BRIGHT POWER

NEW CONSTRUCTION EXPERIENCE

Developing High Performance Buildings

Build high performance.

Maximize asset value.

Optimize systems for tenant comfort.

Designing innovative, efficient, and high-performing buildings on budget is no simple task. There are many complexities in the process of designing and constructing a building. How might you implement a beautiful design using sustainable and durable materials? What equipment and systems will keep your construction costs down while best serving the community in the long-term? How will you find and secure available incentives? How will you meet lenders' requirements for sustainability certifications? And how do you ensure that high-performing design elements actually get incorporated and installed correctly in the construction phase?

We work alongside development teams to ensure that sustainability is integrated and optimized throughout the design and development process and well past the ribbon-cutting. Our solutions enhance building performance, deliver superior resident comfort and health, mitigate carbon emissions and environmental impact, and minimize both construction and long-term operating costs. We ensure that your intentions are captured in the design and construction phases so that the project meets operational needs and achieves performance beyond code minimum standards.

Find, Fix, Follow

Drawing upon our extensive on-the-ground experience with new developments and existing buildings to deliver custom solutions for each new construction project that will work in the real world, not just on paper. The result: a beautiful, sustainable, healthy, and durable building.

How we do it? With our Find, Fix, Follow approach.

Bright Power collaborates with the design and development team to **Find** solutions that improve the project's sustainability, constructability, comfort for future occupants, and anticipated operating costs, while ensuring that all components and systems are designed to operate effectively and efficiently when put together.

We **Fix** issues as they arise in the design process and throughout construction to avoid costly re-engineering, change orders, and reconstruction.

We **Follow** post-occupancy performance to ensure that the building operates as intended so that you can continue to design, develop, and operate strong properties.

A Bright Power client, Radson Development, is going above and beyond in making MLK Plaza incredibly energy efficient, while also choosing sustainable, high-quality materials that are aesthetically comparable to those in luxury buildings.

Dan Rad, Principal of Radson Development, said it best, *"This project demonstrates how low-income residents can also have access to a beautiful, modern, and stylish building that operates efficiently and sustainably."*

Photo Credit: Magnusson Architecture and Planning PC

MLK Plaza, South Bronx
Radson Development & Magnusson Architecture and Planning PC
167-Unit Affordable Housing Development
Built in 2018

Integrated Solutions

DESIGN

Optimize sustainability, minimize costly design changes, and maximize operating efficiency from Day 1.

BUILD

Work closely with the construction team in the field to ensure that execution mirrors design.

MEASURE

Verify and maintain the impact of sustainability investments with ongoing commissioning and data analytics.

Throughout the entire process of SD, DD, and CD's, we work with the development team, including architects, engineers, contractors, and financing partners. This allows us to influence the design and equipment selection from the beginning, before decisions get made that could negatively impact project cost or sustainability, or lead to costly change orders.

Our work integrates individual project goals and verifies that what looks good in the plans will function well together as a single building.

We model the impact, first costs, and operational costs of different architectural and equipment options (HVAC, building envelope, etc), ensure systems are sized appropriately, and consider how to integrate on-site generation technologies (solar PV, cogeneration, battery storage). **We identify trade-offs and facilitate informed decision-making to help you select the best design and equipment for the building.**

Throughout the construction and close-out phase, we work closely with the General Contractor and HVAC subcontractors to ensure that equipment is installed correctly and the start-up and operation of the equipment match the design.

Fixing a mistake that could have been caught early on is not only frustrating but costly. We are on site for key points in the construction process to ensure that systems and materials get installed properly. We diagnose and resolve any problems before they become bigger issues that arise after occupancy.

At the end of construction and prior to resident occupancy, we produce a training curriculum for building operators and train site staff so that diagnostic, operational, and maintenance procedures are in place. This ensures that all of the work completed in design and construction translates into effective operations.

Once your building is operating, our EnergyScoreCards platform and our MoBIUS® real-time energy management service allow us to ensure ongoing comfort and low utility bills. We monitor system parameters, identify equipment that isn't working as intended, and resolve the issues so that your building continues to operate at peak performance. With Bright Power's dedicated energy analysts, EnergyScoreCards easily integrates with ENERGY STAR Portfolio Manager, Enterprise Community Partners, GRESB, USGBC, and ULI Greenprint, providing reporting, submission, and compliance.

New Construction Services

For affordable or mixed-income (e.g. 80/20, 70/30), sustainability can be key to winning RFPs and receiving tax credit awards, as well as to the long-term financial stability of your project. We partner with developers and design teams early on, and we present sustainability plans to HPD, HDC, HCR, and other agencies and lenders.

For market rate and luxury buildings, integrating sustainability will keep you on the cutting edge while extending the life of your building. Going beyond high end fixtures and finishes, we help market-rate developers incorporate resiliency and efficiency from the beginning. Not only will high performance systems add revenue to your net operating income, but also appeal to environmentally responsible residents. Our new construction services for both affordable and market rate developers include:

- Energy Efficiency Design
- Energy Modeling
- Commissioning (Cx)
- Passive House Certification (PHUIS+)
- Solar PV Feasibility Studies, Design & Installation
- Cogeneration Feasibility Studies, Design & Installation
- Battery Storage Feasibility Studies, Design & Installation
- Enterprise Green Communities (EGC) Certification
- LEED Certification
- ENERGY STAR Certification
- NYSERDA New Construction Program (NCP) Partner Services
- New York City Energy Conservation Code (NYCECC) Consulting
- Real-time Energy Management by MoBIUS®
- HPD & HFA Benchmarking with EnergyScoreCards
- Seamless Transition from Design to Post-Occupancy by MoBIUS
- Competitive Energy Supply Purchasing
- Loan/Financing Assistance

Green Certifications

Green, environmentally-friendly buildings cost less to operate and provide healthier, more productive environments in which people can live and work. Our experts help developers improve their ground-up developments to operate sustainably for the long-term.

Achieving a green certification for your development provides operational benefits of a green building in addition to the public recognition as a leader in sustainability. Furthermore, some lenders will give economic incentives for achieving certain certifications or require them.

Our team will work with you to determine which certifications make the most sense for your project. And we will work with your development team to ensure your project will receive certification along with all the benefits of a green building.

Passive House buildings perform to an extremely high standard. They significantly lower operation costs — 90% reduction in heating and cooling demand and up to 75% reduction in overall energy demand — and provide maximum resident comfort. Our Passive House Certified professionals consult throughout the design process and perform the rigorous inspections, testing, and verification necessary to achieve certification.

Enterprise Green Communities (EGC) is the first national green building program developed for affordable housing that aligns affordable housing investment strategies with environmentally responsive building practices. EGC is required for New York City HPD funded projects and is one of several certifications developers can achieve for HFA communities across New York State.

ENERGY STAR has a number of different certification programs. For new construction, the EPA requires that a building conform to certain design standards and undergo a process of inspections, testing, and verification to receive the ENERGY STAR label. This certification indicates a building uses less energy while delivering tenants better comfort.

Leadership in Energy and Environmental Design (LEED) is one of the most widely used green building rating systems in the world for all building types. Our LEED Accredited Professionals work with multifamily development teams to design and build to the highest levels of LEED certification.

OMNI NEW YORK, LLC

Morris Avenue Apartments & Park Avenue Green

MORRIS AVENUE APARTMENTS BUILT IN 2016

PARK AVENUE GREEN BUILT IN 2019

BRONX

335,300 SQUARE FEET

330 MIXED INCOME UNITS

15 STORIES

MORRIS AVENUE DESIGNED BY MELTZER/ MANDL ARCHITECTS

PARK AVENUE GREEN DESIGNED BY CURTIS + GINSBERG ARCHITECTS LLP

Project Details

Morris Avenue Apartments

- 50 kW Solar PV Design & Installation
- LEED Gold Certification
- NYSERDA MPP NC
- Commissioning
- Energy Efficiency Consulting
- Cogeneration Consulting
- $444,000 anticipated NYSERDA MPP NC incentives

Park Avenue Green

- 34 kW Solar PV Design & Installation
- Passive House Certification (PHIUS+)
- PHIUS Passive House Verifier
- Enterprise Green Communities Certification
- Energy Efficiency Consulting
- Cogeneration Consulting
- Commissioning
- $138,000 anticipated NYSERDA MPP NC incentives

Omni New York, LLC sought a partner to help deliver the first new construction building in their portfolio: Morris Avenue. Having previously worked together on many existing buildings, Omni felt confident in designing their first new construction project with Bright Power.

Integrating with their design team for Morris Avenue Apartments, Bright Power recommended energy efficiency elements and on-site generation technologies, producing a LEED Gold Certified building. Committed to sustainability and resiliency, Omni wanted to incorporate both solar PV and cogeneration into their first affordable housing new construction. When paired together, these two technologies can significantly minimize operational costs while providing on-site resiliency.

Wanting to push the envelope further, Park Avenue Green is Omni's first Passive House building. In order to obtain this level of high performance and keep construction costs down, Bright Power had to be creative. Beyond downsizing oversized equipment and relocating systems, Bright Power worked with Passive House Institute U.S. (PHIUS) to source specific project components from local manufacturers — reducing first costs for Omni, while still adhering to performance requirements.

JONATHAN ROSE COMPANIES
PHIPPS HOUSES

Via Verde

BUILT IN 2012
BRONX
1 BUILDING
220,000 SQUARE FEET
222 UNITS
20 STORIES
DESIGNED BY GRIMSHAW + DATTNER ARCHITECTS

Bright Power was an integral part of Via Verde's design team. We provided expert consultation in energy efficiency, solar energy, and green building construction. Through our services, the building achieved ENERGY STAR certification and a LEED Gold rating. Bright Power continues to be actively involved in designing and installing battery storage and tracking performance using our proprietary EnergyScoreCards service.

With one of the most innovative Building Integrated Photovoltaic systems in New York City, Via Verde also features rooftop agriculture, natural daylighting and cross-ventilation, and a curtain-wall integrated continuous insulation barrier. The project set a new standard for green affordable housing in NYC.

"When you're designing a new building, the possibilities are endless. We needed someone with a depth of knowledge in sustainable technology and design that could steer us toward the most practical and impactful solutions."

Jonathan Rose, Founder
Jonathan Rose Companies

Project Details

- 66 kW Solar PV Design & Installation
- LEED Gold Certification
- ENERGY STAR Certification
- Comprehensive Commissioning
- Battery Storage Design & Installation
- $771,000 NYSERDA MPP NC incentives received in partnership with AEA

Awards

- Urban Land Institute Global Award for Excellence, 2013
- Rudy Bruner Award, Silver Medalist, 2013
- Residential Architect Design Award, 2013
- Architizer Top 10 NYC Projects of the Decade, 2012

HUDSON COMPANIES

Dumont Green

BUILT IN 2011
BROOKLYN
1 BUILDING
172,000 SQUARE FEET
176 UNITS
8 STORIES
DESIGNED BY MHG ARCHITECTS, PC AND ABEL BAINNSON BUTZ, LLP

Project Details

- 80 kW Solar PV Design & Installation
- Enterprise Green Communities Certification
- ENERGY STAR Certification
- $240,000 NYSERDA MPP NC incentives received in partnership with AEA

Awards

- Winner of National Grid Energy Efficiency Award, 2012

Bright Power worked with Hudson Companies in designing a building that achieved ENERGY STAR certification, which resulted in a 26% improvement from code. The project features a solar photovoltaic (PV) system that was the largest solar PV array on a residential building in New York state at the time of construction. The 80kW solar PV system powers over half of the laundry facilities, elevators, and common areas all while reducing electricity demand by 40%.

Dumont Green was one of the first city-subsidized affordable housing developments to voluntarily attain Enterprise Green Communities (EGC) Certification. By building to EGC standards, Dumont Green boasts lower utility costs, a healthier living environment for its residents, and increased sustainability.

"Rising energy costs are significant drivers of rising rents in NYC and we needed to strategically tackle that reality early on in the development process. Bright Power developed a long-term strategy to help us achieve our sustainability goals."

Aaron Koffman, Principal
Hudson Companies

HUDSON COMPANIES
BRP COMPANIES
BREAKING GROUND

La Central

PHASE 1: A, B
PHASE 2: C, E
EXPECTED COMPLETION IN 2020 (PHASE 1) & 2022 (PHASE 2)
BRONX
992 UNITS
FXCOLLABORATIVE
MHG ARCHITECTS PC
FUTURE GREEN STUDIO

Buildings A & B

- 183 kW kilowatt (kW) solar PV design & installation
- LEED Certification
- Commissioning
- $595,200 anticipated NYSERDA MPP incentives

Buildings C & E

- LEED Certification
- NYSERDA New Construction Program
- Commissioning
- On-site generation consulting

L+M DEVELOPMENT PARTNERS
TACONIC INVESTMENT PARTNERS
BFC PARTNERS

Essex Crossing

PHASE 1: SITE 1, SITE 2, SITE 5, SITE 6
PHASE 2: SITE 3, SITE 4, SITE 8
PHASE 3: SITE 9, SITE 10
EXPECTED COMPLETION IN 2024
MANHATTAN
1,079 UNITS
DATTNER
SHoP
HANDEL
BEYER BLINDER BELLE

All Sites

- LEED Neighborhood Development (ND)
- Enterprise Green Communities Certification
- $46,000 anticipated NYSERDA incentives

Sites 3 & 4

- Commissioning

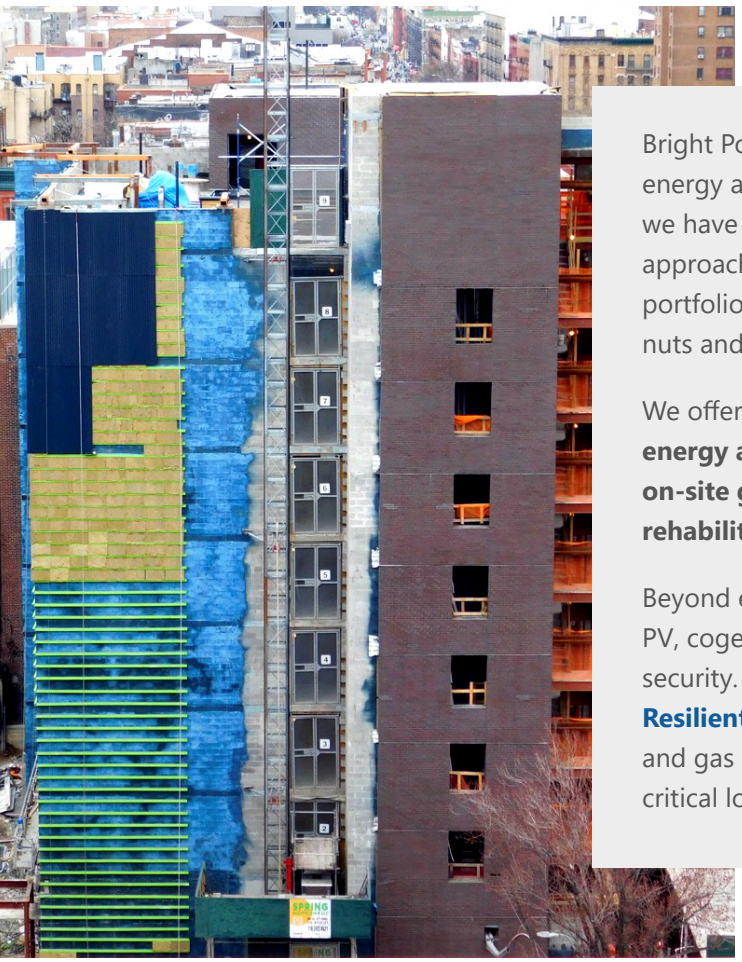
Site 6

- 31 kW solar PV design & installation

For the Life of Your Building & Across Your Portfolio

Bright Power has multiple certifications and technical licenses across many green building disciplines, including:

- Professional Engineer (PE)
- Certified Building Commissioning Professional (CBCP)
- Certified Passive House Consultant (PHIUS)
- Passive House Institute Consultant (PHI)
- LEED AP
- LEED AP Building Design + Construction
- LEED AP Existing Building Operations + Maintenance
- LEED Green Rater
- Home Energy Rating System (HERS)
- Certified Energy Manager (CEM)
- Certified Energy Analyst (CEA)
- Building Performance Institute Multifamily Building Analyst (BPI MFBA)
- Certified Energy Procurement Professional (CEP)
- North American Board of Certified Energy Practitioners (NABCEP)



Bright Power's experts work with real estate teams to design a customized energy and water roadmap for each building and portfolio. Since 2004, we have used our intelligence-driven energy and water management approach to help owners and developers build, buy, rehab, and manage portfolios better. From utility analytics and design planning, down to the nuts and bolts of making physical changes in buildings, we do it all.

We offer **benchmarking and data analytics, energy procurement, energy auditing, feasibility studies, turnkey retrofit installation, on-site generation design and installation, retro-commissioning, rehabilitation consulting, and ongoing energy management services.**

Beyond efficiency, our on-site generation team designs and installs solar PV, cogeneration, and battery storage systems to provide on-site power security. Winner of the 2015 RISE: NYC Innovation Awards, Bright Power's **Resilient Power Hub** reduces building energy costs by offsetting electric and gas consumption while also providing emergency backup power to critical loads such as elevators, pumps, and lighting.

Bright Power Impact

210+
New Construction Buildings

16,500+
New Construction Units

170+
Green Certifications

$6,000,000+
New Construction
Incentives Procured

176+
Buildings With Solar and
On-Site Power Systems
Installed

Multifamily Leaders Build With Us

Leaders in the industry depend on Bright Power to achieve results. Established as the preferred provider of green building and energy efficient design services for multifamily developers in the New York City metro area, Bright Power delivers expertise on energy efficiency, Enterprise Green Communities, Passive House, LEED and on-site power generation, and provides comprehensive commissioning to many of the City's most notable developments. Some of our development clients include:

PHIPPS HOUSES

SETTLEMENT HOUSING FUND·INC

TACONIC INVESTMENT PARTNERS LLC

L+M Development Partners

Hudson

BREAKING GROUND BUILDING AND RESTORING LIVES

BRP

NY Omni New York LLC

Jonathan Rose Companies

BFC PARTNERS BUILDING PROGRESS. INSPIRING CHANGE.

Ready Willing & Able | The Doe Fund, Inc.

BRIGHT POWER

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