# The Energy Incentives Playbook for Commercial Buildings & Industrial Facilities

**New York State** 

Prepared by



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# Let's Make Power Plants Obsolete

It'll come as no surprise that <u>electricity production</u> is the second largest source of emissions in the US after transportation. It's because 60% of electricity comes from burning fossil fuels. If we want to shift power generation to cleaner sources, decentralization is key.

It's why federal, state, and local governments have created a vast network of financial incentives to power the shift to Distributed Energy Resources (DERs).

But these incentives are hard to navigate and complex to understand. In states like New York, strong government support for clean energy has created large markets for renewables, but that also means there's even more incentives to navigate.

With the right strategies commercial and industrial players can unlock profitability, tap into multiple value streams and incentives, and make progress towards net zero.

At Peak Power, our goal is to empower our customers to realize the economic benefits of their energy and net zero goals. We've put together this New York energy incentives playbook so you can get a quick scan of the financial benefits that could be available to your business.



# **Net Zero Makes Business Sense**

Climate change is no longer a matter of discussion. Across the globe, climate change and sustainability are becoming key driving factors in brand, rentability, and investment scoring.

# **Attracting and Retaining Tenants**

With buildings being one of the leading sources of greenhouse gas emissions, tenants are demanding their commercial spaces be sustainable to aid with their own corporate decarbonization goals.

Many gold-standard tenants won't even consider a lease unless the building meets their sustainability standards.

### **Attracting Capital**

Ever since the Task Force on Climate-Related Disclosures (TCFD) was created in 2015 by the Financial Stability Board (FSB), the reality of the risks posed by climate change have become key factors in investment scoring. You can view the investor guides developed by UNEP FI here.

And, as detailed in the regulatory highlights below, mandated disclosures and reporting are on the horizon.

Take it from Larry Fink, the CEO of BlackRock, the world's largest asset manager, "No issue ranks higher than climate change on our clients' lists of priorities. They ask us about it nearly every day."



Watch the TCFD update delivered by Michael Bloomberg: 2020 TCFD Status Report

### **LEED Certification**

Leadership in Energy and Environmental Design (LEED) is a certification for all building types and all building phases including new construction, interior fit-outs, operations and maintenance and core and shell. Many renewable energy and battery systems can contribute to a better LEED score. "LEED-certified buildings command the highest rents, while lease-up rates typically range from average to 20% above average; vacancy rates for green buildings are an estimated 4% lower than non-green properties." <u>US Green Building Council</u>



### The Energy Transition is Underway: Regulatory Highlights

In 2019, New York passed the Climate Leadership and Community Protection Act (Climate Act), codifying some of the most aggressive energy and climate goals in the country, including 70% renewable energy by 2030 and 3,000 MW of energy storage by 2030. The incentives are working, and at last update New York was already at 82% of the 2025 target. This prompted Governor Kathy Hochul to announce plans to double the energy storage target to 6 GW by 2030. We've got 8 years to get there.

<u>View the New York State Energy Storage Roadmap</u>

The other news making headlines in Q1 2022 was about the <u>SEC's proposed rules to require climate-</u> related disclosures in their registration statements and periodic reports. One of the required disclosures would be on a registrant's greenhouse gas emissions. Reporting standards are on the horizon.

<u>View the IEA's Policy Database</u>



# Why it All Matters

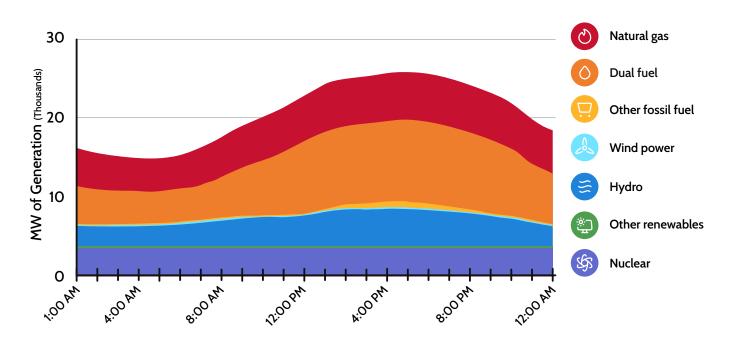
# The Importance of Grid Mix

As we noted earlier, 60% of electricity in the US is generated from burning fossil fuels. That type of generation is a direct contributor to your company's Scope 2 emissions. Demand spikes increase the need for dirtier, more expensive generation like natural gas.

The higher the demand, the dirtier the generation, and the higher your costs.

# Large commercial and industrial sites have essentially 2 choices to reduce their Scope 2 emissions:

- 1. Permanent load reduction through energy efficiency upgrades or sited energy resources
- 2. Strategic curtailment to avoid pulling electricity during the dirtiest, high demand periods



# **State-Wide Incentives**

## A Quick Overview of NYISO (New York Independent System Operator) Demand Response

Demand Response is just that, responding to demand during periods when demand spikes. It's a way for qualifying participants to be paid to reduce consumption during periods defined by NYISO. This has a positive effect on the entire electrical grid during events like outages and weather that significantly affect the grid.

To become a qualifying participant, you'll have to enroll to take part in either a reliability-based or economicbased demand response program.

It's important to note that a customer can opt-in to a demand response program at the state-level (NYISO) or at the utility-level (more on this below).

Program Name	Payment Types	Metering	Performance Requirements
ICAP-SCR (Reliability-based)	Monthly capacity payment and performance payment	Hourly interval meter	Mandatory for NYISO reliability event
EDRP (Reliability-based)	Performance payment	Hourly interval meter	Voluntary for NYISO reliability event
DADRP (Economic-based)	Performance payment	Hourly interval meter	Mandatory if scheduled
ESASP (Economic-based)	Ancillary service market payment	Telemetry; real-time metering; instantaneous load meter	Mandatory if scheduled

### Important links

- <u>View the NYISO DR Web page</u>
- <u>View the FAQ Guide</u>

🗗 Talk to us About Enrolling

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Source: NYISO

# An ICAP Overview (without the jargon)

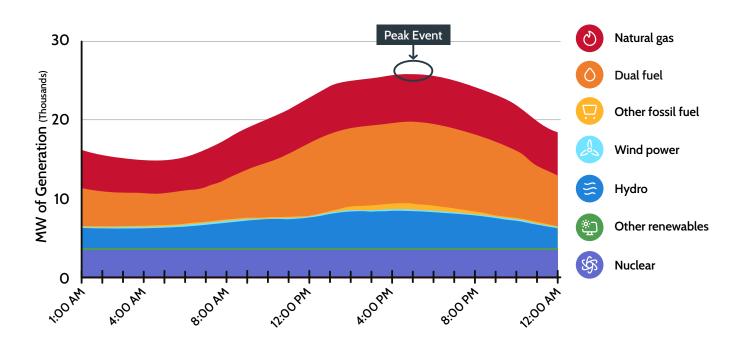
The New York Installed Capacity Market (ICAP) was developed to ensure electricity supply will meet the demands of the market.

We'll use the highway analogy: The way our current electricity system is designed, we need to build infrastructure for the 1-hour of highest demand in the entire year. It's like building a superhighway that'll be full on the busiest travel day of the year, and nearly unnecessary for the other 364 days. Building infrastructure in that way just doesn't make sense... and it costs us all a lot of money.

Put simply, the more electricity you use during demand peaks, the more you contribute to the infrastructure requirements, and the more you'll pay in ICAP charges.

In Peak Power's latest analysis, 1 MW of load during 1 ICAP hour is equal to approximately \$80,000 in annual cost. For large energy users, ICAP charges will be about 30% of your typical bill.





August 25, 2021 NY-ISO ICAP Event

# Energy Conservation Improvements Property Tax Exemption (RPTL § 487)

This incentive is a 15-year tax exemption applied to the increased value of the real property resulting from the development of clean energy projects.

This can include lithium-ion battery energy storage equipment and systems, micro-hydroelectric energy systems, fuel cell electric generating systems, and micro-combined heat and power generating equipment systems, solar, wind, and farm waste energy systems.

### How does it work

This tax exemption is applied uniformly across the state unless a taxing jurisdiction has <u>opted out</u>. A school district, county, city, town, or village can choose to not provide the tax exemption to clean energy projects.

### Eligibility

The cost of such construction, alteration, installation, or improvement must exceed \$10,000 or a higher minimum, and not exceed \$50,000, as may be provided in such local law or resolution.

### Timelines

To qualify for the exemption, electric energy storage equipment must have started construction after January 1, 2018, and before January 1, 2025. The application must be filed in the assessor's office on or before the applicable taxable status date (typically March 1st in most jurisdictions) and within one year from the date of completion of the improvements.

In 2012, New York State exempted commercial solar energy systems from the 4% New York State sales tax.

• <u>View a full list of</u> participating jurisdictions

### Important links

- Department Email Address
- Application Form
- Application Instructions

### **Quick Tip**

New York City has its own Tax Abatement program, the New York City Energy Storage Property Tax Abatement (RPTL § 499). This program provides incentives worth the lesser of:

- 3. 10% of expenditures on the equipment; or
- 4. The amount of taxes payable in such tax year; or
- 5. \$62,500

This program could provide a better incentive than RPTL § 487 depending on the Payment in Lieu of Taxes (PILOT) structure. Equipment will need to have been installed on an eligible building after January 1, 2019, and before January 1, 2024. Applications must be submitted by March 15, 2024.

• View the program guide

# NYSERDA Retail Energy Storage Incentive

This state-wide incentive is meant to fund the development of standalone, grid-connected energy storage paired with or without new or existing on-site green generation, like solar or combined heat and power systems.

The great thing about this program is that you can receive this funding and payments from an NYISO or utility program (more on this below). It's an incredible way to stack the financial incentives and get these projects going. Just make sure you understand all the rules with stacking incentives, and if you need help reach out to us at <u>Peak</u> <u>Power</u>.

### How does it work

You'll receive a fixed amount per usable kWh of installed energy storage capacity measured in Alternating Current (AC) at Commercial Operation Date (COD). NYSERDA will provide a technical inspection to determine the usable capacity.

Once approved, NYSERDA provides notification of the approved incentive amount. The incentive will be provided at the stated incentive level based on the system's total MWh in the first four hours of duration and decline to 25% of the stated incentive level for hours five and six, with no incentive for any duration beyond six hours. The maximum incentive payment a project may receive is 15 MWh.

### Eligibility

To be eligible, you'll have to prove that you contribute to the System Benefits Charge (SBC) by producing a recent utility bill. To determine if you are paying the SBC, look at a recent bill from your utility company to see if "SBC" or "RPS" is listed as a charge. Systems under 5 MW are eligible and must be permanent, stationary, and behind-the-meter or grid-connected. You'll also need to make sure you have the right electrical meter installed to record the net energy charged and discharged.

Front-of-the-meter storage systems and customers with demand metering are eligible for the program. Behind the meter systems are eligible if the customer is taking part in any of the following ancillary programs. *Source*:

- 1. Distribution utility demand response
- 2. Have a Non-Wires Alternative (NWA) contract
- 3. VDER Value stack tariff
- 4. Granular delivery rate tariff (ConEd Rider Q)

All applications for this incentive must go through an approved energy storage contractor, like Peak Power.

### Timelines

Once you apply there are several checks and balances to go through. But there are two important milestones you should be aware of:

- **Milestone 1 (within 170 days of project approval):** All preliminary documentation must be submitted to NYSERDA, including building permits and written confirmation for a utility with proof of payment.
- Milestone 2: Deliverables for the project are to be submitted to NYSERDA as the deliverables are achieved and before incentive fund disbursement. Documents include a utilities Permissions to Operate (PTO) letter, total installed project cost, proof of storage system 10-year warrant, safety certifications and more.

### Important links

- Incentive Dashboard
- Program Web Page
- Energy Storage Contractor List

# New York's Value of Distributed Energy Resources (VDER)

You've likely heard a lot about net metering, which rewards clean energy customers for their excess generation. In New York, VDER (a component of Rider-R) replaced Net Metering as a compensation framework for energy discharged by Distributed Energy Resources (DERs). It was an updated framework to realize the true value that DERs provide to the electrical grid.

This program awards DER owners utility bill credits based on the system's value stack benefits provided to the grid during specific times and in specific locations. This is the main difference between VDER and net metering– net metering was a fixed volumetric credit that did not consider location and time of day/year.

### The 5 components that make up the VDER value stack and determine the bill credits are:

- 1. Energy value
- 2. Capacity value
- 3. Locational system relief value
- 4. Environmental value
- 5. Demand reduction value
- 6. Community Credit (when paired with solar)

### Eligibility

Value stack compensation is specifically for excess electricity delivered back to the grid. Systems must be sized between 750 kW to 5 MW alternating current.

Eligible technologies include solar, stand-alone and co-located energy storage, certain combined heat and power (CHP) systems, anaerobic digesters, wind turbines, small hydro, and fuel cells.

It's important to note the PSEG-LI utility territory has a slightly different VDER calculation and framework. You can view this information on the <u>NYSERDA website</u>.

### Important links

- View the NYSERDA Value Stack Web Page
- Read the Utility Dive Article on REV and VDER
- VDER Value Stack Calculators



Battery storage project in Westchester, NY

## New York Dynamic Load Management (DLM) Programs

This state-wide program was issued by New York's Public Service Commission as a way to incentivize long-term investments in energy storage technologies to shave peak load and respond to system needs. The program, administered by the state's major electric utilities (except PSEG-LI), is split into Term-DLM and Auto-DLM programs. However, it's important to note that the Auto-DLM program is available only in specified areas in each utilities service territory.

As with many of the incentives, these DLM programs can be stacked alongside other, specific incentives! If you need help in terms of project design to maximize stacked incentives, reach out to us at <u>Peak Power</u>.

### How does it work

The program is designed to provide incentive payment certainty over a 3 to 5 year contract period for participants, although, individual utilities can offer

longer terms if desired. To participate, a client or an aggregator will submit a response to the DLM Request for Proposal (RFP) process. If the application is successful, a contract for 3-5 years at a fixed price will be awarded to the participant to lock in an incentivized rate for the client-provided economic load-relief for a specific quantity of energy. If a client wishes to exit their contract before the end of its term, there are early exit penalties that will consider the remainder of the fixed term as well as the deficient quantity of energy not delivered yet to the ISO.

Here are the key differences between each p	program:
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Term-DLM	Auto-DLM
At least 21 hours' notice is provided for a demand response event	May be called with as little as 10 minutes notice for a demand response event
Events can be called Monday to Friday, with the exception of holidays	Events can be called 7 days a week between the hours of 6:00 AM and Midnight
Performance adjustment factor adjusted for a 0.8 factor requirement	Performance adjustment factor adjusted for a 0.9 factor requirement
	Auto-DLM requires that assets achieve a higher performance factor and are awarded a higher fixed rate as a result. Poor- or non-performance is also more punitive under Auto-DLM than under Term-DLM
Participants in Term-DLM can simultaneously participate in DLRP but are excluded from participating in CSRP	Participants in Auto-DLM are excluded from participating in any other economic relief programs (including Term-DLM, CSRP, DLRP and DADRP)

### Incentive payments for these programs are split into two types:

- 1. **Reservation Payments:** This rate is part of your application and is agreed upon in the terms of the contract
- 2. **Performance Payments:** This rate is determined by the utility and provides a per kWh incentive for each kW reduced during demand response events

"These new DLM program options are designed to be attractive to customers making use of energy storage technologies, and will encourage further deployment of energy storage technologies as quickly as possible."

New York Public Service Commission

### Eligibility

To be eligible, a participant must be a customer of a participating utility provider and must have a communication interval meter. The programs are technology agnostic and instead focus on load curtailment, however, fossil fuel generators are not eligible to participate in the program.

Participation in either the Auto-DLM or Term-DLM program must be through a Curtailment Service Provider (CSP).

### Timelines

Requests for proposals are solicited by each utility and define specific timelines for applications and enrollments. It is best to contact your electric utility provider for timelines.

### Important links

- <u>National Grid DLM Web page</u>
- <u>ConEdison DLM Web page</u>



# **Local Utility Incentives**

# Con Edison Electric Smart Usage Rewards Commercial Demand Response (Rider-T) Program

Commercial and industrial facilities can make money with this program simply by reducing their energy consumption during peak demand events, in turn enhancing grid resiliency.

For every 100 kW of load reduction, a participant can earn up to \$18,000 annually.

# There are two program types that a commercial or industrial consumer can enroll in under this program:

- 1. **Commercial System Relief Program (CSRP):** This program is designed to reduce consumption during peak demand events at the system level. This program is based on an event notification received 21 hours in advance of the demand response event. These can be planned peak demand events (mandatory participation), or unplanned events (voluntary participation) requested Monday to Friday during designated call windows, excluding federal holidays. Calls for participation are made system-wide for all program participants.
- 2. Distribution Load Relief Program (DLRP): This program is designed to provide network-level support through load relief for Condition Yellow events (during risk of outages or infrastructure overload). This program is based on an event notification received 2 hours or less in advance of the demand response event. These are almost always unplanned peak load events and participation can be requested any day or time during the capability period, except between the hours of 12 AM and 6 AM. Calls for participation are made at the network level, only for customers enrolled in a specific network.

### How does it work

Most participants apply for and manage these programs through an aggregator. Customers can participate in both the CLRP and DSLRP programs concurrently but must use the same aggregator.

Participants can apply through the program based on the volume of the reduction pledges. For customers that can pledge fewer than 50 kW, applications must be submitted through a participating aggregator as the 50 kW minimum applies for all networks/sites in aggregate. Customers that can pledge greater than 50 kW can apply through an aggregator or directly to Con Edison.

### Eligibility

- Sites must have a communicating interval meter as interval data is needed to calculate a customer baseline
- A minimum of 50 kW is required for participation in the commercial demand response program
- All customers enrolled in the Reservation programs must provide Load Relief during program events except in the case of CSRP Unplanned.

Customers participating in Rider T demand response programs while also taking service under the Rider R – Value Stack Tariff (net energy metered (NEM) and value of distributed energy 8 Rider T, Leaf 281, Section J. 21 resources (VDER)) are not eligible to receive performance (kWh) payments under CSRP or DLRP. <u>Source</u>

### Timelines

Enrollment periods open on two dates annually and are open for 30 days and a participant must apply each year to participate. The table below details out the enrollment periods and capability start dates.

Enrollment Period Opens	Enrollment Period Closes	Capability Period Start	
Tuesday, March 1, 2022	Friday, April 1, 2022	May 2022	
Monday, April 4, 2022	Tuesday, May 2, 2022	June 2022	

Interval meters must be installed 30 days prior to the start date, and communications established at least a day before the start.

### Important links

- Direct Email Address
- Full Program Guidelines
- Application Form

Con Edison has previously offered several incentives for developing energy storage. <u>You can check out their</u> <u>current offerings here</u>.

# BQDM Prescriptive Energy Storage Program Con Edison

### **Non-Wires Solutions Program**

The Brooklyn-Queens Demand Management (BQDM) program is a part of the non-wires solutions (NWS) Con Edison is deploying to defer or eliminate traditional infrastructure projects for the benefit of the distribution system. BQDM is targeting 15 MW of total peak load relief through new battery energy storage systems operational before 2026.

This program is being offered in a specific territory through ConEd and provides eligible participants incentives for installing approved battery energy storage systems.

### How does it work

This Program is offering two separate incentive rates: \$2,500/kW of registered load relief for front-of-the-meter systems that require distribution circuit level upgrades, and \$3,000/kW of registered load relief for behind-the-meter systems that do not require distribution upgrades and are used to reduce building load. The maximum per applicant is 5 MW of total load reduction.

- 50% of the total incentive is paid after installation and performance verification
- The remaining 50% of the incentive is paid over 10 summer terms (5% per term) based on energy storage system performance during hours prescribed by Con Edison

\*Projects operational on or before May 1, 2025, are eligible for an additional 10-20% bonus on installation payment.

Applications are reviewed, evaluated, and accepted on a rolling, first-come first-served basis after a project applicant completion of Coordinated Electric System Interconnection Review (CESIR) study and payment of 25% of interconnection costs.

The next step in the process is a Preliminary Incentive Offer Letter (PIOL) specifying the details or program participation and commitments of the applicant.

After 100% of the interconnection costs have been paid, successful applications will execute a Program Agreement to secure incentives.

### Eligibility

- 3. There are several eligibility requirements to participate in this incentive program. To confirm your eligibility, it is always best to speak directly with the utility. The following is a list of criteria that must be met for the project to be eligible to participate in BQDM:
- 4. Project Location: Project sites must be in the eligible territory, and the building must be a customer in good standing with Con Edison.
- 5. Qualifying Technology: a BESS approved for use in New York City must be used for the project.
- 6. BESS Rated Capacity: Between 50 and 5,000 kW.
- 7. Demand Reduction Guarantee: A minimum of 90% load reduction guarantee for each prescribed event with 4 consecutive hours at the guaranteed load reduction amounts when called upon. This is required to receive the subsequent incentive payments.
- 8. COD Timing: All projects must be installed and operational by May 1 of the first Summer Performance Period set in the Program Agreement. This includes all necessary permits and approvals, including the Permission to Operate (PTO).

\*Participants would not be eligible for other Con Edison programs that may conflict with first-right-of-dispatch, including Demand Response (CSRP and DLRP).

### Timelines

Because this program is targeting 15 MW for peak load relief, it will only be available until the enrollment capacity is reached. It's best to get your applications in as early as possible as applications are reviewed, evaluated, and accepted on a rolling, first-come, first-served basis.

- December 31, 2023: Program application deadline (or until Con Edison reaches enrollment capacity).
- May 1, 2025: Cutoff for eligibility of bonus installation incentive.
- May 1, 2026: BESS projects must be installed and available for operation no later than this date.

### **Important Links**

- BQDM Energy Storage Website
- Program Guide
- Application Form

# EV Charging Station Program National Grid

At Peak Power, we're leaders in developing bi-directional Electric Vehicle (EV) charging to have EVs act as mobile batteries. It's also a terrific way to enhance your portfolio's brand and future-proof for tenant attraction.

It's why we're so thrilled to see a program like this in New York!

National Grid has developed an innovative Charging Station Program to install EV charging stations at minimal or no cost and provide other key incentives for EV charging.

Learn More About this Innovative Program

」 Talk to Peak Power about Bi-Directional Charging

### To find a Demand Response program with your local utility, use the links below.

They are all similarly structured to the Con Edison program.

NYSERDA Directory
 PSEG Long Island
 Centre

<u>Central Hudson</u>

<u>National Grid</u>



# **Federal Incentives**

#### Federal Investment Tax Credit & MACRS: Solar + Storage

The Inflation Reduction Act has officially been signed into law, and this presents a multitude of financial incentives to drive the deployment of clean technologies throughout the United States.

There are two key federal incentives we wanted to highlight for companies looking to deploy clean energy assets.

### Investment Tax Credit (ITC)

This is a tax credit for commercial and large-scale deployments of solar or solar + storage. The Inflation Reduction Act updated the ITC to include standalone energy storage projects and several other clean energy technologies. Storage projects must be capable of receiving, storing, and delivering electricity and must have a minimum capacity of 5 kWh.

The tax credit has been restored to its full 30% value for solar, storage, and solar+storage projects beginning construction before January 1, 2025. However, there are new eligibility guidelines to qualify for the full ITC value and failure to meet these requirements means a developer may only be entitled to a 6% ITC (an 80% reduction in value).

- **1. Prevailing Wages:** Any project must pay prevailing wages during construction, alteration and repair phases and for at least the first 5 years of operation. These rates are published by the U.S. Secretary of Labor. Projects under 1 MW are exempt.
- 2. Registered Apprenticeship Requirements: Qualified apprentices (as defined by the National Apprenticeship Act) must make up a specific percentage of the labor hours on a project. If a project employs 4 or more individuals, this requirement would apply. Projects under 1 MW are exempt. The following ratios apply based on the year construction begins:
  - Construction beginning in 2022: 10%
  - Construction beginning in 2023: 12.5%
  - Construction beginning in 2024 and later: 15%

The ITC is vested over 5 years and the amount of tax credit you can claim in any particular year is based on the criteria above (or on additional criteria that may be publicized at a later date).

### Important links

U.S. Department of Energy Website

At Peak Power, we've got a team of energy experts. But whenever it comes to tax incentives and depreciation make sure to speak with a finance professional. Please note, because of the recent nature of the Inflation Reduction Act, the information contained in this section may change.

### **Quick Facts**



The Inflation Reduction Act (IRA) also provides an added 10% ITC bonus (bringing the value to 40%) for projects that meet either of these criteria:

- 1. Domestic Content: Projects that use 100% U.S. steel and iron or include manufactured components with specific percentages defined for these components that are mined, produced or manufactured domestically. There are several intricacies to consider with this bonus. The ITC bonus is 10% for qualifying projects.
- **2. Located in an "Energy Community":** Energy Communities are those areas which had significant employment related to fossil fuels or had coal-fired power plants or coal mines closed after December 31, 1999. The ITC bonus is 10% for qualifying projects.
- **3. Located in an "Environmental Justice Area":** Environmental Justice Areas are communities or areas defined as low-income or on "Native American land," or low-income residential building or low-income economic benefit project. This only applies to wind or solar projects and the bonus ranges from 10-20% depending on the project type.

### **Important links**

- <u>Read More Here</u>
- View List of Energy Communities
- Map of Environmental Justice Areas

### Interconnection Costs now Included as part of ITC Calculation

For projects under 5 MW, the IRA now allows participants to claim the ITC on their interconnection costs. This applies as an added benefit for eligible ITC participants but cannot be used in a standalone fashion.

### Modified Accelerated Cost Recovery System (MACRS)

Commercial and industrial sites can access this incentive for their battery storage systems, whether they have renewable generation capacity installed or not.

- Battery only: Eligible for 7-year depreciation schedule, equivalent to a 20% reduction in capital costs
- Battery + renewable: Eligible for the 5-year depreciation schedule IF the battery is charged by a renewable energy system 75% of the time on an annual basis. This is equivalent to an approximate 21% reduction in capital costs

Want to know what's great about MACRS (pronounced "makers")? Based on a 2012 ruling, you can claim the tax benefit for battery energy storage systems added to an already existing renewable energy system if it's under the same ownership and in close proximity.

### **Important links**

- View the 2021 MACRS Depreciation Schedule
- Learn More from NREL (National Renewable Energy Laboratory)

### Can I get both federal incentives?

Yes! Customers can combine both the ITC and MACRS. If you're claiming both incentives, you'll need to subtract half of the ITC from the solar asset value.

"For example, if your solar installation gets the 26% tax credit available in 2022, you can depreciate 87% of its value over five years (after subtracting 13%)." <u>Source</u>

# **Project Highlight: NYSERDA Battery Energy Storage System**

Customer GHP Location Westchester, NY **Total System Size** 1334 kW / 5336 kWh **Commission Date** Q2 2018 **Applications** 

> Peak Demand Management



# **Overview**

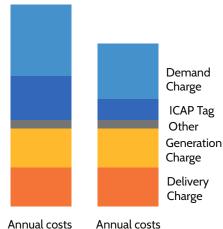
The energy storage system was installed in a commercial office compound and is composed of four batteries. The project reduces electricity costs from ICAP and Demand Charges and to provide services in the form of participating in NYISO and ConEd demand response programs. This project employs a shared-savings approach - GHP (owner) and Peak Power split the utility bill savings and market revenues from the operation of the battery. GHP takes on little to no risk while receiving energy cost savings, and Peak Power retains a portion of the revenue in exchange for installing, maintaining, and operating the system.

### Service Provided

- Behind-the-meter operation: ICAP tag reduction, demand charge reduction, demand response participation
- System Benefits: Electricity bill savings, reduced emissions from peak electricity production, demand response revenue, resiliency

### Results

The energy storage system reduces utility costs and provides peak demand relief for the utility. Con Edison, the electric utility for this site, provides funding for this system to reduce peak demand during certain windows of time through the Demand Management Program. By participating in the program, the project received an incentive from Con Edison, which reduced the total project cost. Additionally, GHP gains a revenue stream in addition to the savings achieved with better building demand charge management. The results below reflect lifetime customer savings and emissions avoided as of 2021.



\$495,742 Energy Cost Savings

# **Quick Facts**

Program	Quick Description	Jurisdiction
Energy Conservation Improvements Property Tax Exemption (RPTL § 487)	A 5-year tax exemption applied to the increased value of the real property resulting from the development of clean energy projects	State (with jurisdictional opt outs)
New York City Energy Storage Property Tax Abatement (RPTL § 499)	This program could provide a better incentive than RPTL § 487 depending on the Payment in Lieu of Taxes (PILOT) structure	Municipality
NYSERDA Retail Energy Storage Incentive	Funding for the development of energy storage with or without renewable energy systems	State
Value of Distributed Energy Resources (VDER)	Compensation framework in the way of utility bill credits based on the value stack of DERs	State (except PSEG Long Island)
Dynamic Load Management (DLM) Programs	3-to-5-year contracted incentive rates for load reduction	State (except PSEG Long Island)
Con Edison Electric Smart Usage Rewards	Demand response incentive which pays participants based on load reduction during high demand events. Note that each utility has its own demand response program	Utility-Level
BQDM Prescriptive Energy Storage Program	Incentives for battery energy storage systems located in the prescribed area of Brooklyn-Queens.	Utility-Level
EV Charging Station Program	A financial incentive to install electric vehicle charging stations at commercial sites	Utility-Level
Investment Tax Credit (ITC)	Federal tax credit for commercial and large-scale deployments of solar or solar + storage.	Federal
Modified Accelerated Cost Recovery System (MACRS)	A federal tax incentive based on an accelerated depreciation schedule for development of battery and/or renewable energy systems.	Federal
Investment Tax Credit (ITC)	Federal tax credit for several clean energy technologies.	Federal

Battery Storage Systems in New York are permitted through one of two regulatory bodies:	Take a look at NYSERDA's storage data maps here
<ol> <li>Office of Renewable Energy Siting: Systems co-located with large-scale generators</li> <li>State Environmental Quality Review Act (SEQR): All other projects regardless of size</li> </ol>	View a database of US federal and state clean energy related policies on the IEA website
	View the DSIRE program and incentive database



# We'll Help Make It Profitable to get to Net Zero

Energy storage will allow us to more efficiently use our electricity resources while cutting emissions. We can build resiliency, reduce the need for costly infrastructure upgrades (which we all end up paying for), and reach our net zero goals—this is the power of decentralization.

For commercial real estate and industrial facilities, now is the time to act to take advantage of the plethora of incentives available. Bring this guide to your Energy Manager today!

**PEAK** Power

### Energy Markets are Complex. We'll Help You Navigate Them.

Our team of energy experts can help you with everything from project design to incentive application to software-powered system operation.

Book a call with our New York energy expert, Tim Calla



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