



PUBLIC SOLAR NYC

SCALING UP RENEWABLE PUBLIC POWER

a plan by

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INTRODUCTION

New York City has more than [1.6 billion square feet](#) of rooftops, holding enormous potential for the generation of renewable energy through rooftop solar. The widespread installation of rooftop solar in New York City would not only create reliable, renewable sources of electricity to dramatically reduce the City's carbon footprint, but would also reduce demand on New York City's strained electrical grid and create high-paying, high-quality green-collar jobs for New Yorkers. The environmental and social benefits of rooftop solar are clear.

Unfortunately, property owners all across the five boroughs still face serious barriers to installation including fronting costs, accessing capital and financing, and navigating the City's slow and complicated permitting process. Meanwhile, our City's privately-owned, for-profit utility companies are going about business as usual. About a million NYC rooftops sit vacant and unused, while New Yorkers suffer from widespread blackouts, service shutoffs, explosions, and utility rate hikes to fund new fossil fuel infrastructure.

The City should create Public Solar NYC, a publicly-owned entity to install 25,000 rooftop solar units to generate 100% renewable, clean energy. Brad has a plan to get it done.

BACKGROUND

New York City and State have made some good progress supporting the installation of rooftop solar panels over the last decade, increasing the number of solar panels installed [sixfold since 2014](#). Financing models like [NYCEEC](#) paired with [tax incentives, credits, and rebates](#) and technical expertise from [NYSERDA](#) have led to the installation of over [252 Megawatts](#) of solar power generation capacity in New York City over the last decade—that's roughly enough renewable energy to power about [47,880](#) homes. And installations on government-owned buildings, including 47 public schools, will soon add another [22 MW of solar power](#) and energy storage, helping to accelerate the City's clean-energy goals.

But these models have not achieved anywhere near the scale that is necessary—or even that was imagined at the outset of their creation. Clearly, we have a long way to go to reach our [renewable energy goals](#), which include the installation of 1,000 Megawatts of solar power generation capacity by 2030. Yet there remains no systematic approach to dramatically scaling up solar installation in New York City.

THE CHALLENGE

Building owners face different barriers to solar installation depending on the size, location, use, and ownership structure of the building. Single-family homes in the outer boroughs are well-suited for available financing and tax credits, but those homeowners tend to lack awareness or interest, and they are often faced with barriers to financing due to personal credit issues. The permitting process is long and slow. Installing solar panels on your roof should be like getting a new hot water heater in your basement. Instead, it's more like getting an extension on your house.

Large commercial and residential apartment building owners face a different set of challenges, including the prohibitive cost of preparing the building for the installation itself, which often requires electrical wiring, rooftop reinforcements, and adherence to strict building standards which ensure the structural integrity of the solar panels. Condos face all of these same barriers and often have difficulty making use of available tax incentives because tax credits cannot easily be divided among apartment owners. And finally, co-ops face the same challenges as most large residential and commercial buildings, with the added challenge of getting boards to approve the installations, which adds significant time and effort. All of these building owners also face the significant cost of simply doing business in New York City, which has some of the most complex permitting processes and highest transaction costs in the country.

These challenges have significantly slowed the scaling-up of rooftop solar in New York City. But these problems are not insurmountable. The City has all the tools it needs to assess our City's building stock,

conduct proactive, multi-lingual outreach and education, streamline the permitting process, and pay the upfront costs of solar panel purchase and installation.

THE SOLUTION: PUBLIC SOLAR NYC

The City of New York should create a publicly-owned, democratically-controlled entity responsible for the widespread installation and ownership of rooftop solar panels across the five boroughs: [Public Solar NYC](#). Public Solar NYC would focus entirely on scaling up NYC's solar installation in coordination with the very agencies responsible for permitting and red tape, enabling them to develop internal expertise, drive down transaction costs, and promote a vast increase in solar across the city.

At the outset, Public Solar would have a \$500 million budget to install 25,000 solar panels citywide over 8 years. A \$500 million budget would leave room in the budget to attract and hire a first-rate team focused on market development and the design of efficient, repeatable implementation models to manage the difficult process of installing solar in New York City.

Public Solar NYC's management team would be designed to achieve true systems innovation, including leaders with a track record of systematizing complex processes who understand NYC's industry but who are unwilling to accept "that's just how it is here." Public Solar NYC would be tasked with the following activities in order to create the first-ever municipally-owned renewable energy utility, creating a consistent pipeline of solar installation projects in New York City that would:

SYSTEMATICALLY PRE-SCREEN NYC'S BUILDING STOCK

Building on Google's [Project Sunroof](#), which used satellite imagery to evaluate every rooftop in the US for solar potential, Public Solar NYC would use first-rate analytics to crunch data from [ACRIS](#), DOB's [Building Information System](#), and other data available to City agencies to target and predict a subset of New York City's building stock that can accommodate solar most cheaply (e.g. no need for costly roof reinforcements).

CONDUCT MULTI-LINGUAL AND IN-PERSON OUTREACH AND EDUCATION

With appropriate building owners targeted through data analytics, the City would then conduct inclusive, accessible, and multilingual outreach and education to

those building owners, raising awareness and increasing interest in solar panel installation citywide.

MAKE IT SIMPLE FOR BUILDING OWNERS BY PAYING A RENT FOR THEIR ROOF

Public Solar NYC would offer a monthly or annual rent payment to property owners for use of the building's rooftop. This would make it vastly easier for building owners of all types to participate. They would not be responsible for financing, permitting, contracting, installation, or maintenance. Instead, they would be guaranteed a simple stream of additional rental income.

STREAMLINE THE CITY'S SOLAR INSTALLATION PERMITTING PROCESS

As a City-owned entity, Public Solar NYC would report to the Mayor alongside the very same City agencies that often create unnecessary or time-consuming red tape. With buildings pre-screened for eligibility, Public Solar NYC would shepherd eligible building owners of different building types through an otherwise complex and time-consuming permitting process. In coordination with City agencies, Public Solar NYC would also be positioned to explore the creation of new streamlined processes to standardize the permitting process where appropriate to reduce timeframes, fees, barriers to entry, and ultimately, City costs.

FULLY FUND SOLAR PANEL PURCHASES AND INSTALLATION

Using a mix of City capital dollars, federal infrastructure aid, pension fund investments, and traditional financing mechanisms, the City would contract with solar providers and pay the full cost of solar panel purchases and installation, putting zero cost burden on New Yorkers to help reach our renewable energy goals.

MAINTAIN PUBLIC OWNERSHIP OVER SOLAR PANELS

Public Solar NYC would continue to own its rooftop solar installations, generating public returns on the renewable energy it generates, and would contract for the maintenance and upkeep of its units.

RENEWABLE ENERGY DISTRIBUTION AND BATTERY STORAGE

Because it would rapidly become a significant generator of renewable energy, Public Solar NYC would be in a much stronger position than individual building owners to negotiate with ConEd about rates

and prices. In addition, as a City-owned entity, it would be in a stronger position to work with the FDNY, solar installers, and innovators in sustainable innovation to resolve outstanding safety and permitting issues with battery storage in NYC, significantly enhancing the value of rooftop solar.

THE BENEFITS OF PUBLIC SOLAR NYC

Public Solar would be a first-of-its-kind municipally-owned, democratically-controlled utility providing 100% renewable energy directly to New Yorkers, putting power directly in the hands of the people, from energy generation to distribution. Other benefits to the model include:

DRAMATICALLY SCALING UP PUBLIC & PRIVATE ROOFTOP SOLAR

Public Solar NYC would dramatically scale up solar installations directly, through the 25,000 solar panels and battery energy storage systems it will install over the next 8 years. But the benefits won't stop there. By streamlining the permitting process, promoting economies of scale, and supporting new technologies such as battery storage, Public Solar NYC will bring down costs and speed up installation times for private installations as well. This will help enable the region to shift away from burning fossil fuels to generate electricity to clean, renewable power.

COMPLETELY ELIMINATING BUILDING-OWNERS' COSTS

Even when New Yorkers are interested in solar panel installation and willing to make use of the various support programs available to them, many small homeowners face barriers to financing like low-credit scores. Public Solar NYC would completely eliminate this barrier to entry and would significantly simplify the process even for the homeowners who might otherwise be eligible for financing but don't have time or interest in navigating the months-long application and approval process. This would help rapidly expand the adoption of solar panels to help the City reach its renewable energy goals and reduce our City's carbon footprint.

PUTTING CASH DIRECTLY IN NEW YORKERS' POCKETS

Public Solar NYC would maintain ownership over the solar panels themselves, but would pay a monthly or annual rent to participating building owners, giving NYC's property owners a direct cash incentive to install solar panels. Zero upfront costs in combination with a new modest revenue stream for property

owners would significantly increase interest and participation in the program from building owners of all types.

CREATING A PUBLIC POWER ALTERNATIVE TO CON-ED

Investor-owned utilities like Con-Ed seriously disadvantage New Yorkers, directly profiting off of New Yorkers' hard-earned cash to fund the further extraction and processing of fossil fuels. Public Solar NYC would lay the groundwork for providing New Yorkers with a reliable, transparent, accountable, and clean alternative to Con-Ed while demonstrating the viability of [Public Power](#) at a broader scale.

CREATING HIGH-QUALITY PREVAILING-WAGE JOBS FOR NEW YORKERS WHO NEED THEM MOST

Scaling up the installation and maintenance of solar power in New York City has the capacity to create thousands of high-quality, green-collar union jobs that pay New Yorkers a prevailing wage. As a municipally--owned entity, Public Solar NYC would be empowered to ensure that the contractors hired to complete installations train and employ local New Yorkers, with an emphasis on residents of NYCHA and frontline environmental justice communities, pay their workers a prevailing wage, and offer high-quality benefits and career pathway opportunities.

FINANCING PUBLIC SOLAR NYC

Public Solar NYC would be established with an upfront investment of \$500 million for the purchase and installation of solar panels and energy storage. New York City could finance this investment through a mixture of General Obligation (GO) debt (the City generally issues about \$10 billion each year in GO debt to finance the city's infrastructure), through the issuance of Green Bonds (as outlined in [Brad's infrastructure plan](#)), in combination with traditional financing mechanisms, potentially including market-rate investment from New York City's pension funds. Such a financing structure could lay the foundation for a groundbreaking new model for public power that could be expanded and potentially replicated nationwide.

Alternatively, the American Rescue Plan Act of 2021 and potential American Jobs Plan (aka President Biden's proposed [\\$2 trillion](#) infrastructure plan) raise new opportunities. New York City has [upwards of \\$13 billion](#) coming its way in the form of one-time federal and state aid from the American Rescue Plan, and

potentially much more from the infrastructure bill, some of which would likely be specifically set aside for clean energy projects.

This relief is a critical opportunity to jumpstart a just and durable recovery for New York City - without creating recurring obligations for the City's budget moving forward. An investment in Public Solar NYC would be a particularly smart option as the City faces a significant influx in cash as the result of federal aid. Putting \$500 million in federal aid towards Public Solar NYC would mean a direct investment in durable assets that create jobs and may even produce financial returns for New York City, all without creating any recurring obligations that might create budget holes or slashed services down the road.

CONCLUSION

New York City can and must be a leader in winning - and implementing - a Green New Deal before it's too late. Public Solar NYC can help New York City lead the way by making a direct investment into a just recovery for New York City, creating high-quality jobs, reducing our City's carbon footprint and putting power and resources directly into the hands of the people.

Check out Brad's full plan to [Confront the Climate Crisis](#) as New York City's Comptroller.