



Commercial and Industrial Retrofit Program

PROGRAM INFORMATION

The program is intended to encourage small, medium, and large commercial and industrial customers¹ in Seattle City Light's service territory to undertake energy retrofits of existing buildings and equipment. Types of eligible projects include building control and HVAC system upgrades, industrial process improvements, water heating, and LED lighting conversions including new fixtures, retrofit kits, and networked lighting controls. In addition, City Light also incentivizes complex multi-measure building system upgrades, which also follow these Program Requirements.

Eligibility

To be eligible for funding for a commercial or industrial retrofit project, the customer must have a commercial electricity account in City Light's service territory. In order to receive an incentive, *equipment installation cannot begin and products/equipment shall not be purchased until the project has been reviewed and approved by City Light and there is a signed Participation Agreement*, as detailed below in the Project Timeline and Required Documentation section. For any product to be eligible for an incentive, it must comply with all product specifications, be clearly marked with product information, and meet all applicable federal, state, and local code requirements. Further details on product eligibility are included in the Product Specifications section below.

If you are not upgrading an existing building or piece of equipment, please visit our website to view our new construction program offerings at <https://www.seattle.gov/city-light/construction-services/building-for-energy-efficiency>.

You may also contact an Energy Advisor to see if your project qualifies for an incentive at (206) 684-3800 or SCLEnergyAdvisor@seattle.gov.

Participant Obligations

Once an eligible application form has been received and approved, City Light will send the customer a Participation Agreement outlining the terms and conditions of participation and incentive payment. The customer must sign and return this agreement within 30 days of receiving the incentive offer. All terms and conditions are legally binding and required. The Participation Agreement will be active for a specified contract term from the date the agreement was signed. Project installation, project review and verification, and incentive payment must be completed within the contract term.

Program Incentive Summary & Funding Caps

City Light's retrofit incentives are paid based on calculated annual energy savings or on a per-unit basis as indicated in your contract. Retrofit incentive rates are published at <https://www.seattle.gov/city-light/construction-services/building-for-energy-efficiency/energy-efficiency-program-tools-and-resources#incentives>. This list is not comprehensive, and subject to change without notice. 2022 incentive rates will apply to all new projects received after January 1, 2022. Projects submitted

¹ In most cases, multifamily property owners may apply for commercial retrofit incentives if the property has 5 or more units.

before January 1, 2022 will continue to receive 2021 incentive rates.

As of January 1, 2022, a retrofit project incentive must be greater than or equal to \$1,000. For small projects, customers are encouraged to access City Light's [Small Business program](#) (business customers on small commercial rate code only), [Lighting to Go](#) or [Midstream HVAC+ program](#), depending on the project scope.

Incentives are capped so that City Light does not pay more than 70% of the incremental cost. To calculate the incremental cost, you will be required to provide the invoiced cost of your energy measures. Do not include tenant improvement, seismic, IT upgrades, or fire and life safety costs in this total.

- For lighting and other discretionary energy conservation projects, the incremental cost is equivalent to the total project cost (see Eligible Costs, under Post-Installation Documentation).
- For HVAC and other equipment replaced at or near the end-of-life, the incremental cost is 25% of the total project cost related to energy conservation.
- For prescriptive measures, the incremental cost is determined by Bonneville Power Administration or the Regional Technical Forum based on published research. The City Light prescriptive incentive will pay 70% of the invoiced cost or the total prescriptive incentive amount, whichever is less.

PROJECT TIMELINE & REQUIRED DOCUMENTATION

To receive an incentive, you must provide City Light with documentation demonstrating the proper installation of energy efficient products. If project documentation is incomplete or insufficient, an incentive payment may be delayed or denied. Further detail on required documents is included in the following table, and summarized below:

- Step 1: Pre-Installation
 - Product specification sheets
 - Signed application form
 - Pre-installation documentation including scope of work and plans
 - Estimated project cost
- Step 2: Signed Participation Agreement
- Step 3: Post-Installation
 - As-built documentation
 - Invoice(s)

Pre-Agreement

<p>Action</p>	<p>Fill out your Commercial Retrofit application online. An Energy Management Analyst (EMA) will be assigned to work with you as identify your retrofit project. We are happy to work with you even before the project has been clearly defined. <u>Your project will not qualify for incentive funding if equipment has been purchased and/or if installation has begun prior to review and approval from City Light staff and signed Participation Agreement.</u></p> <p>The time needed to calculate or validate energy savings can vary for each project and may include on-site or virtual pre-installation equipment verification. Please allow time in the project scheduling for this review.</p>
<p>Documentation</p>	<p>To qualify for program funding, the following required documentation must be submitted to City Light for review and approval:</p> <ul style="list-style-type: none"> • Product Specification Sheets: Product Specification Sheets (also referred

	<p>to as cut sheets or spec sheets) are required for all products and equipment. Note: If an existing product is being replaced by multiple pieces of equipment not covered by a single product specification sheet, (i.e., separate driver, sensor, etc.), cut sheets must be submitted for each separate component.</p> <ul style="list-style-type: none"> • Estimated Project Cost: Proposed project cost shall be submitted in the form of a proposal, quote, estimate, or bid. Proposed project costs should include all costs borne by the customer for the associated scope of work including, but not limited to, contracted or in-house labor, equipment and materials, rental equipment, applicable permits, and associated disposal fees. • Pre-Installation Documentation: Customers must work with an EMA from City Light to provide all required information on existing conditions.
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Participation Agreement

<p>Action</p>	<p>Once the required pre-installation documentation has been submitted, City Light will confirm the project’s eligibility to receive an incentive based on the program specifications contained herein and any project-specific addenda. All projects are subject to verification of energy savings calculations and/or visual on-site verification. Final incentive funding is solely the discretion of City Light review.</p> <p>Once the City Light customer has received the signed the Participation Agreement from City Light, the customer can proceed with purchasing and installing (either in-house or notifying the contractor to start the installation.)</p>
<p>Documentation</p>	<ul style="list-style-type: none"> • Participation Agreement: The Participation Agreement outlines what will be required for incentive payment (monitoring, verification, invoices, etc.). The customer must sign and return this agreement within 30 days of receiving the incentive offer. All terms and conditions are legally binding and required. The Participation Agreement will be active for a specified term from the date the agreement was signed. Project installation, project review and verification, and incentive payment must be completed within the project contract term. • Change in Scope from Pre-Installation: If the customer would like to make any changes to the scope of the project after signing the Participation Agreement, contact City Light immediately to make sure the project is still eligible for an incentive. City Light must authorize the change in writing <i>prior</i> to the purchase and installation of the revised scope. If no changes are made to the project, there is no need to contact City Light until the project is complete.

Post-Installation

<p>Action</p>	<p>Once the project is completed and the equipment is operating according to scope, contact your assigned EMA to notify City Light that the project is complete and initiate an incentive payment. Projects may also require additional verification in the form of a post-installation site verification, trend logs from the Building Automation System, or electrical metering of equipment to verify equipment installation and confirm proper operation. Refer to the product specifications below and any included project-specific specifications for detailed requirements.</p> <p>During the post-installation verification, equipment must be labeled with model</p>
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<p>Documentation</p>	<p>information or a visible nameplate that matches the equipment submittals.</p> <ul style="list-style-type: none"> • As-built documentation must be submitted reflecting the final installation counts and final equipment model numbers. If equipment selection has changed during the project, product specification sheets for the new equipment must be submitted. As noted in the Participation Agreement section above, you must notify City Light immediately of any change in scope to ensure incentive eligibility and approval. • Invoice(s): All projects are required to submit a customer invoice that reflects the total project cost in the Commercial Retrofit workbook, itemized with material and labor costs for the energy-related portion of the work. The project invoice shall be the final invoice for the work completed and should reflect the final amount paid by the customer. If the invoice does not come directly from the customer to City Light, then the customer must be copied on all communication by the sender. All project invoices must provide the following level of detail: <ul style="list-style-type: none"> ▪ Contractor company name and address ▪ Customer name and site address ▪ Unique invoice number ▪ Date ▪ Quantity of each item by model number (cost-allocation not required) ▪ Total customer cost (Eligible Costs) including the following elements <ul style="list-style-type: none"> • Equipment • Labor • Permitting • Disposal fees • Equipment rental specific to completing the project • Design or system commissioning • Sales tax • Payment Assignment Form: If the City Light customer would like the incentive payment to go directly to a contractor, this form can be completed and signed by both parties to assign payment to a third party. • W-9 Form: If assigning payment to a contractor, a W-9 form for the contractor will be required if not already on file. • Submittals: Additional submittals may be required depending on the project. Refer to the Participation Agreement specifications for additional technology-specific requirements.
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PRODUCT SPECIFICATIONS

For any product to be eligible for an energy efficiency incentive, it must be clearly marked with product information and meet all applicable federal, state, and local code requirements. All equipment must carry a safety certification by an approved testing laboratory (UL, CE, ETL, etc.). In addition, products will need to meet the following City Light specifications.

Retrofit Lighting

Measure	Specifications																									
All Lighting	<p>For any lighting product to receive an incentive it must meet the criteria included in this table. It is the responsibility of the customer to ensure appropriate illumination levels.</p> <p>To be eligible for lighting incentives, all products must meet one of the following requirements:</p> <ol style="list-style-type: none"> The product is listed on the applicable DesignLights Consortium (DLC)* Qualified Product List (QPL): <ul style="list-style-type: none"> Fixtures (including indoor, high bay, and exterior), downlights**, retrofit kits, sign lighting, and case lighting. Networked lighting controls including luminaire level lighting controls (LLLC) Horticultural lighting <p>* Downlights are <u>only</u> listed in Energy Star.</p> <p>** Must be hardwired (e.g., no pigtail screw-in) and can be any lumen output</p> <p>Or</p> <ol style="list-style-type: none"> Ad-hoc approval by City Light staff with the following product documentation requirements: <ul style="list-style-type: none"> Product LM-79 test results Other documentation as requested <p>LM-79 test results will be used to verify that proposed lighting products not listed on a QPL meet the following minimum technical specifications specific to the appropriate luminaire category.</p> <p><i>LM-79 Test Results:</i></p> <table border="1"> <thead> <tr> <th>Luminaire Category</th> <th>Lumens per Watt</th> <th>Warranty (Years)</th> <th>CRI</th> <th>Power Factor</th> </tr> </thead> <tbody> <tr> <td>Outdoor low output</td> <td>≥ 105</td> <td>≥ 5</td> <td>≥ 70</td> <td>≥ .9</td> </tr> <tr> <td>Outdoor high output</td> <td>≥ 105</td> <td>≥ 5</td> <td>≥ 70</td> <td>≥ .9</td> </tr> <tr> <td>Indoor Directional</td> <td>≥ 80</td> <td>≥ 5</td> <td>≥ 80</td> <td>≥ .9</td> </tr> <tr> <td>Indoor Ambient</td> <td>≥ 115</td> <td>≥ 5</td> <td>≥ 80 ≥ 70 (high-bay)</td> <td>≥ .9</td> </tr> </tbody> </table> <p>City Light reserves the right to deny eligibility for products that are not listed on a qualified products list.</p> <p>For retrofit lighting incentives, fixture wattage must always be entered as the full</p>	Luminaire Category	Lumens per Watt	Warranty (Years)	CRI	Power Factor	Outdoor low output	≥ 105	≥ 5	≥ 70	≥ .9	Outdoor high output	≥ 105	≥ 5	≥ 70	≥ .9	Indoor Directional	≥ 80	≥ 5	≥ 80	≥ .9	Indoor Ambient	≥ 115	≥ 5	≥ 80 ≥ 70 (high-bay)	≥ .9
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	input wattage—combined wattage of the fixture (i.e., driver, ballast, on-board controls)—and must match the product specification sheet. If the fixture has high-end trim capability or selectable wattage, use the high-end trim wattage or selected wattage instead of rated fixture wattage.																
LED Fixtures and Retrofit Kits																	
LED Fixtures	<p>New LED fixtures include all eligible luminaires (as defined by the DLC) including troffers, panels, low-bay and high-bay style fixtures, and exterior fixtures (e.g., light poles).</p> <p>TLEDs and other LED lamps are not eligible through the Commercial and Industrial Retrofit Program. You can get instant discounts on these LED lighting products and more through Lighting to Go.</p> <p>Customers receiving a commercial retrofit incentive from City Light cannot use a Lighting to Go instant discount for the fixtures used in the commercial retrofit.</p>																
Retrofit Kits	<p>Seattle City Light offers two incentive rates for retrofit kits (as defined by the DLC 'Primary Use' categories):</p> <ul style="list-style-type: none"> • Integrated retrofit kits receive \$0.15/kWh • Other (or anything not deemed 'Integrated' by DLC) receive \$0.10/kWh <p>Eligibility can be determined by visiting DLC's eligible retrofit kits page and then confirming whether the fixture is integrated or non-integrated by checking the 'Primary Use' category in the DLC listing for the fixture.</p> <p>There are two primary use designations considered 'other' or non-integrated retrofit kits, eligible to receive \$0.10/kWh:</p> <ul style="list-style-type: none"> • Linear-Style Retrofit Kits for 2x2, 1x4, and 2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces • Retrofit Kits for Direct Linear Ambient Luminaires <table border="1" data-bbox="435 1276 1430 1705"> <tbody> <tr> <td data-bbox="435 1276 932 1482">Integrated (\$0.15/kWh) retrofit kit example</td> <td data-bbox="932 1276 1430 1482"> <table border="1"> <thead> <tr> <th colspan="2" data-bbox="948 1289 1365 1339">PRODUCT OVERVIEW</th> </tr> </thead> <tbody> <tr> <td data-bbox="948 1352 1133 1386">Classification</td> <td data-bbox="1133 1352 1365 1386">Premium</td> </tr> <tr> <td data-bbox="948 1398 1133 1432">Primary Use</td> <td data-bbox="1133 1398 1365 1461">Integrated Retrofit Kits for 2x4 Luminaires</td> </tr> </tbody> </table> </td> </tr> <tr> <td data-bbox="435 1482 932 1705">Non-integrated (\$0.10/kWh) retrofit kit example</td> <td data-bbox="932 1482 1430 1705"> <table border="1"> <thead> <tr> <th colspan="2" data-bbox="948 1495 1365 1545">PRODUCT OVERVIEW</th> </tr> </thead> <tbody> <tr> <td data-bbox="948 1558 1133 1591">Classification</td> <td data-bbox="1133 1558 1365 1591">Standard</td> </tr> <tr> <td data-bbox="948 1604 1133 1638">Primary Use</td> <td data-bbox="1133 1604 1365 1667">Linear Retrofit Kits for 2x4 Luminaires</td> </tr> </tbody> </table> </td> </tr> </tbody> </table> <p>See City Light's Commercial and Multifamily Retrofit Incentive List for incentive levels.</p>	Integrated (\$0.15/kWh) retrofit kit example	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="948 1289 1365 1339">PRODUCT OVERVIEW</th> </tr> </thead> <tbody> <tr> <td data-bbox="948 1352 1133 1386">Classification</td> <td data-bbox="1133 1352 1365 1386">Premium</td> </tr> <tr> <td data-bbox="948 1398 1133 1432">Primary Use</td> <td data-bbox="1133 1398 1365 1461">Integrated Retrofit Kits for 2x4 Luminaires</td> </tr> </tbody> </table>	PRODUCT OVERVIEW		Classification	Premium	Primary Use	Integrated Retrofit Kits for 2x4 Luminaires	Non-integrated (\$0.10/kWh) retrofit kit example	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="948 1495 1365 1545">PRODUCT OVERVIEW</th> </tr> </thead> <tbody> <tr> <td data-bbox="948 1558 1133 1591">Classification</td> <td data-bbox="1133 1558 1365 1591">Standard</td> </tr> <tr> <td data-bbox="948 1604 1133 1638">Primary Use</td> <td data-bbox="1133 1604 1365 1667">Linear Retrofit Kits for 2x4 Luminaires</td> </tr> </tbody> </table>	PRODUCT OVERVIEW		Classification	Standard	Primary Use	Linear Retrofit Kits for 2x4 Luminaires
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Controls			
Standard Lighting Controls	<ul style="list-style-type: none"> • Standard Lighting Controls include: <ul style="list-style-type: none"> ▪ Daylight sensors ▪ Occupancy sensors ▪ Occupancy and daylight sensors <p>If fixtures are upgraded in addition to the standard lighting controls, there is also an incentive for fixture savings.</p>		
Networked Lighting Controls (NLC)	<ul style="list-style-type: none"> • Search for the system on the DLC's Networked Lighting Controls QPL. Provide a screenshot of the QPL listing with your pre-install documentation. • Luminaire-level light control (LLLC)/non-LLLC The incentive requires the system be listed on the NLC QPL, must be ≥20 full-fixture watts, and must have the following capabilities in order to be eligible: <ul style="list-style-type: none"> ▪ High-end trim* ▪ Occupancy sensors ▪ Daylight sensors ▪ Zoning ▪ System must be <i>capable of</i> creating at least 2 zones per 300 sf. ▪ Eligible QPL-listed NLC systems receive the following: <ul style="list-style-type: none"> ▪ LLLC - \$75/fixture incentive** + \$0.15/kWh fixture savings + \$0.15/kWh controls savings. ▪ Non-LLLC - \$50/fixture incentive** + \$0.15/kWh fixture savings (if applicable) + \$0.15/kWh controls savings. <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p><i>*If high-end trim/task tuning is applied, use the new, high-end wattage as input wattage instead of rated fixture wattage.</i></p> <p><i>**TLED products are not eligible for the \$75/-or-\$50/fixture incentive even if they are controlled by systems listed on the DLC's NLC QPL.</i></p> </div> <ul style="list-style-type: none"> ▪ <u>Additional documentation</u> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top; border-right: 1px solid black; padding-right: 10px;"> <p>Pre-install</p> <ul style="list-style-type: none"> ▪ A narrative of the Sequence of Operations (SOO) by space type (click here for guidance: Lighting Design Lab Guide) ▪ Floor plan - optional (if area controlled is >500 sq ft) ▪ Site visit by EMA </td> <td style="width: 50%; vertical-align: top; padding-left: 10px;"> <p>Post-install</p> <ul style="list-style-type: none"> ▪ As-built narrative of sequence of operations ▪ Floor plan (optional) ▪ Site visit including a sampling to confirm sequence of operations </td> </tr> </table> 	<p>Pre-install</p> <ul style="list-style-type: none"> ▪ A narrative of the Sequence of Operations (SOO) by space type (click here for guidance: Lighting Design Lab Guide) ▪ Floor plan - optional (if area controlled is >500 sq ft) ▪ Site visit by EMA 	<p>Post-install</p> <ul style="list-style-type: none"> ▪ As-built narrative of sequence of operations ▪ Floor plan (optional) ▪ Site visit including a sampling to confirm sequence of operations
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Controls-Only Projects	<ul style="list-style-type: none"> • Proposed controls-only projects may receive the same energy savings incentive as standard lighting efficiency projects (\$0.15/kWh control savings). 		

Other Lighting Specifications																						
Fixture Removal	<ul style="list-style-type: none"> Incentives for fixture removal are only eligible within the context of a larger project (i.e., as part of a retrofit project being submitted to City Light) and qualify for the energy savings incentive. To receive funding for Fixture Removal, the fixture must be completely removed from the premises, and the electrical wiring to the fixture must be removed from the source junction box. 																					
Burned-Out Fixtures	<ul style="list-style-type: none"> If $\leq 10\%$ of the fixtures in a given area (e.g., warehouse ceiling) are non-functional (flickering, pulsing, not working at all, etc.), all fixtures (including the 10%) will be eligible for an incentive. If $> 10\%$ are non-functional, the non-functional fixtures will not be eligible for an incentive. 																					
Indoor Horticulture	<ul style="list-style-type: none"> City Light requires all products and equipment submitted for indoor horticulture projects to be listed on DLC's Indoor Horticulture Qualified Products List or meet all the criteria in the following table: <table border="1" data-bbox="461 657 1398 1094"> <thead> <tr> <th>Parameter/Attribute/Metric</th> <th>Requirement</th> <th>Method of Evaluation</th> </tr> </thead> <tbody> <tr> <td>Photosynthetic Photon Efficacy (PPE)</td> <td>$\geq 1.9 \mu\text{mol/J}$</td> <td>LM-79</td> </tr> <tr> <td>Photosynthetic Photon Flux Maintenance (PFMp) Q90</td> <td>$\geq 36,000$ hours</td> <td>LM-80</td> </tr> <tr> <td>Warranty</td> <td>5 years</td> <td>Specification sheet</td> </tr> <tr> <td>Power Factor</td> <td>≥ 0.9</td> <td>LM-79</td> </tr> <tr> <td>Total Harmonic Distortion</td> <td>$\leq 20\%$</td> <td>LM-79</td> </tr> <tr> <td>Safety Certification</td> <td>UL or ETL/Interec listed</td> <td>Specification sheet</td> </tr> </tbody> </table> <p>* Applies to fixtures used in vegetation and flowering stages.</p> <ul style="list-style-type: none"> In addition to the required documentation for all standard lighting projects, indoor horticulture projects must also provide: <ul style="list-style-type: none"> Cannabis projects only: <ul style="list-style-type: none"> Washington State Liquor and Cannabis Board (WSLCB) license Seattle/local Marijuana Regulatory Business License Seattle/local Business License Tax Certificate Cooling equipment description For change of use or new construction: a fixture spacing floor plan showing the layout and area of the lighting racks Tunable fixtures (any fixtures with variable wattage input) must use full input wattage to calculate incentive levels and energy savings. <p>City Light only provides funding for LED fixtures that meet DLC specifications.</p>	Parameter/Attribute/Metric	Requirement	Method of Evaluation	Photosynthetic Photon Efficacy (PPE)	$\geq 1.9 \mu\text{mol/J}$	LM-79	Photosynthetic Photon Flux Maintenance (PFMp) Q90	$\geq 36,000$ hours	LM-80	Warranty	5 years	Specification sheet	Power Factor	≥ 0.9	LM-79	Total Harmonic Distortion	$\leq 20\%$	LM-79	Safety Certification	UL or ETL/Interec listed	Specification sheet
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Retrofit Non-Lighting Projects

Measure	Specifications
All Non-Lighting Projects	<ul style="list-style-type: none"> • City Light does not fund installation of used equipment or the replacement of failed equipment. • Backup equipment is not eligible for funding. Backup equipment is defined as equipment that is redundant to the primary equipment and rarely operates. • Equipment operating in a lead/lag configuration (alternating on/off sequence) is eligible for funding. Funding shall be based on the savings of the combined operating hours of each item. • Savings are calculated based on AHRI-rated equipment efficiencies at full load and part load conditions. Full load efficiencies cannot be substituted for weighted average or seasonal efficiencies. Integrated Part Load Value (IPLV) will be used for standard conditions and Non-Standard Part Load Values will be used for non-standard conditions, and the two will not be interchangeable. • If your project results in both gas and electric savings, you may be eligible for incentives from both City Light and PSE. Your total incentive from both utilities may not exceed 70% of the total project cost. You will need to apply separately to both utilities. • City Light cannot currently incentivize gas to electric energy retrofit projects per state law. City Light can pay for electricity efficiency compared to standard practice/code or existing condition.
Baseline assumptions	<ul style="list-style-type: none"> • In most cases, energy savings will be calculated using the Seattle Energy Code, Federal Code, or standard practice as the baseline condition for equipment replacement. Key exceptions are VSDs installed on equipment with remaining service life, HVAC controls, and electric resistance heating retrofit projects. • Upgrades that involve several complex measures such as control projects, heat recovery, changing out large parts of a HVAC system, or whole building level changes may be eligible for custom incentives that use a pre and post evaluation as a basis for savings.

Measure	Specifications
Pumps, Fans, and Circulators	<ul style="list-style-type: none"> • Installations of new clean water pumps ≤200 HP, fans and blowers, and ECM circulators ≤ 3.5 HP are no longer eligible for funding as of February 1, 2021: <ol style="list-style-type: none"> 1. <u>1-200 HP Clean water pumps</u> <ul style="list-style-type: none"> ▪ End suction frame mounted ▪ End suction close coupled ▪ Inline close coupled & split coupled ▪ Submersible vertical turbine ▪ Vertical multi-stage 2. <u>Fans and Blowers < 11.2 kW</u> 3. Electrically Commutated Motor (ECM) clean water circulator pumps. (Commercial is ≤3.5 HP, Residential any size)
Variable Speed Drives on HVAC pumps and fans (e.g. converting constant speed to variable speed)	<ul style="list-style-type: none"> • Variable speed drives installed on constant speed pumps and fans, or new pumps or fans integrated VSDs are eligible for funding if there is remaining service life. • Baseline energy consumption is calculated based on the existing equipment operation and the existing efficiency of the pump and/or fan. • VSDs installations are NOT eligible for funding if required by code, <ul style="list-style-type: none"> • Industrial process load VSDs are case-by-case and may be eligible.
Variable Speed Drives on Air Handling Units (AHUs) <i>Note: An AHU includes both the supply and return fan.</i>	<ul style="list-style-type: none"> • This measure is deemed per BPA implementation manual. • Existing constant volume AHU must serve variable air volume (VAV) systems. • Incentives shall be based on the total rounded HP that is controlled by the VSD. • The new VSD shall have a screen or digital readout that indicates output frequency, current, voltage, power (kW), power factor and percent speed. • If the VSD will be connected to the building’s control system, the VSD must communicate kW and percent speed as trendable data points. • Existing flow control devices (e.g. fan inlet vanes, inlet cones, or outlet dampers) being replaced by a VSD shall be fixed in the open position or completely removed. • VSD control status must be set to “auto”. • Post-installation, customer must demonstrate the fan speed varies below 80% for 1 hour based on zone conditions, via a weekly trend.

Measure	Specifications
Chiller Plant Improvements	<ul style="list-style-type: none"> 1:1 replacement of chillers is no longer eligible for funding as of January 1, 2022. Custom chiller plant improvements that include controls, process loads, heat recovery, and reconfigurations are eligible as a custom incentive.
Dedicated Outdoor Air System	<ul style="list-style-type: none"> Dedicated Outdoor Air System (DOAS) retrofits will be treated as a custom project. Very High Efficiency Dedicated Outdoor Air Systems shall meet NEEA's requirements at https://neea.org/our-work/very-high-efficiency-doas-requirements If DOAS is coupled with Variable Refrigerant Flow (VRF): <ul style="list-style-type: none"> Controls must lock out heating on VRF whenever free cooling is enabled. Heating setpoints should be well below free cooling setpoint. Heating/cooling system and HRV should be in an unoccupied mode at night. Recommended heating setback of >10 degrees F, and cooling setback of >6 degrees. Heating and cooling fans shall be off whenever setpoint is met
Refrigeration equipment, Variable Refrigerant Flow (VRF), and heat pump equipment	<ul style="list-style-type: none"> New refrigerated cases shall reference the Federal Energy Code §431.66 as the baseline energy consumption for the class and type of equipment of the existing case. Retrofits of existing refrigerated cases shall reference the existing energy consumption as baseline. Installer must have a refrigeration and air conditioning contractor's license. See Refrigeration Licensing code requirements at http://www.seattle.gov/sdci/codes/licensing-and-registration/refrigeration-licensing VRF and heat pump retrofits must replace electric resistance heating or be a ground- or groundwater-source VRF, as of April 20, 2020.
Heat Pump Water Heater Systems	<ul style="list-style-type: none"> Must meet NEEA's Advanced Water Heating Specification 8.0, commercial only. Systems <=120 gallons not eligible. https://neea.org/our-work/advanced-water-heating-specification <p>Savings are custom calculated.</p>
Measure	Specifications
Data Center and IT efficiency measures	<ul style="list-style-type: none"> Data Center / IT measures are available for Commercial Customers only. Uninterruptible Power Systems (UPS) ≥10 kVA may receive a \$0.23 per kWh incentive, smaller systems <10 kVA qualify for \$0.12 per kWh. Plug load reduction shall use a custom calculation. Submetering may be required to determine the energy savings. Computer Room Air Conditioners (CRACs) projects must incorporate efficiencies above code requirements, such as VSDs or Electronically Commutated Motors (ECM) motors and controls. Air flow management energy savings shall use a custom calculator.

<p>Other measures</p> <p><i>(City Light will provide customer with additional requirements if pursuing these measures)</i></p>	<ul style="list-style-type: none">• Process loads incentives shall be for industrial customers only, and are custom-calculated.• HVAC controls upgrades (City Light will provide incentives based on the energy savings project cost portion only, not the full scope of the project).• If your building must comply with the City of Seattle’s Tune Up ordinance, you may apply for Building Automation System controls improvement incentives 18 months prior to your required tune-up date.
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