MacDonald-Miller
FACILITY SOLUTIONS

Memorandum

To:	City of Burlington	Date:	March 7, 2025
From:	MacDonald-Miller Facility Solutions	Project No.:	M2736.02.001
Re:	Capital Program Energy Audit Report		

Task 4: Capital Program Audit

Task 4a: Facilities Audit for Energy Efficiency and Renewable Energy Opportunities

MacDonald Miller Facilities Solutions (MMFS) has worked closely with the City of Burlington's Facility Manager to identify 11 buildings for inclusion in a Capital Program Energy Audit (CPEA). Once the buildings were identified, MMFS prepared the CPEA by assessing the building envelope, lighting systems, HVAC equipment, power sources, energy management systems, and overall energy usage patterns. The CPEA provides a list of Energy Efficiency Measures (EEMs) and provide rough-order-of-magnitude pricing, energy savings, and GHGe reductions for each EEM, including a preliminary assessment of the potential to integrate renewable energy solutions such as solar PV and battery storage systems, and the feasibility of microgrids at key facilities. The CPEA also provided an overview of grants and incentives that may help offset capital investment by the City for implementation of EEMs. The results of the CPEA are provided in the attachments.

In parallel, MMFS has created an ENERGY STAR® Portfolio Manager (ESPM) account for each of the buildings in scope to ensure that the data is accurately entered and up to date. This process has helped to determine how many of the identified buildings are considered Phase 2 buildings by Washington Department of Commerce and subject to the CBA.

MMFS has also reviewed Burlington's existing procurement policies related to building materials and mechanical systems and identified potential new or updated policies to better support energy-saving, electric, and renewable energy solutions. The result of the revisions are provided in the attachments.

Task 4b: Fleet Audit for Emissions-Reduction Opportunities

Pacific Mobility Group (PMG) has conducted an audit of the City of Burlington's vehicle fleet to assess its current operations and develop recommendations for transitioning to an electrified fleet. The first phase of the audit involved collaboration with city staff to gather information on the existing fleet. This included documenting the age, condition, and use of the vehicles. Understanding the frequency, mileage, and operational demands of the fleet also helped to identify which vehicles are best suited for electrification.

Based on vehicle condition, use case, available electric replacement vehicles, and the city's priorities, PMG has proposed which vehicles can be transitioned to electric, in what order, and at what cost. The process has evaluated the feasibility of transitioning to hybrid and fully battery-electric vehicles, based on operational demands, suitable alternatives, potential emission reductions, and projected cost savings. PMG also evaluated the existing infrastructure necessary to support the transition, including the need to prepare for and install charging stations. Additionally, PMG will assess the city's ability to maintain and service electric vehicles.

PMG has conducted an emissions reduction analysis to estimate the potential GHG reductions that could result from electrifying the fleet. This analysis has compared the emissions profile of the current fleet (including fossil fuel-powered vehicles) with the projected emissions from a fleet that includes hybrid and fully electric vehicles. By quantifying the potential emissions reductions, PMG has provided the city with a clear picture of the carbon benefits of transitioning to a more electrified fleet.

PMG has conducted a financial analysis of fleet electrification. This analysis has compared the capital and operating costs associated with electric vehicles versus the current costs of operating and maintaining the existing fossil fuel-powered fleet. The financial evaluation includes the initial costs of purchasing electric vehicles, the cost of installing and maintaining charging infrastructure, and long-term savings from reduced fuel consumption and maintenance needs associated with electric vehicles. Additionally, PMG has considered the total cost of ownership for electric vehicles over their projected lifespan. Finally, PMG has identified possible funding opportunities to support the city's fleet electrification efforts. This includes outlining federal, state, and local programs such as grants, incentives, tax credits, that could help offset the initial costs of fleet electrification.

A chapter has been provided in the Capital Program Energy Audit (CPEA) report including the findings of the fleet audit, recommendations for vehicle replacement including the planning-level cost estimates and emissions reduction potential, and funding opportunities.

Deliverables: Draft and final Capital Program Energy Audit Report; ESPM account update (if needed); prioritized facilities for future investment-grade audit; procurement policy recommendations.

Attachments

Limitations

Burlington Capital Program Energy Audit

Burlington Procurement Policy

Fleet Analysis

Limitations

The services undertaken in completing this technical memorandum were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This technical memorandum is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this technical memorandum apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this technical memorandum.

Attachment

Burlington Capital Program Energy Audit

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

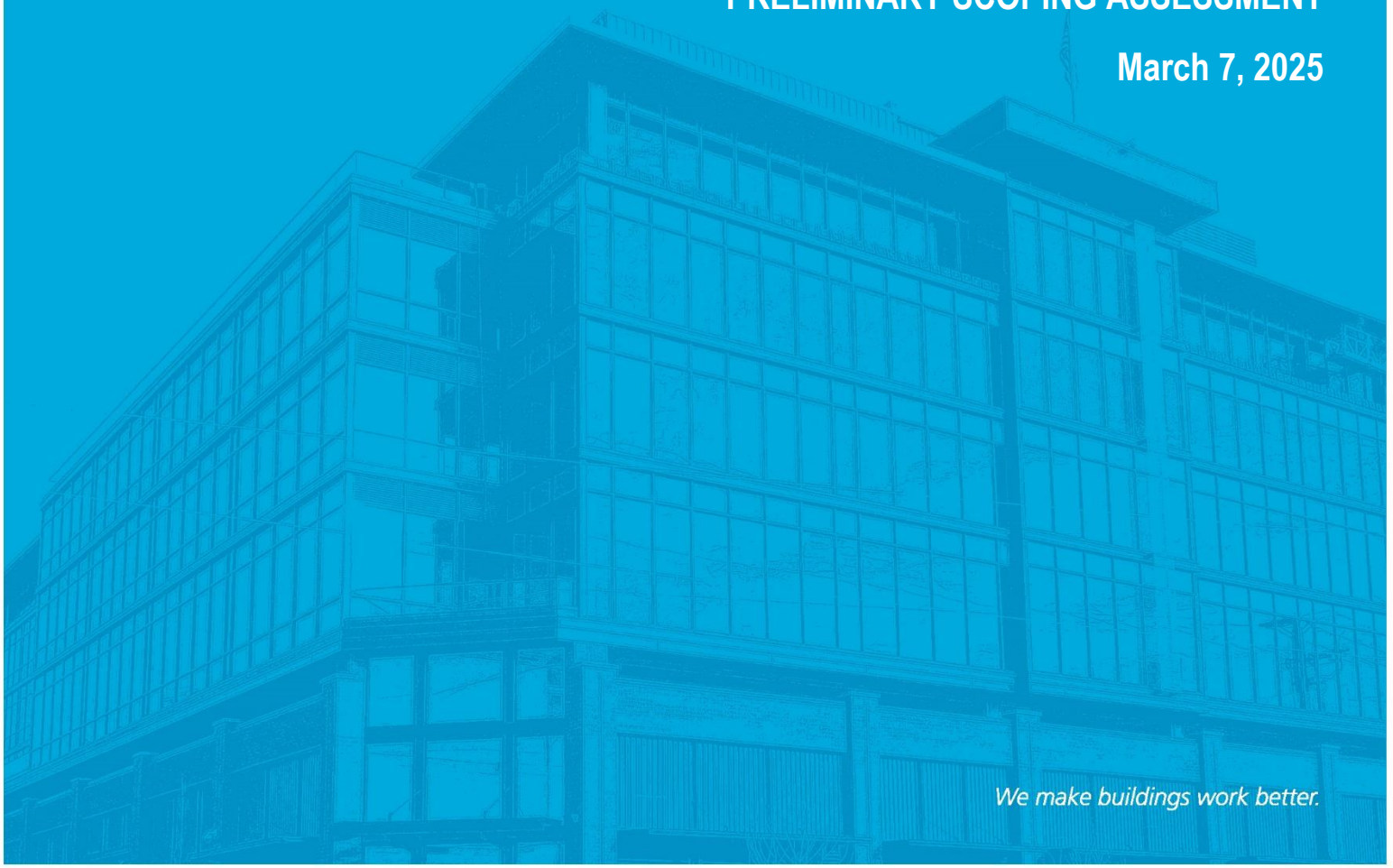
COUNTDOWN TO COMPLIANCE

Fire/EMS Station

16220 Peterson Rd, Burlington, WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025



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1.0 SUMMARY

The purpose of this report is to further evaluate the Fire/EMS Station building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated. If the EUI is above the EUIt, recommendations are proposed to get the building under the EUIt. If the facility's EUI is less than the EUIt, the facility's energy usage is preliminarily in compliance, and recommendations to further reduce energy use of the building is optional. Additional facility documentation is also required to be uploaded to the Department of Commerce portal to be in full compliance. These additional facility documentations are an Energy Management Plan, Operations and Maintenance Plan and Capital Management Plan. Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:

A facility is considered in energy compliance if the EUI is less than the EUIt, therefore this facility is in compliance. It should be noted that the EUI and EUIt are based on Energy Star inputs and utility data from 2023.

This facility must submit paperwork to show compliance to the Clean Buildings Standard by June 1, 2027. The early compliance option begins June 1, 2023 and must show compliance to the energy target in a period not to exceed two years prior to the submission.

Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building.

The next step will be to meet and review the EEMs in more detail. Based on these selected measures, MacDonald-Miller will provide an Investment Grade Audit (IGA) proposal that describes the scope of work to be studied as well as the cost to complete it. The deliverable from this effort is an investment-level scope of work with firm costs, energy savings and EUI reductions associated with the chosen EEMs.

Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

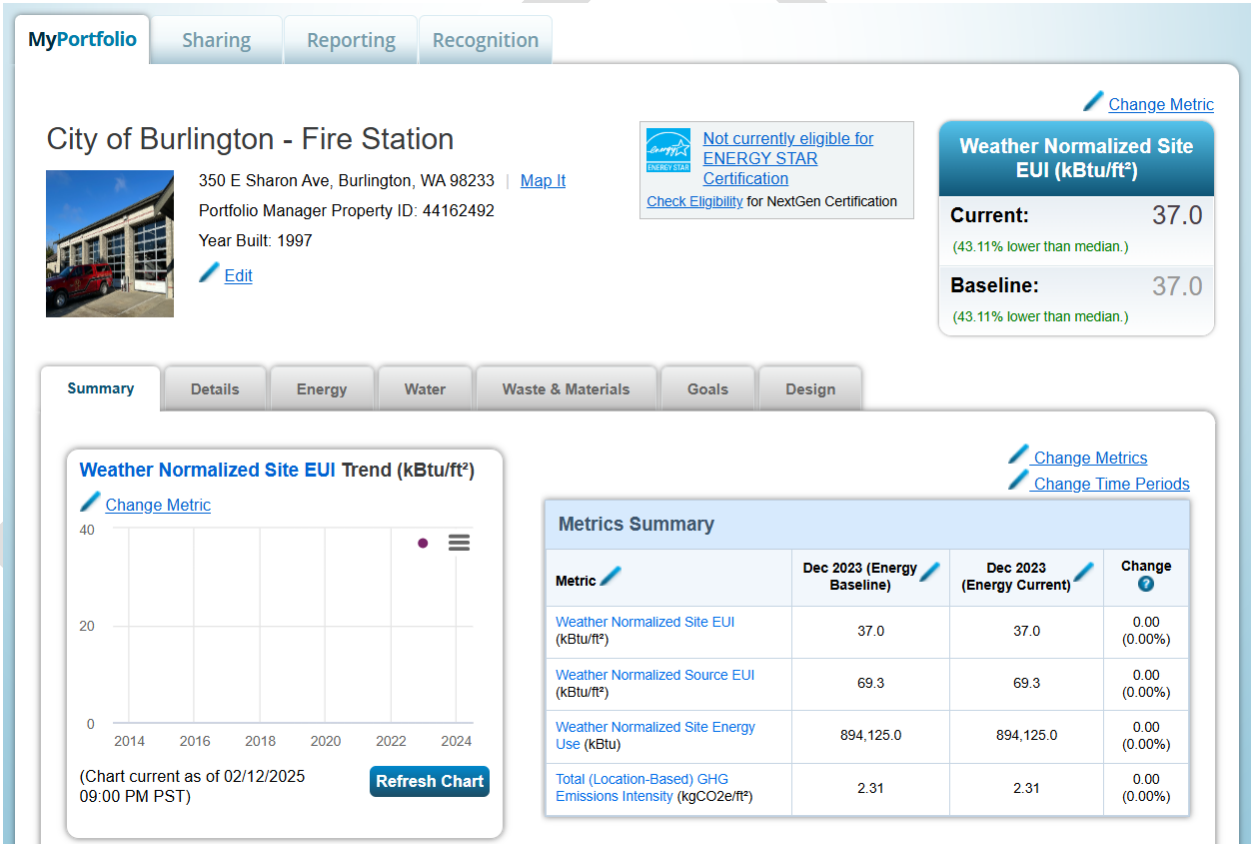
It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built. We highly recommend being completed with the improvements to allow 18-24 months prior to the submission date (June 1, 2027). This will allow 6-12 months to commission the facility and confirm the facility is operating properly and then 12 continuous months of energy usage for reporting to the Department of Commerce through Energy Star.

2.0 ENERGY STAR INFORMATION

The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

The Department of Commerce has published target EUIs based on building type and climate zone. Western Washington is Climate Zone 4C while Eastern Washington is Climate Zone 5B. To be in compliance with the Clean Buildings Standards, your buildings EUI must be less than the published target EUI for your building type and climate zone.

Energy Star Site Information



2023 Weather Normalized EUI = **37.0**
Clean Buildings EUIt = **71.5**
EUI Below Target = **-34.5**

Based on owner provided information, the gross floor area is 24,177 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is below the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist Fire/EMS Station with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

Fire/EMS Station			2023 EUI: 37.0 Target EUI: 71.5		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings & Incentive
			Low	High	Savings
IGA	**Investment Grade Audit (IGA)** - Detailed Review of As-Builts for Existing Systems, Measure Development, Energy Savings Calculations, Preliminary Design of DDC & Mechanical, Incentive Applications (State & Local), Estimating & Preconstruction Services.	$ 19,342	N/A		Required for Guaranteed Energy Savings and utility incentive applications as applicable
EEM 1	**Smart Building Analytics and Fault Detection** Provide fault analytics and monitoring of major equipment to achieve peak energy performance	$ 21,000	0.3	0.5	$ 200
EEM 2	**Radiant Heaters** Add Radiant Tube heaters in the High Bay Areas with roll up door lock out.	$ 196,000	1.7	2.0	$ 1,200
EEM 3	**Replace Package and split AC/HP Units** Replace package and split AC/HP units with new higher efficiency units.	$ 723,000	2.1	2.7	$ 1,000
EEM 4	**HVAC Controls Upgrade** Upgrade existing controls to newer web based controls.	$ 510,000	1.5	1.9	$ 800
EEM 5	**Domestic Hot Water Tank Upgrades** Replace existing hot water tanks with newer more efficient HP technology	$ 60,000	2.4	3.1	$ 200
	ROUGH ORDER OF MAGNITUDE	**$ 1,529,342**	**8.0**	**10.2**	**$ 3,400**
		Post Project EUI:	**29.0**	**26.8**	

Due to the recent completion of lighting upgrades to LED for this building, additional lighting measures were found to be unnecessary at this time.

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

In addition to the above recommended EEM's the following items will need to be developed and implemented for a period of 1 year prior to submission:

- An Energy Management Plan
- An Operations and Maintenance Plan
- A Capital Management Plan

4.0 PROJECT INCENTIVES

UTILITY INCENTIVES

Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

Cascade Natural Gas

Cascade Natural Gas
WA Commercial and Industrial Incentives

Rebates effective on installs on or after March 15, 2024

Heating	**Warm Air Furnaces - $6.00/kBtu/hr** High Efficiency Condensing Furnace—Min 91% AFUE **Ex:** 120 kBtuh x $6/ kBtuh = $720	**Boiler Steam Trap - $125** Min 300 kBtu in; steam pressure at 25 psig or > Retrofit Only
	HVAC Unit Heater - $5.00/kBtu/hr High Efficiency Condensing—Min 91% AFUE **Ex:** 180 kBtuh x $5/ kBtuh = $900	**Demand Control Ventilation - $50/nominal ton** 5 tons ≤ Unit Cooling Capacity ≤ 20 tons **Pre-Approval Required**
	Radiant Heating - $15.00/kBtu/hr Direct fired radiant heating **Ex:** 180 kBtuh x $15/ kBtuh = $2,700	**High-Efficiency Condensing Boiler - $10.25/kBtu/hr** Min 94% Thermal Eff & 300 kBtu input **Ex:** 1600 kBtuh x $10.25/ kBtuh = $16,400
	Install any piece of HVAC equipment and receive a $100 incentive bonus. Applies to warm air furnaces, HVAC unit heaters, radiant heaters, and both condensing and mid-efficiency boilers	
Food service Equipment	**Gas Griddle - $600** ENERGY STAR® ≥38% Cooking Eff/ ≤2,650 Btu/hr sq ft Idle Rate	**Gas Convection Oven - $800** ENERGY STAR® ≥44% Cooking Eff/ ≤13,000 Btu/hr Idle Rate
	Double Rack Oven - $2,700 FSTC Qualified ≥50% Cooking Eff/ ≤3,500 Btu/hr/Idle Rate D Rack	**Gas Conveyor Oven - $700** ≥42% tested baking efficiency
Weatherization	**Windows - (retrofit only)** Pre-Existing must be single pane; Post must be ENERGY STAR® Northern Zone U-Factor ≤ 0.30 - $7.50/sq ft U-Factor ≤ 0.22 - $9.00/sq ft	**Attic Insulation - (retrofit only)** Min R-30 - $2.00/sq ft Min R-45 - $2.50/sq ft
	Floor Insulation - (retrofit only) Min R-30 - $1.25/sq ft	**Hot Fluid Pipe Insulation - (retrofit only)** >140F, <200F, 1.5" insulation - $15.00 per linear foot, ≥ 200F, 2.5" insulation- $25.00 per linear foot
	Roof Insulation - (retrofit only) Min R-30 - $2.00/sq ft	**Wall Insulation - (retrofit only)** Min R-19 - $2.00/sq ft
Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597
	Domestic Hot Water Tankless Water Heater .87 UEF/Thermal Efficiency - $120/gpm .93 UEF/Thermal Efficiency - $150/gpm **Ex:** 0.93 UEF 6 GPM x $150/gpm = $900	**Ozone Injection Laundry - $9,000** Venturi injection or bubble diffusion - Min 125 lb. total washer/extractor capacity. **Pre-approval required.**
	DHW Recirculation Controls - $200 Continuous Operation DHW Pump. Retrofit Only. **Pre-approval required.**	

View page 2 to review all terms and conditions, including equipment specific requirements.

Bundle and save in addition to your standard incentive!
Install radiant heating and upgrade insulation for a 10% increase.

Two insulation measures, min. 1000 sqft +$500
Two Kitchen Equipment +$300, Three Kitchen Equipment +$500

If you are planning equipment or building upgrades that do not fit within the standard incentives, but significantly reduce natural gas consumption, please call 866.450.0005 to learn about custom project opportunities.

General Qualifications

- New or existing commercial or industrial customer of Cascade Natural Gas Corporation on one of the following rate schedules: 504, 505, 511, 570
- High efficiency equipment, i.e. heating, water heating & cooking equipment installed as a replacement, retrofit or new, in place of standard efficiency
- Custom incentives are available, contact program representative if the equipment being installed is not on the prescriptive incentive list attached
- Each piece of equipment may only receive one incentive
- Applications must be submitted within 90 days of installation date. Please contact the program if your project does not meet this requirement
- Incentives may be subject to change and are only applicable for measures approved within the Biennial Conservation Plan at the time of installation
- Installation must comply with all federal, state and local code requirements
- Call 866-450-0005 or visit www.cngc.com/energy-efficiency/commercial or email conserve@cngc.com to review qualifications and eligibility

Equipment Specific Requirements

- Regular steam trap maintenance and replacement every seven (7) years is required, retrofit only
- Tankless water heater applications must include the serial number
- For existing packaged HVAC with gas fired furnace and direct expansion cooling sections DCV; controller must meet joint utility advanced rooftop control guidelines
- Incentive eligibility is contingent upon use of natural gas-fired domestic water serving the specific measure equipment or fixture
- Insulation projects in spaces with existing, functional insulation do not qualify. Functional insulation is considered any existing insulation less than 30 years old. The building/space insulated must be heated with natural gas provided by CNGC. Roof insulation is defined as insulation that is installed on top of the roof deck. Minimum value of Post R-19 applies only where existing walls have an internal insulation cavity. If existing insulation is damaged to the point of ineffectiveness or applied in spotty coverage, the insulation must be removed and the condition that led to the ineffectiveness/damage must be corrected before the rebate will be considered. Insulation R value must meet specifications of current CNGC tariff
- To be considered for incentive funding, the output capacity of heating equipment applied for should generally not exceed winter design day requirements by more than 25%. Where multiple parallel units are proposed, heating capacities greater than or equal to 100% redundancy will not be incentivized

How to qualify for CNGC incentives

1. Establish eligibility:
   Call 1.866.450.0005 or visit www.cngc.com/energy-efficiency for program requirements.
2. Install energy-efficient upgrades:
   Contact a licensed contractor or one of our Trade Allies to install eligible measures.
3. Submit application:
   Available online at www.cngc.com/energy-efficiency. Sign and enclose:

   ☐ Application
   ☐ CNGC bill
   ☐ Invoice showing total cost, model number and R Values for insulation measures

Mail forms to:

Cascade Natural Gas Corporation,
c/o TRC
111 SW Columbia Street, Suite 945
Portland, OR 97201

Upon receipt of completed application, please allow six to eight weeks for processing and payment.

CASCADE NATURAL GAS CORPORATION®
A Subsidiary of MDU Resources Group, Inc.
In the Community to Serve®

Call **866.450.0005** or visit **cngc.com/energy-efficiency**

03/24

Puget Sound Energy

Power your bottom line with energy efficiency

Program guide for business customers

Whether your business is large or small, industrial or mom-and-pop, stepping up your energy efficiency is a smart move. Low or no cost tweaks can mean greater savings on energy bills year after year, which means more money to grow your business. Plus PSE is here to help with a large array of energy-efficiency programs that put money back in your budget when you upgrade to reduce energy consumption.

Rebates and instant discounts

Small Business Direct install	When it comes to energy efficiency, it's helpful to establish a baseline. Find out if your business is eligible for a free assessment to identify cost-effective energy-saving opportunities, and also get some upgrades installed for free.
Lighting to Go	Receive instant discounts on specific LED lighting when purchased at participating distributors.
Commercial HVAC	Significantly lower your business costs by upgrading your HVAC system. Enjoy monthly savings and greater building comfort through affordable smart thermostats, ductless heat pumps and advanced rooftop controls.
Commercial heat pump water heater	Invest in a super-efficient heat pump water heater and use 70% less energy than conventional electric water heaters. Less energy means more savings on your bill.
Full window replacement	Efficient windows seal in cool air during the summer and warm air during the winter, reducing your monthly bill and creating long-term energy savings.
Building insulation	By upgrading your insulation, you can improve thermal performance and create a more comfortable environment for your employees and customers.
Commercial foodservice	Equipment in the kitchen can account for 75% of your energy bill in foodservice businesses. Our rebates can save you thousands upfront on energy-efficient equipment.
Lodging	Maximize guest comfort and minimize energy costs through this program's equipment rebates and on-site energy assessments for hotels and motels.

Strategic energy management

Business Demand Response	Our Business Demand Response program, provides incentives to small, medium, large and industrial businesses for limiting electric use for short periods of time to help us maintain safe, reliable, affordable electricity.
Clean Buildings Accelerator	A no-cost program that unpacks the complex Clean Buildings Law, teaches facility teams how to get their buildings into compliance, and demonstrates how to leverage PSE incentives and technical resources to meet and exceed the law's targets.
Commercial Strategic Energy Management	Receive training, engineering guidance and incentives in this multi-year program for making low- and no-cost changes that reduce energy usage and energy bills.
Industrial Strategic Energy Management	This multi-year program provides training and tools to develop your own on-site energy-management team, as well as incentives thru low or no cost energy savings and achievement of program milestones.
Utility Energy Service Contract	These energy-management services for federal and tribal customers provide streamlined development, contracting and implementation of energy-saving measures.

Customized incentives

HVAC, Commissioning & Controls	
Building Tune-Up	This program is a simplified option for building owners who want to implement low- and no-cost energy-efficiency opportunities without the full commissioning process.
Existing Building Commissioning	This program offers incentives to help you maximize energy-saving potential within your building's existing systems with no capital upgrades required.
Monitoring Based Commissioning	Utilize this program on its own or together with our other commissioning programs to take building optimization to the next level with data collection and analysis that guides ongoing commissioning efforts.
Major HVAC Controls	Earn significant incentives for updating your HVAC controls system with more energy-efficient options, which can produce substantial savings in HVAC energy cost over time.
Industrial	
Industrial System Optimization Program	Receive the engineering support you need to tune up and optimize systems in your industrial facility for greater energy efficiency, and earn a grant to help cover the cost.
Comprehensive Small Industrial Grants	This is an opportunity for smaller industrial customers to expand energy savings beyond a typical equipment retrofit by bundling your capital incentives along with incentives for O&M changes, or earn incentives for O&M changes only.
Industrial Custom Capital Grants	This program offers incentives for energy-efficient upgrades in industrial facilities. If you're planning a custom capital project for your industrial site that demonstrates energy savings, PSE may be able to help pay for it with a custom capital grant. There are also incentives available to pay for operation and maintenance implementation opportunities within your facilities with a custom O&M grant.
Lighting	
Business Lighting Incentive Program	Lighting can amount to more than 40% of your business' total energy usage, and this program offers flexible incentive options that help you affordably upgrade many types of interior and exterior lighting.
Commercial Horticultural Lighting	This program offers incentives for installing energy-efficient LED grow lights in your commercial facility.
New construction	
Commercial New Construction	Business owners and developers have access to an array of financial incentives designed to help new commercial buildings reduce energy usage and costs.
Multifamily New Construction	Multi-unit developers can engage from the design process to leverage incentives for energy-efficient equipment and measures taking a whole building performance approach, and pays you for each unit of energy saved.
Retrofit	
Commercial Secondary Windows	Commercial secondary windows are a lower-cost, energy-efficient upgrade compared to full window replacement, and our incentives further offset costs.
Custom Retrofit Grants	This program offers incentives for energy-efficient upgrades that are not covered by other programs listed on this sheet (e.g.: space heat or process load boiler upgrades, variable frequency drives (VFDs) on fans or pumps, energy recovery, refrigeration system upgrades and chillers). If you're planning an upgrade that demonstrates quantifiable energy savings, we may be able to help you pay for it.
Pay for Performance	Combine multiple capital projects, operational and maintenance improvements, and behavioral changes that save 15% or more of whole-building energy consumption. This program speeds up the grant process and incentivizes savings measured at the meter.
Telecommunications Efficiency Program	This program offers incentives for energy-efficient improvements to customers with medium and large telecommunications facilities.

The energy-efficiency programs we offer our business customers support PSE's vision to reduce carbon emissions and create a cleaner energy future for all. Learn more at pse.com/together.

5.0 Energy Use Intensity Target (EUIt)

Washington State Department of Commerce

ENERGY USE INTENSITY TARGET (EUIt) CALCULATOR

CLEAN BUILDINGS PERFORMANCE STANDARD

Overview

The EUIt Calculator can be used as a tool to identify a building's activity and energy use intensity target (EUIt) for the Clean Buildings Performance Standard (CBPS). Please note, this tool is not a substitute for Form B, and is not required to be submitted for compliance. Building activity and energy use intensity target (Form B) of the CBPS is embedded within the Clean Buildings Portal and is required when submitting CBPS compliance documentation. **This tool is for informational use only**.

Instructions

Enter the appropriate information in the white cells. The tool will not calculate without County, Gross Floor Area, and Building Activity Type data. County, Building Types/Activities and Weekly Hours are drop down menus. Be sure to take note of comment boxes throughout this tool. Use the other worksheets in this tool as a reference for Building Activity Targets and Operating Shift Normalization Factors. Definitions for each listed Building Activity Type are noted in the Activity, Targets & Definitions worksheet.

Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	44162492
Property name	Fire/EMS Station
Parent property name	
Address 1 (street)	350 E Sharon Ave
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	24,177

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Fire Station	24,177	1.00	65	168.0	1.1	72	60.8
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	24,177	1.00				**71.5**	**60.8**

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FACILITY SOLUTIONS®

Clean Buildings Standard

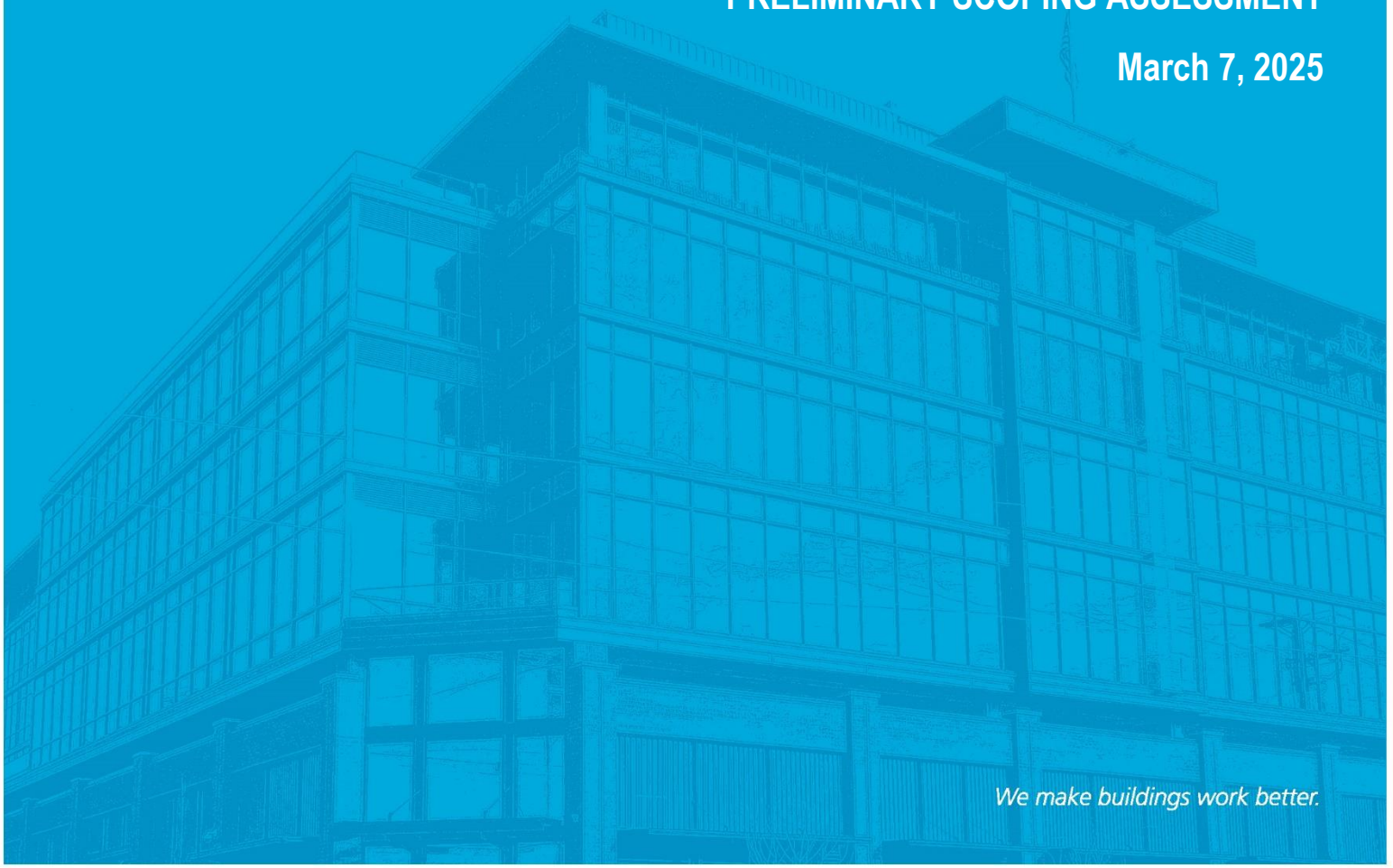
COUNTDOWN TO COMPLIANCE

Library

820 E. Fairhaven Ave, Burlington, WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025



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1.0 SUMMARY

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Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated. If the EUI is above the EUIt, recommendations are proposed to get the building under the EUIt. If the facility's EUI is less than the EUIt, the facility's energy usage is preliminarily in compliance, and recommendations to further reduce energy use of the building is optional. Additional facility documentation is also required to be uploaded to the Department of Commerce portal to be in full compliance. These additional facility documentations are an Energy Management Plan, Operations and Maintenance Plan and Capital Management Plan. Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

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Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

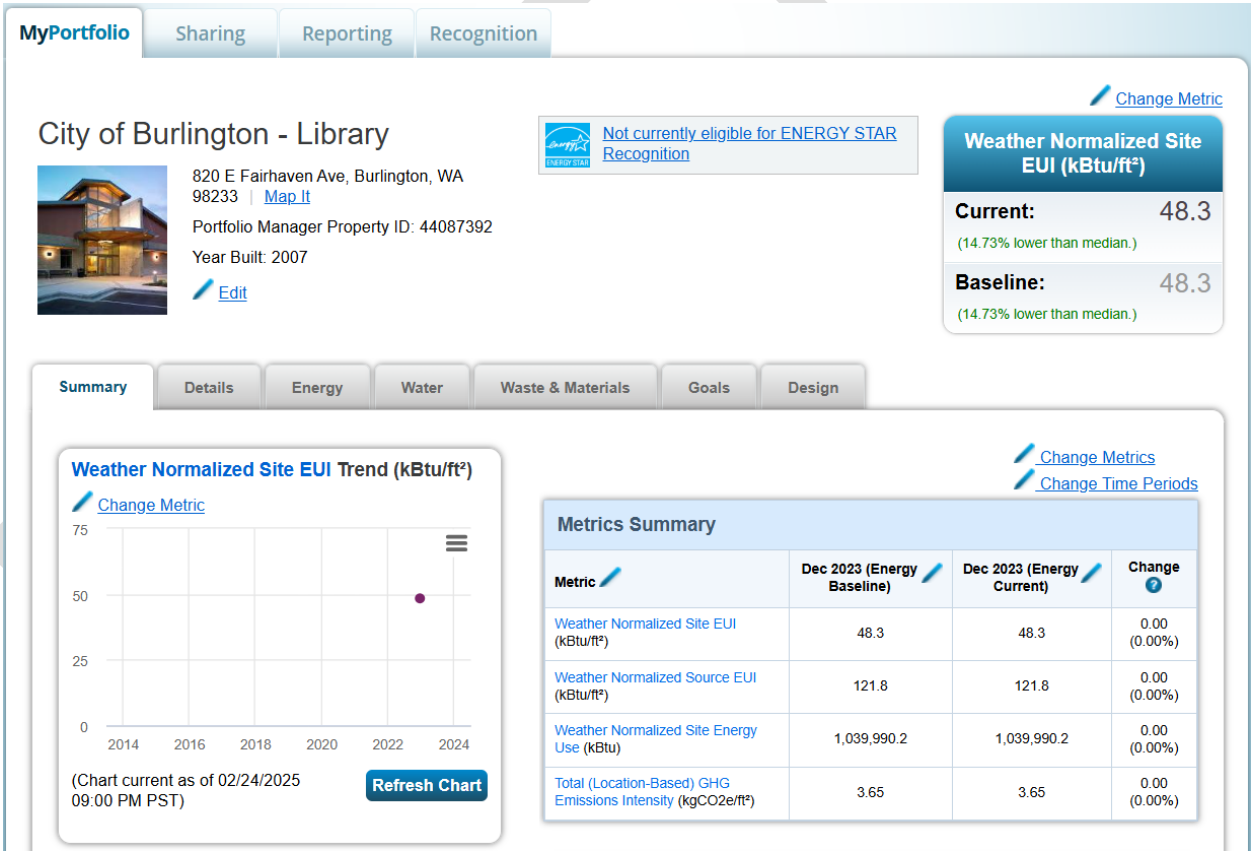
It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built. We highly recommend being completed with the improvements to allow 18-24 months prior to the submission date (June 1, 2027). This will allow 6-12 months to commission the facility and confirm the facility is operating properly and then 12 continuous months of energy usage for reporting to the Department of Commerce through Energy Star.

2.0 ENERGY STAR INFORMATION

The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

The Department of Commerce has published target EUIs based on building type and climate zone. Western Washington is Climate Zone 4C while Eastern Washington is Climate Zone 5B. To be in compliance with the Clean Buildings Standards, your buildings EUI must be less than the published target EUI for your building type and climate zone.

Energy Star Site Information



2023 Weather Normalized EUI = **48.3**
Clean Buildings EUIt = **61.6**
EUI Below Target = **-13.3**

Based on owner provided information, the gross floor area is 21,550 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is below the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist Library with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

Library			2023 EUI: 48.3 Target EUI: 61.6		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings & Incentive
			Low	High	Savings
IGA	**Investment Grade Audit (IGA)** - Detailed Review of As-Builts for Existing Systems, Measure Development, Energy Savings Calculations, Preliminary Design of DDC & Mechanical, Incentive Applications (State & Local), Estimating & Preconstruction Services.	$ 19,395	N/A		Required for Guaranteed Energy Savings, incentive applications (Utility and Early Adopter if eligible)
EEM 1	**Smart Building Analytics and Fault Detection** Provide fault analytics and monitoring of major equipment to achieve peak energy performance	$ 19,000	0.6	0.8	
EEM 2	**Domestic Hot Water Upgrade** Upgrade domestic hot water system to tankless hot water systems.	$ 85,000	0.3	0.4	$ 300
EEM 3	**Destratification Fans** Install Destratification fans in the ceiling of the main library hall and implement DCV control strategy to reduce minimum outside air based on space occupancy	$ 170,000	1.9	2.5	$ 1,300
	ROUGH ORDER OF MAGNITUDE	**$ 293,395**	**3**	**4**	**$ 1,600**
		Post Project EUI:	**45.5**	**44.6**	

Due to the recent completion of lighting upgrades to LED for this building, additional lighting measures were found to be unnecessary at this time.

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

In addition to the above recommended EEM's the following items will need to be developed and implemented for a period of 1 year prior to submission:

- An Energy Management Plan
- An Operations and Maintenance Plan
- A Capital Management Plan

4.0 PROJECT INCENTIVES

UTILITY INCENTIVES

Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

Cascade Natural Gas

Cascade Natural Gas
WA Commercial and Industrial Incentives

Rebates effective on installs on or after March 15, 2024

Heating	**Warm Air Furnaces - $6.00/kBtu/hr** High Efficiency Condensing Furnace—Min 91% AFUE **Ex:** 120 kBtuh x $6/ kBtuh = $720	**Boiler Steam Trap - $125** Min 300 kBtu in; steam pressure at 25 psig or > Retrofit Only
	HVAC Unit Heater - $5.00/kBtu/hr High Efficiency Condensing—Min 91% AFUE **Ex:** 180 kBtuh x $5/ kBtuh = $900	**Demand Control Ventilation - $50/nominal ton** 5 tons ≤ Unit Cooling Capacity ≤ 20 tons **Pre-Approval Required**
	Radiant Heating - $15.00/kBtu/hr Direct fired radiant heating **Ex:** 180 kBtuh x $15/ kBtuh = $2,700	**High-Efficiency Condensing Boiler - $10.25/kBtu/hr** Min 94% Thermal Eff & 300 kBtu input **Ex:** 1600 kBtuh x $10.25/ kBtuh = $16,400
	Install any piece of HVAC equipment and receive a $100 incentive bonus. Applies to warm air furnaces, HVAC unit heaters, radiant heaters, and both condensing and mid-efficiency boilers	
Food service Equipment	**Gas Griddle - $600** ENERGY STAR® ≥38% Cooking Eff/ ≤2,650 Btu/hr sq ft Idle Rate	**Gas Convection Oven - $800** ENERGY STAR® ≥44% Cooking Eff/ ≤13,000 Btu/hr Idle Rate
	Double Rack Oven - $2,700 FSTC Qualified ≥50% Cooking Eff/ ≤3,500 Btu/hr/Idle Rate D Rack	**Gas Conveyor Oven - $700** ≥42% tested baking efficiency
Weatherization	**Windows - (retrofit only)** Pre-Existing must be single pane; Post must be ENERGY STAR® Northern Zone U-Factor ≤ 0.30 - $7.50/sq ft U-Factor ≤ 0.22 - $9.00/sq ft	**Attic Insulation - (retrofit only)** Min R-30 - $2.00/sq ft Min R-45 - $2.50/sq ft
	Floor Insulation - (retrofit only) Min R-30 - $1.25/sq ft	**Hot Fluid Pipe Insulation - (retrofit only)** >140F, <200F, 1.5" insulation - $15.00 per linear foot, ≥ 200F, 2.5" insulation- $25.00 per linear foot
	Roof Insulation - (retrofit only) Min R-30 - $2.00/sq ft	**Wall Insulation - (retrofit only)** Min R-19 - $2.00/sq ft
Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597
	Domestic Hot Water Tankless Water Heater .87 UEF/Thermal Efficiency - $120/gpm .93 UEF/Thermal Efficiency - $150/gpm **Ex:** 0.93 UEF 6 GPM x $150/gpm = $900	**Ozone Injection Laundry - $9,000** Venturi injection or bubble diffusion - Min 125 lb. total washer/extractor capacity. **Pre-approval required.**
	DHW Recirculation Controls - $200 Continuous Operation DHW Pump. Retrofit Only. **Pre-approval required.**	

View page 2 to review all terms and conditions, including equipment specific requirements.

Bundle and save in addition to your standard incentive!
Install radiant heating and upgrade insulation for a 10% increase.

Two insulation measures, min. 1000 sqft +$500
Two Kitchen Equipment +$300, Three Kitchen Equipment +$500

If you are planning equipment or building upgrades that do not fit within the standard incentives, but significantly reduce natural gas consumption, please call 866.450.0005 to learn about custom project opportunities.

General Qualifications

- New or existing commercial or industrial customer of Cascade Natural Gas Corporation on one of the following rate schedules: 504, 505, 511, 570
- High efficiency equipment, i.e. heating, water heating & cooking equipment installed as a replacement, retrofit or new, in place of standard efficiency
- Custom incentives are available, contact program representative if the equipment being installed is not on the prescriptive incentive list attached
- Each piece of equipment may only receive one incentive
- Applications must be submitted within 90 days of installation date. Please contact the program if your project does not meet this requirement
- Incentives may be subject to change and are only applicable for measures approved within the Biennial Conservation Plan at the time of installation
- Installation must comply with all federal, state and local code requirements
- Call 866-450-0005 or visit www.cngc.com/energy-efficiency/commercial or email conserve@cngc.com to review qualifications and eligibility

Equipment Specific Requirements

- Regular steam trap maintenance and replacement every seven (7) years is required, retrofit only
- Tankless water heater applications must include the serial number
- For existing packaged HVAC with gas fired furnace and direct expansion cooling sections DCV; controller must meet joint utility advanced rooftop control guidelines
- Incentive eligibility is contingent upon use of natural gas-fired domestic water serving the specific measure equipment or fixture
- Insulation projects in spaces with existing, functional insulation do not qualify. Functional insulation is considered any existing insulation less than 30 years old. The building/space insulated must be heated with natural gas provided by CNGC. Roof insulation is defined as insulation that is installed on top of the roof deck. Minimum value of Post R-19 applies only where existing walls have an internal insulation cavity. If existing insulation is damaged to the point of ineffectiveness or applied in spotty coverage, the insulation must be removed and the condition that led to the ineffectiveness/damage must be corrected before the rebate will be considered. Insulation R value must meet specifications of current CNGC tariff
- To be considered for incentive funding, the output capacity of heating equipment applied for should generally not exceed winter design day requirements by more than 25%. Where multiple parallel units are proposed, heating capacities greater than or equal to 100% redundancy will not be incentivized

How to qualify for CNGC incentives

1. Establish eligibility:
   Call 1.866.450.0005 or visit www.cngc.com/energy-efficiency for program requirements.
2. Install energy-efficient upgrades:
   Contact a licensed contractor or one of our Trade Allies to install eligible measures.
3. Submit application:
   Available online at www.cngc.com/energy-efficiency. Sign and enclose:

   ☐ Application
   ☐ CNGC bill
   ☐ Invoice showing total cost, model number and R Values for insulation measures

Mail forms to:

Cascade Natural Gas Corporation,
c/o TRC
111 SW Columbia Street, Suite 945
Portland, OR 97201

Upon receipt of completed application, please allow six to eight weeks for processing and payment.

CASCADE NATURAL GAS CORPORATION®
A Subsidiary of MDU Resources Group, Inc.
In the Community to Serve®

Call **866.450.0005** or visit **cngc.com/energy-efficiency**

03/24

Puget Sound Energy

Power your bottom line with energy efficiency

Program guide for business customers

Whether your business is large or small, industrial or mom-and-pop, stepping up your energy efficiency is a smart move. Low or no cost tweaks can mean greater savings on energy bills year after year, which means more money to grow your business. Plus PSE is here to help with a large array of energy-efficiency programs that put money back in your budget when you upgrade to reduce energy consumption.

Rebates and instant discounts

Small Business Direct install	When it comes to energy efficiency, it's helpful to establish a baseline. Find out if your business is eligible for a free assessment to identify cost-effective energy-saving opportunities, and also get some upgrades installed for free.
Lighting to Go	Receive instant discounts on specific LED lighting when purchased at participating distributors.
Commercial HVAC	Significantly lower your business costs by upgrading your HVAC system. Enjoy monthly savings and greater building comfort through affordable smart thermostats, ductless heat pumps and advanced rooftop controls.
Commercial heat pump water heater	Invest in a super-efficient heat pump water heater and use 70% less energy than conventional electric water heaters. Less energy means more savings on your bill.
Full window replacement	Efficient windows seal in cool air during the summer and warm air during the winter, reducing your monthly bill and creating long-term energy savings.
Building insulation	By upgrading your insulation, you can improve thermal performance and create a more comfortable environment for your employees and customers.
Commercial foodservice	Equipment in the kitchen can account for 75% of your energy bill in foodservice businesses. Our rebates can save you thousands upfront on energy-efficient equipment.
Lodging	Maximize guest comfort and minimize energy costs through this program's equipment rebates and on-site energy assessments for hotels and motels.

Strategic energy management

Business Demand Response	Our Business Demand Response program, provides incentives to small, medium, large and industrial businesses for limiting electric use for short periods of time to help us maintain safe, reliable, affordable electricity.
Clean Buildings Accelerator	A no-cost program that unpacks the complex Clean Buildings Law, teaches facility teams how to get their buildings into compliance, and demonstrates how to leverage PSE incentives and technical resources to meet and exceed the law's targets.
Commercial Strategic Energy Management	Receive training, engineering guidance and incentives in this multi-year program for making low- and no-cost changes that reduce energy usage and energy bills.
Industrial Strategic Energy Management	This multi-year program provides training and tools to develop your own on-site energy-management team, as well as incentives thru low or no cost energy savings and achievement of program milestones.
Utility Energy Service Contract	These energy-management services for federal and tribal customers provide streamlined development, contracting and implementation of energy-saving measures.

Customized incentives

HVAC, Commissioning & Controls	
Building Tune-Up	This program is a simplified option for building owners who want to implement low- and no-cost energy-efficiency opportunities without the full commissioning process.
Existing Building Commissioning	This program offers incentives to help you maximize energy-saving potential within your building's existing systems with no capital upgrades required.
Monitoring Based Commissioning	Utilize this program on its own or together with our other commissioning programs to take building optimization to the next level with data collection and analysis that guides ongoing commissioning efforts.
Major HVAC Controls	Earn significant incentives for updating your HVAC controls system with more energy-efficient options, which can produce substantial savings in HVAC energy cost over time.
Industrial	
Industrial System Optimization Program	Receive the engineering support you need to tune up and optimize systems in your industrial facility for greater energy efficiency, and earn a grant to help cover the cost.
Comprehensive Small Industrial Grants	This is an opportunity for smaller industrial customers to expand energy savings beyond a typical equipment retrofit by bundling your capital incentives along with incentives for O&M changes, or earn incentives for O&M changes only.
Industrial Custom Capital Grants	This program offers incentives for energy-efficient upgrades in industrial facilities. If you're planning a custom capital project for your industrial site that demonstrates energy savings, PSE may be able to help pay for it with a custom capital grant. There are also incentives available to pay for operation and maintenance implementation opportunities within your facilities with a custom O&M grant.
Lighting	
Business Lighting Incentive Program	Lighting can amount to more than 40% of your business' total energy usage, and this program offers flexible incentive options that help you affordably upgrade many types of interior and exterior lighting.
Commercial Horticultural Lighting	This program offers incentives for installing energy-efficient LED grow lights in your commercial facility.
New construction	
Commercial New Construction	Business owners and developers have access to an array of financial incentives designed to help new commercial buildings reduce energy usage and costs.
Multifamily New Construction	Multi-unit developers can engage from the design process to leverage incentives for energy-efficient equipment and measures taking a whole building performance approach, and pays you for each unit of energy saved.
Retrofit	
Commercial Secondary Windows	Commercial secondary windows are a lower-cost, energy-efficient upgrade compared to full window replacement, and our incentives further offset costs.
Custom Retrofit Grants	This program offers incentives for energy-efficient upgrades that are not covered by other programs listed on this sheet (e.g.: space heat or process load boiler upgrades, variable frequency drives (VFDs) on fans or pumps, energy recovery, refrigeration system upgrades and chillers). If you're planning an upgrade that demonstrates quantifiable energy savings, we may be able to help you pay for it.
Pay for Performance	Combine multiple capital projects, operational and maintenance improvements, and behavioral changes that save 15% or more of whole-building energy consumption. This program speeds up the grant process and incentivizes savings measured at the meter.
Telecommunications Efficiency Program	This program offers incentives for energy-efficient improvements to customers with medium and large telecommunications facilities.

The energy-efficiency programs we offer our business customers support PSE's vision to reduce carbon emissions and create a cleaner energy future for all. Learn more at pse.com/together.

5.0 Energy Use Intensity Target (EUIt)

Washington State Department of Commerce

ENERGY USE INTENSITY TARGET (EUIt) CALCULATOR

CLEAN BUILDINGS PERFORMANCE STANDARD

Overview

The EUIt Calculator can be used as a tool to identify a building's activity and energy use intensity target (EUIt) for the Clean Buildings Performance Standard (CBPS). Please note, this tool is not a substitute for Form B, and is not required to be submitted for compliance. Building activity and energy use intensity target (Form B) of the CBPS is embedded within the Clean Buildings Portal and is required when submitting CBPS compliance documentation. **This tool is for informational use only**.

Instructions

Enter the appropriate information in the white cells. The tool will not calculate without County, Gross Floor Area, and Building Activity Type data. County, Building Types/Activities and Weekly Hours are drop down menus. Be sure to take note of comment boxes throughout this tool. Use the other worksheets in this tool as a reference for Building Activity Targets and Operating Shift Normalization Factors. Definitions for each listed Building Activity Type are noted in the Activity, Targets & Definitions worksheet.

Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	44087392
Property name	Library
Parent property name	
Address 1 (street)	820 E. Fairhaven Ave
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	21,550

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Library	21,550	1.00	56	51 to 167	1.1	62	52.4
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	21,550	1.00				**61.6**	**52.4**

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

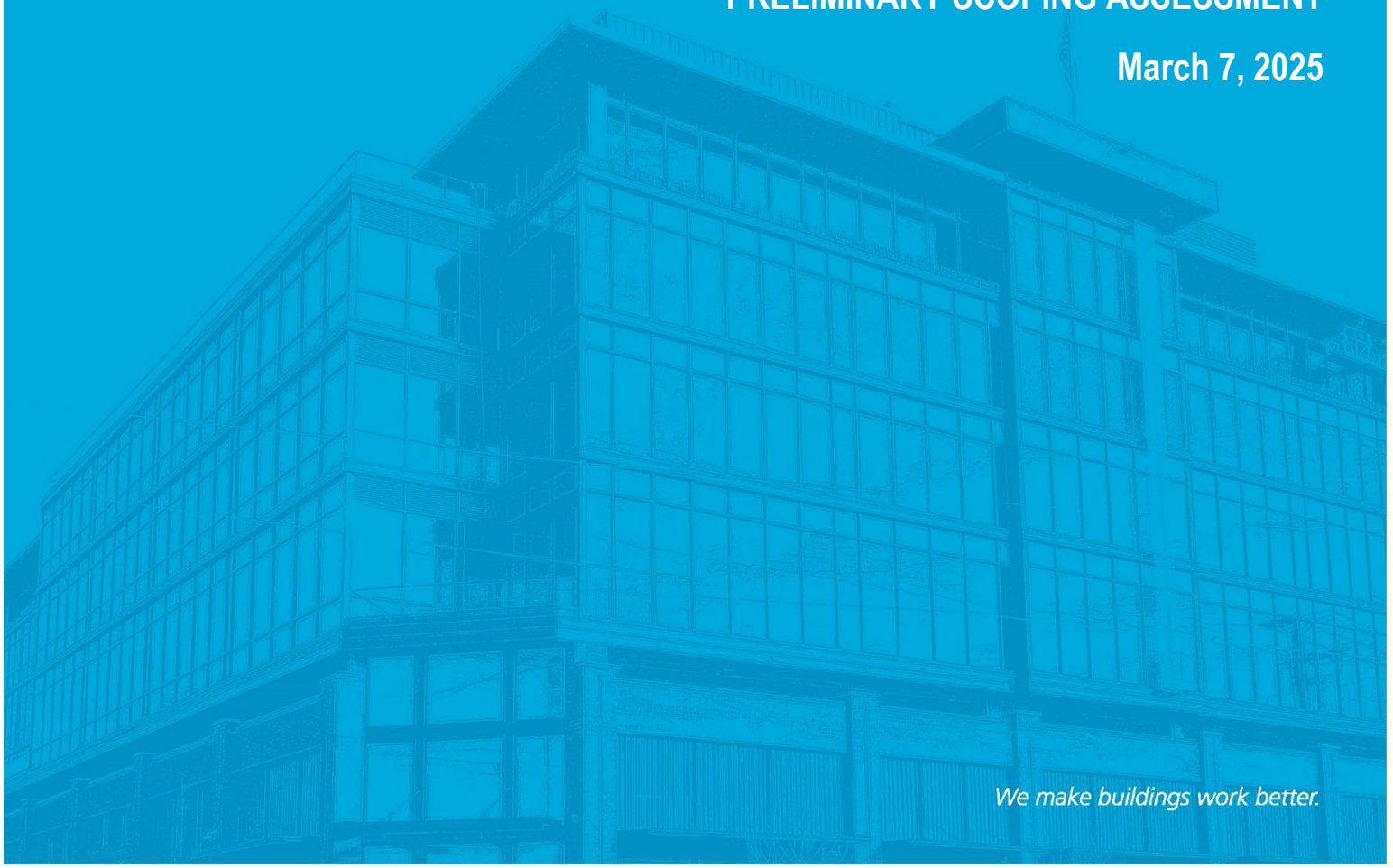
COUNTDOWN TO COMPLIANCE

Maiben House

219 S. Skagit St, Burlington, WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025



We make buildings work better.

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3 RECOMMENDATIONS..... 4
4 UTILITY INCENTIVES..... 5
5 Energy Use Intensity Target (EUIt)..... 10

1.0 SUMMARY

The purpose of this report is to further evaluate the Maiben House building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated. If the EUI is above the EUIt, recommendations are proposed to get the building under the EUIt. If the facility's EUI is less than the EUIt, the facility's energy usage is preliminarily in compliance, and recommendations to further reduce energy use of the building is optional. Additional facility documentation is also required to be uploaded to the Department of Commerce portal to be in full compliance. These additional facility documentations are an Energy Management Plan, Operations and Maintenance Plan and Capital Management Plan. Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:

It should be noted that the EUI and EUIt are based on Energy Star inputs and utility data from 2023.

Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building.

The next step will be to meet and review the EEMs in more detail. Based on these selected measures, MacDonald-Miller will provide an Investment Grade Audit (IGA) proposal that describes the scope of work

to be studied as well as the cost to complete it. The deliverable from this effort is an investment-level scope of work with firm costs, energy savings and EUI reductions associated with the chosen EEMs.

Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built.

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The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

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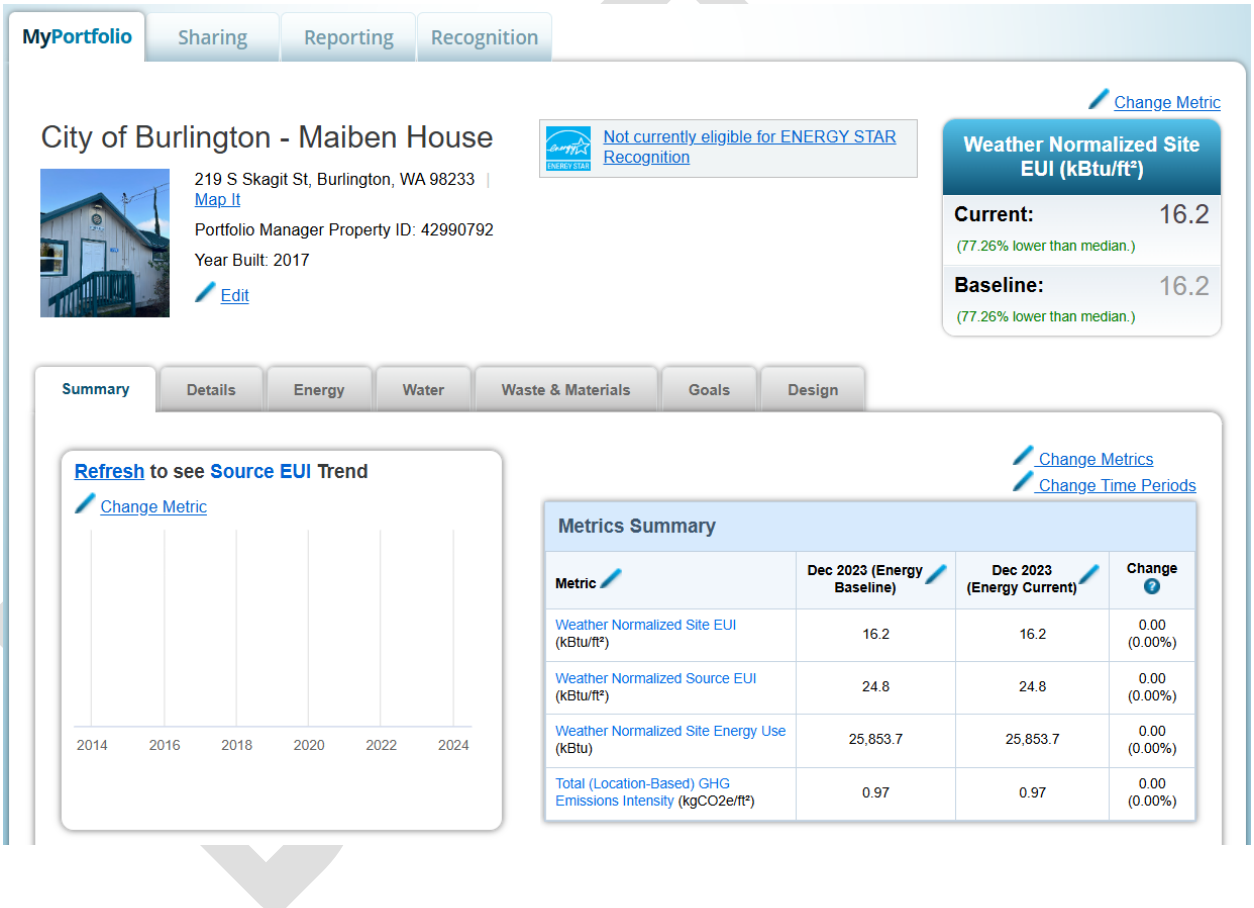

2023 Weather Normalized EUI = **16.2**
Reference EUIt = **37.2**
EUI Below Target = **-21.0**

Based on owner provided information, the gross floor area is 1,594 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is below the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist Maiben House with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

Maiben House			2023 EUI: 16.2 Target EUI: 37.2		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings & Incentive
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EEM 1	**Lighting Occupancy/Motion Sensors** Upgrade lighting controls or fixtures with the capability to sense occupancy in the interior and motion sensing on the exterior spaces.	$ 15,940.00	0.8	1.0	$ 100
EEM 2	**Remote Thermostat Upgrade** Upgrade thermostats to smart thermosets allowing scheduling and remote control.	$ 8,500	1.0	1.2	$ 100
EEM 3	**Upgrade Gas Unit heater** Upgrade gas heating unit to heat pump technology.	$ 170,000	6.7	8.4	$ 200
	ROUGH ORDER OF MAGNITUDE	**$ 201,939**	**8.5**	**10.6**	**$ 400**
	Post Project EUI:		**7.7**	**5.6**	

Due to the recent completion of lighting upgrades to LED for this building, additional lighting replacement measures were found to be unnecessary at this time.

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

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Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve **Domestic Hot Water Tankless Water Heater** .87 UEF/Thermal Efficiency - $120/gpm .93 UEF/Thermal Efficiency - $150/gpm **Ex:** 0.93 UEF 6 GPM x $150/gpm = $900 **DHW Recirculation Controls - $200** Continuous Operation DHW Pump. Retrofit Only. **Pre-approval required.**	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597 **Ozone Injection Laundry - $9,000** Venturi injection or bubble diffusion - Min 125 lb. total washer/extractor capacity. **Pre-approval required.**

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- Incentives may be subject to change and are only applicable for measures approved within the Biennial Conservation Plan at the time of installation
- Installation must comply with all federal, state and local code requirements
- Call 866-450-0005 or visit www.cngc.com/energy-efficiency/commercial or email conserve@cngc.com to review qualifications and eligibility

Equipment Specific Requirements

- Regular steam trap maintenance and replacement every seven (7) years is required, retrofit only
- Tankless water heater applications must include the serial number
- For existing packaged HVAC with gas fired furnace and direct expansion cooling sections DCV; controller must meet joint utility advanced rooftop control guidelines
- Incentive eligibility is contingent upon use of natural gas-fired domestic water serving the specific measure equipment or fixture
- Insulation projects in spaces with existing, functional insulation do not qualify. Functional insulation is considered any existing insulation less than 30 years old. The building/space insulated must be heated with natural gas provided by CNGC. Roof insulation is defined as insulation that is installed on top of the roof deck. Minimum value of Post R-19 applies only where existing walls have an internal insulation cavity. If existing insulation is damaged to the point of ineffectiveness or applied in spotty coverage, the insulation must be removed and the condition that led to the ineffectiveness/damage must be corrected before the rebate will be considered. Insulation R value must meet specifications of current CNGC tariff
- To be considered for incentive funding, the output capacity of heating equipment applied for should generally not exceed winter design day requirements by more than 25%. Where multiple parallel units are proposed, heating capacities greater than or equal to 100% redundancy will not be incentivized

How to qualify for CNGC incentives

1. Establish eligibility:
   Call 1.866.450.0005 or visit www.cngc.com/energy-efficiency for program requirements.
2. Install energy-efficient upgrades:
   Contact a licensed contractor or one of our Trade Allies to install eligible measures.
3. Submit application:
   Available online at www.cngc.com/energy-efficiency. Sign and enclose:

   ☐ Application
   ☐ CNGC bill
   ☐ Invoice showing total cost, model number and R Values for insulation measures

Mail forms to:

Cascade Natural Gas Corporation,
c/o TRC
111 SW Columbia Street, Suite 945
Portland, OR 97201

Upon receipt of completed application, please allow six to eight weeks for processing and payment.

CASCADE NATURAL GAS CORPORATION®
A Subsidiary of MDU Resources Group, Inc.
In the Community to Serve®

Call **866.450.0005** or visit **cngc.com/energy-efficiency**

03/24

Puget Sound Energy

Power your bottom line with energy efficiency

Program guide for business customers

Whether your business is large or small, industrial or mom-and-pop, stepping up your energy efficiency is a smart move. Low or no cost tweaks can mean greater savings on energy bills year after year, which means more money to grow your business. Plus PSE is here to help with a large array of energy-efficiency programs that put money back in your budget when you upgrade to reduce energy consumption.

Rebates and instant discounts

Small Business Direct install	When it comes to energy efficiency, it's helpful to establish a baseline. Find out if your business is eligible for a free assessment to identify cost-effective energy-saving opportunities, and also get some upgrades installed for free.
Lighting to Go	Receive instant discounts on specific LED lighting when purchased at participating distributors.
Commercial HVAC	Significantly lower your business costs by upgrading your HVAC system. Enjoy monthly savings and greater building comfort through affordable smart thermostats, ductless heat pumps and advanced rooftop controls.
Commercial heat pump water heater	Invest in a super-efficient heat pump water heater and use 70% less energy than conventional electric water heaters. Less energy means more savings on your bill.
Full window replacement	Efficient windows seal in cool air during the summer and warm air during the winter, reducing your monthly bill and creating long-term energy savings.
Building insulation	By upgrading your insulation, you can improve thermal performance and create a more comfortable environment for your employees and customers.
Commercial foodservice	Equipment in the kitchen can account for 75% of your energy bill in foodservice businesses. Our rebates can save you thousands upfront on energy-efficient equipment.
Lodging	Maximize guest comfort and minimize energy costs through this program's equipment rebates and on-site energy assessments for hotels and motels.

Strategic energy management

Business Demand Response	Our Business Demand Response program, provides incentives to small, medium, large and industrial businesses for limiting electric use for short periods of time to help us maintain safe, reliable, affordable electricity.
Clean Buildings Accelerator	A no-cost program that unpacks the complex Clean Buildings Law, teaches facility teams how to get their buildings into compliance, and demonstrates how to leverage PSE incentives and technical resources to meet and exceed the law's targets.
Commercial Strategic Energy Management	Receive training, engineering guidance and incentives in this multi-year program for making low- and no-cost changes that reduce energy usage and energy bills.
Industrial Strategic Energy Management	This multi-year program provides training and tools to develop your own on-site energy-management team, as well as incentives thru low or no cost energy savings and achievement of program milestones.
Utility Energy Service Contract	These energy-management services for federal and tribal customers provide streamlined development, contracting and implementation of energy-saving measures.

Customized incentives

HVAC, Commissioning & Controls	
Building Tune-Up	This program is a simplified option for building owners who want to implement low- and no-cost energy-efficiency opportunities without the full commissioning process.
Existing Building Commissioning	This program offers incentives to help you maximize energy-saving potential within your building's existing systems with no capital upgrades required.
Monitoring Based Commissioning	Utilize this program on its own or together with our other commissioning programs to take building optimization to the next level with data collection and analysis that guides ongoing commissioning efforts.
Major HVAC Controls	Earn significant incentives for updating your HVAC controls system with more energy-efficient options, which can produce substantial savings in HVAC energy cost over time.
Industrial	
Industrial System Optimization Program	Receive the engineering support you need to tune up and optimize systems in your industrial facility for greater energy efficiency, and earn a grant to help cover the cost.
Comprehensive Small Industrial Grants	This is an opportunity for smaller industrial customers to expand energy savings beyond a typical equipment retrofit by bundling your capital incentives along with incentives for O&M changes, or earn incentives for O&M changes only.
Industrial Custom Capital Grants	This program offers incentives for energy-efficient upgrades in industrial facilities. If you're planning a custom capital project for your industrial site that demonstrates energy savings, PSE may be able to help pay for it with a custom capital grant. There are also incentives available to pay for operation and maintenance implementation opportunities within your facilities with a custom O&M grant.
Lighting	
Business Lighting Incentive Program	Lighting can amount to more than 40% of your business' total energy usage, and this program offers flexible incentive options that help you affordably upgrade many types of interior and exterior lighting.
Commercial Horticultural Lighting	This program offers incentives for installing energy-efficient LED grow lights in your commercial facility.
New construction	
Commercial New Construction	Business owners and developers have access to an array of financial incentives designed to help new commercial buildings reduce energy usage and costs.
Multifamily New Construction	Multi-unit developers can engage from the design process to leverage incentives for energy-efficient equipment and measures taking a whole building performance approach, and pays you for each unit of energy saved.
Retrofit	
Commercial Secondary Windows	Commercial secondary windows are a lower-cost, energy-efficient upgrade compared to full window replacement, and our incentives further offset costs.
Custom Retrofit Grants	This program offers incentives for energy-efficient upgrades that are not covered by other programs listed on this sheet (e.g.: space heat or process load boiler upgrades, variable frequency drives (VFDs) on fans or pumps, energy recovery, refrigeration system upgrades and chillers). If you're planning an upgrade that demonstrates quantifiable energy savings, we may be able to help you pay for it.
Pay for Performance	Combine multiple capital projects, operational and maintenance improvements, and behavioral changes that save 15% or more of whole-building energy consumption. This program speeds up the grant process and incentivizes savings measured at the meter.
Telecommunications Efficiency Program	This program offers incentives for energy-efficient improvements to customers with medium and large telecommunications facilities.

The energy-efficiency programs we offer our business customers support PSE's vision to reduce carbon emissions and create a cleaner energy future for all. Learn more at pse.com/together.

5.0 Energy Use Intensity Target (EUIt)

Washington State Department of Commerce

ENERGY USE INTENSITY TARGET (EUIt) CALCULATOR

CLEAN BUILDINGS PERFORMANCE STANDARD

Overview

The EUIt Calculator can be used as a tool to identify a building's activity and energy use intensity target (EUIt) for the Clean Buildings Performance Standard (CBPS). Please note, this tool is not a substitute for Form B, and is not required to be submitted for compliance. Building activity and energy use intensity target (Form B) of the CBPS is embedded within the Clean Buildings Portal and is required when submitting CBPS compliance documentation. **This tool is for informational use only**.

Instructions

Enter the appropriate information in the white cells. The tool will not calculate without County, Gross Floor Area, and Building Activity Type data. County, Building Types/Activities and Weekly Hours are drop down menus. Be sure to take note of comment boxes throughout this tool. Use the other worksheets in this tool as a reference for Building Activity Targets and Operating Shift Normalization Factors. Definitions for each listed Building Activity Type are noted in the Activity, Targets & Definitions worksheet.

Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	42990792
Property name	Maiben House
Parent property name	
Address 1 (street)	219 S. Skagit St
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	1,594

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Other - Entertainment/Public Assembly (Recreation)	1,594	1.00	73	50 or less		44	37.2
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	1,594	1.00				**43.8**	**37.2**

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

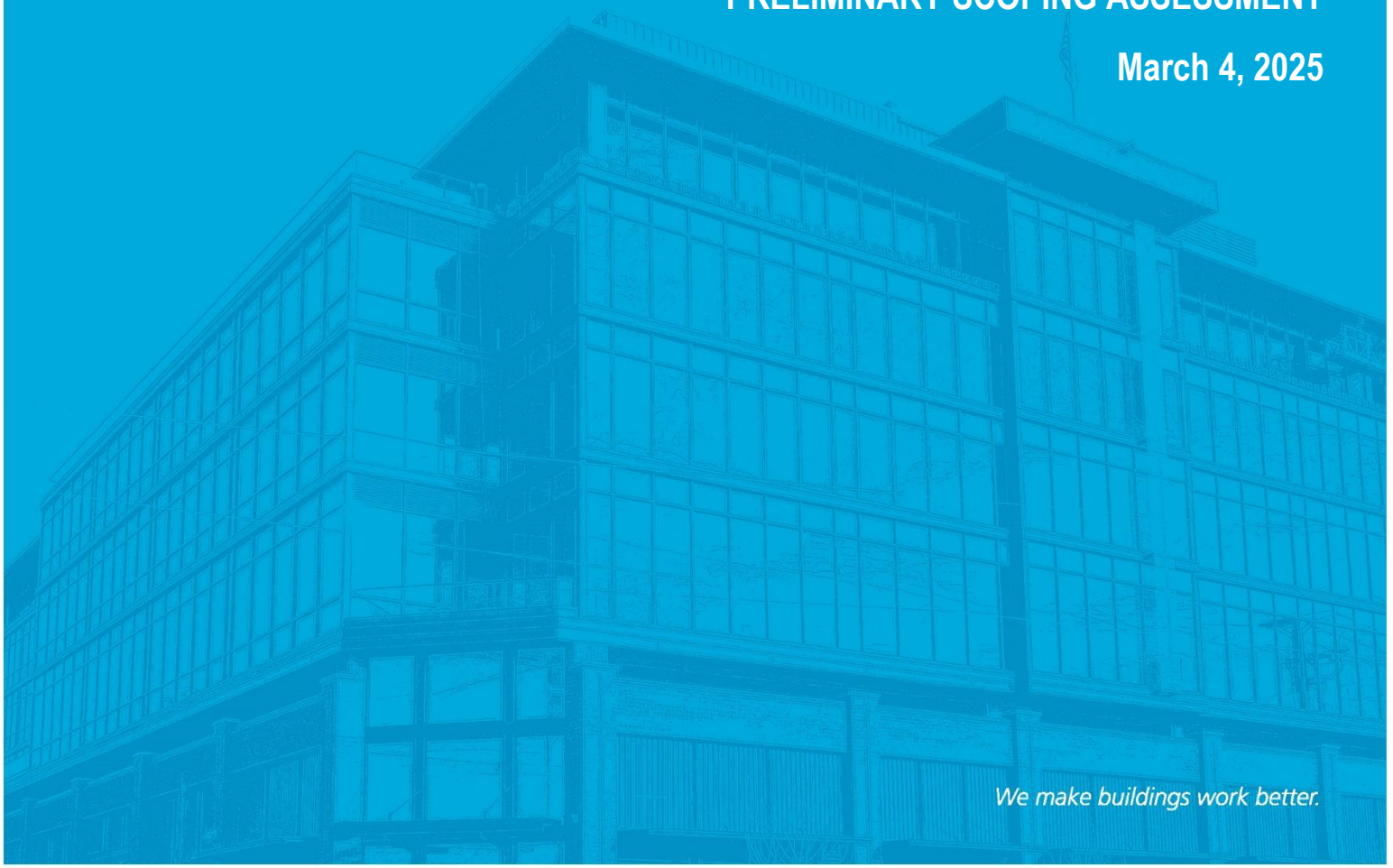
COUNTDOWN TO COMPLIANCE

Railroad Avenue Storage

633 E Sharon Ave, Burlington, WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 4, 2025



We make buildings work better.

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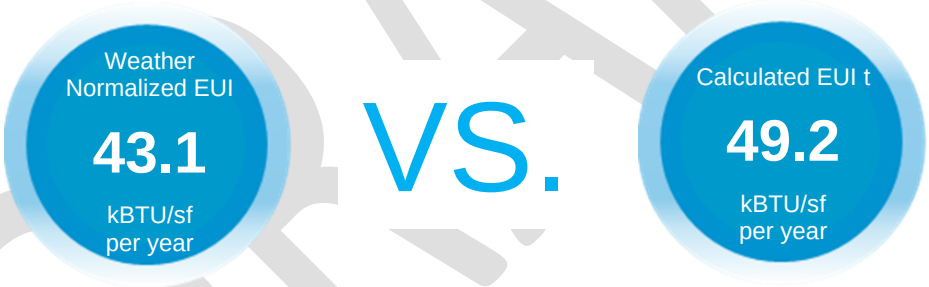
1.0 SUMMARY

The purpose of this report is to further evaluate the Railroad Avenue Storage building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated (for reference only). Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:



It should be noted that the EUI and EUIt are based on Energy Star inputs and utility data from 2023.

Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building.

The next step will be to meet and review the EEMs in more detail. Based on these selected measures, MacDonald-Miller will provide an Investment Grade Audit (IGA) proposal that describes the scope of work to be studied as well as the cost to complete it. The deliverable from this effort is an investment-level scope of work with firm costs, energy savings and EUI reductions associated with the chosen EEMs.

Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

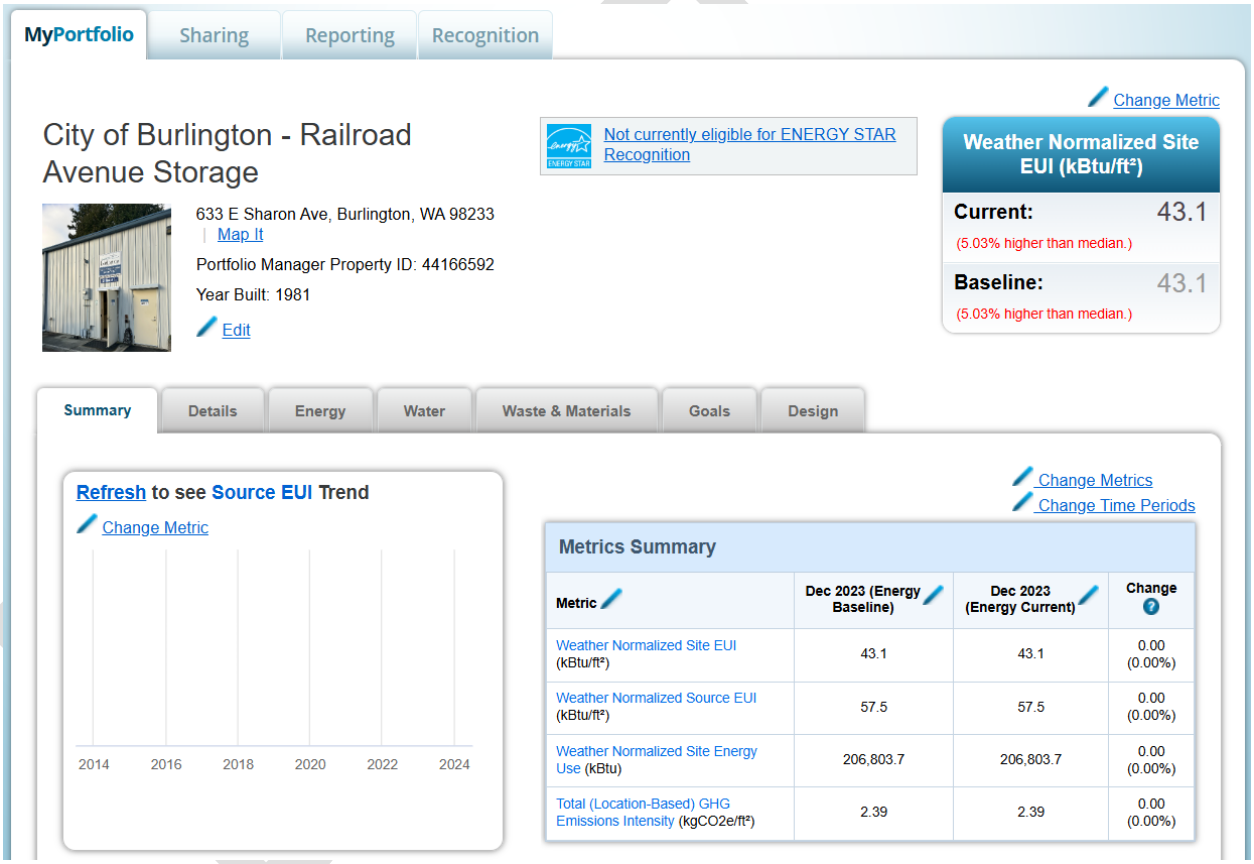
It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built.

2.0 ENERGY STAR INFORMATION

The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

The Department of Commerce has published target EUIs based on building type and climate zone. Western Washington is Climate Zone 4C while Eastern Washington is Climate Zone 5B.

Energy Star Site Information



2023 Weather Normalized EUI = **43.1**
Reference EUIt = **49.2**
EUI Below Target = **-6.1**

Based on owner provided information, the gross floor area is 4,800 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is below the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

No energy efficiency measures are recommended for this facility at this time.

4.0 PROJECT INCENTIVES

UTILITY INCENTIVES

Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

Cascade Natural Gas

Cascade Natural Gas
WA Commercial and Industrial Incentives

Rebates effective on installs on or after March 15, 2024

Heating	**Warm Air Furnaces - $6.00/kBtu/hr** High Efficiency Condensing Furnace—Min 91% AFUE **Ex:** 120 kBtuh x $6/ kBtuh = $720	**Boiler Steam Trap - $125** Min 300 kBtu in; steam pressure at 25 psig or > Retrofit Only
	HVAC Unit Heater - $5.00/kBtu/hr High Efficiency Condensing—Min 91% AFUE **Ex:** 180 kBtuh x $5/ kBtuh = $900	**Demand Control Ventilation - $50/nominal ton** 5 tons ≤ Unit Cooling Capacity ≤ 20 tons **Pre-Approval Required**
	Radiant Heating - $15.00/kBtu/hr Direct fired radiant heating **Ex:** 180 kBtuh x $15/ kBtuh = $2,700	**High-Efficiency Condensing Boiler - $10.25/kBtu/hr** Min 94% Thermal Eff & 300 kBtu input **Ex:** 1600 kBtuh x $10.25/ kBtuh = $16,400
	Install any piece of HVAC equipment and receive a $100 incentive bonus. Applies to warm air furnaces, HVAC unit heaters, radiant heaters, and both condensing and mid-efficiency boilers	
Food service Equipment	**Gas Griddle - $600** ENERGY STAR® ≥38% Cooking Eff/ ≤2,650 Btu/hr sq ft Idle Rate	**Gas Convection Oven - $800** ENERGY STAR® ≥44% Cooking Eff/ ≤13,000 Btu/hr Idle Rate
	Double Rack Oven - $2,700 FSTC Qualified ≥50% Cooking Eff/ ≤3,500 Btu/hr/Idle Rate D Rack	**Gas Conveyor Oven - $700** ≥42% tested baking efficiency
Weatherization	**Windows - (retrofit only)** Pre-Existing must be single pane; Post must be ENERGY STAR® Northern Zone U-Factor ≤ 0.30 - $7.50/sq ft U-Factor ≤ 0.22 - $9.00/sq ft	**Attic Insulation - (retrofit only)** Min R-30 - $2.00/sq ft Min R-45 - $2.50/sq ft
	Floor Insulation - (retrofit only) Min R-30 - $1.25/sq ft	**Hot Fluid Pipe Insulation - (retrofit only)** >140F, <200F, 1.5" insulation - $15.00 per linear foot, ≥ 200F, 2.5" insulation- $25.00 per linear foot
	Roof Insulation - (retrofit only) Min R-30 - $2.00/sq ft	**Wall Insulation - (retrofit only)** Min R-19 - $2.00/sq ft
Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597
	Domestic Hot Water Tankless Water Heater .87 UEF/Thermal Efficiency - $120/gpm .93 UEF/Thermal Efficiency - $150/gpm **Ex:** 0.93 UEF 6 GPM x $150/gpm = $900	**Ozone Injection Laundry - $9,000** Venturi injection or bubble diffusion - Min 125 lb. total washer/extractor capacity. **Pre-approval required.**
	DHW Recirculation Controls - $200 Continuous Operation DHW Pump. Retrofit Only. **Pre-approval required.**	

View page 2 to review all terms and conditions, including equipment specific requirements.

Bundle and save in addition to your standard incentive!
Install radiant heating and upgrade insulation for a 10% increase.

Two insulation measures, min. 1000 sqft +$500
Two Kitchen Equipment +$300, Three Kitchen Equipment +$500

If you are planning equipment or building upgrades that do not fit within the standard incentives, but significantly reduce natural gas consumption, please call 866.450.0005 to learn about custom project opportunities.

General Qualifications

- New or existing commercial or industrial customer of Cascade Natural Gas Corporation on one of the following rate schedules: 504, 505, 511, 570
- High efficiency equipment, i.e. heating, water heating & cooking equipment installed as a replacement, retrofit or new, in place of standard efficiency
- Custom incentives are available, contact program representative if the equipment being installed is not on the prescriptive incentive list attached
- Each piece of equipment may only receive one incentive
- Applications must be submitted within 90 days of installation date. Please contact the program if your project does not meet this requirement
- Incentives may be subject to change and are only applicable for measures approved within the Biennial Conservation Plan at the time of installation
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Lighting	
Business Lighting Incentive Program	Lighting can amount to more than 40% of your business' total energy usage, and this program offers flexible incentive options that help you affordably upgrade many types of interior and exterior lighting.
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5.0 Energy Use Intensity Target (EUIt)

Washington State Department of Commerce

ENERGY USE INTENSITY TARGET (EUIt) CALCULATOR

CLEAN BUILDINGS PERFORMANCE STANDARD

Overview

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Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	44166592
Property name	Railroad Avenue Storage
Parent property name	
Address 1 (street)	633 E Sharon Ave
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	4,800

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Repair Services (Vehicle storage/maintenance.)	4,800	1.00	41	51 to 167	1.2	49	41.8
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	4,800	1.00				**49.2**	**41.8**

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

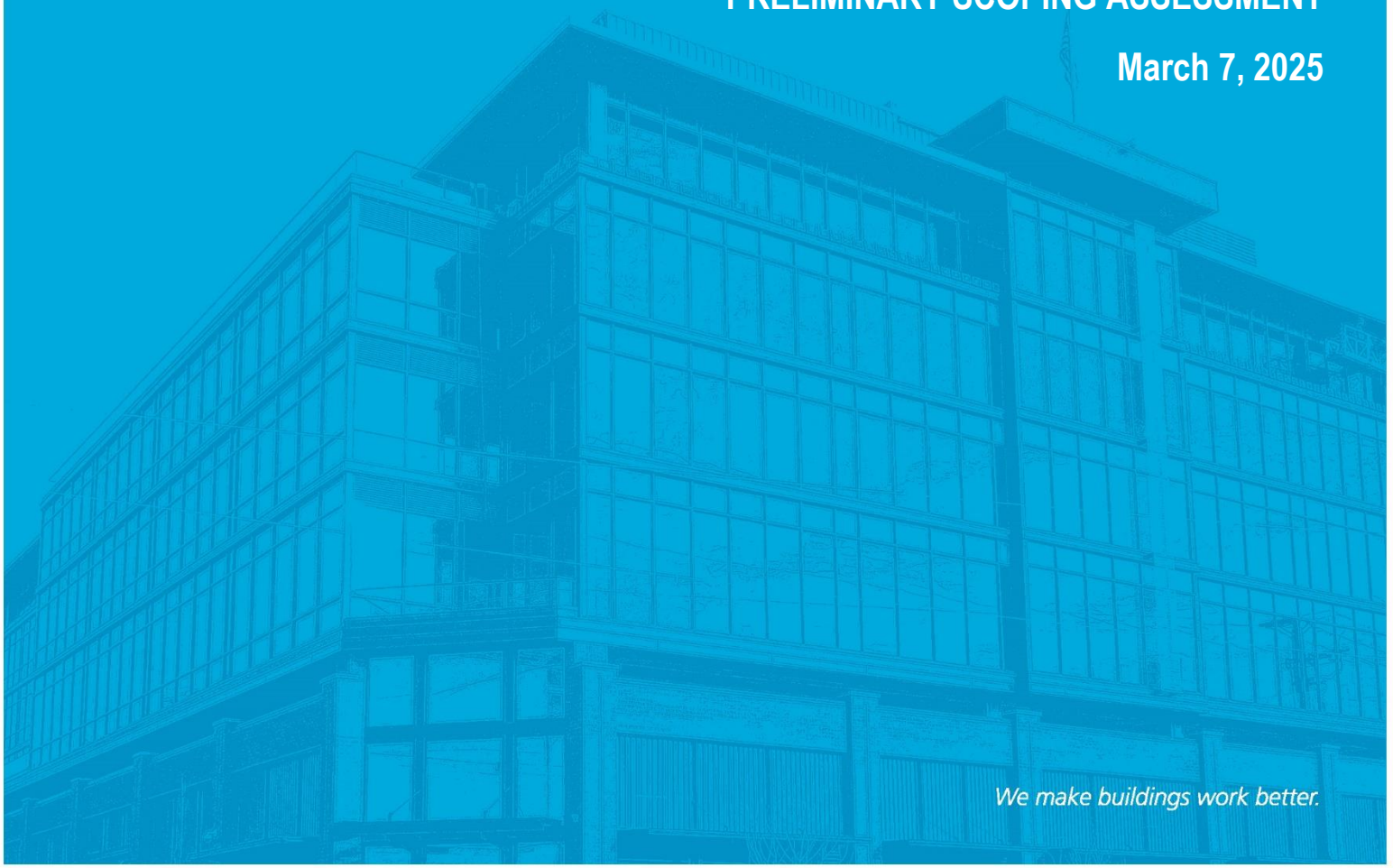
COUNTDOWN TO COMPLIANCE

Senior Center

1011 Greenleaf Ave, Burlington, WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025



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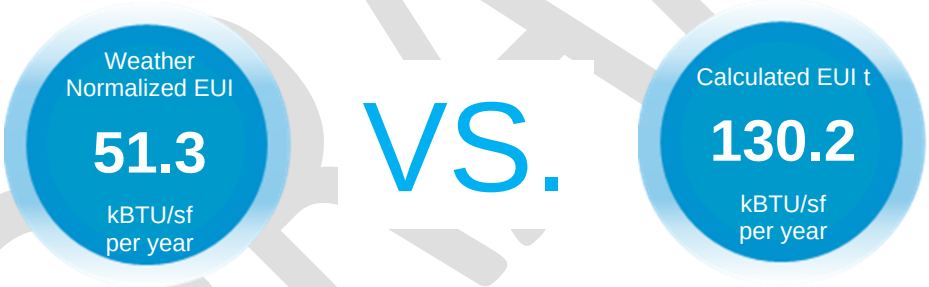
1.0 SUMMARY

The purpose of this report is to further evaluate the Senior Center building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated (for reference only). Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:



It should be noted that the EUI and EUIt are based on Energy Star inputs and utility data from 2023.

Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building.

The next step will be to meet and review the EEMs in more detail. Based on these selected measures, MacDonald-Miller will provide an Investment Grade Audit (IGA) proposal that describes the scope of work to be studied as well as the cost to complete it. The deliverable from this effort is an investment-level scope of work with firm costs, energy savings and EUI reductions associated with the chosen EEMs.

Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

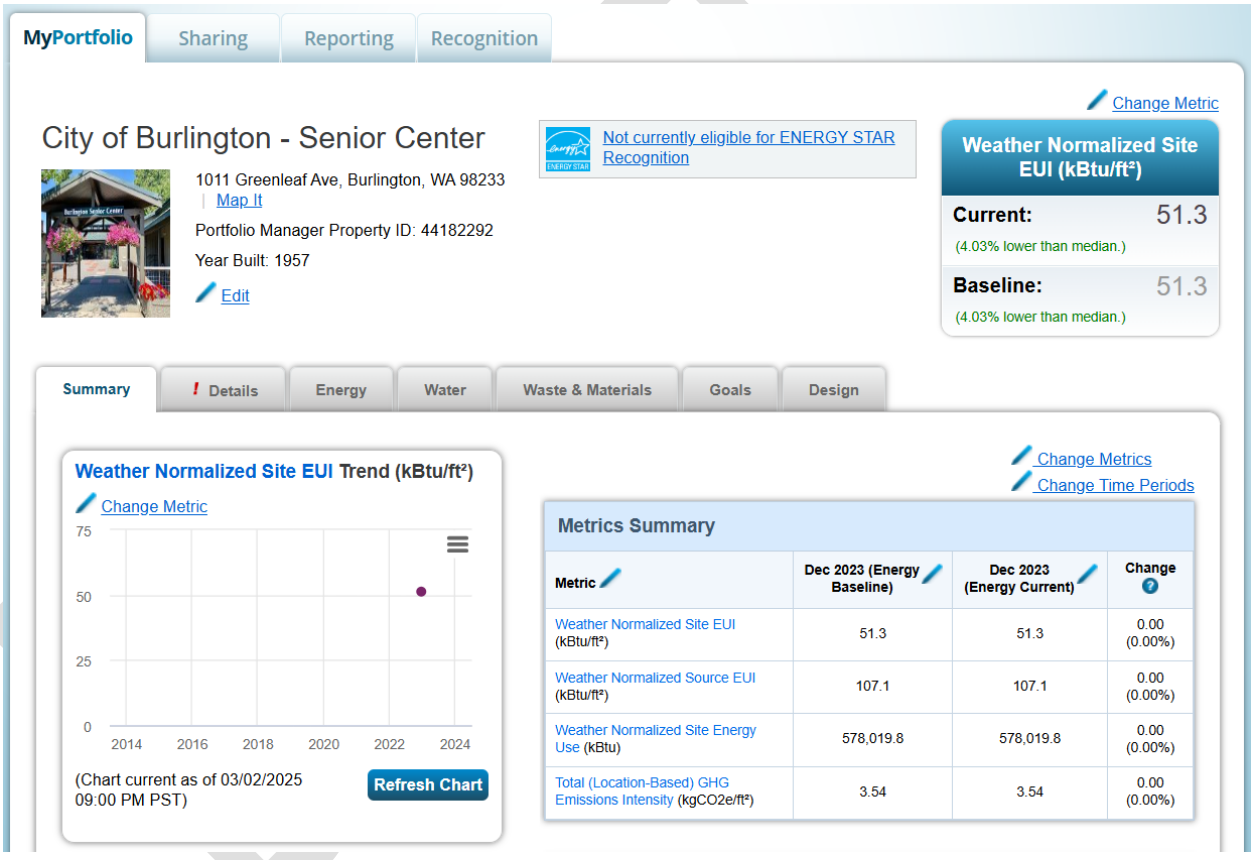
It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built.

2.0 ENERGY STAR INFORMATION

The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

The Department of Commerce has published target EUIs based on building type and climate zone. Western Washington is Climate Zone 4C while Eastern Washington is Climate Zone 5B.

Energy Star Site Information



2023 Weather Normalized EUI = **51.3**
Reference EUIt = **130.2**
EUI Below Target = **-78.9**

Based on owner provided information, the gross floor area is 11,270 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is below the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist Senior Center with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

Senior Center			2023 EUI: 51.3 Target EUI: 130.2		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings & Incentive
			Low	High	Savings
IGA	**Investment Grade Audit (IGA)** - Detailed Review of As-Builts for Existing Systems, Measure Development, Energy Savings Calculations, Preliminary Design of DDC & Mechanical, Incentive Applications (State & Local), Estimating & Preconstruction Services.	$ 9,016	N/A		Required for Guaranteed Energy Savings, incentive applications (Utility and Early Adopter if eligible)
EEM 1	**Retro-Commissioniong (RCx)** Optimize control systems through calibration of sensors, review metered data and/or trend logs, perform functional equipment testing, and review existing sequences of operation. Identify operational and maintenance enhancements that result in improvements in energy efficiency, occupant comfort, or indoor air quality.	$ 71,000	0.8	1.1	$ 454
EEM 2	**Submeter Gas and Electricity Equipment** Implementing submetering wil provide accurate energy consumption readings so that tenants who are regularly using the kitchen may pay for the increase in gas and electricity.	$ 77,000	NA	N/A	$ -
	ROUGH ORDER OF MAGNITUDE	**$ 80,016**	**0.8**	**1.1**	**$ 454**
		Post Project EUI:	**50.5**	**50.2**	

Due to the recent completion of lighting upgrades to LED for this building, additional lighting measures were found to be unnecessary at this time.

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

4.0 PROJECT INCENTIVES

UTILITY INCENTIVES

Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

Cascade Natural Gas

Cascade Natural Gas
WA Commercial and Industrial Incentives

Rebates effective on installs on or after March 15, 2024

Heating	**Warm Air Furnaces - $6.00/kBtu/hr** High Efficiency Condensing Furnace—Min 91% AFUE **Ex:** 120 kBtuh x $6/ kBtuh = $720	**Boiler Steam Trap - $125** Min 300 kBtu in; steam pressure at 25 psig or > Retrofit Only
	HVAC Unit Heater - $5.00/kBtu/hr High Efficiency Condensing—Min 91% AFUE **Ex:** 180 kBtuh x $5/ kBtuh = $900	**Demand Control Ventilation - $50/nominal ton** 5 tons ≤ Unit Cooling Capacity ≤ 20 tons **Pre-Approval Required**
	Radiant Heating - $15.00/kBtu/hr Direct fired radiant heating **Ex:** 180 kBtuh x $15/ kBtuh = $2,700	**High-Efficiency Condensing Boiler - $10.25/kBtu/hr** Min 94% Thermal Eff & 300 kBtu input **Ex:** 1600 kBtuh x $10.25/ kBtuh = $16,400
	Install any piece of HVAC equipment and receive a $100 incentive bonus. Applies to warm air furnaces, HVAC unit heaters, radiant heaters, and both condensing and mid-efficiency boilers	
Food service Equipment	**Gas Griddle - $600** ENERGY STAR® ≥38% Cooking Eff/ ≤2,650 Btu/hr sq ft Idle Rate	**Gas Convection Oven - $800** ENERGY STAR® ≥44% Cooking Eff/ ≤13,000 Btu/hr Idle Rate
	Double Rack Oven - $2,700 FSTC Qualified ≥50% Cooking Eff/ ≤3,500 Btu/hr/Idle Rate D Rack	**Gas Conveyor Oven - $700** ≥42% tested baking efficiency
Weatherization	**Windows - (retrofit only)** Pre-Existing must be single pane; Post must be ENERGY STAR® Northern Zone U-Factor ≤ 0.30 - $7.50/sq ft U-Factor ≤ 0.22 - $9.00/sq ft	**Attic Insulation - (retrofit only)** Min R-30 - $2.00/sq ft Min R-45 - $2.50/sq ft
	Floor Insulation - (retrofit only) Min R-30 - $1.25/sq ft	**Hot Fluid Pipe Insulation - (retrofit only)** >140F, <200F, 1.5" insulation - $15.00 per linear foot, ≥ 200F, 2.5" insulation- $25.00 per linear foot
	Roof Insulation - (retrofit only) Min R-30 - $2.00/sq ft	**Wall Insulation - (retrofit only)** Min R-19 - $2.00/sq ft
Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597
	Domestic Hot Water Tankless Water Heater .87 UEF/Thermal Efficiency - $120/gpm .93 UEF/Thermal Efficiency - $150/gpm **Ex:** 0.93 UEF 6 GPM x $150/gpm = $900	**Ozone Injection Laundry - $9,000** Venturi injection or bubble diffusion - Min 125 lb. total washer/extractor capacity. **Pre-approval required.**
	DHW Recirculation Controls - $200 Continuous Operation DHW Pump. Retrofit Only. **Pre-approval required.**	

View page 2 to review all terms and conditions, including equipment specific requirements.

Bundle and save in addition to your standard incentive!
Install radiant heating and upgrade insulation for a 10% increase.

Two insulation measures, min. 1000 sqft +$500
Two Kitchen Equipment +$300, Three Kitchen Equipment +$500

If you are planning equipment or building upgrades that do not fit within the standard incentives, but significantly reduce natural gas consumption, please call 866.450.0005 to learn about custom project opportunities.

General Qualifications

- New or existing commercial or industrial customer of Cascade Natural Gas Corporation on one of the following rate schedules: 504, 505, 511, 570
- High efficiency equipment, i.e. heating, water heating & cooking equipment installed as a replacement, retrofit or new, in place of standard efficiency
- Custom incentives are available, contact program representative if the equipment being installed is not on the prescriptive incentive list attached
- Each piece of equipment may only receive one incentive
- Applications must be submitted within 90 days of installation date. Please contact the program if your project does not meet this requirement
- Incentives may be subject to change and are only applicable for measures approved within the Biennial Conservation Plan at the time of installation
- Installation must comply with all federal, state and local code requirements
- Call 866-450-0005 or visit www.cngc.com/energy-efficiency/commercial or email conserve@cngc.com to review qualifications and eligibility

Equipment Specific Requirements

- Regular steam trap maintenance and replacement every seven (7) years is required, retrofit only
- Tankless water heater applications must include the serial number
- For existing packaged HVAC with gas fired furnace and direct expansion cooling sections DCV; controller must meet joint utility advanced rooftop control guidelines
- Incentive eligibility is contingent upon use of natural gas-fired domestic water serving the specific measure equipment or fixture
- Insulation projects in spaces with existing, functional insulation do not qualify. Functional insulation is considered any existing insulation less than 30 years old. The building/space insulated must be heated with natural gas provided by CNGC. Roof insulation is defined as insulation that is installed on top of the roof deck. Minimum value of Post R-19 applies only where existing walls have an internal insulation cavity. If existing insulation is damaged to the point of ineffectiveness or applied in spotty coverage, the insulation must be removed and the condition that led to the ineffectiveness/damage must be corrected before the rebate will be considered. Insulation R value must meet specifications of current CNGC tariff
- To be considered for incentive funding, the output capacity of heating equipment applied for should generally not exceed winter design day requirements by more than 25%. Where multiple parallel units are proposed, heating capacities greater than or equal to 100% redundancy will not be incentivized

How to qualify for CNGC incentives

1. Establish eligibility:
   Call 1.866.450.0005 or visit www.cngc.com/energy-efficiency for program requirements.
2. Install energy-efficient upgrades:
   Contact a licensed contractor or one of our Trade Allies to install eligible measures.
3. Submit application:
   Available online at www.cngc.com/energy-efficiency. Sign and enclose:

   ☐ Application
   ☐ CNGC bill
   ☐ Invoice showing total cost, model number and R Values for insulation measures

Mail forms to:

Cascade Natural Gas Corporation,
c/o TRC
111 SW Columbia Street, Suite 945
Portland, OR 97201

Upon receipt of completed application, please allow six to eight weeks for processing and payment.

CASCADE NATURAL GAS CORPORATION®
A Subsidiary of MDU Resources Group, Inc.
In the Community to Serve®

Call **866.450.0005** or visit **cngc.com/energy-efficiency**

03/24

Puget Sound Energy

Power your bottom line with energy efficiency

Program guide for business customers

Whether your business is large or small, industrial or mom-and-pop, stepping up your energy efficiency is a smart move. Low or no cost tweaks can mean greater savings on energy bills year after year, which means more money to grow your business. Plus PSE is here to help with a large array of energy-efficiency programs that put money back in your budget when you upgrade to reduce energy consumption.

Rebates and instant discounts

Small Business Direct install	When it comes to energy efficiency, it's helpful to establish a baseline. Find out if your business is eligible for a free assessment to identify cost-effective energy-saving opportunities, and also get some upgrades installed for free.
Lighting to Go	Receive instant discounts on specific LED lighting when purchased at participating distributors.
Commercial HVAC	Significantly lower your business costs by upgrading your HVAC system. Enjoy monthly savings and greater building comfort through affordable smart thermostats, ductless heat pumps and advanced rooftop controls.
Commercial heat pump water heater	Invest in a super-efficient heat pump water heater and use 70% less energy than conventional electric water heaters. Less energy means more savings on your bill.
Full window replacement	Efficient windows seal in cool air during the summer and warm air during the winter, reducing your monthly bill and creating long-term energy savings.
Building insulation	By upgrading your insulation, you can improve thermal performance and create a more comfortable environment for your employees and customers.
Commercial foodservice	Equipment in the kitchen can account for 75% of your energy bill in foodservice businesses. Our rebates can save you thousands upfront on energy-efficient equipment.
Lodging	Maximize guest comfort and minimize energy costs through this program's equipment rebates and on-site energy assessments for hotels and motels.

Strategic energy management

Business Demand Response	Our Business Demand Response program, provides incentives to small, medium, large and industrial businesses for limiting electric use for short periods of time to help us maintain safe, reliable, affordable electricity.
Clean Buildings Accelerator	A no-cost program that unpacks the complex Clean Buildings Law, teaches facility teams how to get their buildings into compliance, and demonstrates how to leverage PSE incentives and technical resources to meet and exceed the law's targets.
Commercial Strategic Energy Management	Receive training, engineering guidance and incentives in this multi-year program for making low- and no-cost changes that reduce energy usage and energy bills.
Industrial Strategic Energy Management	This multi-year program provides training and tools to develop your own on-site energy-management team, as well as incentives thru low or no cost energy savings and achievement of program milestones.
Utility Energy Service Contract	These energy-management services for federal and tribal customers provide streamlined development, contracting and implementation of energy-saving measures.

Customized incentives

HVAC, Commissioning & Controls	
Building Tune-Up	This program is a simplified option for building owners who want to implement low- and no-cost energy-efficiency opportunities without the full commissioning process.
Existing Building Commissioning	This program offers incentives to help you maximize energy-saving potential within your building's existing systems with no capital upgrades required.
Monitoring Based Commissioning	Utilize this program on its own or together with our other commissioning programs to take building optimization to the next level with data collection and analysis that guides ongoing commissioning efforts.
Major HVAC Controls	Earn significant incentives for updating your HVAC controls system with more energy-efficient options, which can produce substantial savings in HVAC energy cost over time.
Industrial	
Industrial System Optimization Program	Receive the engineering support you need to tune up and optimize systems in your industrial facility for greater energy efficiency, and earn a grant to help cover the cost.
Comprehensive Small Industrial Grants	This is an opportunity for smaller industrial customers to expand energy savings beyond a typical equipment retrofit by bundling your capital incentives along with incentives for O&M changes, or earn incentives for O&M changes only.
Industrial Custom Capital Grants	This program offers incentives for energy-efficient upgrades in industrial facilities. If you're planning a custom capital project for your industrial site that demonstrates energy savings, PSE may be able to help pay for it with a custom capital grant. There are also incentives available to pay for operation and maintenance implementation opportunities within your facilities with a custom O&M grant.
Lighting	
Business Lighting Incentive Program	Lighting can amount to more than 40% of your business' total energy usage, and this program offers flexible incentive options that help you affordably upgrade many types of interior and exterior lighting.
Commercial Horticultural Lighting	This program offers incentives for installing energy-efficient LED grow lights in your commercial facility.
New construction	
Commercial New Construction	Business owners and developers have access to an array of financial incentives designed to help new commercial buildings reduce energy usage and costs.
Multifamily New Construction	Multi-unit developers can engage from the design process to leverage incentives for energy-efficient equipment and measures taking a whole building performance approach, and pays you for each unit of energy saved.
Retrofit	
Commercial Secondary Windows	Commercial secondary windows are a lower-cost, energy-efficient upgrade compared to full window replacement, and our incentives further offset costs.
Custom Retrofit Grants	This program offers incentives for energy-efficient upgrades that are not covered by other programs listed on this sheet (e.g.: space heat or process load boiler upgrades, variable frequency drives (VFDs) on fans or pumps, energy recovery, refrigeration system upgrades and chillers). If you're planning an upgrade that demonstrates quantifiable energy savings, we may be able to help you pay for it.
Pay for Performance	Combine multiple capital projects, operational and maintenance improvements, and behavioral changes that save 15% or more of whole-building energy consumption. This program speeds up the grant process and incentivizes savings measured at the meter.
Telecommunications Efficiency Program	This program offers incentives for energy-efficient improvements to customers with medium and large telecommunications facilities.

The energy-efficiency programs we offer our business customers support PSE's vision to reduce carbon emissions and create a cleaner energy future for all. Learn more at pse.com/together.

5.0 Energy Use Intensity Target (EUIt)

Washington State Department of Commerce

ENERGY USE INTENSITY TARGET (EUIt) CALCULATOR

CLEAN BUILDINGS PERFORMANCE STANDARD

Overview

The EUIt Calculator can be used as a tool to identify a building's activity and energy use intensity target (EUIt) for the Clean Buildings Performance Standard (CBPS). Please note, this tool is not a substitute for Form B, and is not required to be submitted for compliance. Building activity and energy use intensity target (Form B) of the CBPS is embedded within the Clean Buildings Portal and is required when submitting CBPS compliance documentation. **This tool is for informational use only**.

Instructions

Enter the appropriate information in the white cells. The tool will not calculate without County, Gross Floor Area, and Building Activity Type data. County, Building Types/Activities and Weekly Hours are drop down menus. Be sure to take note of comment boxes throughout this tool. Use the other worksheets in this tool as a reference for Building Activity Targets and Operating Shift Normalization Factors. Definitions for each listed Building Activity Type are noted in the Activity, Targets & Definitions worksheet.

Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	44182292
Property name	Senior Center
Parent property name	
Address 1 (street)	1011 Greenleaf Ave
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	11,270

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Food Service (Restaurant/cafeteria)	5,635	0.50	361	50 or less	0.6	108	92.1
Other - Recreation	5,635	0.50	73	50 or less	0.6	22	18.6
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	11,270	1.00				**130.2**	**110.7**

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

COUNTDOWN TO COMPLIANCE

Wastewater Treatment Plant

900 S Section St, Burlington, WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025

We make buildings work better.

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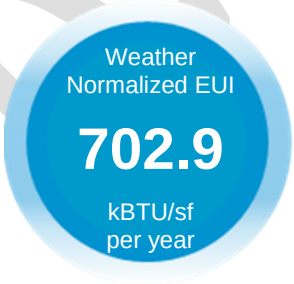
3 RECOMMENDATIONS..... 4
4 UTILITY INCENTIVES..... 5

1.0 SUMMARY

The purpose of this report is to further evaluate the Wastewater Treatment Plant building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated. If the EUI is above the EUIt, recommendations are proposed to get the building under the EUIt. If the facility's EUI is less than the EUIt, the facility's energy usage is preliminarily in compliance, and recommendations to further reduce energy use of the building is optional. Additional facility documentation is also required to be uploaded to the Department of Commerce portal to be in full compliance. These additional facility documentations are an Energy Management Plan, Operations and Maintenance Plan and Capital Management Plan. Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:



This facility is not required to meet an EUI target according to Washington's Clean Building Performance Standard. Please note that the target provided is designated as Other – Public Service, but a target is not available specifically for the Wastewater Treatment Plant.

Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building. Based on this list of EEMs, all or a combination of these measures would be required to get the facility's energy usage below the target EUI such that it will be in compliance.

The next step will be to meet and review the EEMs in more detail. Based on these selected measures, MacDonald-Miller will provide an Investment Grade Audit (IGA) proposal that describes the scope of work to be studied as well as the cost to complete it. The deliverable from this effort is an investment-level scope of work with firm costs, energy savings and EUI reductions associated with the chosen EEMs.

Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built.

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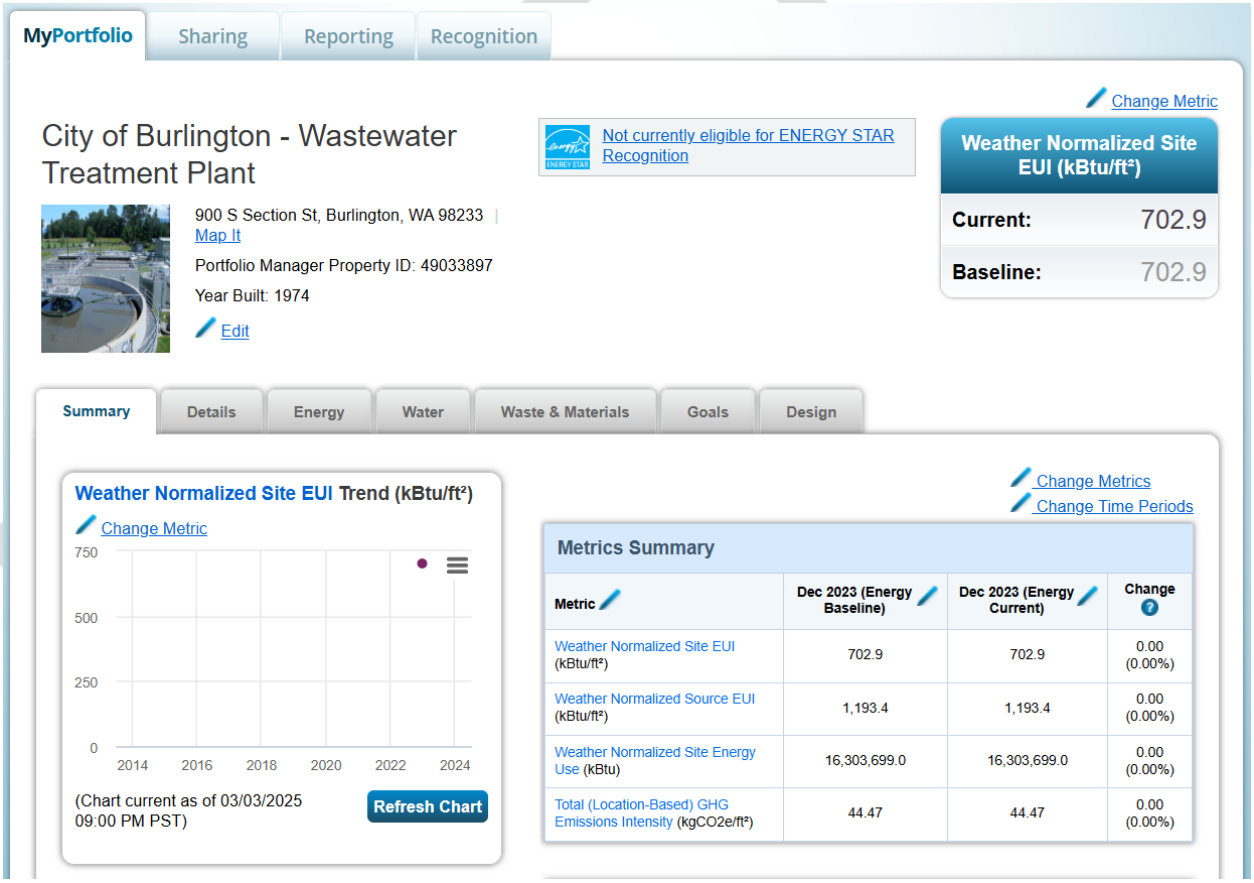
The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

The Department of Commerce has published target EUIs based on building type and climate zone. Western Washington is Climate Zone 4C while Eastern Washington is Climate Zone 5B. To be in compliance with the Clean Buildings Standards, your buildings EUI must be less than the published target EUI for your building type and climate zone.

Energy Star Site Information



2023 Weather Normalized EUI = **702.9**

Based on owner provided information, the gross floor area is 23,195 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is above the EUIt and requires Energy Efficiency Measures (EEMs) to be completed.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist Wastewater Treatment Plant with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

Wastewater Treatment Plant			2023 EUI: 702.9		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings & Incentive Savings
			Low	High	
IGA	**Investment Grade Audit (IGA)** - Detailed Review of As-Builts for Existing Systems, Measure Development, Energy Savings Calculations, Preliminary Design of DDC & Mechanical, Incentive Applications (State & Local), Estimating & Preconstruction Services.	$ 6,959	N/A		Required for Guaranteed Energy Savings, incentive applications (Utility and Early Adopter if eligible)
EEM 1	**Radiant Heaters** Add Radiant tube heaters in one of the shop buildings.	$ 169,000	1.2	1.6	$ 504
	ROUGH ORDER OF MAGNITUDE	**$ 175,959**	**1.2**	**1.6**	**$ 504**
		Post Project EUI:	**701.7**	**701.3**	

Due to the recent completion of lighting upgrades to LED for this building, additional lighting measures were found to be unnecessary at this time.

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

In addition to the above recommended EEM's the following items will need to be developed and implemented for a period of 1 year prior to submission:

- An Energy Management Plan
- An Operations and Maintenance Plan
- A Capital Management Plan

4.0 PROJECT INCENTIVES

UTILITY INCENTIVES

Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

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	Roof Insulation - (retrofit only) Min R-30 - $2.00/sq ft	**Wall Insulation - (retrofit only)** Min R-19 - $2.00/sq ft
Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597
	Domestic Hot Water Tankless Water Heater .87 UEF/Thermal Efficiency - $120/gpm .93 UEF/Thermal Efficiency - $150/gpm **Ex:** 0.93 UEF 6 GPM x $150/gpm = $900	**Ozone Injection Laundry - $9,000** Venturi injection or bubble diffusion - Min 125 lb. total washer/extractor capacity. **Pre-approval required.**
	DHW Recirculation Controls - $200 Continuous Operation DHW Pump. Retrofit Only. **Pre-approval required.**	

View page 2 to review all terms and conditions, including equipment specific requirements.

Bundle and save in addition to your standard incentive!
Install radiant heating and upgrade insulation for a 10% increase.

Two insulation measures, min. 1000 sqft +$500
Two Kitchen Equipment +$300, Three Kitchen Equipment +$500

If you are planning equipment or building upgrades that do not fit within the standard incentives, but significantly reduce natural gas consumption, please call 866.450.0005 to learn about custom project opportunities.

General Qualifications

- New or existing commercial or industrial customer of Cascade Natural Gas Corporation on one of the following rate schedules: 504, 505, 511, 570
- High efficiency equipment, i.e. heating, water heating & cooking equipment installed as a replacement, retrofit or new, in place of standard efficiency
- Custom incentives are available, contact program representative if the equipment being installed is not on the prescriptive incentive list attached
- Each piece of equipment may only receive one incentive
- Applications must be submitted within 90 days of installation date. Please contact the program if your project does not meet this requirement
- Incentives may be subject to change and are only applicable for measures approved within the Biennial Conservation Plan at the time of installation
- Installation must comply with all federal, state and local code requirements
- Call 866-450-0005 or visit www.cngc.com/energy-efficiency/commercial or email conserve@cngc.com to review qualifications and eligibility

Equipment Specific Requirements

- Regular steam trap maintenance and replacement every seven (7) years is required, retrofit only
- Tankless water heater applications must include the serial number
- For existing packaged HVAC with gas fired furnace and direct expansion cooling sections DCV; controller must meet joint utility advanced rooftop control guidelines
- Incentive eligibility is contingent upon use of natural gas-fired domestic water serving the specific measure equipment or fixture
- Insulation projects in spaces with existing, functional insulation do not qualify. Functional insulation is considered any existing insulation less than 30 years old. The building/space insulated must be heated with natural gas provided by CNGC. Roof insulation is defined as insulation that is installed on top of the roof deck. Minimum value of Post R-19 applies only where existing walls have an internal insulation cavity. If existing insulation is damaged to the point of ineffectiveness or applied in spotty coverage, the insulation must be removed and the condition that led to the ineffectiveness/damage must be corrected before the rebate will be considered. Insulation R value must meet specifications of current CNGC tariff
- To be considered for incentive funding, the output capacity of heating equipment applied for should generally not exceed winter design day requirements by more than 25%. Where multiple parallel units are proposed, heating capacities greater than or equal to 100% redundancy will not be incentivized

How to qualify for CNGC incentives

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   Call 1.866.450.0005 or visit www.cngc.com/energy-efficiency for program requirements.
2. Install energy-efficient upgrades:
   Contact a licensed contractor or one of our Trade Allies to install eligible measures.
3. Submit application:
   Available online at www.cngc.com/energy-efficiency. Sign and enclose:

   ☐ Application
   ☐ CNGC bill
   ☐ Invoice showing total cost, model number and R Values for insulation measures

Mail forms to:

Cascade Natural Gas Corporation,
c/o TRC
111 SW Columbia Street, Suite 945
Portland, OR 97201

Upon receipt of completed application, please allow six to eight weeks for processing and payment.

CASCADE NATURAL GAS CORPORATION®
A Subsidiary of MDU Resources Group, Inc.
In the Community to Serve®

Call **866.450.0005** or visit **cngc.com/energy-efficiency**

03/24

Puget Sound Energy

Power your bottom line with energy efficiency

Program guide for business customers

Whether your business is large or small, industrial or mom-and-pop, stepping up your energy efficiency is a smart move. Low or no cost tweaks can mean greater savings on energy bills year after year, which means more money to grow your business. Plus PSE is here to help with a large array of energy-efficiency programs that put money back in your budget when you upgrade to reduce energy consumption.

Rebates and instant discounts

Small Business Direct install	When it comes to energy efficiency, it's helpful to establish a baseline. Find out if your business is eligible for a free assessment to identify cost-effective energy-saving opportunities, and also get some upgrades installed for free.
Lighting to Go	Receive instant discounts on specific LED lighting when purchased at participating distributors.
Commercial HVAC	Significantly lower your business costs by upgrading your HVAC system. Enjoy monthly savings and greater building comfort through affordable smart thermostats, ductless heat pumps and advanced rooftop controls.
Commercial heat pump water heater	Invest in a super-efficient heat pump water heater and use 70% less energy than conventional electric water heaters. Less energy means more savings on your bill.
Full window replacement	Efficient windows seal in cool air during the summer and warm air during the winter, reducing your monthly bill and creating long-term energy savings.
Building insulation	By upgrading your insulation, you can improve thermal performance and create a more comfortable environment for your employees and customers.
Commercial foodservice	Equipment in the kitchen can account for 75% of your energy bill in foodservice businesses. Our rebates can save you thousands upfront on energy-efficient equipment.
Lodging	Maximize guest comfort and minimize energy costs through this program's equipment rebates and on-site energy assessments for hotels and motels.

Strategic energy management

Business Demand Response	Our Business Demand Response program, provides incentives to small, medium, large and industrial businesses for limiting electric use for short periods of time to help us maintain safe, reliable, affordable electricity.
Clean Buildings Accelerator	A no-cost program that unpacks the complex Clean Buildings Law, teaches facility teams how to get their buildings into compliance, and demonstrates how to leverage PSE incentives and technical resources to meet and exceed the law's targets.
Commercial Strategic Energy Management	Receive training, engineering guidance and incentives in this multi-year program for making low- and no-cost changes that reduce energy usage and energy bills.
Industrial Strategic Energy Management	This multi-year program provides training and tools to develop your own on-site energy-management team, as well as incentives thru low or no cost energy savings and achievement of program milestones.
Utility Energy Service Contract	These energy-management services for federal and tribal customers provide streamlined development, contracting and implementation of energy-saving measures.

Customized incentives

HVAC, Commissioning & Controls	
Building Tune-Up	This program is a simplified option for building owners who want to implement low- and no-cost energy-efficiency opportunities without the full commissioning process.
Existing Building Commissioning	This program offers incentives to help you maximize energy-saving potential within your building's existing systems with no capital upgrades required.
Monitoring Based Commissioning	Utilize this program on its own or together with our other commissioning programs to take building optimization to the next level with data collection and analysis that guides ongoing commissioning efforts.
Major HVAC Controls	Earn significant incentives for updating your HVAC controls system with more energy-efficient options, which can produce substantial savings in HVAC energy cost over time.
Industrial	
Industrial System Optimization Program	Receive the engineering support you need to tune up and optimize systems in your industrial facility for greater energy efficiency, and earn a grant to help cover the cost.
Comprehensive Small Industrial Grants	This is an opportunity for smaller industrial customers to expand energy savings beyond a typical equipment retrofit by bundling your capital incentives along with incentives for O&M changes, or earn incentives for O&M changes only.
Industrial Custom Capital Grants	This program offers incentives for energy-efficient upgrades in industrial facilities. If you're planning a custom capital project for your industrial site that demonstrates energy savings, PSE may be able to help pay for it with a custom capital grant. There are also incentives available to pay for operation and maintenance implementation opportunities within your facilities with a custom O&M grant.
Lighting	
Business Lighting Incentive Program	Lighting can amount to more than 40% of your business' total energy usage, and this program offers flexible incentive options that help you affordably upgrade many types of interior and exterior lighting.
Commercial Horticultural Lighting	This program offers incentives for installing energy-efficient LED grow lights in your commercial facility.
New construction	
Commercial New Construction	Business owners and developers have access to an array of financial incentives designed to help new commercial buildings reduce energy usage and costs.
Multifamily New Construction	Multi-unit developers can engage from the design process to leverage incentives for energy-efficient equipment and measures taking a whole building performance approach, and pays you for each unit of energy saved.
Retrofit	
Commercial Secondary Windows	Commercial secondary windows are a lower-cost, energy-efficient upgrade compared to full window replacement, and our incentives further offset costs.
Custom Retrofit Grants	This program offers incentives for energy-efficient upgrades that are not covered by other programs listed on this sheet (e.g.: space heat or process load boiler upgrades, variable frequency drives (VFDs) on fans or pumps, energy recovery, refrigeration system upgrades and chillers). If you're planning an upgrade that demonstrates quantifiable energy savings, we may be able to help you pay for it.
Pay for Performance	Combine multiple capital projects, operational and maintenance improvements, and behavioral changes that save 15% or more of whole-building energy consumption. This program speeds up the grant process and incentivizes savings measured at the meter.
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The energy-efficiency programs we offer our business customers support PSE's vision to reduce carbon emissions and create a cleaner energy future for all. Learn more at pse.com/together.

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

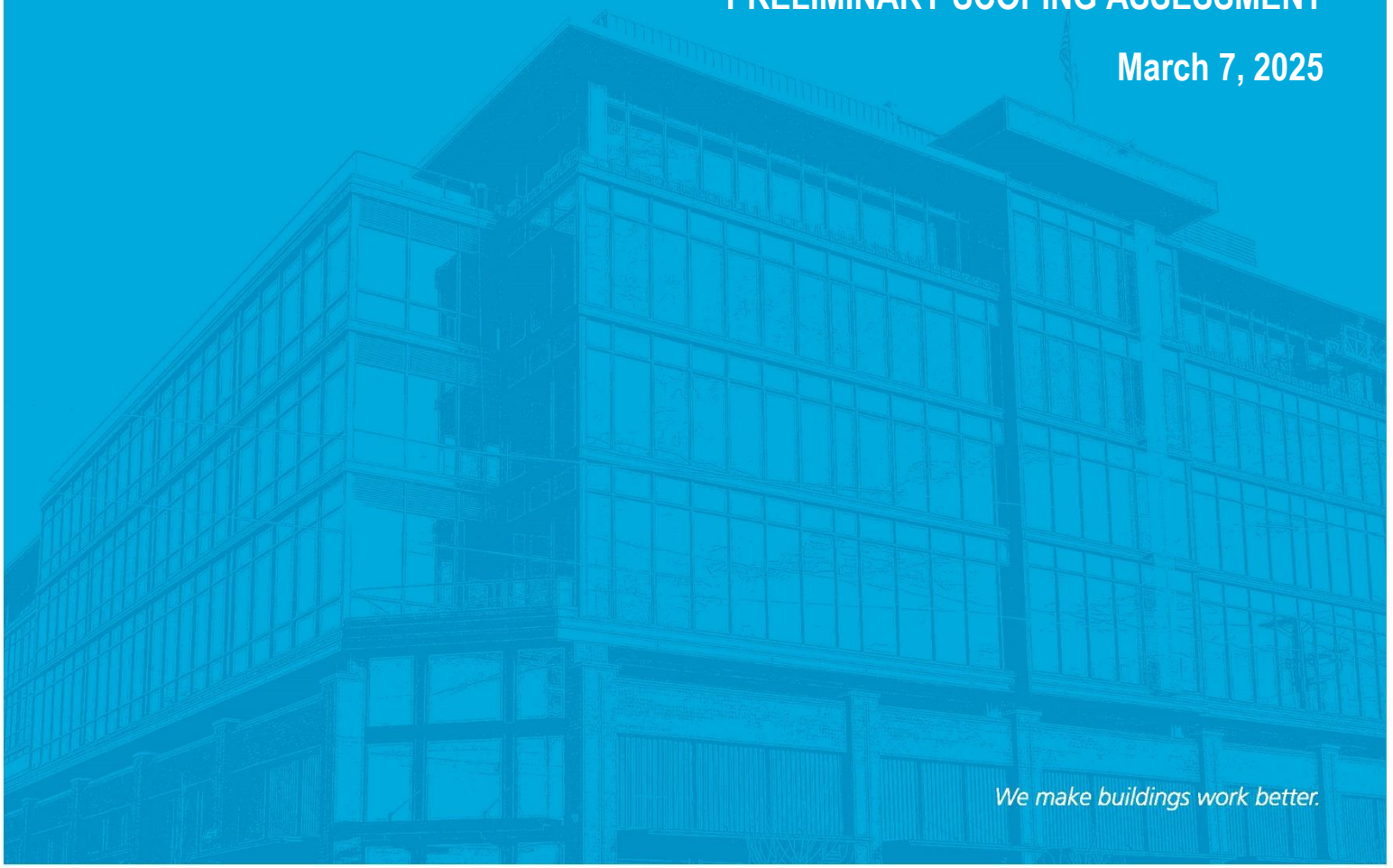
COUNTDOWN TO COMPLIANCE

Visitor Information Center

520 Fairhaven Ave, Burlington , WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025



We make buildings work better.

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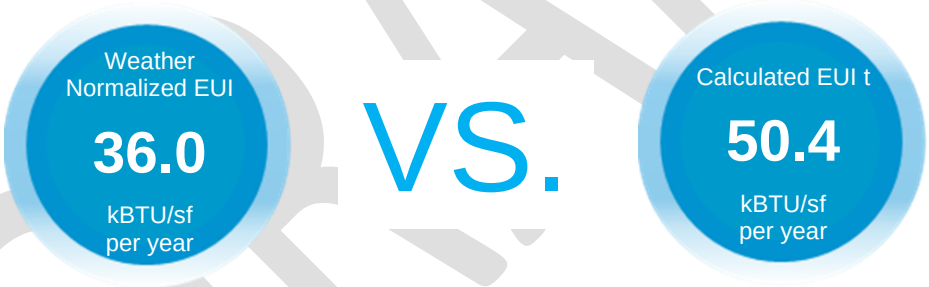
1.0 SUMMARY

The purpose of this report is to further evaluate the Visitor Information Center building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated (for reference only). Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:



It should be noted that the EUI and EUIt are based on Energy Star inputs and utility data from 2023.

Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building.

The next step will be to meet and review the EEMs in more detail. Based on these selected measures, MacDonald-Miller will provide an Investment Grade Audit (IGA) proposal that describes the scope of work to be studied as well as the cost to complete it. The deliverable from this effort is an investment-level scope of work with firm costs, energy savings and EUI reductions associated with the chosen EEMs.

Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built.

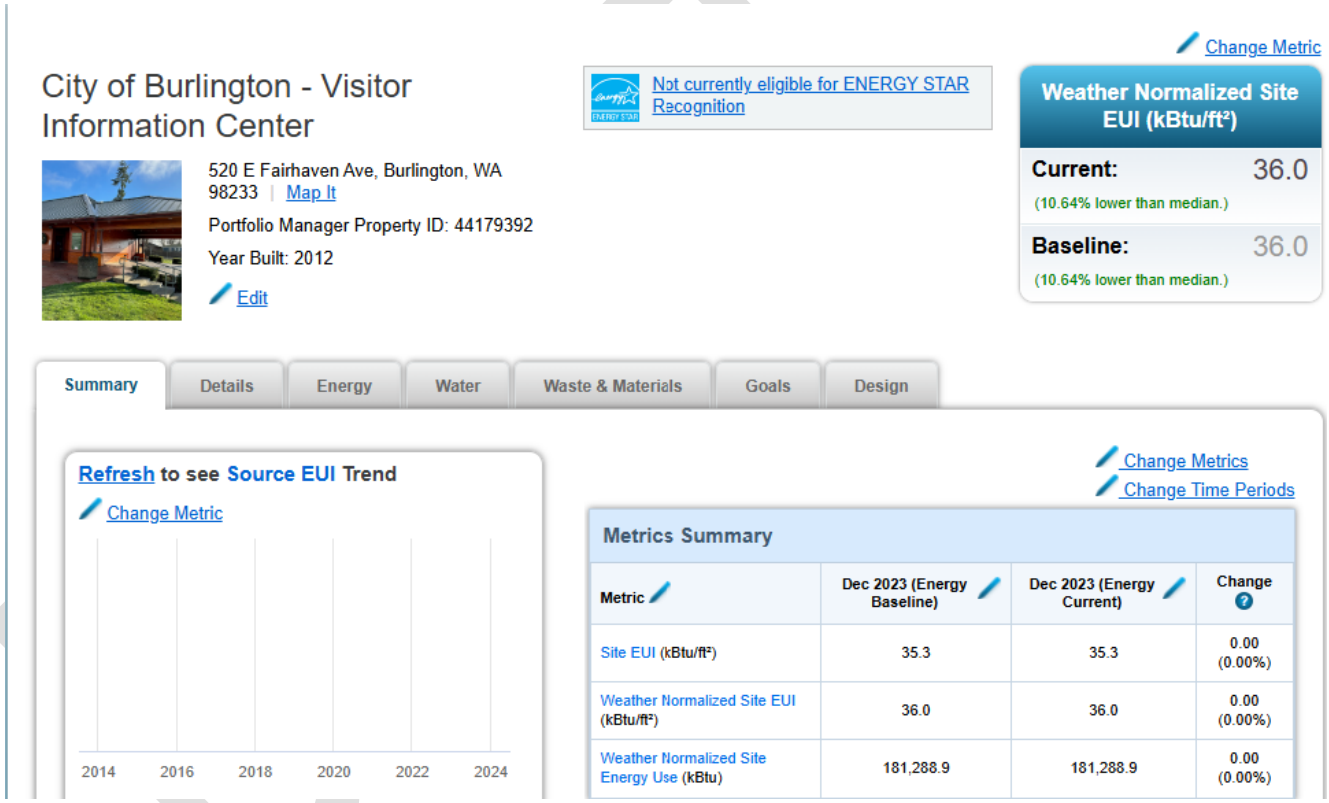
This graph below suggests that there was a large increase in 2023, assuming that was before any retrofits or more efficient equipment was installed,

2.0 ENERGY STAR INFORMATION

The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

The Department of Commerce has published target EUIs based on building type and climate zone. Western Washington is Climate Zone 4C while Eastern Washington is Climate Zone 5B.

Energy Star Site Information



2023 Weather Normalized EUI = **36.0**
Reference EUIt = **50.4**
EUI Below Target = **-14.4**

Based on owner provided information, the gross floor area is 5,030 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is below the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist Visitor Info Center with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

Visitor Information Center			2023 EUI: 36.0 Target EUI: 50.4		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings
			Low	High	Savings
IGA	**Investment Grade Audit (IGA)** - Detailed Review of As-Builts for Existing Systems, Measure Development, Energy Savings Calculations, Preliminary Design of DDC & Mechanical, Incentive Applications (State & Local), Estimating & Preconstruction Services.	$ 8,048	N/A		Required for Guaranteed Energy Savings and utility incentive applications as applicable
EEM 1	**Domestic Heating Water Upgrades** Upgrade water heating to tankless water heater technology.	$ 9,000	0.2	0.3	$ 44
EEM 2	**Destratification fans** Add destrat fans to balance temperatures from ceiling to floor.	$ 52,000	0.5	0.7	$ 200
EEM 3	**Upgrade Natural Gas Fireplace** Install new electric fire place.	$ 11,000	1.3	1.7	$ 300
	ROUGH ORDER OF MAGNITUDE	**$ 80,048**	**2.0**	**2.7**	**$ 544**
	Post Project EUI:		**34.0**	**33.3**	

Due to the recent completion of lighting upgrades to LED for this building, additional lighting measures were found to be unnecessary at this time.

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

4.0 PROJECT INCENTIVES

UTILITY INCENTIVES

Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

Cascade Natural Gas

Cascade Natural Gas
WA Commercial and Industrial Incentives

Rebates effective on installs on or after March 15, 2024

Heating	**Warm Air Furnaces - $6.00/kBtu/hr** High Efficiency Condensing Furnace—Min 91% AFUE **Ex:** 120 kBtuh x $6/ kBtuh = $720	**Boiler Steam Trap - $125** Min 300 kBtu in; steam pressure at 25 psig or > Retrofit Only
	HVAC Unit Heater - $5.00/kBtu/hr High Efficiency Condensing—Min 91% AFUE **Ex:** 180 kBtuh x $5/ kBtuh = $900	**Demand Control Ventilation - $50/nominal ton** 5 tons ≤ Unit Cooling Capacity ≤ 20 tons **Pre-Approval Required**
	Radiant Heating - $15.00/kBtu/hr Direct fired radiant heating **Ex:** 180 kBtuh x $15/ kBtuh = $2,700	**High-Efficiency Condensing Boiler - $10.25/kBtu/hr** Min 94% Thermal Eff & 300 kBtu input **Ex:** 1600 kBtuh x $10.25/ kBtuh = $16,400
	Install any piece of HVAC equipment and receive a $100 incentive bonus. Applies to warm air furnaces, HVAC unit heaters, radiant heaters, and both condensing and mid-efficiency boilers	
Food service Equipment	**Gas Griddle - $600** ENERGY STAR® ≥38% Cooking Eff/ ≤2,650 Btu/hr sq ft Idle Rate	**Gas Convection Oven - $800** ENERGY STAR® ≥44% Cooking Eff/ ≤13,000 Btu/hr Idle Rate
	Double Rack Oven - $2,700 FSTC Qualified ≥50% Cooking Eff/ ≤3,500 Btu/hr/Idle Rate D Rack	**Gas Conveyor Oven - $700** ≥42% tested baking efficiency
Weatherization	**Windows - (retrofit only)** Pre-Existing must be single pane; Post must be ENERGY STAR® Northern Zone U-Factor ≤ 0.30 - $7.50/sq ft U-Factor ≤ 0.22 - $9.00/sq ft	**Attic Insulation - (retrofit only)** Min R-30 - $2.00/sq ft Min R-45 - $2.50/sq ft
	Floor Insulation - (retrofit only) Min R-30 - $1.25/sq ft	**Hot Fluid Pipe Insulation - (retrofit only)** >140F, <200F, 1.5" insulation - $15.00 per linear foot, ≥ 200F, 2.5" insulation- $25.00 per linear foot
	Roof Insulation - (retrofit only) Min R-30 - $2.00/sq ft	**Wall Insulation - (retrofit only)** Min R-19 - $2.00/sq ft
Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597
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5.0 Energy Use Intensity Target (EUIt)

Washington State Department of Commerce

ENERGY USE INTENSITY TARGET (EUIt) CALCULATOR

CLEAN BUILDINGS PERFORMANCE STANDARD

Overview

The EUIt Calculator can be used as a tool to identify a building's activity and energy use intensity target (EUIt) for the Clean Buildings Performance Standard (CBPS). Please note, this tool is not a substitute for Form B, and is not required to be submitted for compliance. Building activity and energy use intensity target (Form B) of the CBPS is embedded within the Clean Buildings Portal and is required when submitting CBPS compliance documentation. **This tool is for informational use only**.

Instructions

Enter the appropriate information in the white cells. The tool will not calculate without County, Gross Floor Area, and Building Activity Type data. County, Building Types/Activities and Weekly Hours are drop down menus. Be sure to take note of comment boxes throughout this tool. Use the other worksheets in this tool as a reference for Building Activity Targets and Operating Shift Normalization Factors. Definitions for each listed Building Activity Type are noted in the Activity, Targets & Definitions worksheet.

Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	44179392
Property name	Visitor Information Center
Parent property name	
Address 1 (street)	520 Fairhaven Ave
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	5,030

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Office (Admin/professional office)	)30	1.00	63	50 or less	0.8	50	42.8
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	5,030	1.00				**50.4**	**42.8**

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

COUNTDOWN TO COMPLIANCE

Public Safety and Municipal Court

311 Cedar St , Burlington , WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025

We make buildings work better.

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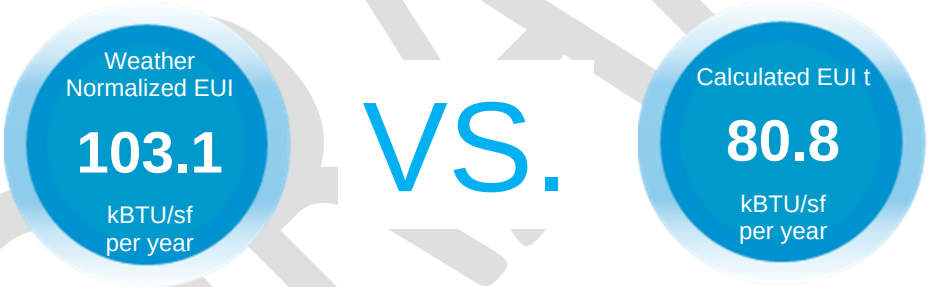
1.0 SUMMARY

The purpose of this report is to further evaluate the Public Safety and Municipal Court building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated (for reference only). Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:



It should be noted that the EUI and EUIt are based on Energy Star inputs and utility data from 2023.

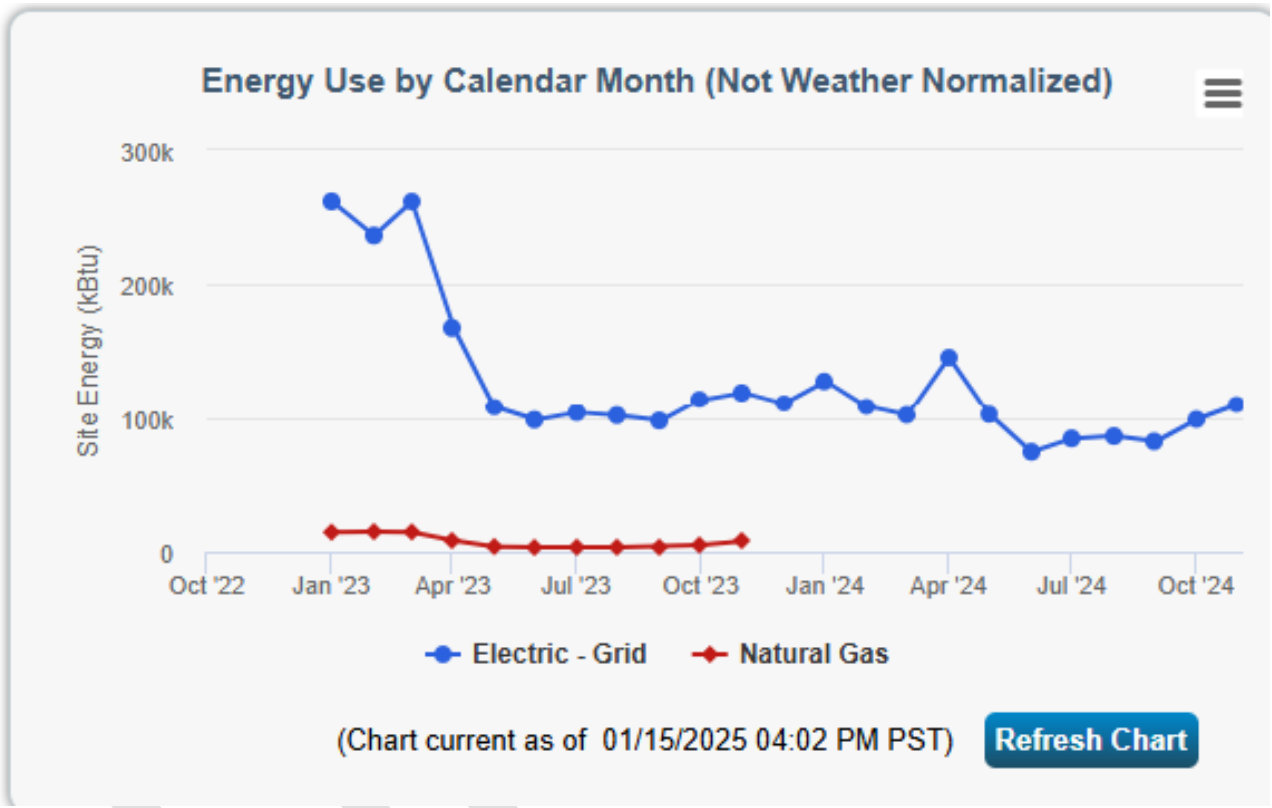
Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building.

The next step will be to meet and review the EEMs in more detail. Based on these selected measures, MacDonald-Miller will provide an Investment Grade Audit (IGA) proposal that describes the scope of work to be studied as well as the cost to complete it. The deliverable from this effort is an investment-level scope of work with firm costs, energy savings and EUI reductions associated with the chosen EEMs.

Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built.

This graph below suggests that there was a large decrease in 2023, This is making the buildings EUI higher than expected. More utility data will be needed to evaluate the buildings EUI.

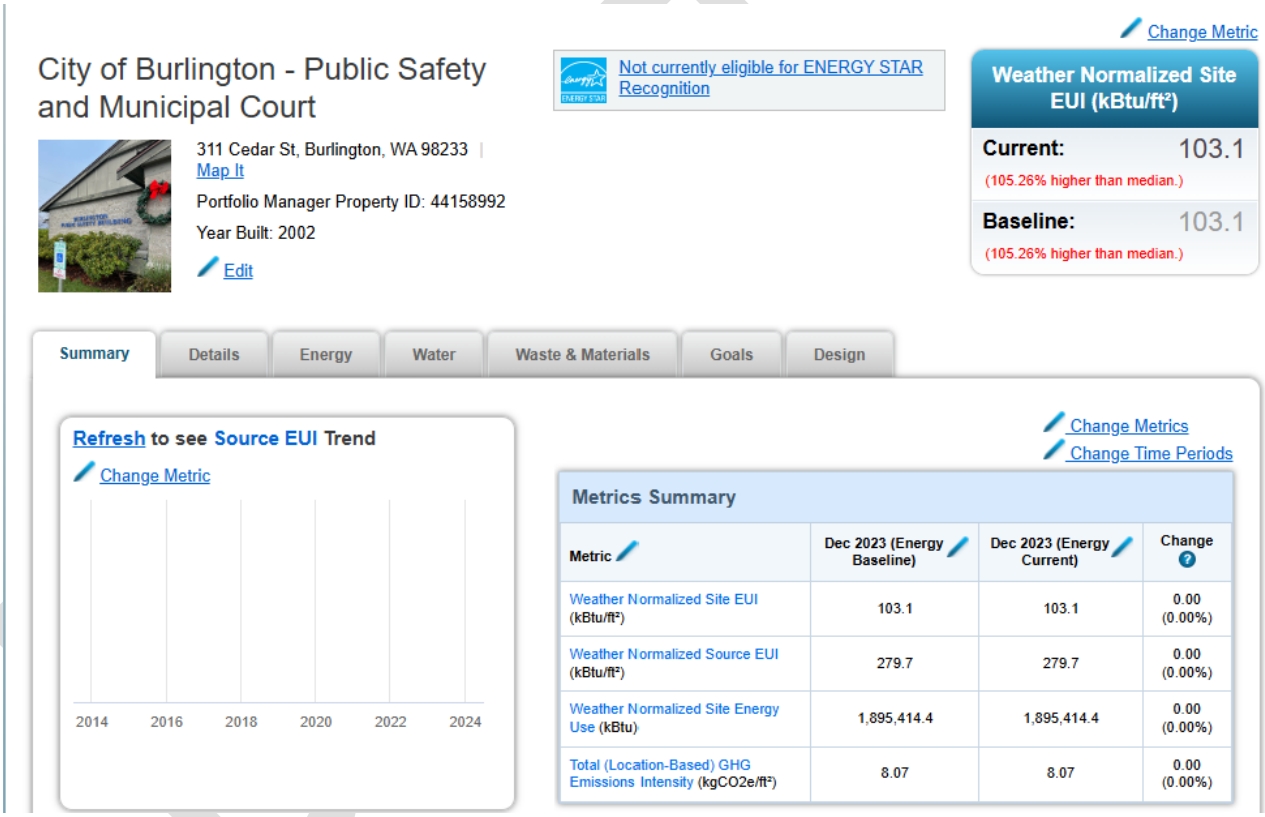


2.0 ENERGY STAR INFORMATION

The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

The Department of Commerce has published target EUIs based on building type and climate zone. Western Washington is Climate Zone 4C while Eastern Washington is Climate Zone 5B.

Energy Star Site Information



2023 Weather Normalized EUI = **103.1**
Reference EUIt = **80.8**
EUI Above Target = **22.3**

Based on owner provided information, the gross floor area is 18,385 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is above the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist Public Safety and Municipal Court with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

Public Safety and Municipal Court			2023 EUI: 103.1 Target EUI: 80.8		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings
			Low	High	Savings
IGA	**Investment Grade Audit (IGA)** - Detailed Review of As-Builts for Existing Systems, Measure Development, Energy Savings Calculations, Preliminary Design of DDC & Mechanical, Incentive Applications (State & Local), Estimating & Preconstruction Services.	$ 14,708	N/A		Required for Guaranteed Energy Savings and utility incentive applications as applicable
EEM 1	**Smart Building Analytics and Fault Detection** Provide fault analytics and monitoring of major equipment to achieve peak energy performance	$ 16,000	0.2	0.4	$ 187
EEM 2	**Interior Lighting and Controls Upgrade** Upgrade fluorescent fixtures and/or lamps to LED fixtures and/or lamps and add space level lighting controls	$ 94,000	1.9	2.2	$ 1,400
EEM 3	**HVAC Upgrades** Upgrades to VRF technology	$ 723,000	1.9	2.5	$ 700
EEM 4	**Envelope Ugrades** Upgrade Roof and add insulation to meet code	$ 300,000	0.0	0.2	$ 100
	ROUGH ORDER OF MAGNITUDE	**$ 1,147,708**	**4**	**5**	**$ 2,387**
	Post Project EUI:		**99.1**	**97.8**	

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

In addition to the above recommended EEM's the following items will need to be developed and implemented for a period of 1 year prior to submission:

- An Energy Management Plan
- An Operations and Maintenance Plan
- A Capital Management Plan

4.0 PROJECT INCENTIVES

UTILITY INCENTIVES

Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

Cascade Natural Gas

Cascade Natural Gas
WA Commercial and Industrial Incentives

Rebates effective on installs on or after March 15, 2024

Heating	**Warm Air Furnaces - $6.00/kBtu/hr** High Efficiency Condensing Furnace—Min 91% AFUE **Ex:** 120 kBtuh x $6/ kBtuh = $720	**Boiler Steam Trap - $125** Min 300 kBtu in; steam pressure at 25 psig or > Retrofit Only
	HVAC Unit Heater - $5.00/kBtu/hr High Efficiency Condensing—Min 91% AFUE **Ex:** 180 kBtuh x $5/ kBtuh = $900	**Demand Control Ventilation - $50/nominal ton** 5 tons ≤ Unit Cooling Capacity ≤ 20 tons **Pre-Approval Required**
	Radiant Heating - $15.00/kBtu/hr Direct fired radiant heating **Ex:** 180 kBtuh x $15/ kBtuh = $2,700	**High-Efficiency Condensing Boiler - $10.25/kBtu/hr** Min 94% Thermal Eff & 300 kBtu input **Ex:** 1600 kBtuh x $10.25/ kBtuh = $16,400
	Install any piece of HVAC equipment and receive a $100 incentive bonus. Applies to warm air furnaces, HVAC unit heaters, radiant heaters, and both condensing and mid-efficiency boilers	
Food service Equipment	**Gas Griddle - $600** ENERGY STAR® ≥38% Cooking Eff/ ≤2,650 Btu/hr sq ft Idle Rate	**Gas Convection Oven - $800** ENERGY STAR® ≥44% Cooking Eff/ ≤13,000 Btu/hr Idle Rate
	Double Rack Oven - $2,700 FSTC Qualified ≥50% Cooking Eff/ ≤3,500 Btu/hr/Idle Rate D Rack	**Gas Conveyor Oven - $700** ≥42% tested baking efficiency
Weatherization	**Windows - (retrofit only)** Pre-Existing must be single pane; Post must be ENERGY STAR® Northern Zone U-Factor ≤ 0.30 - $7.50/sq ft U-Factor ≤ 0.22 - $9.00/sq ft	**Attic Insulation - (retrofit only)** Min R-30 - $2.00/sq ft Min R-45 - $2.50/sq ft
	Floor Insulation - (retrofit only) Min R-30 - $1.25/sq ft	**Hot Fluid Pipe Insulation - (retrofit only)** >140F, <200F, 1.5" insulation - $15.00 per linear foot, ≥ 200F, 2.5" insulation- $25.00 per linear foot
	Roof Insulation - (retrofit only) Min R-30 - $2.00/sq ft	**Wall Insulation - (retrofit only)** Min R-19 - $2.00/sq ft
Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597
	Domestic Hot Water Tankless Water Heater .87 UEF/Thermal Efficiency - $120/gpm .93 UEF/Thermal Efficiency - $150/gpm **Ex:** 0.93 UEF 6 GPM x $150/gpm = $900	**Ozone Injection Laundry - $9,000** Venturi injection or bubble diffusion - Min 125 lb. total washer/extractor capacity. **Pre-approval required.**
	DHW Recirculation Controls - $200 Continuous Operation DHW Pump. Retrofit Only. **Pre-approval required.**	

View page 2 to review all terms and conditions, including equipment specific requirements.

Bundle and save in addition to your standard incentive!
Install radiant heating and upgrade insulation for a 10% increase.

Two insulation measures, min. 1000 sqft +$500
Two Kitchen Equipment +$300, Three Kitchen Equipment +$500

If you are planning equipment or building upgrades that do not fit within the standard incentives, but significantly reduce natural gas consumption, please call 866.450.0005 to learn about custom project opportunities.

General Qualifications

- New or existing commercial or industrial customer of Cascade Natural Gas Corporation on one of the following rate schedules: 504, 505, 511, 570
- High efficiency equipment, i.e. heating, water heating & cooking equipment installed as a replacement, retrofit or new, in place of standard efficiency
- Custom incentives are available, contact program representative if the equipment being installed is not on the prescriptive incentive list attached
- Each piece of equipment may only receive one incentive
- Applications must be submitted within 90 days of installation date. Please contact the program if your project does not meet this requirement
- Incentives may be subject to change and are only applicable for measures approved within the Biennial Conservation Plan at the time of installation
- Installation must comply with all federal, state and local code requirements
- Call 866-450-0005 or visit www.cngc.com/energy-efficiency/commercial or email conserve@cngc.com to review qualifications and eligibility

Equipment Specific Requirements

- Regular steam trap maintenance and replacement every seven (7) years is required, retrofit only
- Tankless water heater applications must include the serial number
- For existing packaged HVAC with gas fired furnace and direct expansion cooling sections DCV; controller must meet joint utility advanced rooftop control guidelines
- Incentive eligibility is contingent upon use of natural gas-fired domestic water serving the specific measure equipment or fixture
- Insulation projects in spaces with existing, functional insulation do not qualify. Functional insulation is considered any existing insulation less than 30 years old. The building/space insulated must be heated with natural gas provided by CNGC. Roof insulation is defined as insulation that is installed on top of the roof deck. Minimum value of Post R-19 applies only where existing walls have an internal insulation cavity. If existing insulation is damaged to the point of ineffectiveness or applied in spotty coverage, the insulation must be removed and the condition that led to the ineffectiveness/damage must be corrected before the rebate will be considered. Insulation R value must meet specifications of current CNGC tariff
- To be considered for incentive funding, the output capacity of heating equipment applied for should generally not exceed winter design day requirements by more than 25%. Where multiple parallel units are proposed, heating capacities greater than or equal to 100% redundancy will not be incentivized

How to qualify for CNGC incentives

1. Establish eligibility:
   Call 1.866.450.0005 or visit www.cngc.com/energy-efficiency for program requirements.
2. Install energy-efficient upgrades:
   Contact a licensed contractor or one of our Trade Allies to install eligible measures.
3. Submit application:
   Available online at www.cngc.com/energy-efficiency. Sign and enclose:

   ☐ Application
   ☐ CNGC bill
   ☐ Invoice showing total cost, model number and R Values for insulation measures

Mail forms to:

Cascade Natural Gas Corporation,
c/o TRC
111 SW Columbia Street, Suite 945
Portland, OR 97201

Upon receipt of completed application, please allow six to eight weeks for processing and payment.

CASCADE NATURAL GAS CORPORATION®
A Subsidiary of MDU Resources Group, Inc.
In the Community to Serve®

Call **866.450.0005** or visit **cngc.com/energy-efficiency**

03/24

Puget Sound Energy

Power your bottom line with energy efficiency

Program guide for business customers

Whether your business is large or small, industrial or mom-and-pop, stepping up your energy efficiency is a smart move. Low or no cost tweaks can mean greater savings on energy bills year after year, which means more money to grow your business. Plus PSE is here to help with a large array of energy-efficiency programs that put money back in your budget when you upgrade to reduce energy consumption.

Rebates and instant discounts

Small Business Direct install	When it comes to energy efficiency, it's helpful to establish a baseline. Find out if your business is eligible for a free assessment to identify cost-effective energy-saving opportunities, and also get some upgrades installed for free.
Lighting to Go	Receive instant discounts on specific LED lighting when purchased at participating distributors.
Commercial HVAC	Significantly lower your business costs by upgrading your HVAC system. Enjoy monthly savings and greater building comfort through affordable smart thermostats, ductless heat pumps and advanced rooftop controls.
Commercial heat pump water heater	Invest in a super-efficient heat pump water heater and use 70% less energy than conventional electric water heaters. Less energy means more savings on your bill.
Full window replacement	Efficient windows seal in cool air during the summer and warm air during the winter, reducing your monthly bill and creating long-term energy savings.
Building insulation	By upgrading your insulation, you can improve thermal performance and create a more comfortable environment for your employees and customers.
Commercial foodservice	Equipment in the kitchen can account for 75% of your energy bill in foodservice businesses. Our rebates can save you thousands upfront on energy-efficient equipment.
Lodging	Maximize guest comfort and minimize energy costs through this program's equipment rebates and on-site energy assessments for hotels and motels.

Strategic energy management

Business Demand Response	Our Business Demand Response program, provides incentives to small, medium, large and industrial businesses for limiting electric use for short periods of time to help us maintain safe, reliable, affordable electricity.
Clean Buildings Accelerator	A no-cost program that unpacks the complex Clean Buildings Law, teaches facility teams how to get their buildings into compliance, and demonstrates how to leverage PSE incentives and technical resources to meet and exceed the law's targets.
Commercial Strategic Energy Management	Receive training, engineering guidance and incentives in this multi-year program for making low- and no-cost changes that reduce energy usage and energy bills.
Industrial Strategic Energy Management	This multi-year program provides training and tools to develop your own on-site energy-management team, as well as incentives thru low or no cost energy savings and achievement of program milestones.
Utility Energy Service Contract	These energy-management services for federal and tribal customers provide streamlined development, contracting and implementation of energy-saving measures.

Customized incentives

HVAC, Commissioning & Controls	
Building Tune-Up	This program is a simplified option for building owners who want to implement low- and no-cost energy-efficiency opportunities without the full commissioning process.
Existing Building Commissioning	This program offers incentives to help you maximize energy-saving potential within your building's existing systems with no capital upgrades required.
Monitoring Based Commissioning	Utilize this program on its own or together with our other commissioning programs to take building optimization to the next level with data collection and analysis that guides ongoing commissioning efforts.
Major HVAC Controls	Earn significant incentives for updating your HVAC controls system with more energy-efficient options, which can produce substantial savings in HVAC energy cost over time.
Industrial	
Industrial System Optimization Program	Receive the engineering support you need to tune up and optimize systems in your industrial facility for greater energy efficiency, and earn a grant to help cover the cost.
Comprehensive Small Industrial Grants	This is an opportunity for smaller industrial customers to expand energy savings beyond a typical equipment retrofit by bundling your capital incentives along with incentives for O&M changes, or earn incentives for O&M changes only.
Industrial Custom Capital Grants	This program offers incentives for energy-efficient upgrades in industrial facilities. If you're planning a custom capital project for your industrial site that demonstrates energy savings, PSE may be able to help pay for it with a custom capital grant. There are also incentives available to pay for operation and maintenance implementation opportunities within your facilities with a custom O&M grant.
Lighting	
Business Lighting Incentive Program	Lighting can amount to more than 40% of your business' total energy usage, and this program offers flexible incentive options that help you affordably upgrade many types of interior and exterior lighting.
Commercial Horticultural Lighting	This program offers incentives for installing energy-efficient LED grow lights in your commercial facility.
New construction	
Commercial New Construction	Business owners and developers have access to an array of financial incentives designed to help new commercial buildings reduce energy usage and costs.
Multifamily New Construction	Multi-unit developers can engage from the design process to leverage incentives for energy-efficient equipment and measures taking a whole building performance approach, and pays you for each unit of energy saved.
Retrofit	
Commercial Secondary Windows	Commercial secondary windows are a lower-cost, energy-efficient upgrade compared to full window replacement, and our incentives further offset costs.
Custom Retrofit Grants	This program offers incentives for energy-efficient upgrades that are not covered by other programs listed on this sheet (e.g.: space heat or process load boiler upgrades, variable frequency drives (VFDs) on fans or pumps, energy recovery, refrigeration system upgrades and chillers). If you're planning an upgrade that demonstrates quantifiable energy savings, we may be able to help you pay for it.
Pay for Performance	Combine multiple capital projects, operational and maintenance improvements, and behavioral changes that save 15% or more of whole-building energy consumption. This program speeds up the grant process and incentivizes savings measured at the meter.
Telecommunications Efficiency Program	This program offers incentives for energy-efficient improvements to customers with medium and large telecommunications facilities.

The energy-efficiency programs we offer our business customers support PSE's vision to reduce carbon emissions and create a cleaner energy future for all. Learn more at pse.com/together.

5.0 Energy Use Intensity Target (EUIt)

Washington State Department of Commerce

ENERGY USE INTENSITY TARGET (EUIt) CALCULATOR

CLEAN BUILDINGS PERFORMANCE STANDARD

Overview

The EUIt Calculator can be used as a tool to identify a building's activity and energy use intensity target (EUIt) for the Clean Buildings Performance Standard (CBPS). Please note, this tool is not a substitute for Form B, and is not required to be submitted for compliance. Building activity and energy use intensity target (Form B) of the CBPS is embedded within the Clean Buildings Portal and is required when submitting CBPS compliance documentation. **This tool is for informational use only**.

Instructions

Enter the appropriate information in the white cells. The tool will not calculate without County, Gross Floor Area, and Building Activity Type data. County, Building Types/Activities and Weekly Hours are drop down menus. Be sure to take note of comment boxes throughout this tool. Use the other worksheets in this tool as a reference for Building Activity Targets and Operating Shift Normalization Factors. Definitions for each listed Building Activity Type are noted in the Activity, Targets & Definitions worksheet.

Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	44158992
Property name	Public Safety and Municipal Court
Parent property name	
Address 1 (street)	311 Cedar St
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	18,385

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Courthouse	18,385	1.00	101	51 to 167	0.8	81	68.7
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	18,385	1.00				**80.8**	**68.7**

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

COUNTDOWN TO COMPLIANCE

Parks and Recreation Headquarters

900 Fairhaven Ave, Burlington , WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025

We make buildings work better.

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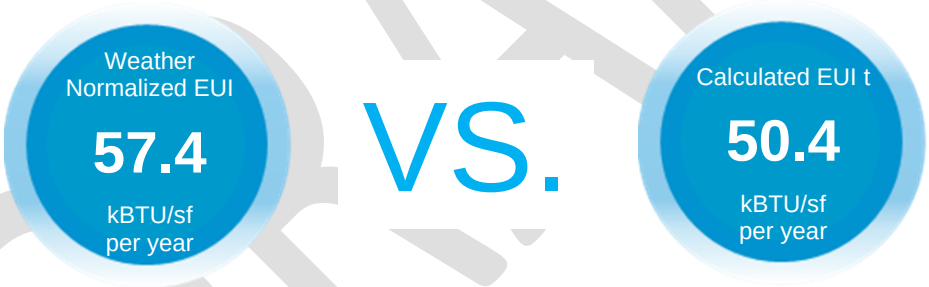
1.0 SUMMARY

The purpose of this report is to further evaluate the Parks and Recreation Headquarters building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated (for reference only). Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:



It should be noted that the EUI and EUIt are based on Energy Star inputs and utility data from 2023.

Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building.

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Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built.

This graph below suggests that there was a large increase in 2023, assuming that was before any retrofits or more efficient equipment was installed,

2.0 ENERGY STAR INFORMATION

The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

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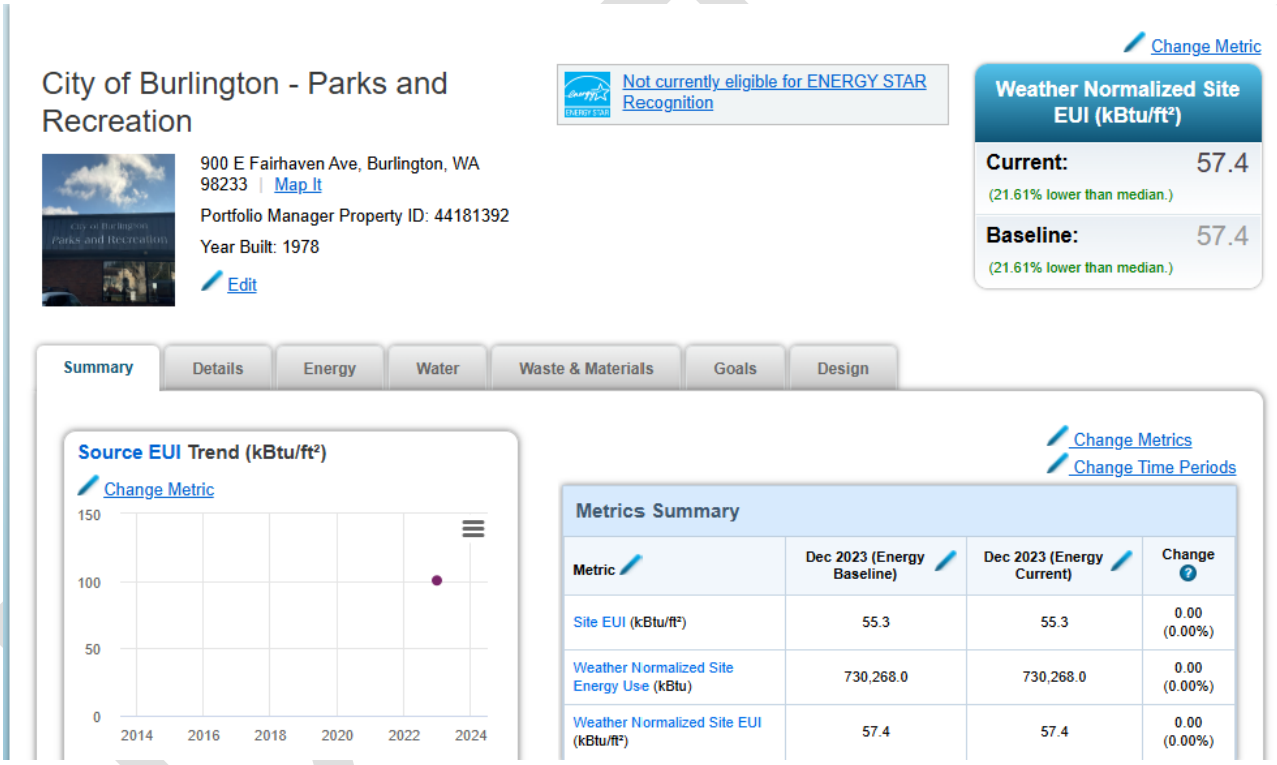

2023 Weather Normalized EUI = **57.4**
Reference EUIt = **50.4**
EUI Above Target = **7.0**

Based on owner provided information, the gross floor area is 12,719 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is above the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist parks and Recreations headquarters with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

Parks and Recreation Headquarters			2023 EUI: 57.4 Target EUI: 50.4		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings
			Low	High	Savings
IGA	**Investment Grade Audit (IGA)** - Detailed Review of As-Builts for Existing Systems, Measure Development, Energy Savings Calculations, Preliminary Design of DDC & Mechanical, Incentive Applications (State & Local), Estimating & Preconstruction Services.	$ 10,175	N/A		Required for Guaranteed Energy Savings, incentive applications (Utility and Early Adopter if eligible)
EEM 1	**Smart Building Analytics and Fault Detection** Provide fault analytics and monitoring of major equipment to achieve peak energy performance	$ 11,000			
EEM 2	**Interior Lighting and Controls Upgrade** Upgrade fluorescent fixtures and/or lamps to LED fixtures and/or lamps and add space level lighting controls	$ 65,000	1	2	$ 500
EEM 3	**HVAC Upgrades** **Upgrade to water source ho to more efficent models**	$ 425,000	2	3	$ -
EEM 4	**Upgrade HHW Boiler to Condensing** Replace non-condensing gas boilers with new higher efficiency condensing boilers	$ 595,000	2	3	$ 500
EEM 5	**Envelope Upgrade** Replace existing windows with new more efficient windows with increased R value	$ 765,000	0.5	1	$ 100
EEM 6	**Cooling tower upgrade** Upgrade cooling tower to newer more efficient model	$ 595,000	0.3	1	$ 200
	ROUGH ORDER OF MAGNITUDE	**$ 2,466,175**	**6**	**9**	**$ 1,300** **$ 17,081**
		Post Project EUI:	**51.2**	**48.2**	

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

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Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

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	Install any piece of HVAC equipment and receive a $100 incentive bonus. Applies to warm air furnaces, HVAC unit heaters, radiant heaters, and both condensing and mid-efficiency boilers	
Food service Equipment	**Gas Griddle - $600** ENERGY STAR® ≥38% Cooking Eff/ ≤2,650 Btu/hr sq ft Idle Rate	**Gas Convection Oven - $800** ENERGY STAR® ≥44% Cooking Eff/ ≤13,000 Btu/hr Idle Rate
	Double Rack Oven - $2,700 FSTC Qualified ≥50% Cooking Eff/ ≤3,500 Btu/hr/Idle Rate D Rack	**Gas Conveyor Oven - $700** ≥42% tested baking efficiency
Weatherization	**Windows - (retrofit only)** Pre-Existing must be single pane; Post must be ENERGY STAR® Northern Zone U-Factor ≤ 0.30 - $7.50/sq ft U-Factor ≤ 0.22 - $9.00/sq ft	**Attic Insulation - (retrofit only)** Min R-30 - $2.00/sq ft Min R-45 - $2.50/sq ft
	Floor Insulation - (retrofit only) Min R-30 - $1.25/sq ft	**Hot Fluid Pipe Insulation - (retrofit only)** >140F, <200F, 1.5" insulation - $15.00 per linear foot, ≥ 200F, 2.5" insulation- $25.00 per linear foot
	Roof Insulation - (retrofit only) Min R-30 - $2.00/sq ft	**Wall Insulation - (retrofit only)** Min R-19 - $2.00/sq ft
Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597
	Domestic Hot Water Tankless Water Heater .87 UEF/Thermal Efficiency - $120/gpm .93 UEF/Thermal Efficiency - $150/gpm **Ex:** 0.93 UEF 6 GPM x $150/gpm = $900	**Ozone Injection Laundry - $9,000** Venturi injection or bubble diffusion - Min 125 lb. total washer/extractor capacity. **Pre-approval required.**
	DHW Recirculation Controls - $200 Continuous Operation DHW Pump. Retrofit Only. **Pre-approval required.**	

View page 2 to review all terms and conditions, including equipment specific requirements.

Bundle and save in addition to your standard incentive!
Install radiant heating and upgrade insulation for a 10% increase.

Two insulation measures, min. 1000 sqft +$500
Two Kitchen Equipment +$300, Three Kitchen Equipment +$500

If you are planning equipment or building upgrades that do not fit within the standard incentives, but significantly reduce natural gas consumption, please call 866.450.0005 to learn about custom project opportunities.

General Qualifications

- New or existing commercial or industrial customer of Cascade Natural Gas Corporation on one of the following rate schedules: 504, 505, 511, 570
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- Custom incentives are available, contact program representative if the equipment being installed is not on the prescriptive incentive list attached
- Each piece of equipment may only receive one incentive
- Applications must be submitted within 90 days of installation date. Please contact the program if your project does not meet this requirement
- Incentives may be subject to change and are only applicable for measures approved within the Biennial Conservation Plan at the time of installation
- Installation must comply with all federal, state and local code requirements
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- Regular steam trap maintenance and replacement every seven (7) years is required, retrofit only
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- To be considered for incentive funding, the output capacity of heating equipment applied for should generally not exceed winter design day requirements by more than 25%. Where multiple parallel units are proposed, heating capacities greater than or equal to 100% redundancy will not be incentivized

How to qualify for CNGC incentives

1. Establish eligibility:
   Call 1.866.450.0005 or visit www.cngc.com/energy-efficiency for program requirements.
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   Contact a licensed contractor or one of our Trade Allies to install eligible measures.
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   ☐ Application
   ☐ CNGC bill
   ☐ Invoice showing total cost, model number and R Values for insulation measures

Mail forms to:

Cascade Natural Gas Corporation,
c/o TRC
111 SW Columbia Street, Suite 945
Portland, OR 97201

Upon receipt of completed application, please allow six to eight weeks for processing and payment.

CASCADE NATURAL GAS CORPORATION®
A Subsidiary of MDU Resources Group, Inc.
In the Community to Serve®

Call **866.450.0005** or visit **cngc.com/energy-efficiency**

03/24

Puget Sound Energy

Power your bottom line with energy efficiency

Program guide for business customers

Whether your business is large or small, industrial or mom-and-pop, stepping up your energy efficiency is a smart move. Low or no cost tweaks can mean greater savings on energy bills year after year, which means more money to grow your business. Plus PSE is here to help with a large array of energy-efficiency programs that put money back in your budget when you upgrade to reduce energy consumption.

Rebates and instant discounts

Small Business Direct install	When it comes to energy efficiency, it's helpful to establish a baseline. Find out if your business is eligible for a free assessment to identify cost-effective energy-saving opportunities, and also get some upgrades installed for free.
Lighting to Go	Receive instant discounts on specific LED lighting when purchased at participating distributors.
Commercial HVAC	Significantly lower your business costs by upgrading your HVAC system. Enjoy monthly savings and greater building comfort through affordable smart thermostats, ductless heat pumps and advanced rooftop controls.
Commercial heat pump water heater	Invest in a super-efficient heat pump water heater and use 70% less energy than conventional electric water heaters. Less energy means more savings on your bill.
Full window replacement	Efficient windows seal in cool air during the summer and warm air during the winter, reducing your monthly bill and creating long-term energy savings.
Building insulation	By upgrading your insulation, you can improve thermal performance and create a more comfortable environment for your employees and customers.
Commercial foodservice	Equipment in the kitchen can account for 75% of your energy bill in foodservice businesses. Our rebates can save you thousands upfront on energy-efficient equipment.
Lodging	Maximize guest comfort and minimize energy costs through this program's equipment rebates and on-site energy assessments for hotels and motels.

Strategic energy management

Business Demand Response	Our Business Demand Response program, provides incentives to small, medium, large and industrial businesses for limiting electric use for short periods of time to help us maintain safe, reliable, affordable electricity.
Clean Buildings Accelerator	A no-cost program that unpacks the complex Clean Buildings Law, teaches facility teams how to get their buildings into compliance, and demonstrates how to leverage PSE incentives and technical resources to meet and exceed the law's targets.
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Customized incentives

HVAC, Commissioning & Controls	
Building Tune-Up	This program is a simplified option for building owners who want to implement low- and no-cost energy-efficiency opportunities without the full commissioning process.
Existing Building Commissioning	This program offers incentives to help you maximize energy-saving potential within your building's existing systems with no capital upgrades required.
Monitoring Based Commissioning	Utilize this program on its own or together with our other commissioning programs to take building optimization to the next level with data collection and analysis that guides ongoing commissioning efforts.
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Industrial System Optimization Program	Receive the engineering support you need to tune up and optimize systems in your industrial facility for greater energy efficiency, and earn a grant to help cover the cost.
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Industrial Custom Capital Grants	This program offers incentives for energy-efficient upgrades in industrial facilities. If you're planning a custom capital project for your industrial site that demonstrates energy savings, PSE may be able to help pay for it with a custom capital grant. There are also incentives available to pay for operation and maintenance implementation opportunities within your facilities with a custom O&M grant.
Lighting	
Business Lighting Incentive Program	Lighting can amount to more than 40% of your business' total energy usage, and this program offers flexible incentive options that help you affordably upgrade many types of interior and exterior lighting.
Commercial Horticultural Lighting	This program offers incentives for installing energy-efficient LED grow lights in your commercial facility.
New construction	
Commercial New Construction	Business owners and developers have access to an array of financial incentives designed to help new commercial buildings reduce energy usage and costs.
Multifamily New Construction	Multi-unit developers can engage from the design process to leverage incentives for energy-efficient equipment and measures taking a whole building performance approach, and pays you for each unit of energy saved.
Retrofit	
Commercial Secondary Windows	Commercial secondary windows are a lower-cost, energy-efficient upgrade compared to full window replacement, and our incentives further offset costs.
Custom Retrofit Grants	This program offers incentives for energy-efficient upgrades that are not covered by other programs listed on this sheet (e.g.: space heat or process load boiler upgrades, variable frequency drives (VFDs) on fans or pumps, energy recovery, refrigeration system upgrades and chillers). If you're planning an upgrade that demonstrates quantifiable energy savings, we may be able to help you pay for it.
Pay for Performance	Combine multiple capital projects, operational and maintenance improvements, and behavioral changes that save 15% or more of whole-building energy consumption. This program speeds up the grant process and incentivizes savings measured at the meter.
Telecommunications Efficiency Program	This program offers incentives for energy-efficient improvements to customers with medium and large telecommunications facilities.

The energy-efficiency programs we offer our business customers support PSE's vision to reduce carbon emissions and create a cleaner energy future for all. Learn more at pse.com/together.

5.0 Energy Use Intensity Target (EUIt)

Washington State Department of Commerce

ENERGY USE INTENSITY TARGET (EUIt) CALCULATOR

CLEAN BUILDINGS PERFORMANCE STANDARD

Overview

The EUIt Calculator can be used as a tool to identify a building's activity and energy use intensity target (EUIt) for the Clean Buildings Performance Standard (CBPS). Please note, this tool is not a substitute for Form B, and is not required to be submitted for compliance. Building activity and energy use intensity target (Form B) of the CBPS is embedded within the Clean Buildings Portal and is required when submitting CBPS compliance documentation. **This tool is for informational use only**.

Instructions

Enter the appropriate information in the white cells. The tool will not calculate without County, Gross Floor Area, and Building Activity Type data. County, Building Types/Activities and Weekly Hours are drop down menus. Be sure to take note of comment boxes throughout this tool. Use the other worksheets in this tool as a reference for Building Activity Targets and Operating Shift Normalization Factors. Definitions for each listed Building Activity Type are noted in the Activity, Targets & Definitions worksheet.

Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	44131892
Property name	Parks and Recreation Headquarters
Parent property name	
Address 1 (street)	900 Fairhaven Ave
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	12,719

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Office (Admin/professional office)	12,719	1.00	63	50 or less	0.8	50	42.8
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	12,719	1.00				**50.4**	**42.8**

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

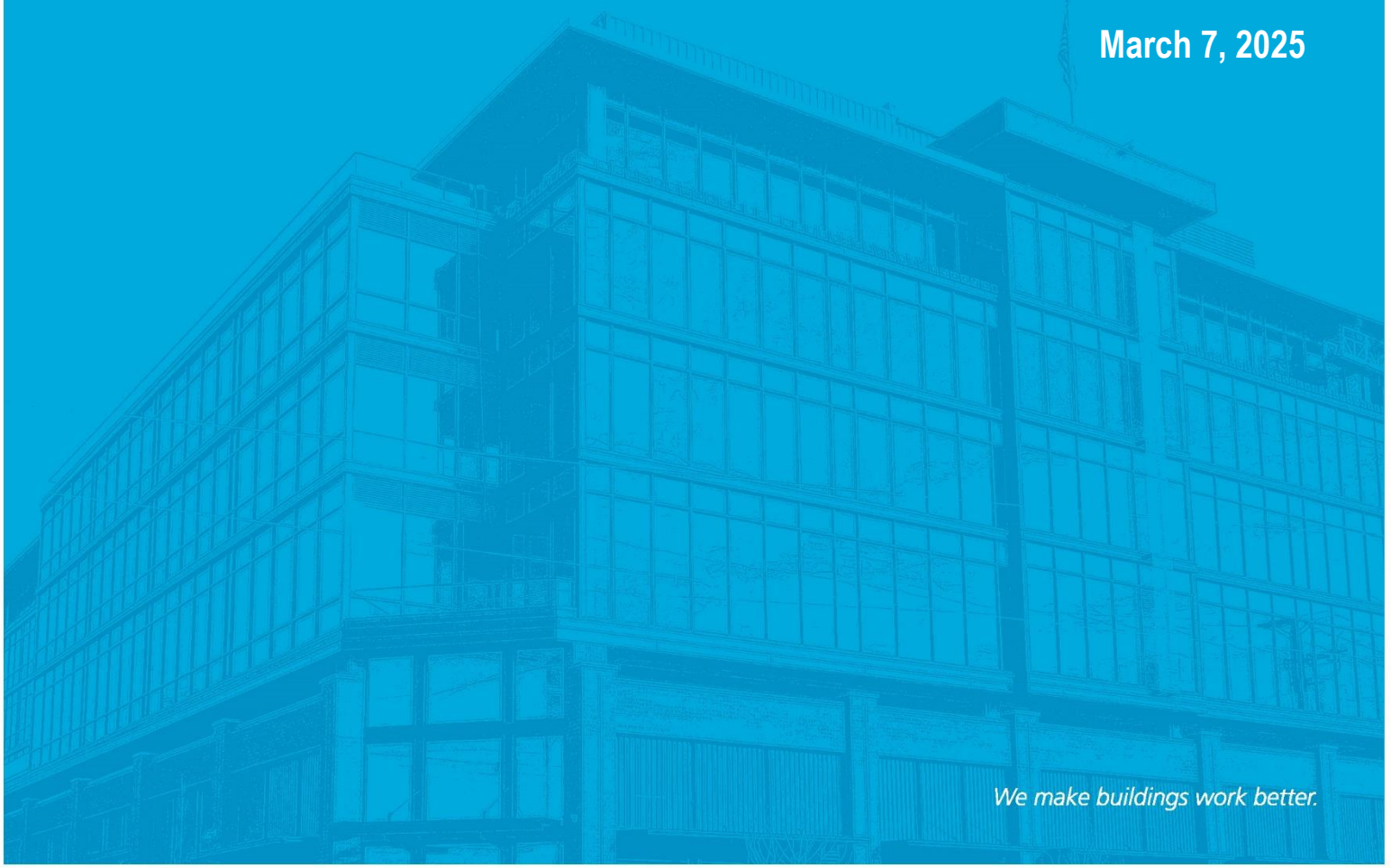
COUNTDOWN TO COMPLIANCE

First Step Center

465 Pease Rd, Burlington , WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025



We make buildings work better.

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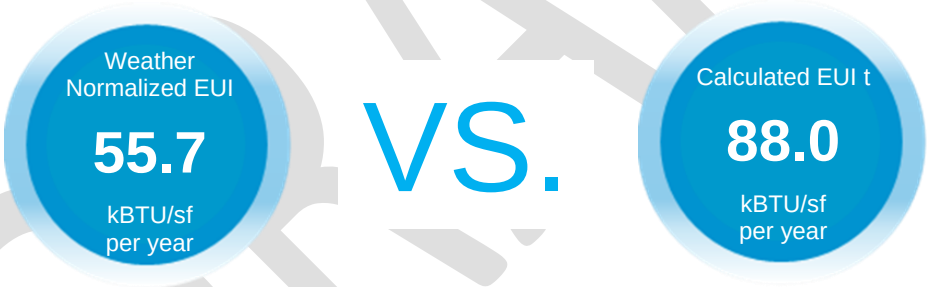
2 ENERGY STAR INFORMATION..... 3
3 RECOMMENDATIONS..... 4
4 UTILITY INCENTIVES..... 5
5 Energy Use Intensity Target (EUIt)..... 10

1.0 SUMMARY

The purpose of this report is to further evaluate the First Step Center building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated (for reference only). Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:



It should be noted that the EUI and EUIt are based on Energy Star inputs and utility data from 2024.

Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building.

The next step will be to meet and review the EEMs in more detail. Based on these selected measures, MacDonald-Miller will provide an Investment Grade Audit (IGA) proposal that describes the scope of work to be studied as well as the cost to complete it. The deliverable from this effort is an investment-level scope of work with firm costs, energy savings and EUI reductions associated with the chosen EEMs.

Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

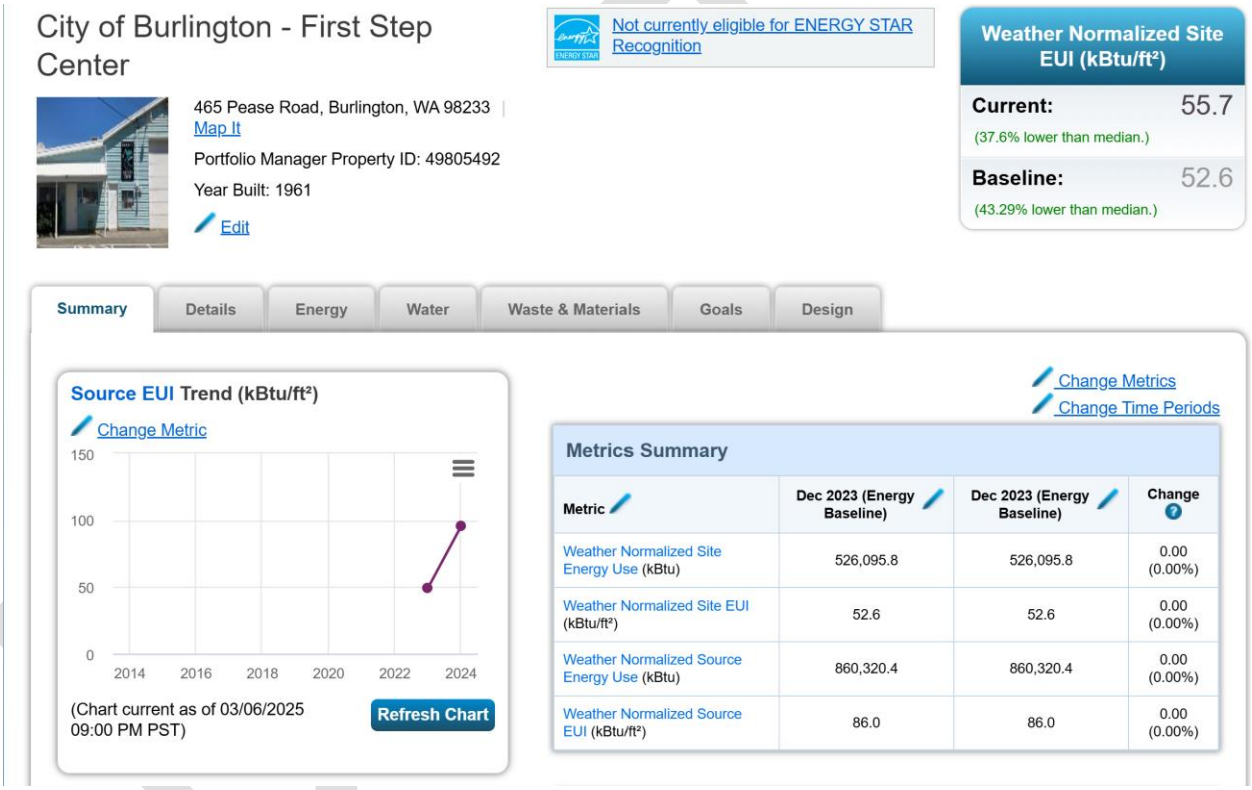
It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built.

2.0 ENERGY STAR INFORMATION

The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

The Department of Commerce has published target EUIs based on building type and climate zone. Western Washington is Climate Zone 4C while Eastern Washington is Climate Zone 5B.

Energy Star Site Information



2024 Weather Normalized EUI = 55.7
Reference EUIt = 88.0
EUI Below Target = **32.3**

Based on owner provided information and county parcel data, the gross floor area is 10,000 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2024 energy usage, this building is below the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist First Step Center with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

First Step Center			2024 EUI: 55.7 Target EUI: 88.0		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings
			Low	High	Savings
IGA	**Investment Grade Audit (IGA)** - Detailed Review of As-Builts for Existing Systems, Measure Development, Energy Savings Calculations, Preliminary Design of DDC & Mechanical, Incentive Applications (State & Local), Estimating & Preconstruction Services.	$ 7,500	N/A		Required for Guaranteed Energy Savings, incentive applications (Utility and Early Adopter if eligible)
EEM 1	**Interior Lighting and Controls Upgrade** Upgrade fluorescent fixtures and/or lamps to LED fixtures and/or lamps and add space level lighting controls	$ 51,000	6	6	$ 2,200
EEM 3	**HVAC Upgrades to VRF technology**	$ 808,000	3	4	$ 300
EEM 4	**Domestic Hot water tank upgrade** **Upgrade to heat pump technology**	$ 68,000	1	1	$ 100
	ROUGH ORDER OF MAGNITUDE	**$ 934,500**	**9**	**11**	**$ 2,600 $ 17,743**
	Post Project EUI:		**46.3**	**44.4**	

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

4.0 PROJECT INCENTIVES

UTILITY INCENTIVES

Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

Cascade Natural Gas

Cascade Natural Gas
WA Commercial and Industrial Incentives

Rebates effective on installs on or after March 15, 2024

Heating	**Warm Air Furnaces - $6.00/kBtu/hr** High Efficiency Condensing Furnace—Min 91% AFUE **Ex:** 120 kBtuh x $6/ kBtuh = $720	**Boiler Steam Trap - $125** Min 300 kBtu in; steam pressure at 25 psig or > Retrofit Only
	HVAC Unit Heater - $5.00/kBtu/hr High Efficiency Condensing—Min 91% AFUE **Ex:** 180 kBtuh x $5/ kBtuh = $900	**Demand Control Ventilation - $50/nominal ton** 5 tons ≤ Unit Cooling Capacity ≤ 20 tons **Pre-Approval Required**
	Radiant Heating - $15.00/kBtu/hr Direct fired radiant heating **Ex:** 180 kBtuh x $15/ kBtuh = $2,700	**High-Efficiency Condensing Boiler - $10.25/kBtu/hr** Min 94% Thermal Eff & 300 kBtu input **Ex:** 1600 kBtuh x $10.25/ kBtuh = $16,400
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Commercial New Construction	Business owners and developers have access to an array of financial incentives designed to help new commercial buildings reduce energy usage and costs.
Multifamily New Construction	Multi-unit developers can engage from the design process to leverage incentives for energy-efficient equipment and measures taking a whole building performance approach, and pays you for each unit of energy saved.
Retrofit	
Commercial Secondary Windows	Commercial secondary windows are a lower-cost, energy-efficient upgrade compared to full window replacement, and our incentives further offset costs.
Custom Retrofit Grants	This program offers incentives for energy-efficient upgrades that are not covered by other programs listed on this sheet (e.g.: space heat or process load boiler upgrades, variable frequency drives (VFDs) on fans or pumps, energy recovery, refrigeration system upgrades and chillers). If you're planning an upgrade that demonstrates quantifiable energy savings, we may be able to help you pay for it.
Pay for Performance	Combine multiple capital projects, operational and maintenance improvements, and behavioral changes that save 15% or more of whole-building energy consumption. This program speeds up the grant process and incentivizes savings measured at the meter.
Telecommunications Efficiency Program	This program offers incentives for energy-efficient improvements to customers with medium and large telecommunications facilities.

The energy-efficiency programs we offer our business customers support PSE's vision to reduce carbon emissions and create a cleaner energy future for all. Learn more at pse.com/together.

5.0 Energy Use Intensity Target (EUIt)

Washington State Department of Commerce

ENERGY USE INTENSITY TARGET (EUIt) CALCULATOR

CLEAN BUILDINGS PERFORMANCE STANDARD

Overview

The EUIt Calculator can be used as a tool to identify a building's activity and energy use intensity target (EUIt) for the Clean Buildings Performance Standard (CBPS). Please note, this tool is not a substitute for Form B, and is not required to be submitted for compliance. Building activity and energy use intensity target (Form B) of the CBPS is embedded within the Clean Buildings Portal and is required when submitting CBPS compliance documentation. **This tool is for informational use only**.

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Enter the appropriate information in the white cells. The tool will not calculate without County, Gross Floor Area, and Building Activity Type data. County, Building Types/Activities and Weekly Hours are drop down menus. Be sure to take note of comment boxes throughout this tool. Use the other worksheets in this tool as a reference for Building Activity Targets and Operating Shift Normalization Factors. Definitions for each listed Building Activity Type are noted in the Activity, Targets & Definitions worksheet.

Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	49805492
Property name	First Step Center
Parent property name	
Address 1 (street)	465 Pease Rd
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	10,000

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Residence Hall/Dormitory	10,000	1.00	88	168.0	1.0	88	74.8
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	10,000	1.00				**88.0**	**74.8**

MacDonald-Miller
FACILITY SOLUTIONS®

Clean Buildings Standard

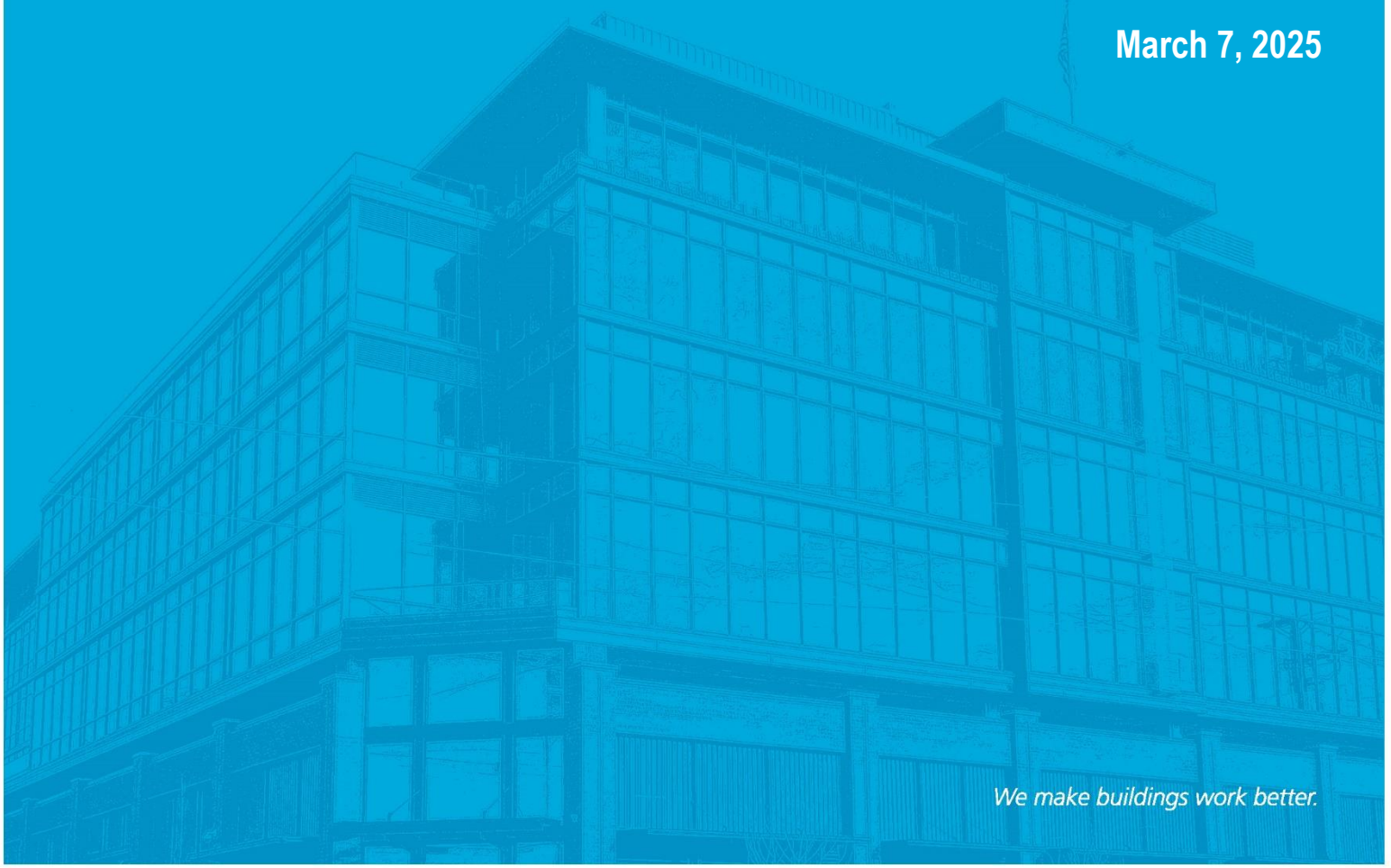
COUNTDOWN TO COMPLIANCE

City Hall and Public Works

833 S Spruce St., Burlington, WA 98233

CLEAN BUILDINGS STANDARD
PRELIMINARY SCOPING ASSESSMENT

March 7, 2025



We make buildings work better.

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3 RECOMMENDATIONS..... 4
4 UTILITY INCENTIVES..... 5
5 Energy Use Intensity Target (EUIt)..... 10

1.0 SUMMARY

The purpose of this report is to further evaluate the City Hall and Public Works building's energy usage, validate Energy Star Data, review gross square footage, and determine if the energy consumption is in compliance with the Washington State Clean Buildings Standard. If the facility is close to the energy use target or above the energy use target, recommendations on an action plan to get the facility's energy use below the target are provided herein.

Based on site walks and information gathered during this Preliminary Scoping Assessment (PSA), the Energy Star data will be updated, or will be requested to be updated, to match the site findings. The facility's Gross Floor Area (GFA), as defined by Clean Buildings Standard, was assumed from owner provided information and space types were documented. Based on assumed GFA and system types, the facility's Energy Use Intensity (EUI) and Energy Use Intensity Target (EUIt) were calculated. If the EUI is above the EUIt, recommendations are proposed to get the building under the EUIt. If the facility's EUI is less than the EUIt, the facility's energy usage is preliminarily in compliance, and recommendations to further reduce energy use of the building is optional. Additional facility documentation is also required to be uploaded to the Department of Commerce portal to be in full compliance. These additional facility documentations are an Energy Management Plan, Operations and Maintenance Plan and Capital Management Plan. Please note that if the building's GFA is less than 50,000 square feet, no official target has been established, but the targets for facilities over 50,000 square feet can be used as a guide to determine future compliance status. Furthermore, if the building is less than 20,000 square feet, the building is not required to meet compliance or submit any documentation.

Based on the Energy Star analysis, your facility has a weather normalized EUI of:

A facility is considered in energy compliance if the EUI is less than the EUIt, therefore this facility is in compliance. It should be noted that the EUI and EUIt are based on Energy Star inputs and utility data from 2023.

This facility must submit paperwork to show compliance to the Clean Buildings Standard by June 1, 2027. The early compliance option begins June 1, 2023 and must show compliance to the energy target in a period not to exceed two years prior to the submission.

Section 3.0 of this report provides a list of Energy Efficiency Measures (EEMs) that are recommended to reduce energy usage in the building.

The next step will be to meet and review the EEMs in more detail. Based on these selected measures, MacDonald-Miller will provide an Investment Grade Audit (IGA) proposal that describes the scope of work to be studied as well as the cost to complete it. The deliverable from this effort is an investment-level scope of work with firm costs, energy savings and EUI reductions associated with the chosen EEMs.

Upon completion of the IGA, an Energy Services Agreement (ESA) will be developed as a contractual agreement that provides a Detailed Scope of Work, GUARANTEED Energy Savings, and GUARANTEED costs to perform the improvements.

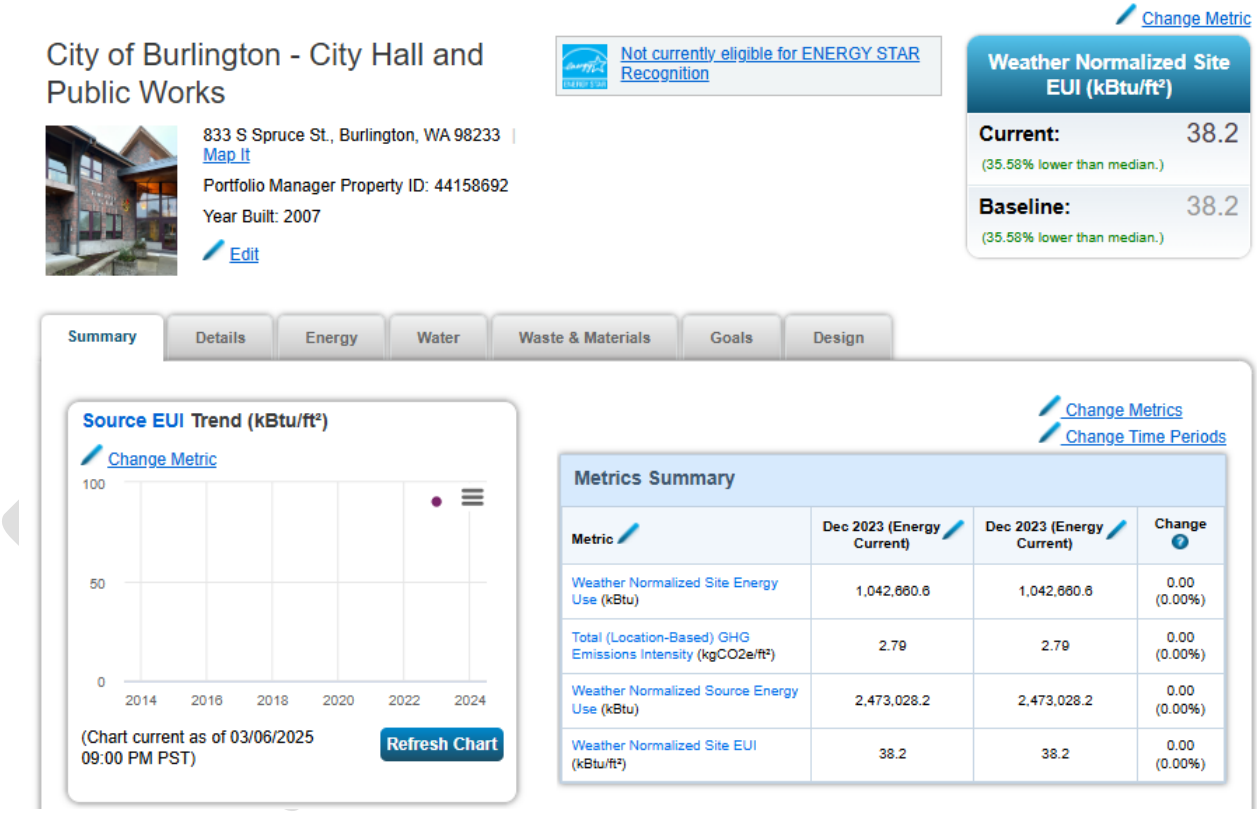
It is important to begin the IGA as soon as possible in order to get these projects defined, developed, contracted, designed, permitted and built. We highly recommend being completed with the improvements to allow 18-24 months prior to the submission date (June 1, 2027). This will allow 6-12 months to commission the facility and confirm the facility is operating properly and then 12 continuous months of energy usage for reporting to the Department of Commerce through Energy Star.

2.0 ENERGY STAR INFORMATION

The standardized metric for comparing building energy usage is the Energy Use Index (EUI). EUI is a measure of the total net energy consumed by the building in one year, divided by the building's gross floor area. Energy Use Intensity (EUI) is reported as a value of a thousand British Thermal Units (kBtu) per square foot per year (kBtu/ft^2 per year).

The Department of Commerce has published target EUIs based on building type and climate zone. Western Washington is Climate Zone 4C while Eastern Washington is Climate Zone 5B. To be in compliance with the Clean Buildings Standards, your buildings EUI must be less than the published target EUI for your building type and climate zone.

Energy Star Site Information



2023 Weather Normalized EUI = 38.2
Clean Buildings EUIt = 66.0
EUI Below Target = **-27.8**

Based on owner provided information, the gross floor area is 27,310 square feet. To verify square footage, and IGA will be necessary to certify the square footage through area takeoffs. Based on the 2023 energy usage, this building is below the EUIt and Energy Efficiency Measures (EEMs) are voluntary.

3.0 RECOMMENDATIONS

The following list of Energy Efficiency Measures (EEMs) are proposed to assist City Hall with reducing energy to. In addition, many measures are being proposed to address aging HVAC systems that have little or no redundancies. If these critical components fail, the facility may be without heating, cooling, or ventilation air until they are repaired. These are Rough Order of Magnitude (ROM) costs as well as a low/high range EUI reduction for implementing each EEM. To further refine these EEM costs and energy savings, an Investment Grade Audit needs to be carried out.

Burlington City Hall			2023 EUI: 38.2 Target EUI: 66.0		
EEM#	EEM Description	ROM Cost	ROM EUI Reduction		ROM Utility Savings
			Low	High	Savings
IGA	**Investment Grade Audit (IGA)** - Detailed Review of As-Builts for Existing Systems, Measure Development, Energy Savings Calculations, Preliminary Design of DDC & Mechanical, Incentive Applications (State & Local), Estimating & Preconstruction Services.	$ 24,579	N/A		Required for Guaranteed Energy Savings and utility incentive applications as applicable
EEM 1	**Smart Building Analytics and Fault Detection** Provide fault analytics and monitoring of major equipment to achieve peak energy performance	$ 24,000			
EEM 2	**Retro-Commissioniong (RCx)** **Optimize control systems through calibration of sensors, review metered data and/or trend logs, perform functional equipment testing, and review existing sequences of operation. Identify operational and maintenance enhancements that result in improvements in energy efficiency, occupant comfort, or indoor air quality.**	$ 55,712	3	3	$ 2,600
EEM 3	**Upgraded Domestic Hotwater Tank to heat pump technology**	$ 60,000	1	1	$ 100
EEM 4	**Replace water source heat pumps and address zoning issues**	$ 1,445,000	4	5	$ 4,500
	ROUGH ORDER OF MAGNITUDE	**$ 1,609,291**	**7**	**9**	**$ 7,200**
		Post Project EUI:	**31.2**	**29.5**	

Due to the recent completion of lighting upgrades to LED for this building, additional lighting measures were found to be unnecessary at this time.

The above ROM costs are +/- 20% of the expected measure budgets but is dependent on what individual measures move to the Investment Grade Audit. Costs not included in the ROM budget: Potential structural upgrades, Potential electrical upgrades, Potential abatement, Owner contingency. These costs will be determined in the IGA.

In addition to the above recommended EEM's the following items will need to be developed and implemented for a period of 1 year prior to submission:

- An Energy Management Plan
- An Operations and Maintenance Plan
- A Capital Management Plan

4.0 PROJECT INCENTIVES

UTILITY INCENTIVES

Utility incentives provide customers with a means to offset the upfront costs of implementing energy efficiency projects. The utility providers that service the City of Burlington, Cascade Natural Gas and Puget Sound Energy, both provide utility incentives and are listed below.

Cascade Natural Gas

Cascade Natural Gas
WA Commercial and Industrial Incentives

Rebates effective on installs on or after March 15, 2024

Heating	**Warm Air Furnaces - $6.00/kBtu/hr** High Efficiency Condensing Furnace—Min 91% AFUE **Ex:** 120 kBtuh x $6/ kBtuh = $720	**Boiler Steam Trap - $125** Min 300 kBtu in; steam pressure at 25 psig or > Retrofit Only
	HVAC Unit Heater - $5.00/kBtu/hr High Efficiency Condensing—Min 91% AFUE **Ex:** 180 kBtuh x $5/ kBtuh = $900	**Demand Control Ventilation - $50/nominal ton** 5 tons ≤ Unit Cooling Capacity ≤ 20 tons **Pre-Approval Required**
	Radiant Heating - $15.00/kBtu/hr Direct fired radiant heating **Ex:** 180 kBtuh x $15/ kBtuh = $2,700	**High-Efficiency Condensing Boiler - $10.25/kBtu/hr** Min 94% Thermal Eff & 300 kBtu input **Ex:** 1600 kBtuh x $10.25/ kBtuh = $16,400
	Install any piece of HVAC equipment and receive a $100 incentive bonus. Applies to warm air furnaces, HVAC unit heaters, radiant heaters, and both condensing and mid-efficiency boilers	
Food service Equipment	**Gas Griddle - $600** ENERGY STAR® ≥38% Cooking Eff/ ≤2,650 Btu/hr sq ft Idle Rate	**Gas Convection Oven - $800** ENERGY STAR® ≥44% Cooking Eff/ ≤13,000 Btu/hr Idle Rate
	Double Rack Oven - $2,700 FSTC Qualified ≥50% Cooking Eff/ ≤3,500 Btu/hr/Idle Rate D Rack	**Gas Conveyor Oven - $700** ≥42% tested baking efficiency
Weatherization	**Windows - (retrofit only)** Pre-Existing must be single pane; Post must be ENERGY STAR® Northern Zone U-Factor ≤ 0.30 - $7.50/sq ft U-Factor ≤ 0.22 - $9.00/sq ft	**Attic Insulation - (retrofit only)** Min R-30 - $2.00/sq ft Min R-45 - $2.50/sq ft
	Floor Insulation - (retrofit only) Min R-30 - $1.25/sq ft	**Hot Fluid Pipe Insulation - (retrofit only)** >140F, <200F, 1.5" insulation - $15.00 per linear foot, ≥ 200F, 2.5" insulation- $25.00 per linear foot
	Roof Insulation - (retrofit only) Min R-30 - $2.00/sq ft	**Wall Insulation - (retrofit only)** Min R-19 - $2.00/sq ft
Water	**Energy Savings Kits - FREE** Kitchen Pre-Rinse Spray Valve	**Domestic Hot Water Tanks - $3.00/kBtu/hr** Condensing tank, Min 91% Thermal Eff **Ex:** 199 kBtuh x $3.00/ kBtuh = $597
	Domestic Hot Water Tankless Water Heater .87 UEF/Thermal Efficiency - $120/gpm .93 UEF/Thermal Efficiency - $150/gpm **Ex:** 0.93 UEF 6 GPM x $150/gpm = $900	**Ozone Injection Laundry - $9,000** Venturi injection or bubble diffusion - Min 125 lb. total washer/extractor capacity. **Pre-approval required.**
	DHW Recirculation Controls - $200 Continuous Operation DHW Pump. Retrofit Only. **Pre-approval required.**	

View page 2 to review all terms and conditions, including equipment specific requirements.

Bundle and save in addition to your standard incentive!
Install radiant heating and upgrade insulation for a 10% increase.

Two insulation measures, min. 1000 sqft +$500
Two Kitchen Equipment +$300, Three Kitchen Equipment +$500

If you are planning equipment or building upgrades that do not fit within the standard incentives, but significantly reduce natural gas consumption, please call 866.450.0005 to learn about custom project opportunities.

General Qualifications

- New or existing commercial or industrial customer of Cascade Natural Gas Corporation on one of the following rate schedules: 504, 505, 511, 570
- High efficiency equipment, i.e. heating, water heating & cooking equipment installed as a replacement, retrofit or new, in place of standard efficiency
- Custom incentives are available, contact program representative if the equipment being installed is not on the prescriptive incentive list attached
- Each piece of equipment may only receive one incentive
- Applications must be submitted within 90 days of installation date. Please contact the program if your project does not meet this requirement
- Incentives may be subject to change and are only applicable for measures approved within the Biennial Conservation Plan at the time of installation
- Installation must comply with all federal, state and local code requirements
- Call 866-450-0005 or visit www.cngc.com/energy-efficiency/commercial or email conserve@cngc.com to review qualifications and eligibility

Equipment Specific Requirements

- Regular steam trap maintenance and replacement every seven (7) years is required, retrofit only
- Tankless water heater applications must include the serial number
- For existing packaged HVAC with gas fired furnace and direct expansion cooling sections DCV; controller must meet joint utility advanced rooftop control guidelines
- Incentive eligibility is contingent upon use of natural gas-fired domestic water serving the specific measure equipment or fixture
- Insulation projects in spaces with existing, functional insulation do not qualify. Functional insulation is considered any existing insulation less than 30 years old. The building/space insulated must be heated with natural gas provided by CNGC. Roof insulation is defined as insulation that is installed on top of the roof deck. Minimum value of Post R-19 applies only where existing walls have an internal insulation cavity. If existing insulation is damaged to the point of ineffectiveness or applied in spotty coverage, the insulation must be removed and the condition that led to the ineffectiveness/damage must be corrected before the rebate will be considered. Insulation R value must meet specifications of current CNGC tariff
- To be considered for incentive funding, the output capacity of heating equipment applied for should generally not exceed winter design day requirements by more than 25%. Where multiple parallel units are proposed, heating capacities greater than or equal to 100% redundancy will not be incentivized

How to qualify for CNGC incentives

1. Establish eligibility:
   Call 1.866.450.0005 or visit www.cngc.com/energy-efficiency for program requirements.
2. Install energy-efficient upgrades:
   Contact a licensed contractor or one of our Trade Allies to install eligible measures.
3. Submit application:
   Available online at www.cngc.com/energy-efficiency. Sign and enclose:

   ☐ Application
   ☐ CNGC bill
   ☐ Invoice showing total cost, model number and R Values for insulation measures

Mail forms to:

Cascade Natural Gas Corporation,
c/o TRC
111 SW Columbia Street, Suite 945
Portland, OR 97201

Upon receipt of completed application, please allow six to eight weeks for processing and payment.

CASCADE NATURAL GAS CORPORATION®
A Subsidiary of MDU Resources Group, Inc.
In the Community to Serve®

Call **866.450.0005** or visit **cngc.com/energy-efficiency**

03/24

Puget Sound Energy

Power your bottom line with energy efficiency

Program guide for business customers

Whether your business is large or small, industrial or mom-and-pop, stepping up your energy efficiency is a smart move. Low or no cost tweaks can mean greater savings on energy bills year after year, which means more money to grow your business. Plus PSE is here to help with a large array of energy-efficiency programs that put money back in your budget when you upgrade to reduce energy consumption.

Rebates and instant discounts

Small Business Direct install	When it comes to energy efficiency, it's helpful to establish a baseline. Find out if your business is eligible for a free assessment to identify cost-effective energy-saving opportunities, and also get some upgrades installed for free.
Lighting to Go	Receive instant discounts on specific LED lighting when purchased at participating distributors.
Commercial HVAC	Significantly lower your business costs by upgrading your HVAC system. Enjoy monthly savings and greater building comfort through affordable smart thermostats, ductless heat pumps and advanced rooftop controls.
Commercial heat pump water heater	Invest in a super-efficient heat pump water heater and use 70% less energy than conventional electric water heaters. Less energy means more savings on your bill.
Full window replacement	Efficient windows seal in cool air during the summer and warm air during the winter, reducing your monthly bill and creating long-term energy savings.
Building insulation	By upgrading your insulation, you can improve thermal performance and create a more comfortable environment for your employees and customers.
Commercial foodservice	Equipment in the kitchen can account for 75% of your energy bill in foodservice businesses. Our rebates can save you thousands upfront on energy-efficient equipment.
Lodging	Maximize guest comfort and minimize energy costs through this program's equipment rebates and on-site energy assessments for hotels and motels.

Strategic energy management

Business Demand Response	Our Business Demand Response program, provides incentives to small, medium, large and industrial businesses for limiting electric use for short periods of time to help us maintain safe, reliable, affordable electricity.
Clean Buildings Accelerator	A no-cost program that unpacks the complex Clean Buildings Law, teaches facility teams how to get their buildings into compliance, and demonstrates how to leverage PSE incentives and technical resources to meet and exceed the law's targets.
Commercial Strategic Energy Management	Receive training, engineering guidance and incentives in this multi-year program for making low- and no-cost changes that reduce energy usage and energy bills.
Industrial Strategic Energy Management	This multi-year program provides training and tools to develop your own on-site energy-management team, as well as incentives thru low or no cost energy savings and achievement of program milestones.
Utility Energy Service Contract	These energy-management services for federal and tribal customers provide streamlined development, contracting and implementation of energy-saving measures.

Customized incentives

HVAC, Commissioning & Controls	
Building Tune-Up	This program is a simplified option for building owners who want to implement low- and no-cost energy-efficiency opportunities without the full commissioning process.
Existing Building Commissioning	This program offers incentives to help you maximize energy-saving potential within your building's existing systems with no capital upgrades required.
Monitoring Based Commissioning	Utilize this program on its own or together with our other commissioning programs to take building optimization to the next level with data collection and analysis that guides ongoing commissioning efforts.
Major HVAC Controls	Earn significant incentives for updating your HVAC controls system with more energy-efficient options, which can produce substantial savings in HVAC energy cost over time.
Industrial	
Industrial System Optimization Program	Receive the engineering support you need to tune up and optimize systems in your industrial facility for greater energy efficiency, and earn a grant to help cover the cost.
Comprehensive Small Industrial Grants	This is an opportunity for smaller industrial customers to expand energy savings beyond a typical equipment retrofit by bundling your capital incentives along with incentives for O&M changes, or earn incentives for O&M changes only.
Industrial Custom Capital Grants	This program offers incentives for energy-efficient upgrades in industrial facilities. If you're planning a custom capital project for your industrial site that demonstrates energy savings, PSE may be able to help pay for it with a custom capital grant. There are also incentives available to pay for operation and maintenance implementation opportunities within your facilities with a custom O&M grant.
Lighting	
Business Lighting Incentive Program	Lighting can amount to more than 40% of your business' total energy usage, and this program offers flexible incentive options that help you affordably upgrade many types of interior and exterior lighting.
Commercial Horticultural Lighting	This program offers incentives for installing energy-efficient LED grow lights in your commercial facility.
New construction	
Commercial New Construction	Business owners and developers have access to an array of financial incentives designed to help new commercial buildings reduce energy usage and costs.
Multifamily New Construction	Multi-unit developers can engage from the design process to leverage incentives for energy-efficient equipment and measures taking a whole building performance approach, and pays you for each unit of energy saved.
Retrofit	
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Pay for Performance	Combine multiple capital projects, operational and maintenance improvements, and behavioral changes that save 15% or more of whole-building energy consumption. This program speeds up the grant process and incentivizes savings measured at the meter.
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The energy-efficiency programs we offer our business customers support PSE's vision to reduce carbon emissions and create a cleaner energy future for all. Learn more at pse.com/together.

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Washington state building ID	TBD
County	TBD
County parcel number(s)	TBD
Portfolio manager property ID number	44162492
Property name	Fire/EMS Station
Parent property name	
Address 1 (street)	350 E Sharon Ave
Address 2	
City	Burlington
State	WA
Postal code	98233
County	Skagit
Climate Zone	4C
Gross Floor Area	24,177

Building Activity Type	Gross Floor Area	Fractional Floor Area	Activity Energy Target (EUIt)	Weekly Hours	Operating Shifts Normalization Factor	Space (EUIt)	More recently built buildings Space (EUIt)
Fire Station	24,177	1.00	65	168.0	1.1	72	60.8
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
		0.00					
Building Totals	24,177	1.00				**71.5**	**60.8**

Attachment

City of Burlington Procurement Policy

MacDonald-Miller FACILITY SOLUTIONS®

Chapter 2.84
PROCUREMENT

03.04.2025 - MacDonald-Miller Facility Solutions additions highlighted

Sections:

2.84.010 Purpose.
2.84.020 Applicability.
2.84.030 Definitions.
2.84.040 Use of rosters.
2.84.050 Procedures.
2.84.060 Designees.
2.84.070 Procurement of goods, supplies, materials, and equipment.
2.84.071 Sustainable Procurement Guiding Principles
2.84.072 Sustainable Procurement Prioritization
2.84.080 Procurement of professional services, consultant services, and purchased services.
2.84.090 Limited public works.
2.84.100 Completion of public works.
2.84.110 Approval of procurement by the mayor.
2.84.120 Approval of procurement by city council.
2.84.130 Exceptions to bidding requirements.
2.84.140 Annual/routine procurement and authorization to bid.
2.84.150 Capital improvement plan (CIP) procurement and prior authorization to bid.

2.84.010 Purpose

The purpose of this chapter is to protect and advance the public interest by promoting fairness and objectivity in the city's procurement process, thus ensuring reasonable costs for goods and services.

Per RCW 35A.11.010, the authority to enter into contracts and be contracted with, vests with the city council but the council desires to delegate certain procurement authority to the mayor to ensure the timely and orderly management of city affairs while retaining authority to approve major expenditures, thus ensuring transparency and accountability to the citizens. (Ord. 1922, 2022).

The city recognizes that the products and services it purchases have inherent social, human health, environmental, and economic impacts throughout their life cycle. By leveraging its purchasing power, the city can reduce adverse impacts and promote positive change within markets and communities, contributing to overall sustainable development.[1] The city also acknowledges its need to be resilient in the face of the changing climate. It is intended that these Guidelines be shared with the entire design and construction team and they incorporate these standards in their drawings and specifications.

In the procurement of building materials for public works projects, preference will be given to sustainable materials. These materials include those that are locally sourced, energy-efficient, recyclable, have low environmental impact, as well as possess Environmental Product Declarations (EPDs) and Health Product Declarations (HPDs).

2.84.020 Applicability
This chapter applies to the purchase of goods, materials, supplies, equipment, professional services, consultant services, and public works as defined in this chapter and in the Revised Code of Washington (RCW). (Ord. 1922, 2022).

2.84.030 Definitions
"Consultant services" shall mean firms or individuals hired to provide advice, recommendations, reports, analysis, evaluations, audits, surveys, or other expert services.

"Contract" means any agreement, written or spoken, between the city and any party that is intended to be enforceable by law and includes, but not limited to, public works agreements, personal service agreements, grant agreements, agreements pursuant to the Interlocal Cooperation Act, and leases of real property.

"Embodied carbon" refers to greenhouse gas emissions arising from the raw extraction, manufacturing, transportation, installation, maintenance, and disposal of construction materials used in the built environment. As buildings become more energy efficient (and operational carbon decreases), attention to reducing embodied carbon should grow. In 2019, embodied carbon was approximately 17% of the global greenhouse gas emissions.[2]

"Environmental Product Declaration (EPD)" is a document that provides comprehensive details about a product's environmental impact throughout its life cycle (from raw material extraction to end-of-life) using the results of its Life Cycle Assessment (LCA).[3]

"Formal bids" means written and published request for proposals (RFP) where quantity, quality, and prices are formally requested. Formal bids shall normally have a due date for submittals together with other technical data requested.

"Global Warming Potential (GWP)" is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time (usually 100 years), relative to the emissions of 1 ton of carbon dioxide (CO_2). The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that time period. A lower GWP is better.[4]

"Goods" means products, materials, supplies, or equipment procured in a sufficient dollar amount to trigger the use of price quotes, bids, or use of a vendor roster.

"Greenhouse gases (GHGs)" are gases that absorb and trap heat energy emitted from the planet's surface and remain in the Earth's atmosphere for a long time (from decades to centuries). These gases are responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_{20}). Less prevalent,

but higher intensity, greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6).[5]

"Gross cost" means the total cost to acquire a good or service, including but not limited to labor, equipment, materials, overhead, profit, bonding, insurance, taxes, license fees, and transportation costs.

"Health product declaration (HPD)" is a standardized report disclosing the content, compositional chemistry, and associated health information of a product.[6]

"Life cycle" refers to the consecutive and interlinked stages of a goods or services system, from "cradle to grave," e.g., from resource generation, raw material acquisition, and manufacturing, through production, use, and final disposal. The environmental, social, and economic impacts are observed in each of these stages.[7]

"Ordinary maintenance" means work performed by city employees that is done regularly to inspect, service, or replace items to maintain the service life of the asset.

"Price quotes" means obtaining prices from vendors through phone calls, emails, or written requests. Price quotes should be documented and presented together with the preferred vendor selection.

"Professional services" shall mean architectural, landscape architectural, land surveying, and engineering services as defined in chapter 39.80 RCW.

"Public work" means all work, construction, alteration, repair, other than ordinary maintenance, for which by law a lien or charge can be levied against property as defined in RCW 39.04.010.

"Purchased services" mean a firm or individual hired by the city to provide services in the form of physical labor which is not subject to direct city supervision and whose labor is not considered a public work.

"Red List" is a list provided by the International Living Future Institute's Living Building Challenge that identifies the "worst in class" materials, chemicals, and elements known to pose serious risks to human health and the greater ecosystem that are prevalent in the building products industry.[8]

"RFP" means requests for proposal and shall be used to solicit pricing for goods, supplies, and equipment.

"RFQ" means requests for qualifications and shall be used to solicit professional services for which price is not a qualifying factor.

"Roster" shall mean a vendor roster, professional service roster, or a consultant roster having a formal listing of qualified individuals or firms amassed by Municipal Research and Service Center, another federal or state agency, or the city of Burlington itself. (Ord. 1922, 2022).

"Substances of (Very) High Concern (SVHC, SHC)" are substances that may have serious and often irreversible effects on human health and the environment. SVHCs/SHCs are typically defined as those that have one or more of the following attributes:

- Persistent, Bioaccumulative and Toxic (PBT),
- very "Persistent and very Bioaccumulative (vPvB),
- very Persistent and Toxic (vPT),
- very Bioaccumulative and Toxic (vBT), or
- known or likely to be carcinogenic, mutagenic, reproductive or developmental toxicant, neurotoxicant or endocrine disrupting.[9]

"Sustainability" is the state of the global system, including environmental, social, and economic aspects, in which the needs of the present are met without compromising the ability of future generation to meet their own needs.[10]

"Sustainable Procurement" refers to procurement that has the greatest positive environmental, social, and economic impacts possible over the entire life cycle. Sustainable procurement involves the sustainability aspects related to the goods, services, and suppliers along the supply chains. Sustainable procurement contributes to the achievement of organizational sustainability objectives and to overall sustainable development.[11]

"Sustainably Sourced Wood" is wood that is Forest Stewardship Council (FSC) certified, recycled, salvaged, or from an ecological restoration forestry project. Ecological restoration forestry refers to management activities that contribute to the recovery of ecosystems that have been degraded, damaged, or destroyed. Some examples of ecological restoration in forests are:

- Harvesting small patches of trees to create compositional and spatial heterogeneity in uniform, single species plantations that developed after harvest of old-growth forests.
- Thinning forests that have become overgrown because of fire suppression.[12]

2.84.040 Use of rosters

The city utilizes the Municipal Research and Service Center (MRSC) for its vendor roster, consultant roster, and small works roster. The city is also authorized to maintain its own roster or to utilize another agency's roster. (Ord. 1922, 2022).

2.84.050 Procedures
The city administrator is authorized to establish procedures to implement this chapter including but not limited to standard price quote forms, bid tabulation sheets, retainage withholding calculation spreadsheets, and other documents to enable the procurement contemplated in this code. (Ord. 1922, 2022).

2.84.060 Designees
Any reference to the mayor, city administrator, city attorney or finance director includes their respective designees who have been authorized to act on their behalf. (Ord. 1922, 2022).

2.84.070 Procurement of goods, supplies, materials, and equipment
The city shall follow the greater of the specific procurement thresholds established by RCW 35A.40.210 as now established or henceforth amended or as set forth below:

Purchases with gross costs up to $7,500 – Secure three price quotes if possible.

Purchases with gross costs greater than $7,500 up to $15,000 – Formal bids or use of vendor roster.

Purchases with gross costs greater than $15,000 – Formal bids. (Ord. 1922, 2022).

2.84.071 Sustainable Procurement Guiding Principles
1. Conserve Resources. Emphasize reuse. Purchase only necessary items and recognize the finite nature of natural resources.

2. Evaluate Holistically. Consider environmental, social, and economic aspects when assessing options. Identify hidden costs to people and the planet that are not reflected in the price.

3. Adopt a Life Cycle Perspective. Acknowledge the impacts of purchases over their entire life cycle. Evaluate long-term costs to people, the planet, and the city.[13]

4. Ensure Health and Safety. Exercise caution and avoid toxins that can contaminate air, water, soil, and materials, posing risks to people and animals.[14]

5. Promote Innovation. Increase demand for and support market capacity for sustainable solutions, driving positive change and improving existing practices.

2.84.072 Sustainable Procurement Prioritization

Based on the Sustainable Building and Development Guidelines and the city's sustainability goals, the City shall prioritize sustainable procurement practices that:
1. Reduce Greenhouse Gases (GHGs). Implement strategies to minimize operational GHG emissions.

2. Avoid High Global Warming Potential (GWP) Hydrofluorocarbons (HCFs). Refrain from using HCF refrigerants with a high GWP when purchasing new energy-efficient refrigeration and air

conditioning equipment. Refer to the Procurement Recommendations for Climate Friendly Refrigerants[15] to help select affordable, energy-efficient heating and cooling equipment that uses next-generation refrigerants.

3. Conserve Energy and Water. Invest in energy efficient products, services and technologies that result in simple paybacks of ten years or less. Invest in on-site renewable energy technologies at applicable City-owned facilities. Implement water-saving measures by choosing products and services that minimize water usage and promote water recycling. Adopt energy conservation measures such as energy-efficient lighting, and heating and cooling systems.[16]

4. Reduce Exposure to Hazardous Substances. Seek out and utilize processes, technologies, services, and products that reduce exposure of Substances of (Very) High Concern (SVHCs/SHCs) and Red List chemicals. The SVHC comprehensive list can be found on the official European Chemicals Agency (ECHA) website.[17]The Red List can be found on the Living Building Challenge website.[18]

5. Request Environmental and Health Product Declarations. Request Environmental Product Declarations (EPDs) and Health Product Declarations (HPDs) from manufacturers. Prioritization of requesting EPDs is in preparation for potential future building embodied carbon reduction requirements, per Washington State House Bill 1458 (2025).

6. Utilize Sustainably Sourced Materials. Prioritize locally manufactured materials. Specify and utilize sustainably sourced wood to support responsible forestry practices. Per Burlington Sustainable Building and Development Guidelines (Section 6):[19]

> Ensure that at least 15% of a project's construction materials (based on value) are comprised of refurbished/reused or recycled content.
>
> Ensure that at least 15% of a project's construction materials are comprised of materials with locally manufactured content.
>
> Where wood-based materials are used, utilize a minimum of 25% that are certified in accordance with the Forest Stewardship Council's principles and criteria for wood building components.[20]

7. Reduce Embodied Carbon. Reuse existing buildings. For renovations and new construction projects, prioritize materials with lower embodied carbon by leveraging EPDs, establishing a baseline for reduction (consider conducting a whole building LCAs), and other strategies such as pg. 62-63 of "Recommendations for Washington State Embodied Carbon Code Language" (November 2024)[21], as well as the anticipated guidelines in State House Bill 1458.

8. Support Ethical Practices. Ensure safe and fair labor practices and uphold ethical behavior throughout the supply chain.

All new construction projects should also strive to achieve a LEED Gold equivalency. While formal certification is not required, striving to achieve LEED prerequisites and credits encourages use of the U.S.'s largest industry-accepted green building framework, while minimizing environmental impact, and creating a more desirable place for occupants and visitors.

2.84.080 Procurement of professional services, consultant services, and purchased services
The city shall follow the greater of the specific procurement thresholds established by RCW 35A.40.210 as now established or henceforth amended or as set forth below:

Professional services with gross costs up to $300,000 – Use of professional services roster.

Professional services with gross costs greater than $300,000 – Formal bids.

All formal bids for construction and renovation projects over $300,000 must include an one-page assessment of the environmental impact of materials and methods used, prioritizing sustainable alternatives where feasible.

Consultant services with gross costs less than $30,000 – Secure three price quotes if possible.

Consultant services with a gross cost of more than $30,000 – Issuance of RFP or use of consultant roster.

Purchased services with gross costs less than $30,000 – Secure three price quotes if possible.

Purchased services with a gross cost of more than $30,000 – Issuance of RFP. (Ord. 1922, 2022).

2.84.090 Limited public works
The city shall follow the greater of the specific procurement thresholds established by RCW 39.04.010 and 39.04.155(3) as now established or henceforth amended or as set forth below:

Limited public work estimated to cost less than $35,000 – Use of small work roster. (Ord. 1922, 2022).

2.84.100 Completion of public works
The city shall follow the greater of the specific procurement thresholds established by RCW 35.23.352 as now established or henceforth amended or as set forth below:

Public works with gross costs up to $300,000 – Use of professional/consultant/purchased services roster.

Public works with gross costs greater than $300,000 – Formal bids. (Ord. 1922, 2022).

2.84.110 Approval of procurement by the mayor

A. The mayor is authorized to approve purchases and contracts that meet all of the following criteria:

1. The gross cost of the purchase and/or contract is less than $50,000.

2. The estimated purchase or contract amount was included in the approved annual budget for the particular fund.

3. The contract is made and/or the vendor has been selected consistent with the procurement requirements of this chapter.

4. The contract has been reviewed and approved by the city attorney.

5. The finance director has certified that funds are available for the procurement.

B. The mayor is further authorized to approve modifications to contracts or other procurements that meet all of the following criteria:

1. For procurements less than $50,000, the modification results in the gross cost being no more than $50,000.

2. For procurements with a gross cost over $50,000 and up to $100,000, the modification is less than $10,000.

3. For procurements with a gross cost of over $100,000, the modification is less than 110 percent of the original contract amount but in no case more than $50,000 more than the original cost. Any procurement contract modifications within this classification shall be reported to the city council by the mayor, city administrator, or public works director at the next council meeting. (Ord. 1922, 2022).

2.84.120 Approval of procurement by city council

The city council is authorized to approve all purchases and contracts that meet the following criteria:

A. Any procurement or modification that the mayor is not authorized to approve.

B. Any contract that includes the conveyance of a real property interest to or from the city or a lease to which the city is a party. (Ord. 1922, 2022).

2.84.130 Exceptions to bidding requirements

Per RCW, the following items are exempted from the foregoing bidding requirements as they have separate requirements: federal grants; piggybacking on another government's bid; cooperative purchasing through an interlocal agreement; sole source brand names; sole source single bid, RCW 39.04.280(1); special market conditions, RCW 39.04.280; emergencies, RCW 39.04.280; purchase of insurance or bonds; purchases at auctions; RCW 39.30.045;

purchases from another local government; pollution control facilities; computer equipment; software/services; contract with community service organizations, RCW 35.21.278; and county or state road projects, RCW 35.77.020. (Ord. 1922, 2022).In cases where emergency procurement is necessary, the city will strive to select sustainable materials that meet emergency requirements while minimizing environmental impact.

2.84.140 Annual/routine procurement and authorization to bid

Goods, supplies, materials, equipment, services, public works and other procurements that occur on a routine or annual basis for which budget authority is included within the annual adopted budget may be bid without specific prior authorization by the council. Any of these procurements whose dollar amount is greater than $50,000 shall be formally approved by the council. (Ord. 1922, 2022).

2.84.150 Capital improvement plan (CIP) procurement and prior authorization to bid

Procurement of items included within the annual CIP shall require specific authorization to bid by the council prior to solicitation of bids and shall require approval of bids prior to procurement. (Ord. 1922, 2022). The procurement of materials and services for capital improvement projects shall incorporate sustainable practices, including the use of energy-efficient and low-emission building materials, in alignment with the city's sustainability goals.

Citations

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Attachment

Fleet Analysis

Fleet Analysis

To:	Brad Johnson Community Development Director City of Burlington, WA
From:	Katherine Peacock Assistant Project Manager Pacific Mobility Group
Date:	March 7, 2025
Subject:	Capital Program Energy Audit Report (Fleet)

1 Overview

1.1 Background

This Fleet Analysis has been conducted by Pacific Mobility Group (PMG) as a part of the Capital Program Energy Audit (CPEA) Report for the City of Burlington (the City). This Fleet Analysis is part of a larger effort in assisting the City plan for increasing resilience and reducing greenhouse gas (GHG) emissions as a part of their new Climate Element for the 2025 Comprehensive Plan periodic update cycle.

1.2 Objectives

The primary objective of this Fleet Analysis is to evaluate the City of Burlington's vehicle fleet and recommend a high-level strategy for transitioning the fleet to zero-emission vehicles (ZEV) to reduce GHG emissions over time.

Additionally, to increase the chances of a successful implementation, this Fleet Analysis aims to recommend a realistic and phased strategy for transition that considers what is possible with the current conditions of the electric vehicle (EV) industry.

1.3 Scope

This Fleet Analysis contains a review of the City's current vehicle fleet in its entirety and provides high-level recommendations for transitioning to a zero-emission fleet.

PLANNING HORIZON

Fleet Analysis recommendations have been projected over a **six-year** period that includes planning and implementation activities.

The City has expressed interest in transitioning its fleet in its entirety to ZEVs. Currently, the City's fleet is comprised of only internal combustion engine (ICE) vehicles. Given the limitations in current EV technology and the uncertainty in the City's capital funding, full fleet electrification is not currently possible. Therefore, it is anticipated approximately 25% of the City's fleet will remain ICE powered at the conclusion of the six-year time horizon.

While ZEVs include a broad scope of vehicle types, only electric vehicles, such as battery electric vehicles (BEV) and hybrid electric vehicles (HEV), have been considered here for the transitioned fleet.

EVALUATION SCOPE

Assess the current conditions of the City's fleet including:

- Vehicles
- Annual CO2 Emissions
- Fleet EVSE
- Management
- Operations & Maintenance
- Budget

RECOMMENDATION SCOPE

Provide a recommended approach to electrifying the City's fleet over a six-year period involving:

- Suitable Electric Vehicles
- Potential Reductions in CO2 Emissions
- Required EVSE Infrastructure
- Transition Strategies
- Financial Feasibility

1.4 Components

Greenhouse Gas Emissions (GHG) Evaluation

- The annual GHG emissions for the current fleet are calculated using data provided by the City for 2023.
- A baseline projection of total fleet emissions is calculated for the proposed six-year analysis period (2026-2031).

Fleet Electrification Analysis

- Current vehicle inventory is evaluated for electrification feasibility.

- Only those vehicles in operation are considered.
- Recommended transition approach for phased electrification is determined and analyzed.
- GHG reduction potential is analyzed.

Electric Vehicle Supply Equipment (EVSE) Analysis

- Currently accessible EVSE for the City's fleet is evaluated.
- EVSE investments are projected based on the recommended transition approach.

Financial Analysis

- Current operations and maintenance (O&M) costs are evaluated.
- Projected capital and O&M costs are calculated based on the recommended transition approach.
- Transition capital budget is determined over the six-year period.

2 Greenhouse Gas Emissions Evaluation

2.1 What is Being Measured

The GHG emissions evaluation focuses on annual tailpipe emissions from all vehicles in the City's fleet. Tailpipe emissions are the product of fuel combustion (gasoline, diesel, or other liquefied fuel or biofuel) made up of pollutants such as carbon dioxide, carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter. This evaluation only accounts for carbon dioxide (CO_2) tailpipe emissions from the direct combustion of liquid fuels, such as gasoline and diesel, in internal combustion engines.

2.2 Methodology

The calculations for GHG emissions were based on 2023 annual mileage of the City's fleet, provided by the City. Additional information used in this evaluation included Vehicle Identification Numbers (VINs), Year, Make, Model and was provided by the City for each individual fleet vehicle.

The Dashboard for Rapid Vehicle Electrification (DRVE) Tool[1] was used to decode each vehicle's VIN and map each vehicle to an equivalent vehicle of the same make and model but of a year between 2023-2025. From these mapped vehicles, information such as use case (or vehicle type), fuel type, city fuel economy, and highway fuel economy were pulled from manufacturer registered vehicle data. The following vehicle types were used to classify each vehicle in the City's current fleet.

- Passenger Car
- SUV/MPV
- Light Pickup
- Cargo Van
- Medium-Duty Pickup
- Medium-Duty Straight Truck
- Heavy-Duty Straight Truck

Using a driving ratio of 75% city streets and 25% highway, the average fuel economy for each vehicle was calculated and used to further calculate the 2023 fuel consumption and annual CO2 tailpipe emissions.

Based on a projected total fleet mileage increase of 2% annually, future GHG emissions from the City's fleet were calculated for the proposed six-year analysis period (2026 to 2031). This is the baseline for total fleet GHG emissions if the City continues to operate an all ICE vehicle fleet.

2.3 Limitations and Assumptions

Due to the limitations in fleet data, the following assumptions were made for this evaluation:

a) The City of Burlington's current fleet totals 113 vehicles spread across at least six different departments. Out of those 113 vehicles, only 102 vehicles were registered with mileage for 2023 and were identified as "in-service". The remaining 11 "out of service" vehicles were assumed to remain unused until disposed of. Out of service vehicles were not included in calculations or any analysis within this report.

b) Individual vehicle mileage for the 2023 year was provided by department managers for each associated vehicle. Contact information is provided below.

[1] The DRVE Tool was developed by the nonprofit organization Electrification Coalition in collaboration with Atlas Public Policy: https://electrificationcoalition.org/resource/drve/

Table 1 – City Fleet Managers

City Department	Manager	Contact Information
Community Development	Brad Johnson	bradmj@burlingtonwa.gov
Operations (Streets, Facilities, & Park Maintenance)	Travis Schwetz	traviss@burlingtonwa.gov
Sewer	Don Erickson	derickson@burlingtonwa.gov
Police	Kevin Turner	kturner@burlingtonwa.gov
Fire	Rob Toth	rtoth@burlingtonwa.gov
Fire	Steve Riggs	stever@burlingtonwa.gov
Cultural Services (Parks & Library)	Sarah Ward	sarahw@burlingtonwa.gov

c) Manufactured years in the City's current fleet ranged from 1980 to 2024. Due to the lack of complete registration data for older vehicles, each vehicle in the fleet was mapped to an equivalent model from 2023 to 2025. Data from these equivalent ICE models were used for the remainder of the evaluation.

d) If the fuel type was unknown, it was assumed based on the following vehicle classifications:

Table 2 – City Fleet Vehicle Types

Vehicle Type	Fuel Type
Passenger Car	Gasoline
SUV/MPV	Gasoline
Light Pickup	Gasoline
Cargo Van	Gasoline
Medium-Duty Pickup	Diesel
Medium-Duty Straight Truck	Gasoline
Heavy-Duty Straight Truck	Diesel

e) Mileage estimations did not account for speed, driving terrain, or environment. Therefore, a 75% city and 25% highway driving environment assumption was used to calculate a weighted fuel economy average for each vehicle.

f) Only vehicle tailpipe emissions were accounted for in this evaluation. Upstream and embedded GHG emissions associated with vehicle production and disposal, GHG emissions associated with electrical energy production and transmission, and GHG emissions associated with the entirety of the liquid hydrocarbon fuel production and supply chain were not accounted for.

g) Although fuel combustion results in many different types of GHG emissions, only carbon dioxide (CO2) emissions are accounted for in this evaluation due to its majority share of 97.7% in U.S. transportation GHG emissions[2].

[2] https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101AKR0.pdf

h) The following conversion factors[3] from the Environmental Protection Agency (EPA) were used in calculating CO2 tailpipe emissions per liquid fuel type:

Gasoline – 8,887 g/gal
Diesel – 10,180 g/gal

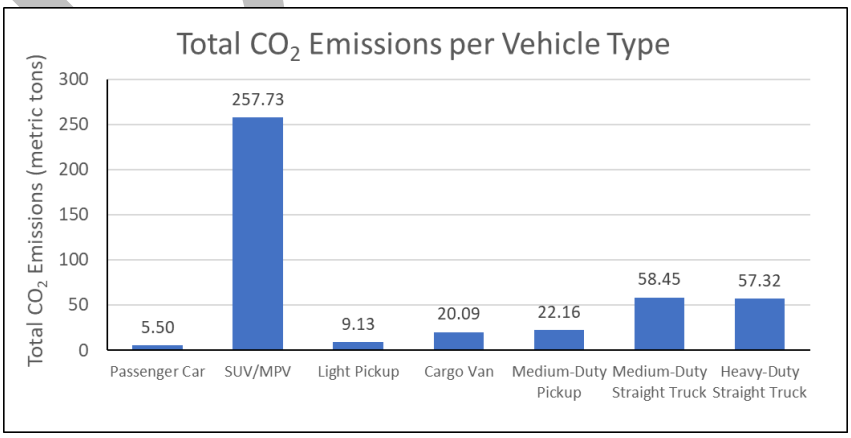
2.4 Findings

The City's current fleet is comprised of 102 in-service vehicles spread across at least six different departments. All 102 vehicles have internal combustion engines and were categorized into seven different vehicle types.

Table 3 – 2023 Total Fleet GHG Emissions per Vehicle Type

Vehicle Type	Count	Total Estimated Mileage (mi)	Total Fuel Consumption (gal)	Total CO2 Emissions (metric tons)
Passenger Car	7	15,250	523.90	5.50
SUV/MPV	37	607,200	29,000.39	257.73
Light Pickup	9	44,860	2,270.79	9.13
Cargo Van	5	2,249	224.90	20.09
Medium-Duty Pickup	14	32,443	2,308.21	22.16
Medium-Duty Straight Truck	19	60,867	6,311.24	58.45
Heavy-Duty Straight Truck	11	26,035	6,541.46	57.32
Fleet Total	102	788,904	47,180.88	430.38

Table 4 – 2023 Emissions per Vehicle Type



[3] https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator-calculations-and-references#:~:text=Gallons%20of%20gasoline%20consumed,CO2%20

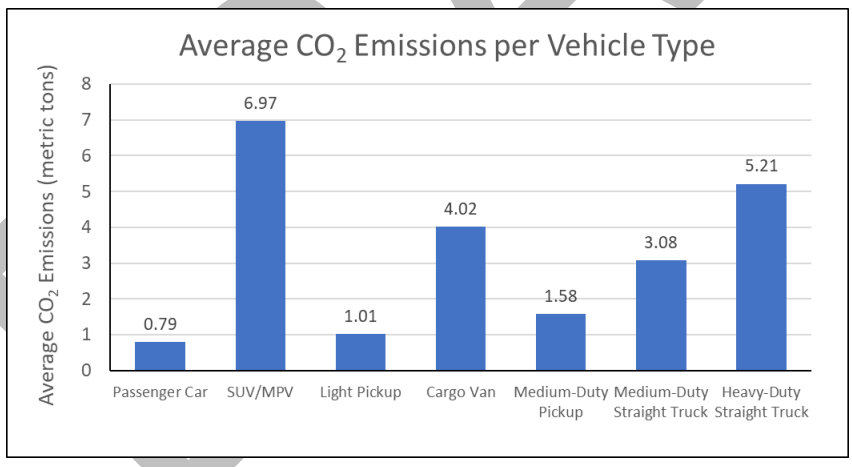
The total GHG emissions for the City's vehicle fleet was estimated at 430.38 metric tons for 2023.

The following averages per vehicle type were also calculated to determine which vehicle types contribute the most to the fleet's total emissions.

Table 5 – GHG Emissions Evaluation per Vehicle Type (Averages)

Vehicle Type	Average Fuel Economy (MPG)	Average Fuel Consumption (gal)	Average CO2 Emissions (metric tons)
Passenger Car	29.25	74.84	0.79
SUV/MPV	20.11	783.79	6.97
Light Pickup	19.69	252.31	1.01
Cargo Van	10.00	44.98	4.02
Medium-Duty Pickup	14.93	164.87	1.58
Medium-Duty Straight Truck	8.58	332.17	3.08
Heavy-Duty Straight Truck	3.98	594.68	5.21

Table 6 – GHG Emissions Evaluation per Vehicle Type (Averages)



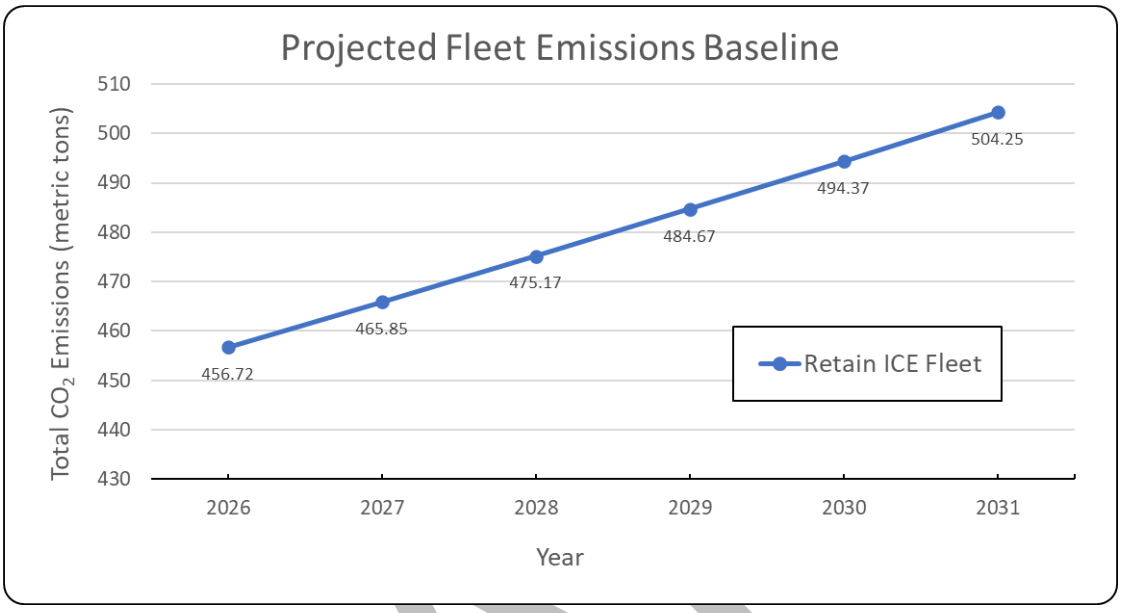
The SUV/MPV vehicle type ranked first in both the highest total emissions and in the highest average emissions per individual vehicle for 2023.

2.5 Projections

It was determined that the level of service provided by the City's fleet will increase at a rate of 2% per year, resulting in the proportionate increase in fleet miles driven.

Using this rate, total fleet emissions were calculated for the six-year analysis period (2026 to 2031).

Table 7 – Fleet GHG Baseline



It is projected that without a fleet transition to electric vehicles the annual total fleet emissions would increase to an estimated annual 504.25 metric tons of CO_2 by 2031. Thus, an estimated 2,881 metric tons of CO_2 is projected to be released into the atmosphere between 2026 and 2031 by the City's fleet if no transition occurs.

3 Fleet Electrification Analysis

3.1 Approach

To realize the potential in emission reductions due to a fleet transition to electric propulsion, the following analysis of a recommended transition approach is provided. This transition approach focuses on the following primary goals:

- Reduce the fleets total GHG emissions.
- Implement a successful transition in phases
- Reduce the fleet size by only transitioning in-service vehicles and retiring excess "out of service" inventory

A six-year transition period has been proposed for the gradual electrification of the City's fleet.

3.2 Phases

It is recommended fleet electrification activities progress in phases. The simplest activities are implemented immediately, and more complicated use cases and issues are addressed in subsequent phases. This approach acknowledges the continuous evolution of EV technology and approaches that are not possible today could be possible in the near future. A phased transition allows time for technology to evolve and for normalization of EV adoption within the City's fleet staff.

The following three phases are recommended for an increased chance of success in transitioning to an EV fleet.

Table 8 – Transition Phases

PHASE 1 - INTRODUCTION

During Phase 1, stakeholders (fleet managers, operators, and users) are introduced to the benefits of EVs and are given information about EVs and EVSE. The following are other components of this phase:

- Stakeholders gain an understanding of, and confidence in, the vehicles through use
- EV-specific technical expertise is developed through training
- Charging infrastructure is installed
- Energy resiliency methods are explored
- Relevant public policy is monitored, and opportunities are acted on
- Relationships are re-enforced with local utilities
- Career connected learning and workforce development programs are designed relevant to the technology present in the Plan (EVs, photovoltaic systems, electric, battery storage, fleet and logistics management)
- Metrics are established and tracked

PHASE 2 - NORMALIZATION

As understanding of, and confidence in, EV technology increases and EVs show their worth, the Plan transitions into the Normalization phase.

- Additional EVs are purchased
- Additional EVSE systems are installed
- More complicated use cases are tackled
- EV-specific technical expertise continues to be developed
- Relevant public policy is monitored and opportunities are acted on
- Relationships are reinforced with local utilities
- Career-connected learning and workforce development programs expand
- Performance is tracked.

PHASE 3 - ADOPTION

The Adoption phase is when stakeholders have embraced the benefits of EV technology, and the majority of use cases have feasible and viable EV solutions.

3.3 Rate of Transition

The following reduction goals have been recommended to meet the target of 75% reduced emissions by 2031, while also accounting for phasing of the transition.

Table 8 – Yearly GHG Reduction Goals

Year	Reduction Goal	Phase
2026	10%	1 – Introduction
2027	20%	1 – Introduction/Normalization
2028	30%	2 – Normalization
2029	45%	2 – Normalization/Adoption
2030	60%	3 – Adoption
2031	75%	3 – Adoption

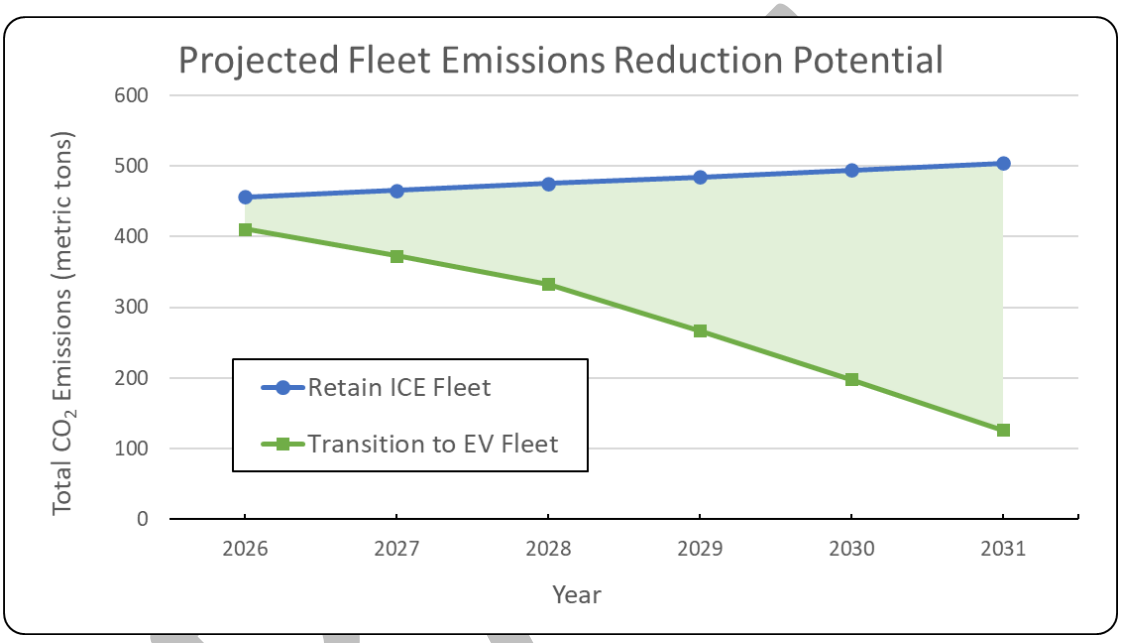
The targeted rate of fleet transition is based on the City's current fleet and is communicated as a percentage of the total fleet miles rather than a percentage of total vehicles.

With the above reduction goals in place the City can expect a rate of transition of 10% every year for the first three years, and 15% every year for the last three years.

3.4 Emission Reduction Potential

The following figure displays a comparison of total annual fleet emissions between two scenarios. In blue, the previously discussed projection of emissions based on no transition occurring for the City's fleet. In green, a projection of emissions if the City were to adopt the recommended phased transition strategy discussed in this section.

Table 9 – Potential GHG Reduction



It is estimated a total of 1,174 metric tons of CO_2 could potentially be eliminated across the six-year transition period with the proposed fleet electrification approach.

3.5 Residual ICE

At the end of six years, it is targeted that 75% of the City's fleet activity, as measured in miles, will have transitioned to EVs. However, even with deliberate effort, it is anticipated that at the end of this period, approximately 25% of City fleet operations will still use ICE vehicles. This is due to a variety of reasons including available technology, market conditions, and funding constraints.

The types of vehicles and uses that will be most difficult to transition include:

- Heavy-duty trucks engaged in high-power consumption activities such as snow plowing
- Certain heavy-duty trucks with long-range and/or high-load towing requirements
- Certain public safety and emergency response vehicles

- Specialty vehicles in heavier weight classes (4–8)

Resolving electrification of the remainder of the fleet will be addressed in subsequent planning updates.

4 Electric Vehicle Supply Equipment (EVSE) Assessment

4.1 What is EVSE

EVs require electric vehicle supply equipment (EVSE) to facilitate charging activities. EVSE feeds electricity to electric vehicles and is commonly referred to as a "charger" or a "charging station."

EVSE equipment is classified as Level 1 (120 volts AC), Level 2 (240 volts, AC), and DC Fast Charger (480 volts DC and higher).

Level 1: Uses 120-volt AC electricity to charge (i.e., a standard household outlet) with an output of roughly 1 kilowatt. Commonly used at home and can take days to charge.

Level 2: Uses 240-volt AC electricity to charge, with outputs generally between 6 and 19 kilowatts. Can charge an EV with a modest-size battery overnight. Can be used at home, however, is the most common EVSE used for public and depot charging.

DC Fast-Charger (DCFC): Uses 400- or 800-volt DC electricity to charge, with output ranging from 50 to 350 kilowatts. Can charge an EV's battery from 10 to 90 percent in as little as a half-hour. DCFCs are impractical for home and depot charging due to their high cost. Commonly used for public charging stations.

4.2 City Infrastructure

Currently, the City has no dedicated EVSE infrastructure installed for fleet use.

It's recommended the City develop an EVSE strategy consistent with the intended use of the City's fleet. The primary options for the City are depot charging, workplace charging, and public charging.

Depot charging is accomplished at centralized facilities ("depots") where a fleet is managed. Depot charging allows EVSE to be dedicated to the vehicle to ensure it is fully charged and ready when needed. Depot charging generally occurs overnight. This approach is appropriate for vehicles that provide mission-critical services and that need to be fully charged and ready to perform at the beginning of a work shift.

While similar, workplace charging is different from depot charging. Workplace charging is normally intended for individual employee use and is commonly located in employee parking areas. City vehicles can access workplace chargers. Workplace chargers are not dedicated to individual EVs and are managed on a first come, first served basis.

Public charging is facilitated through shared infrastructure located at multiple locations accessible to the public. Public charges are network equipped to allow them to collect fees and are part of a larger networked systems. These chargers can be found at many locations, including office building, shopping centers, multifamily communities, and transit hubs.

Public chargers are remotely monitored and controlled and are often owned by large service providers similar to gas station companies. Numerous Level 2 and DC fast charging stations can be found along the I-5 corridor that passes through the City of Burlington geographic area.

City fleet vehicles can access public chargers, but this approach is generally less reliable and more costly than depot or workplace charging. Therefore, the following proposed approach for EVSE only includes Level 2 depot and workplace charging.

4.3 City Strategy

To support a transition to electric fleet vehicles, the City will need to first install EVSE. In theory, City vehicles could be charged at public EVSE, but in practice this is not practical. Initially, the City will need to install enough Level 2 Chargers to support 100% of its year one vehicle transition target. Each year thereafter, the City will need to install 50%-75% of the annual transition target. The EVSE will be located at the City facilities where the electric fleet vehicles will be stationed.

For the City's fleet vehicles, the EVSE installation strategy over a proposed six-year period is recommended is as follows.

Table 10 – Cumulative EVSE Installation

Year	Total count by Year
1	6
2	10
3	20
4	25
5	40
6	45
Total	**45**

5 Financial Analysis

5.1 Approach

This financial analysis determines the cost details of the recommended transition strategy proposed above. The following cost estimates were determined from a market scan based on the current EV and EVSE market conditions. Actual costs for this proposed transition approach may be drastically different at the time of implementation, if implemented.

5.2 Existing Fleet Vehicles

The City's vehicle fleet is comprised of 102 ICE vehicles currently in service. Using the 75% reduction goal as detailed above, and an assumed 10% reduction in fleet size for efficiency, this analysis evaluates the transition of 65 of these vehicles to electric drive over a six-year period.

Transition activities proceed in 3 phases and focus on those vehicles most conducive for transition to electric.

5.3 Electric Vehicle Supply Equipment (EVSE)

Currently, the City has no EVSE installed for fleet use. This analysis evaluates the installation of 45 Level 2 EVSE over a six-year period to support the EV transition activities.

This is a ratio of 70% EVSE charge ports for each EV. 35 of the EVSE will be dedicated depot chargers and 10 will be shared workplace chargers. None of the EVSE will be available for public use.

5.4 Capital Costs

5.4.1 Phase 1 – Introduction (2-year period)

Phase 1 will occur over a 2-year period. During this time, for this analysis, 15 EVs are procured. The categories targeted and the average acquisition costs are listed in Table 11 below.

Table 11 – Phase 1 EV Capital Cost

Vehicle Type	Quantity	Cost per Vehicle	Total Cost	Notes
Passenger Car	4	$50,000	$200,000	
SUV/MPV	4	$65,000	$260,000	

Light Pickup	4	$70,000	$280,000	
Cargo Van	3	$60,000	$180,000	
Total	15		$920,000	

Additionally, 10 EVSE units are procured and installed. The type of EVSE and the average acquisition costs are listed in Table 12 below.

Table 12 – Phase 1 EVSE Capital Cost

EVSE Type	Quantity	Cost per Unit	Total Cost	Notes
Level 2 - Depot	10	$18,500	$185,000	Does not include utility upgrades provided by local utility.
Level 2 - Workplace	0	$0	$0	
Total	10		$185,000	

5.4.2 Phase 2 – Normalization (2-year period)

Phase 2 will occur over a 2-year period. During this time, for this analysis, 20 EVs are procured. The categories targeted and the average acquisition costs are listed in Table 13 below.

Table 13 – Phase 2 EV Capital Cost

Vehicle Type	Quantity	Cost per Vehicle	Total Cost	Notes
Passenger Car	5	$52,000	$260,000	
SUV/MPV	0	$67,600	$0	
Patrol SUV	5	$98,000	$494,000	
Light Pickup	5	$72,800	$364,000	
Cargo Van	2	$62,400	$124,800	
Medium-Duty Pickup	3	$85,000	$255,000	
Total	20		$1,497,800	

Additionally, 15 EVSE units are procured and installed. The type of EVSE and the average acquisition costs are listed in Table 14.

Table 14 – Phase 2 EVSE Capital Cost

EVSE Type	Quantity	Cost per Unit	Total Cost	Notes
Level 2 - Depot	10	$19,240	$192,400	Does not include utility upgrades

				provided by local utility.
Level 2 - Workplace	5	$20,000	$100,000	
Total	15		$292,400	

5.4.3 Phase 3 – Adoption (2-year period)

Phase 3 will occur over a 2-year period. During this time, for this analysis, 30 EVs are procured. The categories targeted and the average acquisition costs are listed in Table 15.

Table 15 – Phase 3 EV Capital Cost

Vehicle Type	Quantity	Cost per Vehicle	Total Cost	Notes
Passenger Car	5	$54,080	$270,400	
SUV/MPV	5	$70,304	$351,520	
Patrol SUV	5	$102,752	$513,760	
Light Pickup	0	$75,712	$0	
Cargo Van	0	$64,896	$0	
Medium-Duty Pickup	10	$88,400	$884,000	
Heavy-Duty Straight Truck	5	$95,000	$475,000	
Total	30		$2,494,680	

Additionally, 20 EVSE units are procured and installed. The type of EVSE and the average acquisition costs are listed in Table 16.

Table 16 – Phase 3 EVSE Capital Cost

EVSE Type	Quantity	Cost per Unit	Total Cost	Notes
Level 2 - Depot	15	$20,010	$300,150	Does not include utility upgrades provided by local utility.
Level 2 - Workplace	5	$20,800	$104,000	
Total	20		$404,150	

From this analysis, over a six-year period, a total of $5.8M of capital funds are required.

Table 17 – Estimated Capital Budget for Fleet Transition Activities

Year	EV Quantity Added	EVSE Quantity Added	Capital Budget
1	5	6	$ 417,667
2	10	4	$687,333
3	10	10	$943,833
4	10	5	$846,367
5	15	15	$1,550,448
6	15	5	$1,348,376
Total	65	45	$5,794,024

5.5 Operation and Maintenance (O&M) Costs

5.5.1 Fuel

The most significant operating cost for the existing fleet is fuel. Based on the mileage reported by the City, in 2023, the fuel expenditures for the City fleet were estimated to be $214,190.

Over the six-year analysis period, total fuel expenditures are projected to total $1,533,991 if no electric vehicles are introduced.

In contrast, if 75% of the forecasted City fleet miles are transitioned to electric, the cost of liquid fuel during the transition period would total $1,099,146.

The savings realized during the transition period of the City fleet to electric is estimated to be $434,846.

Once transition to 75% electric drive is complete, a steady-state annual savings of $224,608 would be realized.

5.5.2 Electricity Costs

During the same six-year transition period, the cost of electricity to charge the City fleet is calculated to be $118,878.

5.5.3 Maintenance and Repair

Another substantial operating cost is fleet maintenance and repair. Cost data was not available for the existing City fleet, so industry standards were used to develop the costs of the internal combustion fleet versus an electric fleet.

The maintenance and repair savings realized by transitioning the City fleet to electric is estimated to be $128,023

5.5.4 Additional Operating Costs

Given the higher value of EVs, an increase in insurance costs is anticipated. This increase is somewhat mitigated by the plan to reduce the total fleet size while transitioning to electric. During the six-year period, the net increase in insurance costs is estimated to be $XX,XXX.

The cost to acquire new fleet management tools and software and provide additional training for fleet managers and technicians is recognized as additional costs. These costs are incurred during Phase 1 and estimated to be $50,000.

5.5.5 Disposal

This analysis addresses disposal of the existing fleet over time. Revenue from the disposal of the existing City fleet is estimated at $XXX,XXX. This revenue is likely to be realized on the Income Statement (as opposed to the Balance Sheet). Therefore, expected revenue from disposal activities was added back as a credit for operating expenditures.

5.5.6 EVSE Networking

For this analysis, the EVSE units procured by the City are networked. While networked EVSE are not required, the reporting capabilities make networking a valid consideration. This just are included here. Over the six-year period total networking and maintenance fees are estimated to be $XX,XXX.