

# New Jersey's Clean Energy Program<sup>TM</sup>

Clean Energy and Efficiency Opportunities for Residential,
Commercial, Industrial, Multifamily, and Institutional Buildings

[Date]

### NJCEP Portfolio of Programs

### Energy Efficiency - C&I Existing Buildings

- FREE Local Government Energy Audits
- C&I Large Energy Users
- FREE Income
   Eligible Residential
   Upgrades

### Energy Efficiency - New Construction

New Construction (Residential, Multifamily, Commercial & Residential)

#### Distributed Energy Resources

- Combined Heat & Power
- Fuel Cells

#### **Electric Vehicles**

- Light-Duty Residential EVs
- At-Home Charging
- Multi Unit Dwelling Chargers
- Municipal Fleets

#### Renewable Energy

- SUSi Solar Incentives
- Community Solar
- Offshore Wind

#### **Specialized Programs**

- Community Energy Plan Grants
- State Facility Initiatives
- Microgrid
   Development
- R&D Energy Tech Hub
- Workforce
   Development



### Local Government Energy Audit

**EXISTING BUILDINGS** 

NJCleanEnergy.com/LGEA

WHO Local Government, New Jersey Colleges and

Universities, and 501(c)(3) Non-Profit buildings

with an average yearly demand >200kW\*

INCLUDES BENCHMARKING

COST

Free

**WHY** 

- Inventory of all energy-consuming equipment and costs
- Comprehensive utility bill analysis
- Facility benchmarking
- Feasibility for solar and combined heat & power
- High level water assessment

INCENTIVE CAP

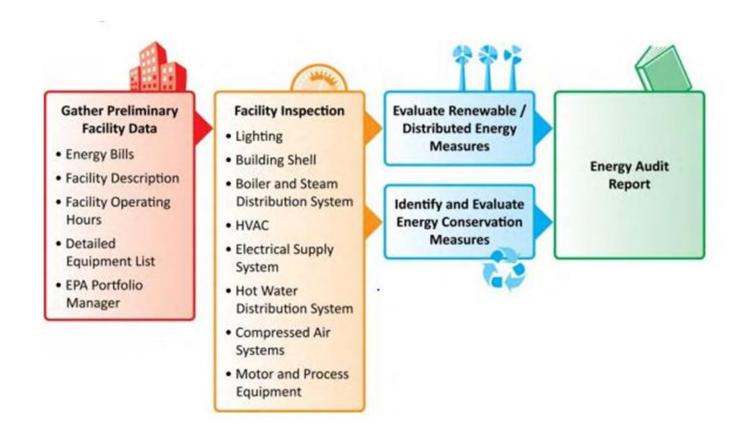
- •\$150,000 per entity (covers most small to large entities)
- •\$300,000 per 501(c)(3) hospital\*\*
- •\$300,000 maximum cap per entity with ESIP participation\*\*



<sup>\*</sup> May be eligible for a waiver \*\* Subject to BPU Approval

### Local Government Energy Audit

NJCleanEnergy.com/LGEA







### Financing Mechanism: ESIP

#### **ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)**

- Energy Performance Contracting = NJ ESIP
- A creative tool and financing mechanism that allows public entities to make energy efficiency improvements without impacting their budgets
- Administered by the NJBPU
- Project is paid for with the value of its own energy savings
- 15 or 20 year pay back; self funding
- NJBPU Approved Incentive Programs
  - Utility or NJCEP
- Can be combined with Federal/State Pandemic Relief Funds (ESSER)
- No upfront capital expenses
- No referendum or impact to tax payers



### The ESIP Process



#### **Preliminary Energy Audit**

Free LGEA or other ASHRAE Level II Audit

#### **Select Path**

ESCO, Hybrid or DIY Model, Public Contract Law Compliance

#### Investment Grade Energy Audit

Prioritize Needs, Select Project's ECM's

### **Energy Savings Plan Developed**

Must be Cash Flow Positive,
Savings Guarantee
Third Party Review



### Energy Savings Improvement Program

#### FOR MORE INFORMATION

#### Michelle Rossi

**ESIP** Coordinator

ESIP@bpu.nj.gov

o: 609.913.6295

c: 609.915.0903



#### **EXISTING BUILDINGS**

### Large Energy Users

NJCleanEnergy.com/LEUP

#### **WHO**

Large C&I entities with one or more locations in NJ

#### **QUALIFICATION**

- Entity must have paid a minimum of \$5,000,000 in utility bills across all investor-owned electric or gas accounts during the previous fiscal year
- The average peak demand of each facility where work is taking place must be ≥400kW and/or 4,000 DTh

#### **ABOUT**

Encourages large C&I utility customers to self-invest in energy efficiency

### INCENTIVE CAP

- Maximum incentive per project is capped by the lesser of the following metrics:
  - 75% of total project cost, or
  - Savings rates:
    - \$0.33/kWh and \$3.75/therm for non-lighting measures
    - \$0.16/kWh for lighting and lighting control measures
- Incentive commitments in a single fiscal year will not exceed \$4,000,000 per entity



### Large Energy Users

NJCleanEnergy.com/LEUP





NJCleanEnergy.com/CP

This **FREE**, energy-saving and education program is geared to low-income homeowners who have an income at or below 250% of the federal poverty guidelines.

Eligible participants may receive free installation by a Building Performance Institute (BPI) certified contractor of the following (on a home specific basis):

- Energy efficient lighting
- Hot water conservation measures (water heater insulation, water heater pipe insulation and energy-saving showerheads and aerators)
- Replacement of inefficient refrigerators and thermostats
- Insulation upgrades (attic, wall, etc.)
- Heating/cooling equipment maintenance

For assistance in paying utility bills:

https://www.bpu.state.nj.us/bpu/assistance/programs/



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- Workforce Development



### **New Construction**

NJCleanEnergy.com

Any size C&I **new construction** or **gut rehab** project may be eligible for energy efficiency incentives.

New construction/gut-rehab projects must exceed ASHRAE 90.1-2019.\*

Savings Potential	Program  Whole Building/ Comprehensive: Pay for Performance Program	Designed for buildings with 50,000 square feet for more of planned conditioned space.
	<b>Multi-Measure:</b> Customer Tailored Energy Efficiency Program	Bundle multiple prescriptive and custom measures into a single application. Includes eligibility for technical assistance incentives to help offset soft costs associated with custom measure development.
	Single Measure: SmartStart Buildings Program	Prescriptive and Custom incentives.



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NJCleanEnergy.com

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### Substantial Renovation (Gut Rehab)

NJCleanEnergy.com

## NJCEP programs for new construction\* include substantial renovation and gut rehabilitation:

- Change of use and reconstruction of an existing building
- Construction work of a nature requiring that the building or portion of the building within be out of service for at least 30 days
- Reconstruction of a vacant structure or a portion of the building within





#### SINGLE MEASURE: NEW CONSTRUCTION

### SmartStart Buildings (SSB)

NJCleanEnergy.com

#### **WHO**

New Construction C&I Projects: commercial, industrial, agricultural, government, non-profit institutional, and multifamily customers



### SIZE TO QUALIFY

N/A

#### **ABOUT**

- Individual high efficiency equipment rebates for new construction, and gut rehab projects.
- Prescriptive and custom designed measures

### INCENTIVE CAP

- C&I New Construction \$500,000 per electric account and \$500,000 per natural gas account, per fiscal year.
- Custom, lesser of the following:
  - \$0.16/kWh and/or \$1.60/therm saved annually;
  - 50% of incremental installed cost; and
  - Buy-down to 1 year payback based on incremental cost and savings



### SmartStart Buildings (SSB)

NJCleanEnergy.com



#### PRESCRIPTIVE INCENTIVES

- Electric Chillers
- Gas Cooling
- Electric Unitary HVAC
- Ground Source Heat Pumps
- Gas Heating
- Variable Frequency Drives
- Gas Water Heating
- Lighting/Lighting Controls
- Refrigeration Doors
- Refrigeration Controls
- Food Service Equipment
- Refrigerator/Freezer Motors



#### **CUSTOM INCENTIVES**

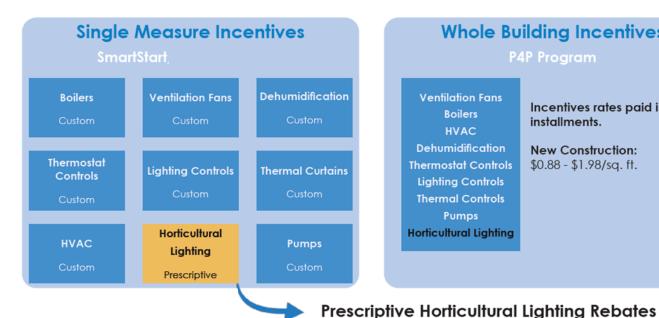
- New or innovative technologies proven to be cost-effective and not listed as prescriptive
- Project pre and post inspection required



### Indoor Horticulture

#### NJCleanEnergy.com

- SmartStart Prescriptive incentives are now available to indoor horticultural lighting for new construction
- SmartStart Custom incentives continue to include new or innovative technologies proven to be cost-effective and not listed as prescriptive
- The whole building Pay for Performance Program is also available



**Whole Building Incentives** P4P Program **Ventilation Fans** Incentives rates paid in three **Boilers** installments. HVAC **Dehumidification New Construction:** Thermostat Controls \$0.88 - \$1.98/sq. ft. **Lighting Controls** Thermal Controls Pumps Horticultural Lighting

**Custom Incentives:** Lesser of \$0.16/kWh, \$1.60/therm savings, 50% project cost, buy-down to 1.0 year payback

#### **LED Fixture** LED Fixture Facility Type and Runtime Hours: <500 Watts >=500 Watts DLC-listed LED for use in indoor grow facilities \$150/fixture \$250/fixture (>3,000 hours/year) DLC-listed LED for use as supplemental lighting in indoor grow facilities that primarily use natural sunlight \$50/fixture \$200/fixture (<3,000 hours/year)



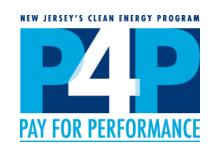
### Pay for Performance (P4P)

MID-LARGE:
NEW CONSTRUCTION

NJCleanEnergy.com

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New construction projects seeking two or more energy efficiency measures with a minimum 5% savings compared to ASHRAE 90.1-2019 (15% savings for Multifamily).



### SIZE TO QUALIFY

Over 50,000 square feet of planned new construction or gut rehab

#### **ABOUT**

A pre-approved Participating Partner will streamline the program and guide users through the program phases

### INCENTIVE CAP

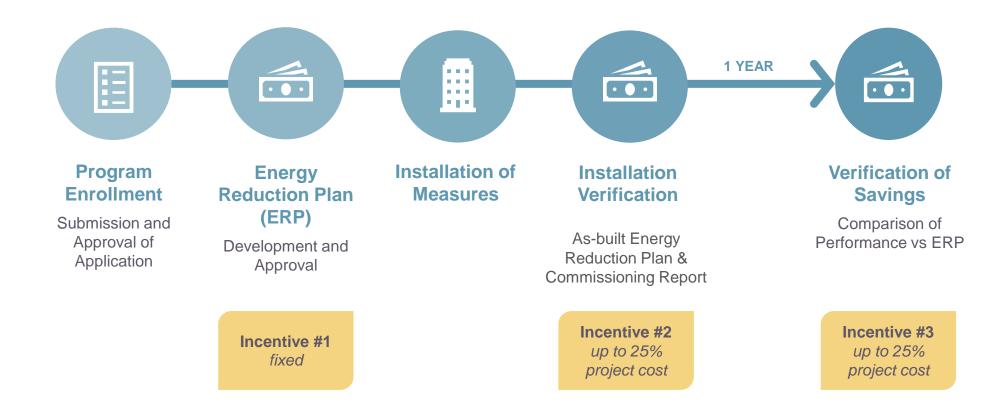
•50% of project cost up to \$2M per project / \$4M per entity annually



### MID-LARGE: NEW CONSTRUCTION

### Pay for Performance (P4P)

NJCleanEnergy.com





### Residential New Construction Overview

NJCleanEnergy.com/RNC



**New Construction or reconstruction (and gut rehab)** 



**Demand for power is less** 



**Operates more efficiently** 



15%-50% more Energy Efficiency and can save \$200-\$400 yearly



### **Unique Opportunity**

NJCleanEnergy.com/RNC

NEW HOMES represent a unique opportunity to meet multiple goals all at the same time. New homes can be:

- Affordable
- Comfortable
- Energy Efficient
- Durable and
- Healthy

Executive Order 316 Goal: 400,000 electrified dwelling units by 2030





### Benefits of an Energy-Efficient Home

- Homes are designed and built to standards well above other homes on the market today
- Builders work with Rating Companies credentialed through the Residential Energy Services Network (RESNET) to build or reconstruct homes to energy efficient standards
- Builders receive incentives for certified ENERGY STAR Homes, Zero Energy Ready Home and Multi-Family High Rise Homes





### Features of an Energy Efficient Home

- A complete thermal enclosure system, includes:
  - Comprehensive air sealing
  - Quality-installed insulation
  - High-performance Windows
- High Efficiency HVAC Systems
- Energy-efficient Lighting and Appliances
- For more information: www.NJCleanEnergy.com/RNC





### Four Levels of Participation

NJCleanEnergy.com/RNC



ENERGY STAR Homes



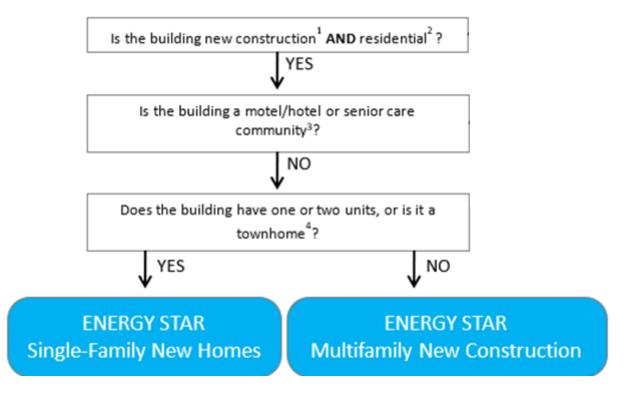
- Zero Energy Ready Home
- Zero Energy Ready Home Plus Solar



ENERGY STAR Multifamily New Construction



### **ENERGY STAR Homes**







#### New and gut rehab residential construction, including:

- Custom and production homes
- Single-family
- Townhouses
- Multi-family low-rise buildings
- Multi-family high rise buildings







#### **New Construction**

#### **Multifamily**



Multifamily New Construction

#### Eligibility:

Any sized multifamily new construction property pursuing the ENERGY STAR designation

### Whole building large multifamily



#### Eligibility:

50,000 sf of planned, conditioned space.

Must achieve a minimum of 15% energy savings compared to ASHRAE 90.1-2019.

#### Incentive Cap

50% of project cost up to \$2M per project / \$4M per entity annually

### Individual rebates multifamily



#### **Eligibility:**

No size to qualify.

Common spaces billed commercially are eligible.

#### **Incentive Cap**

\$500,000 per electric account and \$500,000 per natural gas account, per fiscal year.

#### Other

Free building audit Local Gov't Energy Audit

#### Resiliency

Combined Heat & Power

Low-income bill assistance Utility Assistance





### Building Types – ENERGY STAR Homes



Type of Building	Definition
Single Family	<ul> <li>Detached units</li> </ul>
Multi-single	<ul> <li>2+ units with separate external entrances (townhomes and some apartments)</li> </ul>
Multifamily (MF)	<ul> <li>3+ units up to 5 floors above grade/garage w/common external entrance(s), individual HVAC and DHW; includes most apartment buildings</li> <li>4+ Stories with common HVAC and/or DHW</li> </ul>



### What is an ENERGY STAR Home?

RESIDENTIAL NEW CONSTRUCTION

- Homes have been designed and built to standards well above other homes on the market today
- Better quality, comfort and durability
- Increased home value now and in the future
- The home has undergone a better process of inspections, testing and verification to ensure that it meets strict requirements set by the EPA





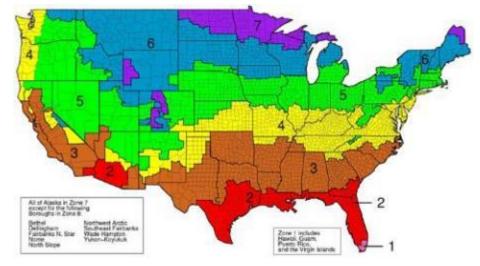
### Key Characteristics: Enclosure

NJCleanEnergy.com/RNC



RESIDENTIAL NEW CONSTRUCTION

- High-performance thermal enclosure, includes:
  - Comprehensive air sealing- blower door tested
  - Quality-installed insulationinspected/verified
  - Reduced thermal bridging
  - High-performance windows



Zone		Floor	
	Uninsulated Attic	Existing 3–4 Inches of Insulation	FIOOF
1	R30 to R49	R25 to R30	R13
2	R30 to R60	R25 to R38	R13 to R19
3	R30 to R60	R25 to R38	R19 to R25
4	R38 to R60	R38	R25 to R30
5 to 8	R49 to R60	R38 to R49	R25 to R30

Wall Insulation - Whenever exterior siding is removed on an:

#### Uninsulated wood-frame wall:

- Drill holes in the sheathing and blow insulation into the empty wall cavity before installing the new siding, and
- Zones 3-4: Add R5 insulative wall sheathing beneath the new siding
- Zones 5-8: Add R5 to R6 insulative wall sheathing beneath the new siding.

OR

Insulated wood-frame wall



### Key Characteristics: HVAC & DHW

ENERGY STAR

RESIDENTIAL NEW CONSTRUCTION

- High efficiency proper- sized HVAC systems
  - Commissioned installations
- Duct quality installation- duct leakage tested
- High efficiency DHW



Courtesy of Rheem



### Other Characteristics



- Whole-house mechanical ventilation system
  - Located away from contamination sources like garage or exhaust fans
- Local mechanical exhaust- kitchen and bathroom
  - Vent fumes and moisture
- Effective HVAC filtration- MERV 6 or higher
  - Reduce dust, allergens and pollutants
- Combustion appliances- mechanical draft or direct vent
  - Vented directly to outdoors
  - Installed in low-risk areas like garages and attics



### Other Characteristics Cont.

RESIDENTIAL NEW CONSTRUCTION

- Energy-efficient Lighting & Appliances
  - Homeowner buy-in
  - 20% of your utility bill
- Water-managed site, foundation, walls, & roof
  - Moisture barriers
  - Heavy-duty membranes
  - Cut down on mold issues





### Four Levels of Participation

NJCleanEnergy.com/RNC



ENERGY STAR Homes



- Zero Energy Ready Home
- Zero Energy Ready Home Plus Solar



ENERGY STAR Multifamily New Construction



### What is a Zero Energy Home





- Symbol of excellence for energy savings, comfort, health, quality and durability.
- High-performance home, so energy efficient, all or most annual energy consumption can be offset by renewable energy.
- It is the home of the future.





### **Key Characteristics**





- Builds on the ENERGY STAR Home baseline
- Higher performing thermal enclosure system
  - Meet the insulation requirements of the 2015 IECC
- Ducts in conditioned space
- Efficient hot water distribution system
- ENERGY STAR- 80% lighting & all appliances
- Meet EPA Indoor airPLUS certification for indoor air quality
- Follow PV solar ready checklist or install PV solar



### Additional Requirements





- 1. Envelope
- 2. Duct System
- 3. Water Efficiency
- 4. Lighting & Appliances
- 5. Indoor Air Quality
- 6. Renewables Not required but suggested



# ZERH Envelope

NJCleanEnergy.com/RNC





# Fenestration shall meet or exceed latest ENERGY STAR requirements

Table 1: Energy Efficiency Requirements for Windows					
Climate Zone	U-Factor <sup>1</sup>	SHGC <sup>2</sup>			
Northern*	≤ 0.27	Any			
North-Central	≤ 0.30	≤ 0.40			
South-Central	≤ 0.30	≤ 0.25			
Southern	≤ 0.40	≤ 0.25			

\*The effective date for the Northern Zone prescriptive criteria for windows is January 1, 2016.

Northern includes: Climate Zone 5A, North-Central is 4A



### ZERH Envelope

NJCleanEnergy.com/RNC



RESIDENTIAL NEW CONSTRUCTION

# Ceiling, wall, floor and slab insulation shall meet or exceed 2018 IECC levels

Climate Zone	Fenestration U-Factor <sup>b</sup>	Skylight U-Factor <sup>b</sup>	Glazed Fenestration SHGC <sup>b</sup>	Ceiling R-Value	Wood Frame Wall R- Value	Mass Wall R-Value	Floor R-Value	Basement Wall R-Value <sup>c</sup>	Slab R- Value & Depth <sup>d</sup>	Crawl Space Wall R-Value
4A	0.35	0.55	0.40	49	20 or 13+5 <sup>h</sup>	8/13	19	10/13	10, 2 ft	10/13
5 A	0.32	0.55	NR	49	20 or 13+5 <sup>h</sup>	13/17	30 <sup>g</sup>	15/19	10, 2 ft	15/19

a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the Rvalue specified in the table.

There is also the option to meet the overall UA for the building envelope.



# ZERH Envelope Modular Built in Factory with "GreenBoard" aka Zip Sheathing









# Envelope Delivered on Site









# Control Layers Critical....example here with Blue-skin house wrap with adhesive backing









# Air Tightness NJCleanEnergy.com/RNC







### ZERH Duct System

NJCleanEnergy.com/RNC





- Ducts located within the home's thermal and air barrier boundary.
  - Conditioned Floor Space
  - Unvented Crawl Space/Basement
  - Unvented Attic
  - Vented Attic\*

\*where other locations in conditioned space are impractical, expensive, don't work well in specific climates, or increase envelope loads.



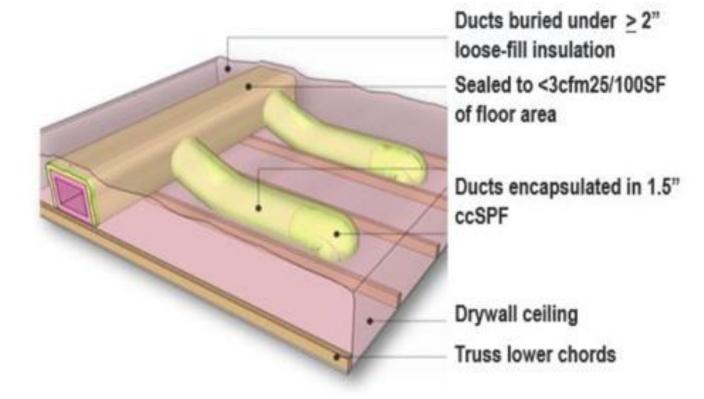
# ZERH Duct System

NJCleanEnergy.com/RNC





### In a vented attic:





### Water Efficiency





- Hot water delivery systems shall meet efficient design requirements based on EPA WaterSense Specifications:
  - No more than 0.5 gallons of water in any piping/manifold between the hot water source and any hot water fixture.
  - No more than 0.6 gallons of water shall be collected from the hot water fixture before hot water delivered.
  - A hot water circulating pump can be used.



### Electric Efficiency





- All installed refrigerators, dishwashers, and clothes washers are ENERGY STAR qualified.
- 80% of lighting fixtures and ENERGY STAR qualified or ENERGY STAR lamps (bulbs) in minimum 80% of sockets
- All installed bathroom ventilation and ceiling fans are ENERGY STAR qualified



# ZERH Lighting









### ZERH Indoor Air Quality

NJCleanEnergy.com/RNC





#### **Moisture Control**

- Drain or sump pump in basements/crawlspaces, include check valve in EPA Radon Zone 1
- Layer of aggregate or sand (4 in.) with geotextile matting installed below slabs AND radon techniques in EPA Radon Zone 1



### ZERH Indoor Air Quality

NJCleanEnergy.com/RNC





#### Moisture Control – continued

- Basements/crawlspaces insulated, sealed and conditioned
- Protection from water splash damage if no gutters by providing proper drainage by grading, add French drains, overhangs, drip edges, etc.
- Hard-surface flooring in kitchens, baths, entry, laundry and utility rooms
   AND piping in exterior walls insulated with pipe wrap



### Bathroom Ventilation







# Bathrooms, kitchens and laundry rooms are places where pollutants are generated......

### ENERGY STAR requirements for **bathroom** fans:

- 50 CFM intermittent or 20 CFM continuous
- ENERGY STAR < 3 sone intermittent recommended or < 1 sone continuous required
- Controls / Timers can be added for enhanced performance along with optional sensors



Relatively Quiet & Energy Efficient



### Kitchen Ventilation







### ENERGY STAR requirements for kitchen fans:

- Kitchen Fans (Range Hoods)
- 100 CFM intermittent or 5 ACH continuous
- ENERGY STAR < 3 sone intermittent recommended or < 1 sone continuous required

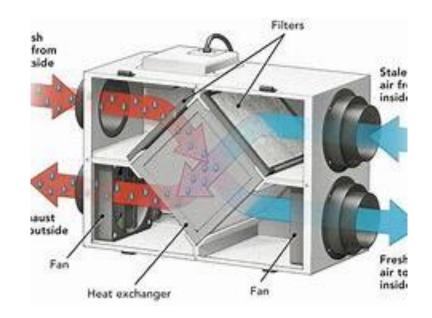


### Ventilation





- ERV & HRVs not required but optional.
- Work great & bring in fresh air
- Costly
- Higher Maintenance Costs than bath fans
- Long Payback period
- Must be Energy Star rated





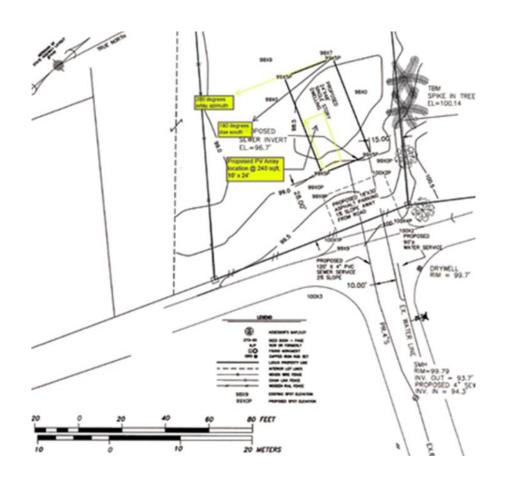
# ZERH PV Ready - Optional

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RESIDENTIAL NEW CONSTRUCTION

Designate a proposed array location and square footage on architectural diagram



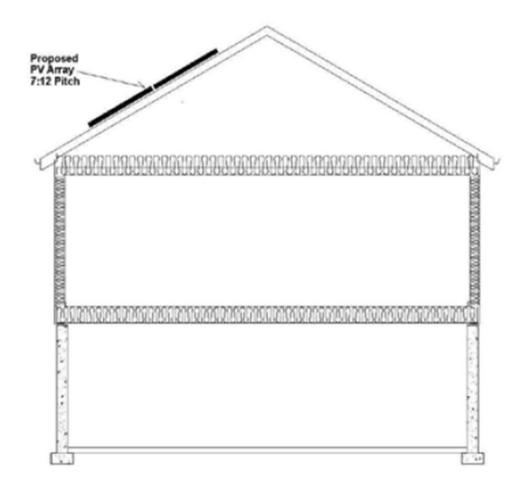


## PV Ready - Optional





- Identify orientation (Azimuth) of proposed array location
- Identify inclination of proposed array location (roof pitch)



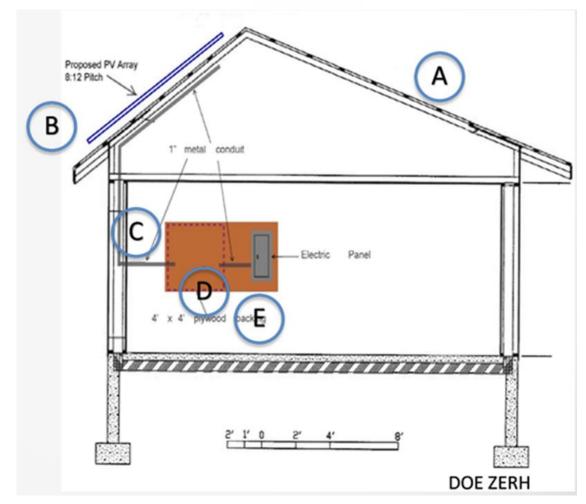


## ZERH PV Ready - Optional





- A. Documentation of the maximum allowable dead load and live load ratings of the existing roof (Rec DL.: 6 lbs./sq.ft.)
- B. Conduit to run DC wire from roof to inverter
- C. Dedicated Area for installing inverter and balance of system
- **D.** Conduit to run wire from inverter location to electric panel
- E. Circuit Breaker designated and/or installed for use by the PV system in the electric panel





### Incentives

Type of Home	Single Home (1&2 Family)	Multi-Single (Townhouse)	Rater Incentive
ENERGY STAR	\$1,000 + \$30/MMBtu	\$500 + \$30/MMBtu	N/A
ZERH	\$4,000 + \$30/MMBtu	\$2,500 + \$30/MMBtu	\$1,200 (single and multi-single only)
ZERH + RE	\$4,000 + \$30/MMBtu + \$2,000	\$2,500 + \$30/MMBtu + \$1,500	\$1,200 (single and multi-single only)
UEZ Bonus*	+\$500 (add to any level above)	+\$500 (add to any level above)	N/A



### What to do first?

- Contact at least three NJ Raters
- Obtain a menu of their fees for rating plans, training the subs, inspections, air infiltration test aka blower door, duct blaster test, optional items, etc.
- Choose a rater to work with
- Submit a set of plans to the rater, have them evaluated & they will discuss options



## NJ Energy Raters

NJCleanEnergy.com/RNC

### www.NJCleanEnergy.com/RATERS

### **Rating Companies**

The following organizations have been qualified by the Residential New Construction Program to provide Open Rater Market Services



## RESIDENTIAL NEW CONSTRUCTION

### NJ Energy Raters

NJCleanEnergy.com/RNC

#### **Bright Power, Inc.**

Carmel Pratt 11 Hanover Square, 21st Floor New York, NY 10005 646-979-4715

#### Integral Building & Design, Inc.

Tony Lisanti 15 N. Mill Street, Suite 225 Nyack, NY 10960 845-535-3035 tony@integralbuilding.com

#### PEG

Josh Spence 3975 Fair Ridge Drive, Suite T15S Fairfax, Virginia 22033 703-934-2777 joshsp@pegenv.com

#### **EAM Associates**

Rick Marx 3350 Highway 138 West Building 2, Suite 223 Wall, NJ 07719 732-556-9190 rmarx@eamenergy.com

cpratt@brightpower.com

#### Integral Building & Design, Inc.

Pasquale Strocchia
231 Main Street, Suite 103
PO Box 96
New Paltz, NY 12561-0096
845-255-0418
pasquale@integralbuilding.com

#### ReVireo

Ben Cohen 200 South Avenue East, Suite 303 Cranford, NJ 07016 888-568-5459 ben@revireo.com

#### **Home Energy Solutions, Inc.**

Glenn LaMay 187 East Main Street Huntington, NY 11743 631-673-0664

gdlamay3@gmail.com

#### **Kitchen and Associates**

756 Haddon Avenue Collingswood NJ 08108 856-854-1880 Office ataylor@kitchenandassociates.com

#### Steven Winter Associates, Inc.

Steve Klocke
307 7th Avenue, Suite 1701
New York, NY 10001
203-857-0200, X221
sklocke@swinter.com

#### **Innova Services Corporation**

Adam Blackburn
1548 South 16th Street
Philadelphia, PA 19146
215-336-0440
program ablackburn@innovaservices.com

#### **MaGrann Associates**

Mike Brown
701 East Gate Drive
Mount Laurel, NJ 08054
609-744-3080
mikebrown@magrann.com

#### The Levy Partnership, Inc.

1776 Broadway, Suite 1250
New York, NY 10019
Phone: 212-496-0800, X130 Fax: 212-496-5389
identz@levypartnership.com

## More Helpful Links

- <u>Clean Coalition: In case you haven't been paying attention, zero has arrived!</u>
- Zero Energy Ready Homes | Department of Energy
- Indoor airPLUS | US EPA
- Watersense | US EPA
- How Realistic Are Zero Energy Ready Homes? ECHOtape



## Why Build Zero Energy Ready

#### Some quotes from builders:

"We build Zero Energy Ready because that's where the money is. We're building at higher margins and higher price / sq. ft. than conventional construction."

"Along those lines, when clients know you build passive house, ZERH, WaterSense, airPLUS, and Energy Star Homes, they know they are dealing with a quality builder (and they'll pay more for that)."

"Not only that, as we all know, someday all houses will be Zero Energy Ready. Why not get on the front of the wave? That will put your building firm in a leadership position."

"Finally, once involved with the Zero Energy Ready community, the leads just generate themselves. Really, more and more, people are seeking out builders who specialize in this market."

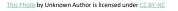


# Potential ZERH Training Opportunities

#### The New Jersey Clean Energy Learning Center

- Zero Energy Ready Homes Training
- Energy Star to Zero Energy Ready
- Visit <a href="https://www.njcelc.com/">https://www.njcelc.com/</a> and sign up for free







### Four Levels of Participation

NJCleanEnergy.com/RNC



ENERGY STAR Homes



- Zero Energy Ready Home
- Zero Energy Ready Home Plus Solar



ENERGY STAR Multifamily New Construction



#### **New Construction**

#### **Multifamily**



Multifamily New Construction

#### Eligibility:

Any sized multifamily new construction property pursuing the ENERGY STAR designation

# Whole building large multifamily



#### Eligibility:

50,000 sf of planned, conditioned space.

Must achieve a minimum of 15% energy savings compared to ASHRAE 90.1-2019.

#### Incentive Cap

50% of project cost up to \$2M per project / \$4M per entity annually

## Individual rebates multifamily



#### Eligibility:

No size to qualify.

Common spaces billed commercially are eligible.

#### **Incentive Cap**

\$500,000 per electric account and \$500,000 per natural gas account, per fiscal year.

#### Other

Local Gov't Energy
Audit

#### Resiliency

Combined Heat & Power

**Low-income bill assistance**Utility Assistance





### Pay for Performance For Multifamily

NJCleanEnergy.com/P4P

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New construction Multifamily projects seeking two or more energy efficiency measures with a minimum 15% savings compared to ASHRAE 90.1-2019.



# SIZE TO QUALIFY

50,000 square feet of planned conditioned space. Low-rise (and mid-rise where appropriate), garden style complexes will be treated as one project under the P4P NC program.

#### **ABOUT**

A pre-approved Participating Partner will streamline the program and guide users through the program phases

# INCENTIVE CAP

50% of project cost up to \$2M per project / \$4M per entity annually



# Incentives – Multifamily

Type of Home	Multifamily	MFHR
ENERGY STAR	\$500 + \$30/MMBtu	\$500 + \$30/MMBtu
ZERH	\$1,500 + \$30/MMBtu	N/A
ZERH + RE	\$1,500 + \$30/MMBtu + \$750	N/A
UEZ Bonus	N/A	N/A



# NJCEP Portfolio of Programs

### Energy Efficiency - C&I Existing Buildings

- FREE Local Government Energy Audits
- C&I Large Energy Users
- FREE Income Eligible Residential Upgrades

### Energy Efficiency - New Construction

New Construction (Residential, Multifamily, Commercial & Residential)

### Distributed Energy Resources

- Combined Heat & Power
- Fuel Cells

#### **Electric Vehicles**

- Light-Duty Residential EVs
- At-Home Charging
- Multi Unit Dwelling Chargers
- Municipal Fleets

#### Renewable Energy

- SUSi Solar Incentives
- Community Solar
- Offshore Wind

#### **Specialized Programs**

- Community Energy Plan Grants
- State Facility Initiatives
- Microgrid
   Development
- R&D Energy Tech Hub
- Workforce
   Development



### DISTRIBUTED ENERGY

### Combined Heat & Power - Fuel Cells

NJCleanEnergy.com/CHP

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C&I customers that require on-site electric generation that either does or does not utilize waste heat

# SIZE TO QUALIFY

N/A - Projects must run 5,000 full load equivalent hours per year (3,500 for critical facilities)

#### **ABOUT**

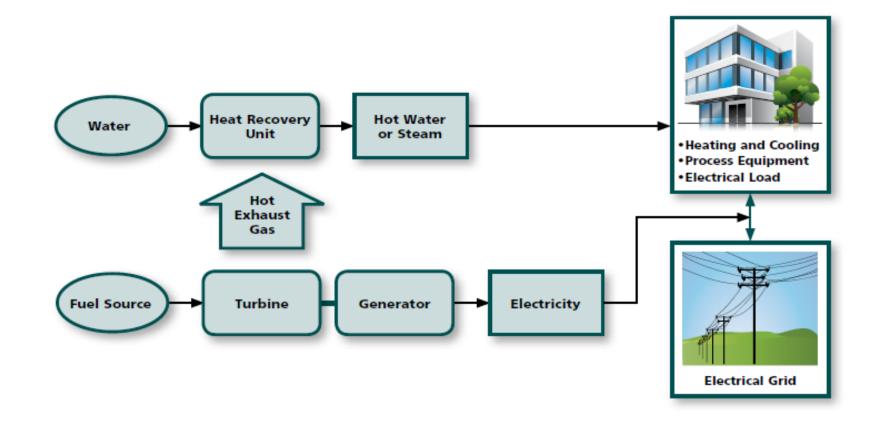
- Combined Heat & Power (CHP) units generates electricity and recycle waste heat to provide heating or cooling
- Resiliency with return on investment
- Fuel Cells (FC) with or without heat recovery (HR)

# INCENTIVE LEVELS

- CHPs and FC with HR have a project cap of \$2M \$3M
- 25% bonus for critical facilities with black-start/islanding capabilities
- Up to 30% incentive bonus for CHP using biofuel
- FC without HR have a project cap of \$1M



### Combined Heat & Power





## DISTRIBUTED ENERGY

### Combined Heat & Power - Fuel Cells

NJCleanEnergy.com/CHI

Eligible Technology	Size (Installed Rated Capacity)	Incentive (\$/Watt) (5)	% of Total Cost Cap per project	\$ Cap per project
CHP powered by non-renewable or renewable fuel source, or a combination <sup>(4)</sup> :	≤500 kW <sup>(1)</sup>	\$2.00	30-40% <sup>(2)</sup>	\$2 million
Gas Internal Combustion Engine	>500 kW – 1 MW <sup>(1)</sup>	\$1.00		
Gas Combustion Turbine     Microturbine	>1 MW – 3 MW <sup>(1)</sup>	\$0.55	30%	\$3 million
Fuel Cell with Heat Recovery (FCHR)	>3 MW <sup>(1)</sup>	\$0.35		
Fuel Cell without Heat Recovery (FCwoHR)	Same as above <sup>(1)</sup>	Applicable amount above	30%	\$1 million
Waste Heat to Power (WHP)(3)	≤1 MW <sup>(1)</sup>	\$1.00	30%	\$2 million
Powered by non-renewable fuel source. Heat recovery or other mechanical recovery from existing equipment utilizing new electric generation equipment (e.g. steam turbine)	>1 MW <sup>(1)</sup>	\$0.50	30%	\$3 million

+critical facility/blackstart bonus of 25%



### More Information

#### **VISIT**

NJCleanEnergy.com

#### **BECOME A TRADE ALLY**

NJCleanEnergy.com/SIGNUP

#### **NJCEP NEWSLETTER**

NJCleanEnergy.com/NEWSLETTER

**ENERGY EFFICIENCY LISTSERV** 

NJCleanEnergy.com/LISTSERVS



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EE Stakeholder Meetings
Program Changes
Regulatory Changes

Coming Soon!



