



Energy Smart Services

solutions &
incentives for
business

SECTION 1

ENERGY SMART SERVICES OVERVIEW



- Welcome to the Energy Smart Services Program Manual. Inside, you will find the service descriptions, specifications, forms and instructions you need to participate in Seattle City Light's conservation services for medium and large businesses.
- City Light has a successful 25 year history of meeting its customers' growing demand for electricity by focusing on energy efficiency. It makes good financial sense to use what we have wisely before looking to buy power from other sources.
- Energy Smart Services partners with customers to offer technical assistance and financial incentives to help integrate efficient technologies and strategies into their businesses.
- In existing facilities, as well as new construction projects, customers are making buildings more efficient, improving their bottom lines, and freeing up money for new initiatives. And they are improving performance: efficient and well-designed lighting improves the work atmosphere; industrial process improvements speed up production lines; and HVAC improvements enhance tenant comfort.
- It's not about doing without or scaling back. It's about making cost-effective investments in efficiency to get more work out of each kilowatt-hour purchased.

from  Seattle City Light

Section 1. Energy Smart Services Overview

- Summary of Services
- How To Use This Manual
- How to Apply
- Application for Service

Summary of Services

Seattle City Light's steadfast commitment to energy efficiency as a cost-effective resource provides an opportunity for customers to reduce energy costs and enhance business performance. Through Energy Smart Services, City Light offers its medium and large commercial, industrial, institutional and governmental customers a comprehensive menu of energy efficiency services including a wide variety of financial incentives and technical assistance intended to flexibly meet their needs. Efficiency improvements benefit both the customers and Seattle City Light since customers pay lower electricity bills and Seattle City Light is able to defer investment in costly new generation capacity and power purchases. What follows in this section is an overview of Energy Smart Services' offerings.

FINANCIAL INCENTIVES FOR ECM INSTALLATION

Energy Smart Services encourages customers to reach beyond standard practice and use promising new technologies. By helping to pay for the additional cost of the higher efficiency option, Energy Smart Services aims to motivate customers to purchase more efficient equipment than they would in the absence of funding. Sometimes the selection of equipment is the same as it would have been without Seattle City Light funding, but funding is nevertheless requested. Funding such a project would result in what is known as a "free rider." The structure of the program discourages free riders in order to provide the best possible investment of utility funding and the broadest benefits to the community.

Energy Smart Services works in conjunction with the normal business relationships between the customer and private sector service providers. The customer, usually the building owner or manager, chooses the designers and installation contractors for the project. The firms and individuals providing these services to the customer are referred to within the context of Energy Smart Services as "trade allies." The conservation projects that receive Seattle City Light funding are developed through a collaborative process between the customer, trade ally(s), and the Seattle City Light Energy Management Analyst. The members of the project team work together to obtain a project description that meets the goals of all three parties.

1. Simple Rebates

Simple Rebates offer a flat per-unit funding amount, making them the easiest way to participate in the Energy Smart Services program. Simple Rebates are currently available for the following:

- Exit sign replacements with no more than 5 input watts (existing buildings only): \$30 per sign
- Exit sign retrofits (existing buildings only): \$20 per sign
- Wall-mounted occupancy sensors (except where required by code): \$30 per sensor
- Ceiling-mounted occupancy sensors (except where required by code): \$90 per sensor

2. Standard Incentives

Standard Incentive funding levels and savings calculations are determined using standardized calculations presented on the program's *Funding Calculation Worksheets*. The standardized worksheets and specifications can be downloaded directly as Excel and .pdf files at the Program's Web site, www.EnergySmartServices.com. Once finalized, the worksheets and specifications become part of the contract between the customer and Seattle City Light. Standard Incentives are offered for the following technologies:

Lighting

- T5, T8 fluorescent lamps, ballasts, and fixtures (with electronic ballasts)
- Compact fluorescent (with detachable lamps)
- Metal halide
- High pressure sodium
- Low pressure sodium
- Central lighting controls

Heating, Ventilation and Air Conditioning (HVAC)

- Chillers
- Air conditioners
- Heat pumps
- Variable speed drives retrofitted on HVAC variable air volume fans

Premium Efficiency Motors

3. Custom Incentives

Any Energy Conservation Measure that reduces kWh consumption without fuel switching may be considered for funding using a customized funding calculation if the measure isn't already covered by a Standard Incentive. Examples of technologies covered by Custom Incentives include but are not limited to: HVAC and industrial controls, daylighting, high efficiency transformers, elevators, variable speed drives in industrial applications, and the latest high-efficiency industrial process equipment. This option gives Energy Smart Services the flexibility to support leading edge technologies and technologies specific to particular industrial or commercial facilities.

4. Points to Remember Regarding Financial Incentives for ECM Installation

- The purpose of Energy Smart Services installation incentives is to help the customer purchase equipment that is more efficient than what he or she would have purchased in the absence of funding.

- With the exception of the Simple Rebates, funding levels are calculated on a project-by-project basis.
- The scope of work and the funding amounts are finalized in a contract between Seattle City Light and the customer.
- A contract **must** be executed between the customer and Seattle City Light **before** equipment is purchased or installed.

TECHNICAL ASSISTANCE SERVICES

1. Facility Assessments

Energy Smart Services offers free “Facility Assessments” for existing facilities. The Facility Assessment includes a review of the facility’s electricity consumption patterns, recommendations of Energy Conservation Measures, and Operations and Maintenance Measures for the customer’s consideration, and estimates of energy savings and Energy Smart Services funding available. Energy conservation measures selected by the customer then become eligible for a Financial Incentives for ECM Installation contract.

2. Energy Analysis Assistance

Through Energy Analysis Assistance, customers can receive funding for in-depth energy analysis of Custom Incentive opportunities by a consultant they select and hire. The Energy Analysis Assistance contract is based on a consultant’s proposal to analyze a specific list of measures using methodologies explained in the proposal. Energy Analysis Assistance is typically offered for new construction projects, major remodels, or complex Energy Conservation Measures recommended for retrofit of an existing facility. Energy Analysis Assistance helps designers and customers include a discussion of the annual costs of electricity and the amount of Energy Smart Services funding availability for an expanded list of design options. An Energy Analysis Assistance contract must be signed with City Light before the analysis is performed.

3. Building Commissioning

Building commissioning is a systematic process for ensuring that the energy systems within a facility perform in accordance with its design intent, contract requirements, and the owner’s operational needs. Seattle City Light provides financial and technical support for the building commissioning process in new construction and major remodel projects with construction budgets over \$5 million. Consideration may also be given to campuses or other multiple building facilities that meet the construction cost threshold if considered collectively. There are currently no retro-commissioning or re-commissioning services for existing facilities through Energy Smart Services.

City Light funds support: (1) development of a commissioning plan early in the building development process and (2) assessment of energy impacts from commissioning activities.

4. Lighting Design Lab

The Lighting Design Lab offers training and support for commercial and industrial lighting designers, contractors and building owners through the use of its consultation services, electric lighting mock-up facilities, and classroom training opportunities. Seattle City Light supports the Lab as a source of reliable guidance and information on the use of energy efficient lighting practices in commercial and industrial spaces. City Light staff work closely with the Lab to help customers choose lighting systems that enhance their business objectives.

5. Assistance with LEED™ Certification for Sustainable New Buildings

Seattle City Light encourages building owners and developers to incorporate sustainable building goals early in building programming and design. Sustainable measures use natural resources efficiently, prevent pollution, and improve the economic, environmental, and social well being of current and future generations. Seattle City Light and members of Seattle's Green Building Team offer significant technical resources to help customers formulate their ideas and work through design processes. The LEED™ Incentive Program provides financial grants of \$15,000 or more to building owners and developers who incorporate meaningful and cost-effective sustainable building ideas into their projects and commit to pursuing LEED™ (Leadership in Energy and Environmental Design) certification.

6. Climate Wise Greenhouse Gas Reduction Assistance

Climate Wise is a voluntary partnership program that encourages cooperation between public, private, and non-governmental sectors to promote environmental performance and greenhouse gas emissions reductions while boosting business productivity and profits. Climate Wise partners with commercial and industrial customers to identify business strategies that save money and help protect our climate. Climate Wise then supports these strategies with a coordinated approach including technical assistance, access to service offerings from a variety of agencies, financial incentives, peer exchange, public recognition, and marketing opportunities.

OPERATIONS AND MAINTENANCE

Equipment efficiency is dependent not only on the initial equipment selection, but also on careful operations and maintenance over the life of the equipment. Energy Smart Services promotes energy efficient operations and maintenance through a number of program elements. As part of free Facility Assessments, the customer receives a list of recommended Operations and Maintenance Measures that have a rapid payback due to low cost and high savings. When a contract is offered to the customer for an Energy Conservation Measure, the scope of work includes not only the capital upgrades covered by Energy Conservation Measures, but also specific O&M Measures for the systems directly affected by the Energy Conservation Measures. There is also a limited offering for funding of other O&M Measures at a rate of 1 cent per first year kWh savings.

PLUG LOAD SERVICES

Since 2001, Seattle City Light has been offering the free installation of a cold drink vending machine control device called "VendingMiser™" that can reduce energy use of these machines by up to 40%. Section 5–*Plug Loads Services*, shows how to arrange for installation of VendingMisers™ and makes other plug load energy efficiency recommendations.

How to Use This Manual

Seattle City Light is a municipal utility—a department of the City of Seattle. As a government agency, it must comply with specific Federal and State laws that regulate the distribution of public funds. Such regulations require that City Light carefully document funding agreements and the value it receives for any payments provided to customers. For this reason, an Energy Smart Services Contract is required for any incentive payments provided for conservation projects. Further, the terms of the Energy Smart Services contract require inspection and verification of the installation of conservation measures. This provides the necessary “due diligence” that ensures that Seattle City Light receives the expected value—reliable energy savings—that justify City Light’s investment.

City Light’s intent is to reduce program requirements to the essential minimum. The purpose of this manual is to clearly describe the available program services and benefits to customers, participation steps, contract requirements, and technical specifications. City Light also provides support tools in the form of electronic spreadsheets that standardize project definition and, in most cases, energy savings and incentive calculations. Finally, if this manual falls short in clarifying program features or requirements, additional information can be found on the Web site at www.EnergySmartServices.com or by calling the program at (206) 684-3254.

The manual is organized into five primary sections: *Energy Smart Services Overview*; *Financial Incentives for ECM Installation*, *Technical Assistance Services*; *Operations & Maintenance Services*; and *Plug Load Services*.

Section 2—*Financial Incentives for ECM Installation*, begins with general information and is then further subdivided into four sub-sections based on the financial incentive mechanisms used in particular situations. These describe financial incentives available for the installation of energy efficient equipment, and the process to apply and complete a successful project. Customers interested in applying for funding for specific technologies should focus not only on the specific sub-section, but should also pay careful attention to the first part of *Financial Incentives for ECM Installation*, where steps to participate and standard specifications related to all funding contracts can be found. Some sub-sections include samples of *Funding Calculation Worksheets*, which are easily identified by the colored paper on which they are printed.

At the end of the manual is a resource directory with useful referrals and Web site addresses for more information. A glossary of terms is also located here.

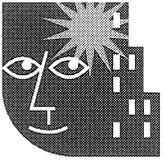
This manual will be updated over time to reflect changing codes, technologies and practices. To facilitate keeping the manual current, each section has an effective date on the bottom of the page. As changes are made, the most recent version of the manual will be located on the www.EnergySmartServices.com Web site. Customers can also call 684-3254 to verify they have the most recent version and request updates.

How to Apply

A customer interested in any of the services described in this Program Manual can get started by filling out a brief *Application for Service*. This can be done in a number of ways:

- Online at www.EnergySmartServices.com
- Over the phone at (206) 684-3254
- By mail (An application form and mailing information are provided on the following page of this manual.)
- By faxing the application form to (206) 684-3682

When an *Application for Service* is received it is forwarded to an Energy Management Analyst, who contacts the applicant within 10 days to understand their needs, help identify energy efficiency opportunities, and guide them through the conservation contracting process. Customers wishing to check the status of their application can do so by calling (206) 684-3254.



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| | |
|-----------------------------|-------------------|
| City Light Use Only: | |
| Project #: | _____ |
| Building #: | _____ |
| EMA: | _____ Supv: _____ |
| Service Rate: | _____ |

APPLICATION FOR SERVICE

Customer Name: _____

Facility Name: _____

Facility Address: _____

City State Zip

Contact Person: _____

Name Title

Mailing Address (if different from above) City State Zip

Phone Fax E-Mail Address

Have you spoken with anyone else at Seattle City Light about this project? No Yes

Who? _____

Primary use of facility (office, retail, hospital, manufacturing, etc.): _____

Building occupancy (lease, owner occupied, multi-sited: chain, franchise; other): _____

- Area of Interest: New Construction Addition to Existing Facility Other
 (Please check all that apply) Remodel Equipment Replacement
 Facility Assessment Environment

- Type of Project: Lighting
 Heating, ventilation, air conditioning (HVAC)
 Industrial Processes
 Other: _____
 (Please Describe)

(Optional) What kind of assistance would you like from City Light?

Please return this form to:

Seattle City Light
 C & I Energy Management Services, MS 3436
 700 5th Avenue – Suite 3300
 Seattle, WA 98104-5031

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