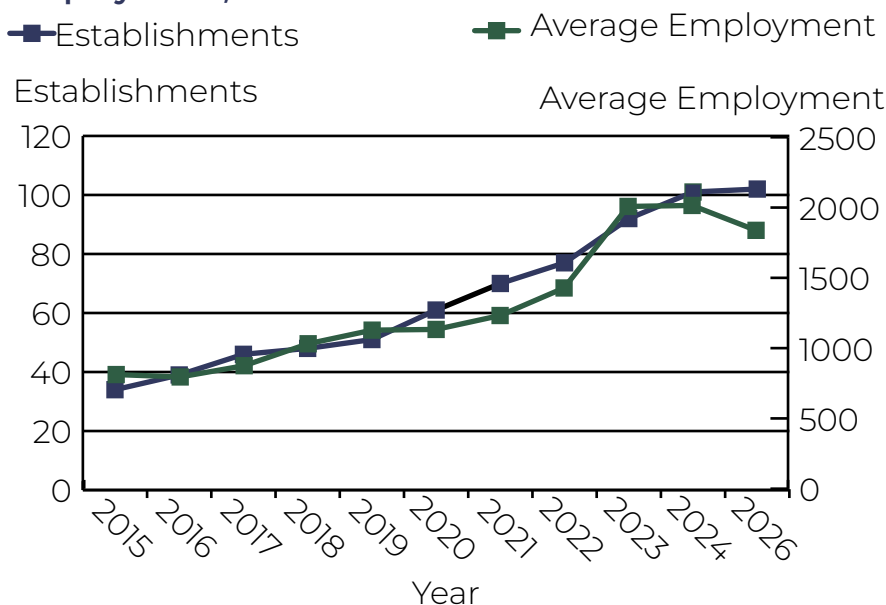
New York City’s solar workforce has also grown in recent years, both preceding and accompanying the expansion of its solar PV capacity. Using New York State Department of Labor Quarterly Census of Employment and Wages (QCEW) [data](#), IBO examines changes in the private sector establishments, employment, and wages related to solar energy and installations from 2015 through 2025. IBO used QCEW data reported under North American Industry Classification System (NAICS) codes associated with core components of solar development—namely, Solar Electric Power Generation (NAICS code [221114](#)) and Power and Communication Line and Related Structures Construction (NAICS code [237130](#))—combining these codes as a proxy for the city’s solar industry.⁸

From 2015 through 2025, the number of solar PV-related business establishments in New York City tripled from approximately 34 to 102. Of these establishments, 51 were added since 2020, indicating that growth in the industry has coincided with large capacity gains at both the municipal and citywide levels. This expansion was also reflected in employment growth—average employment in the industry increased from around 800 in 2015 to 1,800 in 2025; more than 700 of these jobs were added in the past five years. Figure 5 shows establishment and employment trends in the New York City-based solar sector.

Moreover, from 2015 through 2025, total wages in the city’s solar industry increased from \$180 million to \$273 million, a 52% gain—however, this growth has not been linear. Total wages reached \$247 million in 2019 before declining to \$198 million by 2021—coinciding with the halting of non-essential construction in the City by the Department of Buildings. Following the resumption of construction, total wages

FIGURE 5

New York City Solar Industry Establishments and Employment, 2015-2025



SOURCE: IBO analysis of New York State Department of Labor Quarterly Census of Employment and Wages data

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recovered and increased through 2025. At the same time, average wages in the solar industry have declined, falling from a high of \$63,000 in 2016 to \$37,000 in 2025.⁹ This may reflect the growing share of entry-level positions as the industry expands. For example, nationally, the U.S. Bureau of Labor Statistics [projected](#) a 51% increase in employment of solar PV installers from 2019 to 2029, while the median annual wage for installers in 2019 was \$45,000. Seemingly, as demand for solar installations surged in New York City, wages within the industry experienced downward pressure.

New York’s Outlook with Federal Solar Policy Changes

Despite this evolution, current changes at the federal level represent an obstacle for solar affordability, deployment, and employment moving forward. In July of 2025, the One Big Beautiful Bill Act (OBBBA) phased out multiple tax incentives for solar PV installations, including the Residential Clean Energy Credit and the Clean Electricity Investment Credit (CEIC)—which were enhanced under the Inflation Reduction Act (IRA) of 2022 and provided substantial financial incentives for solar installations by residents, commercial entities, and even non-taxable entities such as local governments like the City of New York. (For a broader discussion on the impact of the Trump administration’s environmental fiscal and policy changes on New York City, see IBO’s [report](#).)

This change has the potential to erode the economic viability of solar PV systems. Beyond this, the OBBBA rescinded all unobligated funds within the Greenhouse Gas Reduction Fund, which was a \$27 billion fund created under the IRA for financing clean energy projects nationwide (including solar), which may further exacerbate affordability and practicality challenges.

Gains in solar PV jobs are also at risk. A decrease in demand for solar installations is probable due to reduced federal tax incentives, higher material costs resulting from increased tariffs, and fines for domestic solar PV systems that rely on foreign solar manufacturers. For context, the U.S. EIA found that [around 88% of solar panel shipments in the U.S. were imports](#) in 2022—and BloombergNEF reported that the U.S. imported [\\$13.8 million](#) worth of solar PV panels between January and October of 2024. These changes all pose risks to profitability of the solar industry and job security of New Yorkers employed by solar PV firms and may limit the creation of new solar jobs in the future.

NYSERDA, which contributes to most solar installations in New York City, received federal funds through grants awarded under legislation such as the IRA and Infrastructure Investment and Jobs Act, which went toward the execution of New York State’s clean energy policies and expansion efforts. In October of 2025, the U.S. Department of Energy discontinued this federal funding stream. The Hochul administration [announced](#) that the decision amounted to a loss of \$21.5 million in grants to NYSERDA. Notably, NYSERDA stated in its Fiscal Year 2026 [Budget](#) that it had planned for various scenarios in which these grants were rescinded—noting the uncertainty around future actions from the Trump administration.

Conclusion

The City has made measurable progress toward its municipal solar targets—but this trend must ramp up for the City to meet its first benchmark goal under Local Law 99, though it is on pace for its longer-term goal. This capacity growth has been mirrored across the entire city and state, coinciding with increased affordability and a larger solar workforce. New York City and State continue to make efforts to reduce greenhouse gas emissions and transition energy production from fossil fuel-burning sources to cleaner, renewable energy sources. Nationally, however, clean energy efforts face adversity from a climate change skeptical Trump administration. The sunset of federal incentives for solar PV installations will likely push the cost of adding solar capacity more onto consumers and the City. As the Federal government reduces its investment in solar energy in the coming years, the City faces new challenges to sustaining its progress under Local Law 99 and preserving the broader growth of New York's solar energy market.

Endnotes

- 1 U.S. Energy Information Administration. [Solar energy and the environment](#).
- 2 Different municipalities measure “solar readiness in different ways, making comparison of DCAS’s 13% solar-ready buildings figure with other jurisdictions difficult.
- 3 Throughout this report, IBO calculated annual solar photovoltaic capacity by City fiscal year. all wattage (MW, MWh, etc.) is measured in direct current (DC).
- 4 IBO used property-level data to approximate the median gross square footage (GSF) of City government buildings. The median City-owned building size is 10,000 GSF. IBO calculated median annual electricity usage using the New York City Department of Buildings [benchmarking data](#), filtered for property types representative of City government facilities. The median annual energy usage for a median-sized government building is around 174 MWh.
- 5 IBO’s 23% calculation represents the compound annual growth rate from 2020 through 2025.
- 6 NYSEDA provides incentives through [NY-Sun](#) to contractors as a means of decreasing the cost of solar installations, and in turn, increasing cost-effectiveness for New York residents, businesses, and municipalities. Among these incentives are a Prevailing Wage Adder (contractor must meet [prevailing wage requirements](#)), Community Adder (for eligible community solar projects), and others.
- 7 All NYSEDA cost figures are reported in City Fiscal Year 2025 dollars using the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers in the New York-Newark-Jersey City area.
- 8 See IBO’s [methodology explainer](#) for discussion on IBO’s use of NAICS codes and the limitations of this data. Data on Solar Electric Power Generation is limited for calendar years 2014–2016 due to the small number of establishments. Missing quarterly data is estimated by annualizing available quarters, averaging available quarters within the fiscal year, or averaging the same quarter across adjacent fiscal years.
- 9 All QCEW wage figures are reported in City Fiscal Year 2025 dollars using the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers in the New York-Newark-Jersey City area.

Prepared By:
Cameron Chapman



110 William Street
Suite 1401
New York, NY 10038



info@ibo.nyc.gov



www.ibo.nyc.gov