New Jersey's Clean Energy Program

LGEA Presentation Township of Manalapan

June 26, 2020





INTRODUCTIONS

- Township of Manalapan
 - Tim Kurczeski Buildings & Grounds Supervisor
 - Rose Lafergola Purchasing Agent
- NJ Clean Energy Program
 - Aimee Lalonde TRC Program Manager
 - Kush Patel– TRC Auditor
 - Amanda Muench TRC Account Manager
 - Tony O'Donnell TRC Outreach Manager
 - Michelle Rossi BPU ESIP Coordinator



Agenda

- The audit process overview
- Energy use & existing conditions
- Review of Energy Conservation Measures (ECMs) identified
- Questions regarding the draft audit report
- Overview of NJCEP equipment incentives
- Next steps for Township of Manalapan



LGEA PROCESS

Application Approval

Scheduling Call

Audit

Benchmarking & Analysis

Draft Report

Exit Meeting Presentation

Final Report



SITE VISIT & UTILITY ANALYSIS

Overview of Systems, Baseline & Existing Conditions:

- Lighting System
- HVAC and Mechanical Systems
- Plug Load Equipment

Utility Consumption:

- Electric Consumption and Costs
- Natural Gas Consumption and Costs
- Fuel Oil Consumption Costs

Sites Visited/Analyzed

- Main Building and Police Department
- DPW Complex
- Senior Center
- Community Center
- Kuschick Pavilion and Offices/ Dreyer Snack Bar



UTILITY BREAKOUT



Pre & Post Implementation Cost





BENCHMARKING

program"



Benchmarking



ALL OPPORTUNITIES

Savings Potential





ALL OPPORTUNITIES

| # | Energy Conservation Measure | Annual Electric Savings (kWh) | Peak Demand Savings (kW) | Annual Fuel Savings (MMBtu) | Annual Energy Cost Savings (\$) | Estimated Install Cost (\$) | Estimated Incentive (\$)* | Estimated Net Cost (\$) | Simple Payback Period (yrs)** | CO ₂ e Emissions Reduction (Ibs) |
|------------|--|--|-----------------------------------|--------------------------------------|---|-----------------------------------|---------------------------------|-------------------------------|--|--|
| Lighting | Upgrades | 297,117 | 38.1 | -33.1 | \$41,468 | \$206,841 | \$45,818 | \$161,023 | 3.9 | 295,155 |
| ECM 1 | Install LED Fixtures | 163,297 | 7.5 | -5.7 | \$25,153 | \$163,607 | \$25,650 | \$137,957 | 5.5 | 163,766 |
| ECM 2 | Retrofit Fluorescent Fixtures with LED Lamps and Drivers | 134 | 0.3 | -0.1 | \$24 | \$344 | \$100 | \$244 | 10.4 | 126 |
| ECM 3 | Retrofit Fixtures with LED Lamps | 133,513 | 30.3 | -27.3 | \$16,272 | \$42,673 | \$20,068 | \$22,605 | 1.4 | 131,093 |
| ECM 4 | Install LED Exit Signs | 173 | 0.0 | 0.0 | \$19 | \$217 | \$0 | \$217 | 11.2 | 170 |
| Lighting | Control Measures | 36,937 | 6.9 | -7.6 | \$4,313 | \$40,735 | \$13,345 | \$27,390 | 6.4 | 36,290 |
| ECM 5 | Install Occupancy Sensor Lighting Controls | 21,249 | 5.4 | -4.8 | \$2,523 | \$26,460 | \$6,020 | \$20,440 | 8.1 | 20,818 |
| ECM 6 | Install Daylight Dimming/Photocell Controls | 2,435 | 0.0 | 0.0 | \$296 | \$6,400 | \$0 | \$6,400 | 21.6 | 2,452 |
| ECM 7 | Install High/Low Lighting Controls | 13,253 | 1.6 | -2.8 | \$1,494 | \$7,875 | \$7,325 | \$550 | 0.4 | 13,020 |
| Variable | Frequency Drive (VFD) Measures | 12,406 | 1.0 | 0.0 | \$1,416 | \$8,394 | \$3,600 | \$4,794 | 3.4 | 12,493 |
| ECM 8 | Install VFDs on Heating Water Pumps | 12,406 | 1.0 | 0.0 | \$1,416 | \$8,394 | \$3 <i>,</i> 600 | \$4,794 | 3.4 | 12,493 |
| Electric l | Jnitary HVAC Measures | 1,655 | 0.7 | 0.0 | \$200 | \$7,606 | \$276 | \$7,330 | 36.7 | 1,666 |
| ECM 9 | Install High Efficiency Air Conditioning Units | 1,655 | 0.7 | 0.0 | \$200 | \$7,606 | \$276 | \$7,330 | 36.7 | 1,666 |
| Gas Heat | ing (HVAC/Process) Replacement | 0 | 0.0 | 99.5 | \$1,188 | \$17,532 | \$1,600 | \$15,932 | 13.4 | 11,651 |
| ECM 10 | Install High Efficiency Hot Water Boilers | 0 | 0.0 | 21.8 | \$222 | \$9,036 | \$800 | \$8,236 | 37.2 | 2,552 |
| ECM 11 | Install High Efficiency Furnaces | 0 | 0.0 | 77.7 | \$966 | \$8,497 | \$800 | \$7,697 | 8.0 | 9,099 |
| Domesti | c Water Heating Upgrade | 695 | 0.0 | 7.1 | \$190 | \$93 | \$93 | \$0 | 0.0 | 1,533 |
| ECM 12 | Install Low-Flow DHW Devices | 695 | 0.0 | 7.1 | \$190 | \$93 | \$93 | \$0 | 0.0 | 1,533 |
| Food Sei | rvice & Refrigeration Measures | 10,014 | 1.1 | 0.0 | \$1,699 | \$1,610 | \$600 | \$1,010 | 0.6 | 10,084 |
| ECM 13 | Vending Machine Control | 10,014 | 1.1 | 0.0 | \$1,699 | \$1,610 | \$600 | \$1,010 | 0.6 | 10,084 |
| | TOTALS | 358,823 | 47.8 | 65.9 | \$50,473 | \$282,811 | \$65,332 | \$217,479 | 4.3 | 368,872 |



COST EFFECTIVE OPPORTUNITIES

Savings Potential





COST EFFECTIVE OPPORTUNITIES

| # | Energy Conservation Measure | Annual Electric Savings (kWh) | Peak Demand Savings (kW) | Annual Fuel Savings (MMBtu) | Annual Energy Cost Savings (\$) | Estimated Install Cost (\$) | Estimated Incentive (\$)* | Estimated Net Cost (\$) | Simple Payback Period (yrs)** | CO ₂ e Emissions Reduction (Ibs) |
|----------|--|--|-----------------------------------|--------------------------------------|---|-----------------------------------|---------------------------------|-------------------------------|--|--|
| Lighting | Upgrades | 297,117 | 38.1 | -33.1 | \$41,468 | \$206,841 | \$45,818 | \$161,023 | 3.9 | 295,155 |
| ECM 1 | Install LED Fixtures | 163,297 | 7.5 | -5.7 | \$25,153 | \$163,607 | \$25,650 | \$137,957 | 5.5 | 163,766 |
| ECM 2 | Retrofit Fluorescent Fixtures with LED Lamps and Drivers | 134 | 0.3 | -0.1 | \$24 | \$344 | \$100 | \$244 | 10.4 | 126 |
| ECM 3 | Retrofit Fixtures with LED Lamps | 133,513 | 30.3 | -27.3 | \$16,272 | \$42,673 | \$20,068 | \$22,605 | 1.4 | 131,093 |
| ECM 4 | Install LED Exit Signs | 173 | 0.0 | 0.0 | \$19 | \$217 | \$0 | \$217 | 11.2 | 170 |
| Lighting | Control Measures | 34,255 | 6.3 | -7.5 | \$3,976 | \$31,950 | \$12,715 | \$19,235 | 4.8 | 33,596 |
| ECM 5 | Install Occupancy Sensor Lighting Controls | 21,009 | 4.7 | -4.7 | \$2,483 | \$24,300 | \$5,530 | \$18,770 | 7.6 | 20,582 |
| ECM 7 | Install High/Low Lighting Controls | 13,246 | 1.5 | -2.8 | \$1,493 | \$7,650 | \$7,185 | \$465 | 0.3 | 13,013 |
| Variable | Frequency Drive (VFD) Measures | 12,406 | 1.0 | 0.0 | \$1,416 | \$8,394 | \$3,600 | \$4,794 | 3.4 | 12,493 |
| ECM 8 | Install VFDs on Heating Water Pumps | 12,406 | 1.0 | 0.0 | \$1,416 | \$8,394 | \$3 <i>,</i> 600 | \$4,794 | 3.4 | 12,493 |
| Gas Heat | ting (HVAC/Process) Replacement | 0 | 0.0 | 77.7 | \$966 | \$8,497 | \$800 | \$7,697 | 8.0 | 9,099 |
| ECM 11 | Install High Efficiency Furnaces | 0 | 0.0 | 77.7 | \$966 | \$8,497 | \$800 | \$7,697 | 8.0 | 9,099 |
| Domesti | c Water Heating Upgrade | 695 | 0.0 | 7.1 | \$190 | \$93 | \$93 | \$0 | 0.0 | 1,533 |
| ECM 12 | Install Low-Flow DHW Devices | 695 | 0.0 | 7.1 | \$190 | \$93 | \$93 | \$0 | 0.0 | 1,533 |
| Food Sei | rvice & Refrigeration Measures | 10,014 | 1.1 | 0.0 | \$1,699 | \$1,610 | \$600 | \$1,010 | 0.6 | 10,084 |
| ECM 13 | Vending Machine Control | 10,014 | 1.1 | 0.0 | \$1,699 | \$1,610 | \$600 | \$1,010 | 0.6 | 10,084 |
| | TOTALS | 354,487 | 46.5 | 44.2 | \$49,715 | \$257,384 | \$63,626 | \$193,758 | 3.9 | 361,959 |



MAIN BUILDING AND POLICE DEPT.

| # | Energy Conservation Measure | Cost Effective? | Annual Electric Savings (kWh) | Peak Demand Savings (kW) | Annual Fuel Savings (MMBtu) | Annual Energy Cost Savings (\$) | Estimated Install Cost (\$) | Estimated Incentive (\$)* | Estimated Net Cost (\$) | Simple Payback Period (yrs)** | CO2e Emissions Reduction (Ibs) |
|----------|---|--------------------|--|-----------------------------------|--------------------------------------|---|-----------------------------------|---------------------------------|-------------------------------|--|---|
| Lighting | Upgrades | | 113,465 | 19.5 | -19 | \$12,757 | \$36,799 | \$14,966 | \$21,833 | 1.7 | 112,053 |
| ECM 1 | Install LED Fixtures | Yes | 22,267 | 0.0 | 0 | \$2,542 | \$10,712 | \$3,120 | \$7,592 | 3.0 | 22,423 |
| ECM 2 | Retrofit Fixtures with LED Lamps | Yes | 91,025 | 19.5 | -19 | \$10,196 | \$25,869 | \$11,846 | \$14,023 | 1.4 | 89,460 |
| ECM 3 | Install LED Exit Signs | Yes | 173 | 0.0 | 0 | \$19 | \$217 | \$O | \$217 | 11.2 | 170 |
| Lighting | Control Measures | | 26,909 | 3.9 | -5 | \$3,017 | \$23,675 | \$9,000 | \$14,675 | 4.9 | 26,483 |
| ECM 4 | Install Occupancy Sensor Lighting Controls | Yes | 12,716 | 2.6 | -3 | \$1,424 | \$12,150 | \$2,940 | \$9,210 | 6.5 | 12,494 |
| ECM 5 | Install Daylight Dimming/Photocell Controls | No | 1,800 | 0.0 | 0 | \$206 | \$5,000 | \$0 | \$5,000 | 24.3 | 1,813 |
| ECM 6 | Install High/Low Lighting Controls | Yes | 12,393 | 1.3 | -3 | \$1,388 | \$6,525 | \$6,060 | \$465 | 0.3 | 12,176 |
| Variable | Frequency Drive (VFD) Measures | | 12,406 | 1.0 | 0 | \$1,416 | \$8,394 | \$3,600 | \$4,794 | 3.4 | 12,493 |
| ECM 7 | Install VFDs on Heating Water Pumps | Yes | 12,406 | 1.0 | 0 | \$1,416 | \$8,394 | \$3,600 | \$4,794 | 3.4 | 12,493 |
| Domesti | ic Water Heating Upgrade | | 0 | 0.0 | 7 | \$69 | \$50 | \$50 | \$ 0 | 0.0 | 778 |
| ECM 8 | Install Low-Flow DHW Devices | Yes | 0 | 0.0 | 7 | \$69 | \$50 | \$50 | \$0 | 0.0 | 778 |
| Food Se | rvice & Refrigeration Measures | | 1,954 | 0.2 | 0 | \$223 | \$460 | \$100 | \$360 | 1.6 | 1,968 |
| ECM 9 | Vending Machine Control | Yes | 1,954 | 0.2 | 0 | \$223 | \$460 | \$100 | \$360 | 1.6 | 1,968 |
| | TOTALS (COST EFFECTIVE MEASURES) | | 152,934 | 24.5 | -17 | \$17,277 | \$64,378 | \$27,716 | \$36,661 | 2.1 | 151,961 |
| | TOTALS (ALL MEASURES) | | 154,734 | 24.5 | -17 | \$17,483 | \$69,378 | \$27,716 | \$41,661 | 2.4 | 153,774 |



DPW COMPLEX

| # | Energy Conservation Measure | Cost Effective? | Annual Electric Savings (kWh) | Peak Demand Savings (kW) | Annual Fuel Savings (MMBtu) | Annual Energy Cost Savings (\$) | Estimated Install Cost (\$) | Estimated Incentive (\$)* | Estimated Net Cost (\$) | Simple Payback Period (yrs)** | CO2e Emissions Reduction (Ibs) |
|------------|--|--------------------|--|-----------------------------------|--------------------------------------|---|-----------------------------------|---------------------------------|-------------------------------|--|---|
| Lighting | Upgrades | | 61,986 | 10.8 | -9 | \$7,376 | \$51,569 | \$15,068 | \$36,501 | 4.9 | 61,416 |
| ECM 1 | Install LED Fixtures | Yes | 46,435 | 7.5 | -6 | \$5,534 | \$45,635 | \$12,000 | \$33,635 | 6.1 | 46,086 |
| ECM 2 | Retrofit Fixtures with LED Lamps | Yes | 15,552 | 3.3 | -3 | \$1,842 | \$5,934 | \$3,068 | \$2,866 | 1.6 | 15,330 |
| Lighting | Control Measures | | 5,276 | 1.4 | -1 | \$622 | \$6,165 | \$1,555 | \$4,610 | 7.4 | 5,171 |
| ECM 3 | Install Occupancy Sensor Lighting Controls | Yes | 4,936 | 1.3 | -1 | \$582 | \$5,940 | \$1,330 | \$4,610 | 7.9 | 4,838 |
| ECM 4 | Install High/Low Lighting Controls | Yes | 340 | 0.1 | 0 | \$40 | \$225 | \$225 | \$0 | 0.0 | 333 |
| Electric L | Jnitary HVAC Measures | | 1,655 | 0.7 | 0 | \$200 | \$7,606 | \$276 | \$7,330 | 36.7 | 1,666 |
| ECM 5 | Install High Efficiency Air Conditioning Units | No | 1,655 | 0.7 | 0 | \$200 | \$7,606 | \$276 | \$7,330 | 36.7 | 1,666 |
| Gas Heat | ting (HVAC/Process) Replacement | | 0 | 0.0 | 78 | \$966 | \$8,497 | \$800 | \$7,697 | 8.0 | 9,099 |
| ECM 6 | Install High Efficiency Furnaces | Yes | 0 | 0.0 | 78 | \$966 | \$8,497 | \$800 | \$7,697 | 8.0 | 9,099 |
| | TOTALS (COST EFFECTIVE MEASURES) | | 67,262 | 12.2 | 68 | \$8,964 | \$66,231 | \$17,423 | \$48,808 | 5.4 | 75,686 |
| | TOTALS (ALL MEASURES) | | 68,917 | 12.9 | 68 | \$9,164 | \$73,836 | \$17,699 | \$56,137 | 6.1 | 77,353 |



SENIOR CENTER

| # | Energy Conservation Measure | Cost Effective? | Annual Electric Savings (kWh) | Peak Demand Savings (kW) | Annual Fuel Savings (MMBtu) | Annual Energy Cost Savings (\$) | Estimated Install Cost (\$) | Estimated Incentive (\$)* | Estimated Net Cost (\$) | Simple Payback Period (yrs)** | CO ₂ e Emissions Reduction (Ibs) |
|----------|---|--------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|---------------------------------|-------------------------------|--|--|
| Lighting | Upgrades | | 14,166 | 2.6 | -2 | \$1,813 | \$9,478 | \$2,820 | \$6,658 | 3.7 | 14,027 |
| ECM 1 | Install LED Fixtures | Yes | 4,530 | 0.0 | 0 | \$587 | \$6,110 | \$1,130 | \$4,980 | 8.5 | 4,562 |
| ECM 2 | Retrofit Fixtures with LED Lamps | Yes | 9,636 | 2.6 | -2 | \$1,226 | \$3,368 | \$1,690 | \$1,678 | 1.4 | 9,465 |
| Lighting | Control Measures | | 3,279 | 0.7 | -1 | \$418 | \$5,750 | \$1,670 | \$4,080 | 9.8 | 3,231 |
| ECM 3 | Install Occupancy Sensor Lighting Controls | Yes | 2,338 | 0.6 | 0 | \$298 | \$4,050 | \$770 | \$3,280 | 11.0 | 2,296 |
| ECM 4 | Install Daylight Dimming/Photocell Controls | No | 428 | 0.0 | 0 | \$55 | \$800 | \$0 | \$800 | 14.4 | 431 |
| ECM 5 | Install High/Low Lighting Controls | Yes | 513 | 0.1 | 0 | \$65 | \$900 | \$900 | \$0 | 0.0 | 504 |
| Domest | ic Water Heating Upgrade | | 0 | 0.0 | 0 | \$5 | \$7 | \$7 | \$0 | 0.0 | 56 |
| ECM 6 | Install Low-Flow DHW Devices | Yes | 0 | 0.0 | 0 | \$5 | \$7 | \$7 | \$0 | 0.0 | 56 |
| | TOTALS (COST EFFECTIVE MEASURES) | | 17,017 | 3.4 | -2 | \$2,181 | \$14,435 | \$4,497 | \$9,938 | 4.6 | 16,882 |
| | TOTALS (ALL MEASURES) | | 17,445 | 3.4 | -2 | \$2,236 | \$15,235 | \$4,497 | \$10,738 | 4.8 | 17,314 |



COMMUNITY CENTER

| # | Energy Conservation Measure | Cost Effective? | Annual Electric Savings (kWh) | Peak Demand Savings (kW) | Annual Fuel Savings (MMBtu) | Annual Energy Cost Savings (\$) | Estimated Install Cost (\$) | Estimated Incentive (\$)* | Estimated Net Cost (\$) | Simple Payback Period (yrs)** | CO ₂ e Emissions Reduction (lbs) |
|----------|--|--------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|---------------------------------|-------------------------------|--|--|
| Lighting | Upgrades | | 6,764 | 2.4 | 0 | \$1,132 | \$3,806 | \$1,772 | \$2,034 | 1.8 | <mark>6,7</mark> 88 |
| ECM 1 | Retrofit Fluorescent Fixtures with LED Lamps and Drivers | Yes | 6 | 0.1 | 0 | \$1 | \$69 | \$20 | \$49 | 46.3 | 6 |
| ECM 2 | Retrofit Fixtures with LED Lamps | Yes | 6,757 | 2.4 | 0 | \$1,131 | \$3,738 | \$1,752 | \$1,986 | 1.8 | 6,782 |
| Lighting | Control Measures | | 454 | 0.7 | 0 | \$75 | \$2,985 | \$630 | \$2,355 | 31.2 | 451 |
| ECM 3 | Install Occupancy Sensor Lighting Controls | No | 240 | 0.6 | 0 | \$40 | \$2,160 | \$490 | \$1,670 | 42.0 | 236 |
| ECM 4 | Install Daylight Dimming/Photocell Controls | No | 207 | 0.0 | 0 | \$35 | \$600 | \$0 | \$600 | 17.3 | 208 |
| ECM 5 | Install High/Low Lighting Controls | No | 6 | 0.0 | 0 | \$1 | \$225 | \$140 | \$85 | 79.9 | 6 |
| Gas Hea | ting (HVAC/Process) Replacement | | 0 | 0.0 | 22 | \$222 | \$9,036 | \$800 | \$8,236 | 37.2 | 2,552 |
| ECM 6 | Install High Efficiency Hot Water Boilers | No | 0 | 0.0 | 22 | \$222 | \$9,036 | \$800 | \$8,236 | 37.2 | 2,552 |
| Domest | ic Water Heating Upgrade | | 695 | 0.0 | 0 | \$117 | \$36 | \$36 | \$0 | 0.0 | 700 |
| ECM 7 | Install Low-Flow DHW Devices | Yes | 695 | 0.0 | 0 | \$117 | \$36 | \$36 | \$0 | 0.0 | 700 |
| | TOTALS (COST EFFECTIVE MEASURES) | | 7,459 | 2.4 | 0 | \$1,248 | \$3,842 | \$1,808 | \$2,034 | 1.6 | 7,488 |
| | TOTALS (ALL MEASURES) | | 7,912 | 3.1 | 22 | \$1,545 | \$15,863 | \$3,238 | \$12,625 | 8.2 | 10,491 |



KUSCHICK PAVILLIONS

| # | Energy Conservation Measure | Cost Effective? | Annual Electric Savings (kWh) | Peak Demand Savings (kW) | Annual Fuel Savings (MMBtu) | Annual Energy Cost Savings (\$) | Estimated Install Cost (\$) | Estimated Incentive (\$)* | Estimated Net Cost (\$) | Simple Payback Period (yrs)** | CO ₂ e Emissions Reduction (Ibs) |
|----------|--|--------------------|--|-----------------------------------|--------------------------------------|---|-----------------------------------|---------------------------------|-------------------------------|--|--|
| Lighting | Upgrades | | 100,736 | 2.8 | -3 | \$18,390 | \$105,189 | \$11,192 | \$93,997 | 5.1 | 100,870 |
| ECM 1 | Install LED Fixtures | Yes | 90,066 | 0.0 | 0 | \$16,491 | \$101,150 | \$9,400 | \$91,750 | 5.6 | 90,695 |
| ECM 2 | Retrofit Fluorescent Fixtures with LED Lamps and Drivers | Yes | 127 | 0.2 | 0 | \$22 | \$275 | \$80 | \$195 | 8.7 | 119 |
| ECM 3 | Retrofit Fixtures with LED Lamps | Yes | 10,543 | 2.5 | -3 | \$1,876 | \$3,764 | \$1,712 | \$2,052 | 1.1 | 10,056 |
| Lighting | Control Measures | | 1,019 | 0.3 | 0 | \$180 | \$2,160 | \$490 | \$1,670 | 9.3 | 955 |
| ECM 4 | Install Occupancy Sensor Lighting Controls | Yes | 1,019 | 0.3 | 0 | \$180 | \$2,160 | \$490 | \$1,670 | 9.3 | 955 |
| Food Se | rviœ & Refrigeration Measures | | 8,059 | 0.9 | 0 | \$1,476 | \$1,150 | \$500 | \$650 | 0.4 | 8,116 |
| ECM 5 | Vending Machine Control | Yes | 8,059 | 0.9 | 0 | \$1,476 | \$1,150 | \$500 | \$650 | 0.4 | 8,116 |
| | TOTALS (COST EFFECTIVE MEASURES) | | 109,814 | 3.9 | -4 | \$20,045 | \$108,499 | \$12,182 | \$96,317 | 4.8 | 109,941 |
| | TOTALS (ALL MEASURES) | | 109,814 | 3.9 | -4 | \$20,045 | \$108,499 | \$12,182 | \$96,317 | 4.8 | 109,941 |



ENERGY EFFICIENT BEST PRACTICES

- Reduce Air Leakage
- Close Doors and Windows
- Develop a Lighting Maintenance Schedule
- Ensure Lighting Controls
 Are Operating Properly
- Use Fans to Reduce
 Cooling Load
- Use Window
 Treatments/Coverings

- Clean and/or Replace
 HVAC filters
- Check and Seal Duct Leakage
- Perform Proper Boiler
 Maintenance
- Perform Proper Water Heater Maintenance
- Plug Load Controls
- Water Conservation
- Retro-Commissioning Study

See individual reports for specific EE practices by building



CLEAN ENERGY PROGRAM PORTFOLIO

ELIGIBLE SECTORS

INCENTIVE PROGRAMS

OTHER PROGRAMS



Commercial, Industrial, Government, Non-Profit, Institutional and Multifamily

Equipment Rebates:

- SmartStart
- Customer Tailored Energy Efficiency Pilot (CTEEP)
- Direct Install
- Large Energy Users

Whole Buildings:

Pay for Performance

Energy Generation:

Combined Heat and Power – Fuel Cells

Renewable Energy Generation:

- Transition Incentive (TI) Program
- Community Solar

SOLAR ENERGY GENERATION POTENTIAL

| | Main Building & Police | Kuschick Pavillion |
|--|---------------------------|--------------------|
| Potential: | MEDIUM | MEDIUM |
| System Potential: (kW) | 160 | 64 |
| Electric Generation: (kWh per year) | 120,391 | 48,157 |
| Displaced Cost: (per year) | \$540,800 | \$166,400 |

Transition Incentive (TI) Program:

https://www.njcleanenergy.com/renewableenergy/programs/transition-incentive-program Community Solar Energy Pilot Program:

http://www.NJCleanEnergy.com/ CommunitySolar



RECOMMENDED NJCEP INCENTIVES PER BUILDING

| Township of Manalapan | Direct Install | SmartStart | CTEEP |
|-------------------------------------|----------------|------------|-------|
| Main Building and Police Department | Х | Х | Х |
| DPW Complex | Х | Х | Х |
| Senior Center | Х | Х | Х |
| Community Center | Х | Х | Х |
| Kuschick Pavillion and Offices | Х | Х | Х |



DIRECT INSTALL

NJCleanEnergy.com/DI

What is DI: Turn-key retrofit program to replace outdated and inefficient equipment, including lighting, HVAC, refrigeration, etc.



Qualifications: Average electric peak demand <200 kW in the previous 12 months

About:

- Pre-approved participating contractors provide support and process paperwork
 - Incentives paid directly to the contractor
 - Fast project turnaround time (4-6 months)

Incentives:

- \$125,000 incentive funding per project/building (\$250K UEZ/OZ/ Local Govt.I/K-12 Public Schools), or
 - \$250,000 entity cap (\$4MM UEZ/OZ/Local Govt./K-12 Public Schools)



DIRECT INSTALL

NJCleanEnergy.com/DI

Facilities in Urban Enterprise Zones (UEZ), Opportunity Zones (OZ), Local Governments, and K-12 public schools:

| INCENTIVE FUNDING | CUSTOMER | | | | | | |
|---|-----------------------|--|--|--|--|--|--|
| Up to 80% of installed cost is paid directly to the contractor | 20% of installed cost | | | | | | |
| All other eligible facilities: | | | | | | | |
| INCENTIVE FUNDING | CUSTOMER | | | | | | |
| Up to 70% of installed cost is paid directly to the contractor | 30% of installed cost | | | | | | |





Participating Contractor

Hutchinson Mechanical Services Pete Hatton 856-429-5828 x259 petehatton@hutchbiz.com



DIRECT INSTALL: FINANCING OPTION

- Eligible NJNG customers can <u>finance</u> <u>the remaining 30 percent balance</u> at 0% APR through the "SAVEGREEN Project[®] On-Bill Repayment Program" (OBRP) for 36 months.
- For measures that may not qualify for Direct Install, NJNG also offers financing options for SmartStart that will cover up to \$130,000 per year.



• Questions? Contact:

Jerry Ryan

Energy Efficiency Ops. Manager New Jersey Natural Gas 732-433-4362 (cell) 732 378 4920 (office) jryan@njng.com



SMARTSTART

NJCleanEnergy.com/SSB

What is SSB: Individual high efficiency equipment rebates for new construction, renovation, remodeling, equipment replacement



Qualifications: • All C&I customer types contributing into the Societal Benefits Charge (SBC)

About:

- Prescriptive and custom designed measures
- Pre-approval required only for lighting projects with incentives >\$100,000 and <u>all</u> custom projects
- For measures not requiring pre-approval, applications must be submitted to the program within one year of purchase.

Incentives:

- Prescriptive: \$500,000 cap for each electric or gas account
- Custom, lesser of the following:
 - \$0.16/kWh and/or \$1.60/Therm saved annually
 - 50% of incremental installed cost
 - Buy-down to 1 year payback based on incremental cost and savings



SMARTSTART NJCleanEnergy.com/SSB

Prescriptive Incentives

- Lighting & Lighting
 Controls
- Packaged HVAC
- Boilers & Water Heaters
- Chillers
- VFD's
- Food Service
- Refrigeration

Prescriptive Only:

DOUBLE INCENTIVES FOR OZ/UEZ/ LOCAL GOVT./K-12 PUBLIC SCHOOLS

Custom Incentives

- New or innovative technologies proven to be cost-effective and not listed as prescriptive
- Projects must have a minimum first year energy savings of 75,000 kWh or 1,500 therms
- Project pre and post inspection required



CUSTOMER TAILORED ENERGY EFFICIENCY PILOT NJCleanEnergy.com/CTEEP

What is CTEEP: A streamlined/single application process for participants submitting multiple different technology types.

Qualifications: • All C&I customer types contributing into the Societal Benefits Charge (SBC)

About:

- On site assistance available
- Additional technical incentive available to offset soft costs associated with developing and planning custom projects

Incentives:

- \$250,000 fiscal year entity cap
 - Technical assistance incentives for custom project evaluation (up to \$10K)

SAME INCENTIVE VALUES AS SMARTSTART



SMARTSTART & CTEEP: FINANCING OPTION

- NJNG provides 0% financing options that will cover up to \$130,000 per year.
- 10 year term-repayments made on regular monthly gas bill
- Need to review project with NJNG to confirm project qualifies.
- The SAVEGREEN program can help with a consultation to discuss your Commercial Energy Efficiency Project.



• Questions? Contact:

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Energy Efficiency Ops. Manager New Jersey Natural Gas 732-433-4362 (cell) 732 378 4920 (office) jryan@njng.com



FINANCING MECHANISM: ESIP

ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)

- Provides alternative financing for energy savings projects at public institutions
- Administered directly by the BPU
- Value of energy savings leveraged to pay for cost of EE projects over a 15 year contract
- Requires NO new bonding and is outside of capital budget
- Does not count as debt or require voter approval



FINANCING MECHANISM: ESIP





Program

ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)

FOR MORE INFORMATION

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FOR MORE INFORMATION

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QUESTIONS



