



SEATTLE
**building
tune-ups**

Tune-Ups Policy Overview & Accelerator Program

ASHRAE Puget Sound Chapter Meeting
October 19, 2017

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Seattle
Office of Sustainability
& Environment



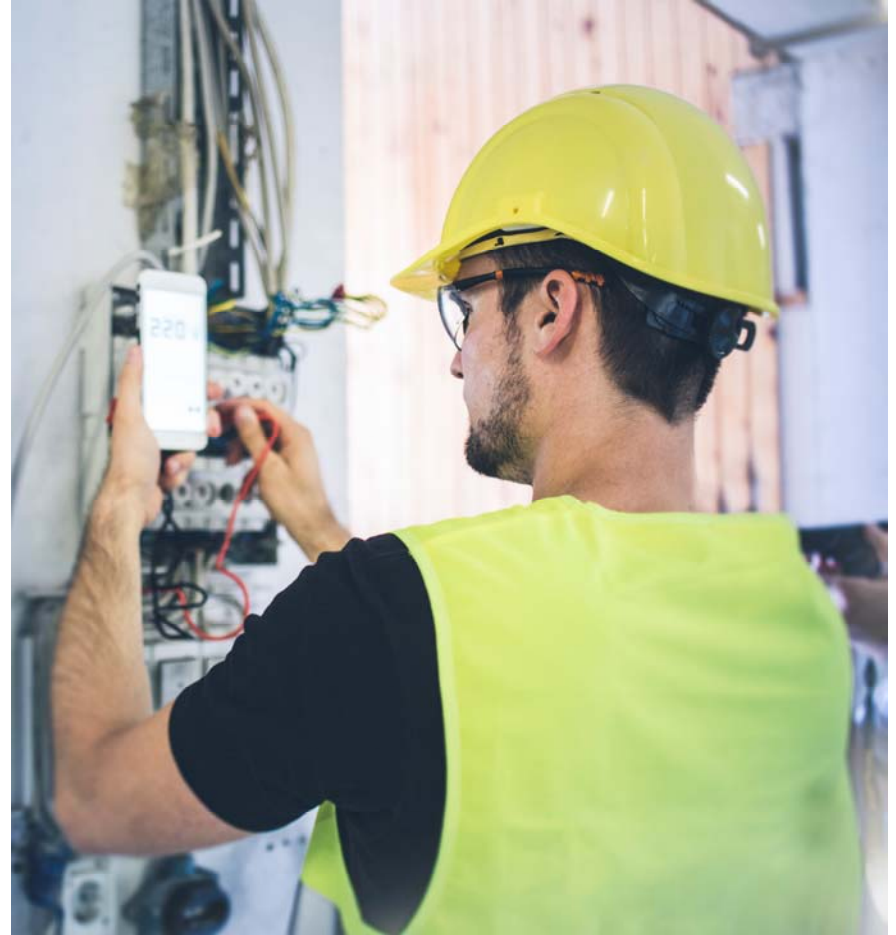
What is the Seattle Building Tune-Ups Program?



What is a Seattle Building Tune-Up?

- Operational and maintenance improvements
- Typically generates 10-15% savings
- Best practice for managing an efficient building

10 to 15%
Savings





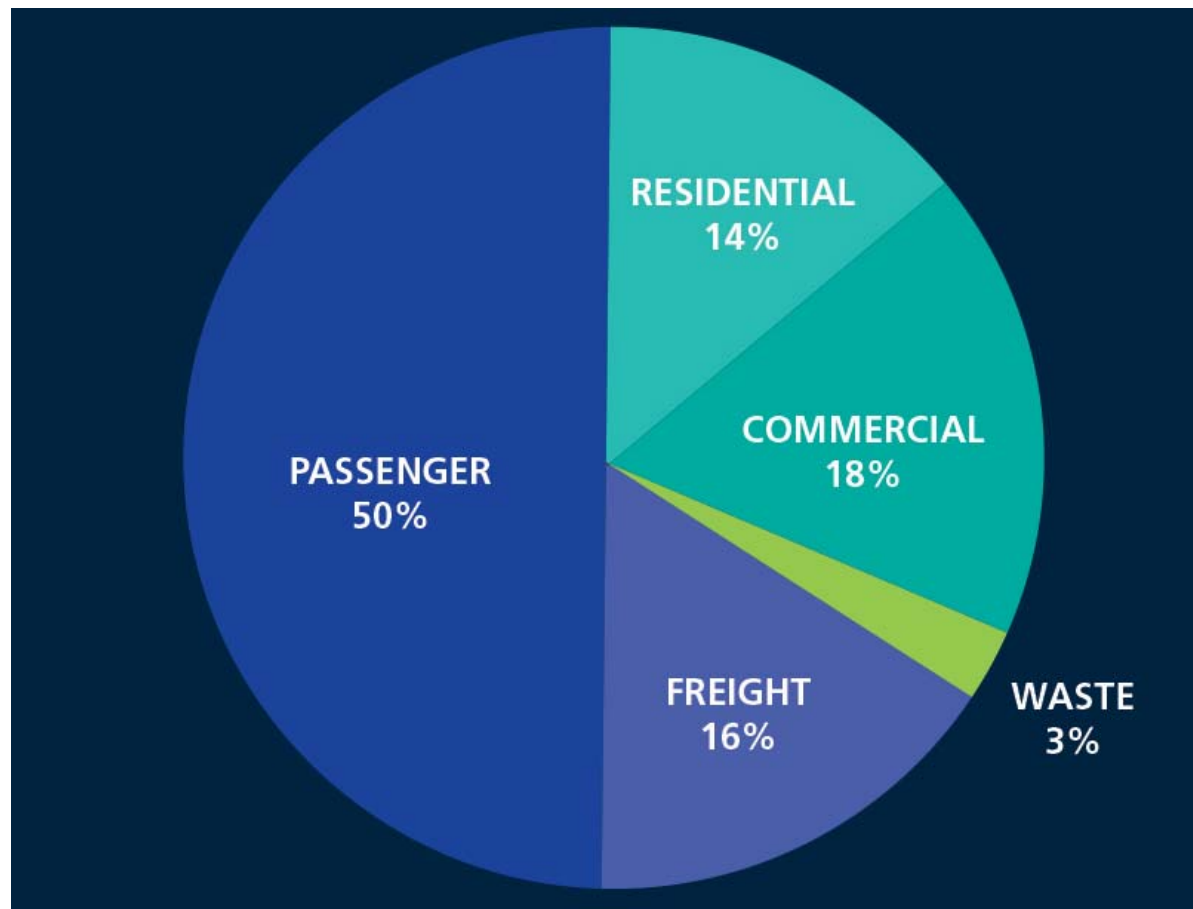
Why is the City of Seattle Mandating Building Tune-Ups?



Seattle Climate Action Plan



32% of Seattle's Emissions from Buildings



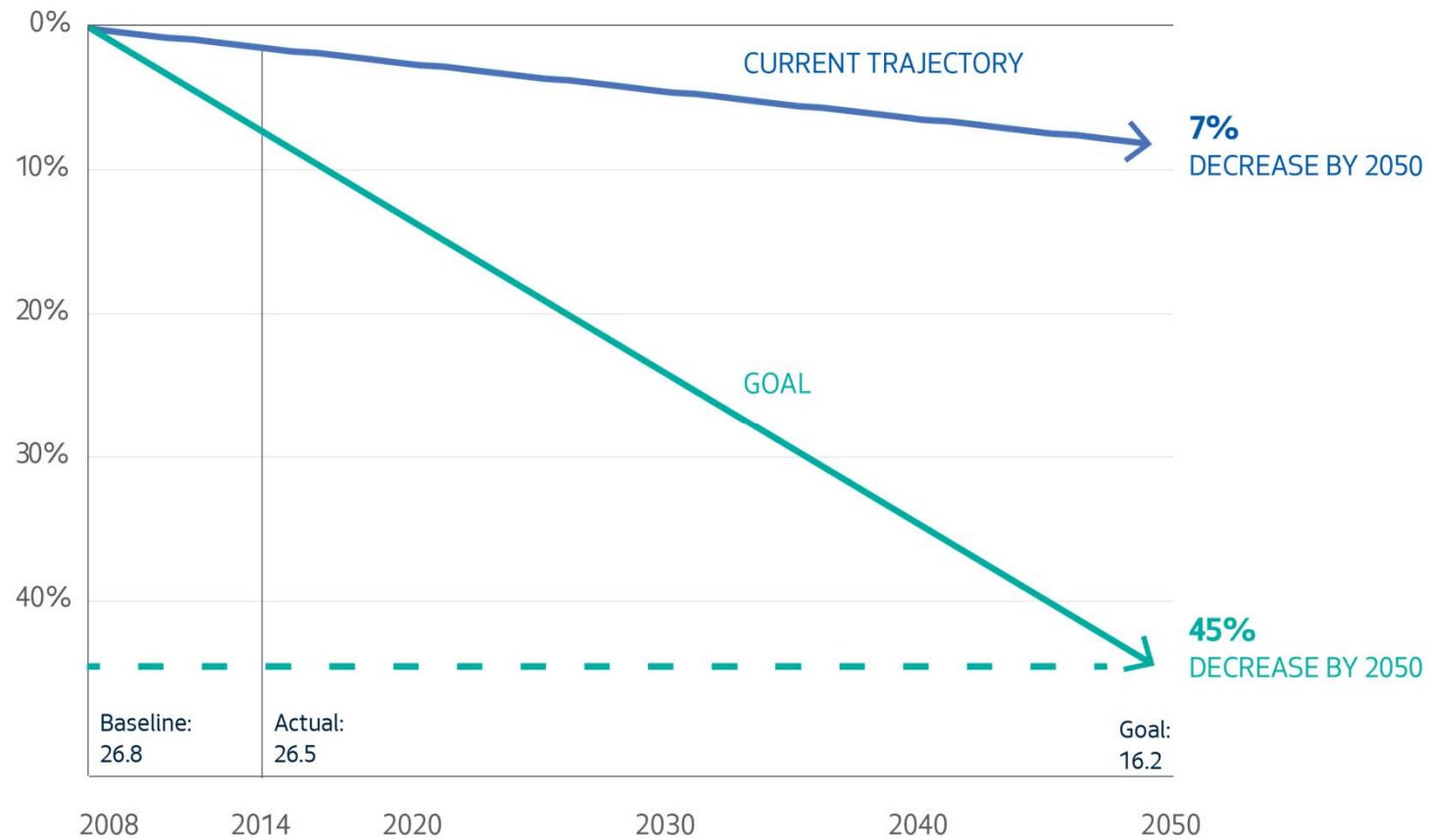
Source: 2014 Seattle Community GHG Inventory



Our Progress to Date: We Have Work to do.....



Seattle Annual Commercial Energy Use



Who Needs to Comply?

- All commercial buildings and spaces 50,000 sf or greater (excluding parking)
- Tune-Up required every five years

Every
5
Years



Leading by Example

All City of Seattle-owned buildings must meet the Building Tune-Ups deadlines one year ahead of privately-owned buildings.

- Save tax payer dollars
- Reduce carbon
- Generate lessons learned
- Help improve implementation



Seattle Municipal Tower





Tune-Up Elements

MARS HILL
CHURCH

Tune-Up Elements

Operating Protocols

- HVAC systems
- Lighting
- Water heating
- Water usage

Maintenance & Repair

- HVAC systems
- Lighting
- Water heating
- Water usage
- Envelope



Examples of Tune-Up Requirements





Tune-Ups Compliance Process

READY TO GET STARTED?



DATE

TUNE-UP SCHEDULE

Ongoing, every five years

BUILDING SIZE*	WAIVER AND EXTENSION DUE DATE	TUNE-UP SUMMARY REPORT DUE DATE
200,000+ SF	September 4, 2018	March 1, 2019
100,000-199,999 SF	April 1, 2019	October 1, 2019
70,000-99,999 SF	April 1, 2020	October 1, 2020
50,000-69,999 SF	April 1, 2021	October 1, 2021

** Excluding parking*





- **Tune-Up Your Building**
- Tune-Up Accelerator Program (if <100K SF)
- Exemplary Performance or Low Energy Use (<20 EUI)*
- Tune-Up Equivalency*
- Limited Extensions and Single-Round Waivers*

*If not conducting a Tune-Up requests due 180 days before compliance deadline.



SPECIALIST

Tune-Up Specialists must meet following qualifications

At least seven years experience **plus** one of the following:

- 🔧 Professional Engineer PE
- 🔧 Building Operator Certification BOC Level II
- 🔧 Certified Energy Manager CEM
- 🔧 Certified Commissioning Professional CCP
- 🔧 Commissioning Authority CxA
- 🔧 Existing Building Commissioning Professional EBCP
- 🔧 Bachelor in Sustainable Building Science Technology BAS



Conduct a Building Assessment

- of building systems to identify operational or maintenance issues
- review benchmarking data and water bills

Identify Corrective Actions

- identify required operational and maintenance improvements

Implement Required Actions

- address all required corrective actions identified in the building assessment

Verify Changes

- confirm all corrected equipment and systems are functioning as intended



Report to City of Seattle

- Complete the online summary report ([available 4/1/2018](#))
- Review with building owner
- Submit to the City for compliance review





Assessment Element	Corrective Action	Tune-Up Finding	Status of Tune-Up Correction	Corrective Action Description	End Condition
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1. HVAC
2. Lighting
3. Domestic Hot Water
4. Water Usage
5. Envelope





Alternative Compliance

Alternative Compliance Pathways



High Performance

- Certified ENERGY STAR Score
 - LEED Gold for O&M
 - Living Building, Petal, or Net Zero Energy
 - Low Energy Consumption
-



Equivalent Process

- Active Monitoring & Continuous Cx
 - Completed RCx
 - Implemented ASHRAE L2 Audit Recs
 - Reduced EUI
 - New Construction or Substantial Alteration
-



Tune-Up Accelerator

- Program for buildings 100K SF or less
- Funding sunsets after 2018



Under Limited Circumstances

Single-Round Waiver

- Demolition
 - Major Renovation
 - Financial Distress
-

Extension Requests

- Change of Ownership
- High Vacancy Rate
- Existing Mechanical Improvements
- Demonstrated 15% EUI Reduction



Building Tune-Up Accelerator





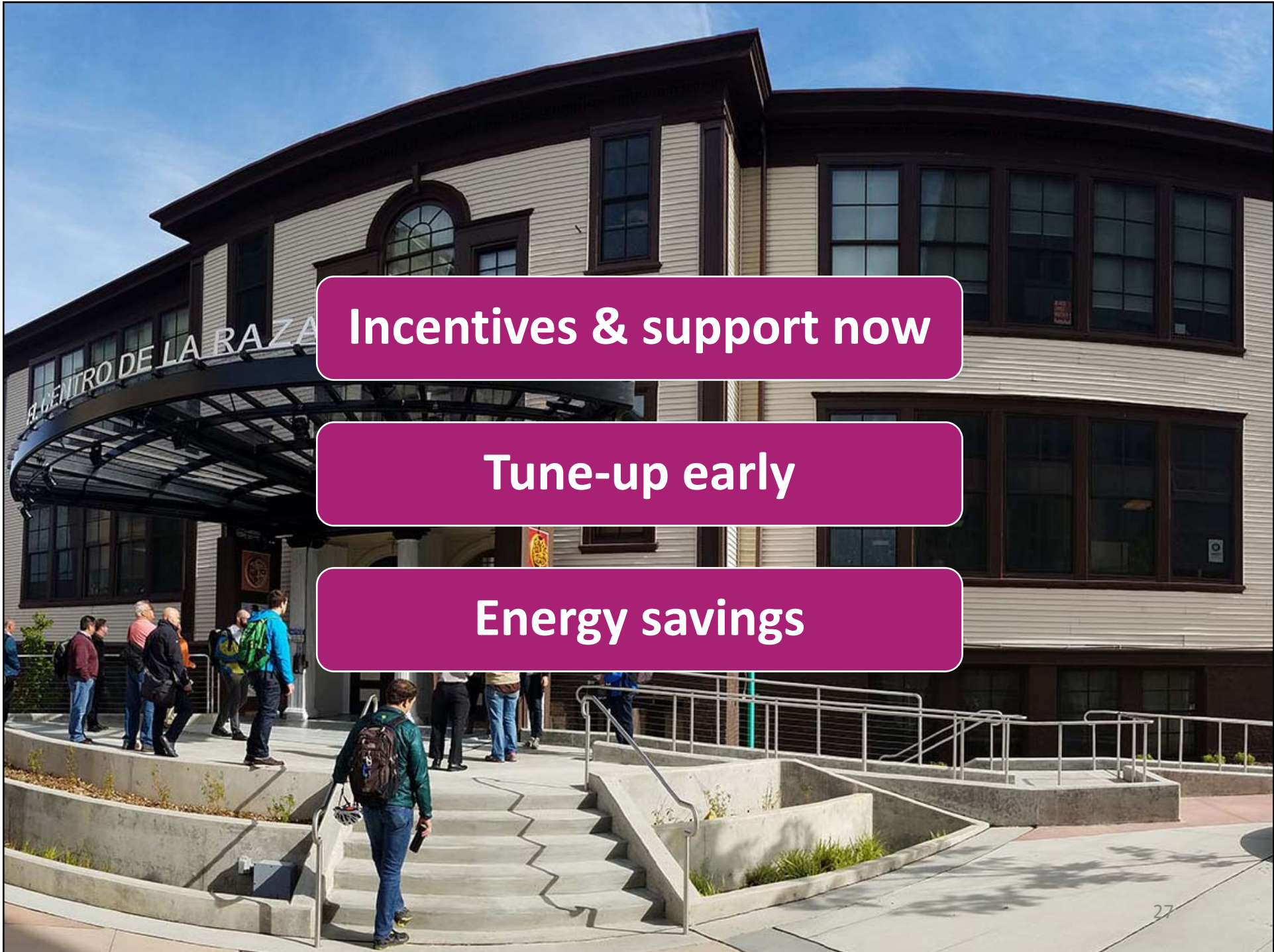
Tune-Up Accelerator Program

- <100,000 SF / Due 2020 or 2021
- Tune-up now to meet Seattle Building Tune-Ups requirements
- Financial incentives, DOE Asset Score & enhanced technical support
- Sunsets after 2018

2017

» Q2 2019





Incentives & support now

Tune-up early

Energy savings



Program Incentives

A. BASIC TUNE-UP

City Light incentive of up to **\$0.12 per SF** for a tune-up that meets requirements

B. TUNE-UP PLUS

Plus standard incentives for energy-saving improvements like lighting, HVAC

C. BUILDING RENEWAL

Support for deeper investments like renovations or tenant improvements

2017

» Q2 2019





Basic Tune-Up – 2 Steps

- ✓ **\$0.03 per SF paid upon completion of Building Assessment**
 - Cost of Assessment submitted to City Light

- ✓ **\$0.09 per SF paid upon completion of Tune-Up Actions**
 - Required tune-up corrective actions & verification
 - Completed & Tune-Up Accelerator Summary Report submitted
 - Operating hours worksheet submitted to City Light
 - Cost of Tune-Up submitted to City Light





Building Renewal

Resources for up to **25 participant buildings** pursuing deeper energy savings through building renewal at **three levels of project engagement**.

- SPARK Analysis
- Technical Assistance for Goal Setting/Lighting/Controls Retrofit Evaluation/Envelope upgrades
- Engineering Analyses
- SCL and PSE standard incentives could apply for deep retrofits

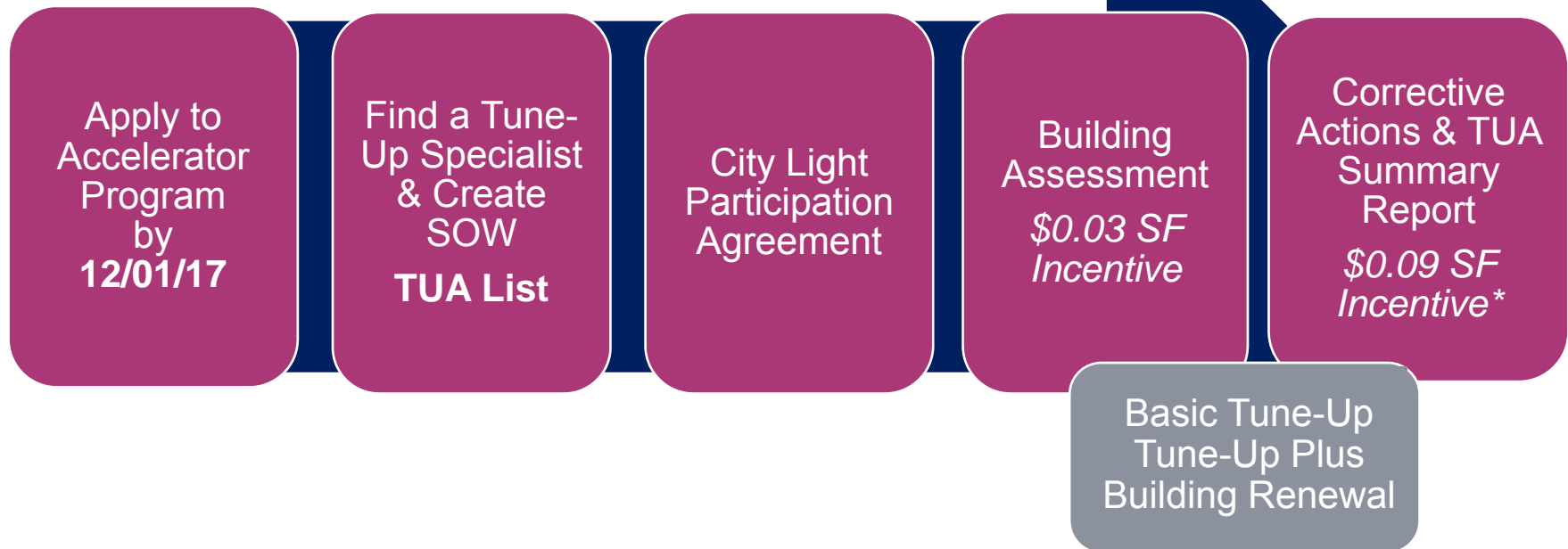
INTEGRATED DESIGN LAB

UNIVERSITY of WASHINGTON // **W**





Accelerator Process



2017

» Q2 2019




**up to 70% of project costs*



How to Enroll

Updated 08/04/2017

Seattle City Light  **Building Tune-Up Accelerator**

Customer Energy Solutions - Business Conservation Program
Program Application for Building Tune-Up Accelerator

Please enter information into the green cells & send to accelerator@seattle.gov.
Questions? Call 206-233-7184.

EMA:		Supv:	
Proj. #:		Date Assigned:	
Project Name:			
City of Seattle Building ID:			
Facility Use:		Use Code:	
<i>For Internal Use Only</i>			

Project Information & Site Address

Facility Name:		Project Scope: <small>(pick from the drop-down)</small>	Basic Tune-Up: This basic Tune-Up meets BTU Requirements. No other additional scope.
Facility Address:			
City:	Zip:		
Building Sq Ft (Excluding Parking):			

Customer Information

Company name for Participation Agreement (as it appears on W-9):		Tax ID:	
C/O (alternate business name):			
Mailing Address:	City:	State:	Zip:
Authorized Signer:	Project Contact:		
Position:	Position/ Company:		
Phone:	Phone:		
Email Address:	Email Address:		

Tune-Up Specialist Information

First & Last Name:		City:	State:	Zip:
Address:				
Firm Name:		Phone:		
Position:		Email Address:		

Available at:

www.seattle.gov/buildingtuneups click on Accelerator

“How to Enroll in the Accelerator”





Nicole Ballinger

Tune-Up Accelerator Program Manager
Seattle Office of Sustainability & Environment

nicole.ballinger@seattle.gov

206-233-7184

seattle.gov/buildingtuneups, Click 





An energy efficiency mandate that helps building owners identify smart, responsible ways to reduce energy and water costs.

NEED MORE INFORMATION?

Seattle.gov/BuildingTuneUps

BuildingTuneUps@Seattle.gov

206.727.TUNE

Like cars and bikes, all buildings need to be tuned regularly to keep them running as efficiently as possible.



Seattle
Office of Sustainability
& Environment