

Environmental Stewardship Initiative City Council Update



Presenters: Jennifer Ewing, Mac Cummins, Liz Stead
August 7, 2017



Presentation Outline

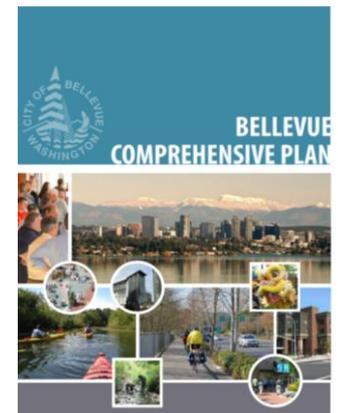
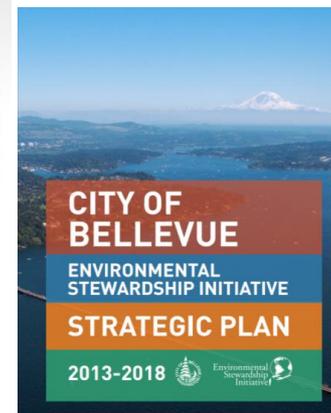
1. ESI Strategic Plan
Implementation Progress
 1. Energy and Climate
 2. Mobility – EV Charging
 3. Tree Canopy
 4. EnviroStars Green Business Program
2. Green Building Update
3. Advanced Green Building Pilot Program
4. Discussion



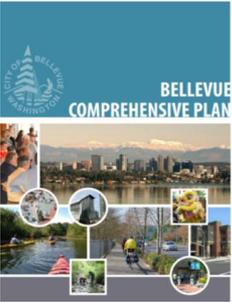
ESI Policy Drivers

- Council Vision – regional leadership and high quality built and natural environment
- Comprehensive Plan Environmental Element:
 - Reduce countywide GHG emissions, 25% by 2020, 50% by 2030, and 80% by 2050
 - Establish a GHG emissions inventory and measurement framework
 - Citywide GHG reduction target
 - Restore tree canopy coverage to 40%
 - Climate change adaptation strategies
 - Regional leadership
 - Public education
 - Minimize/eliminate release of harmful substances into the air, water, and soil
 - Promote and invest in energy efficiency and renewable energy

- ESI Strategic Plan
- Mayor’s Climate Protection Agreement
- King-County Cities Climate Collaboration Joint Commitments

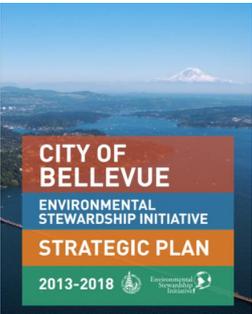


Green Building Policy Drivers and Strategies



Comprehensive Plan:

- Support the use of emerging best practices in the area of green building and site design through the use of pilot programs and model ordinances (EN-48)



ESI Strategic Plan:

- Reduce code barriers and streamline permitting processes for green building and renewable energy projects.
- Encourage energy and water conservation and green building in Bellevue through the energy code and other tools.

ESI Strategic Plan Progress

Greenhouse Gas Emissions

Mobility & Land Use

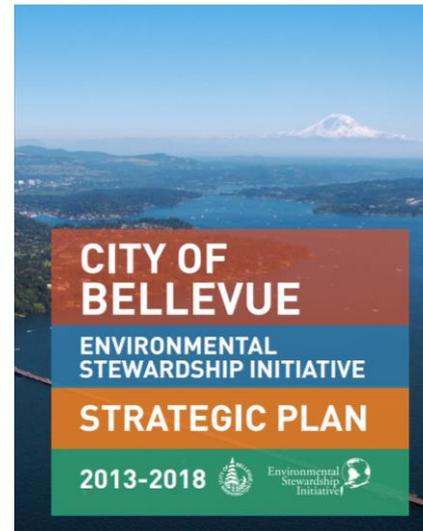
Energy & Water

Materials Management & Waste

Ecosystems & Open Spaces

Plan includes:

- 17 Sustainability Indicators
- 57 Actions



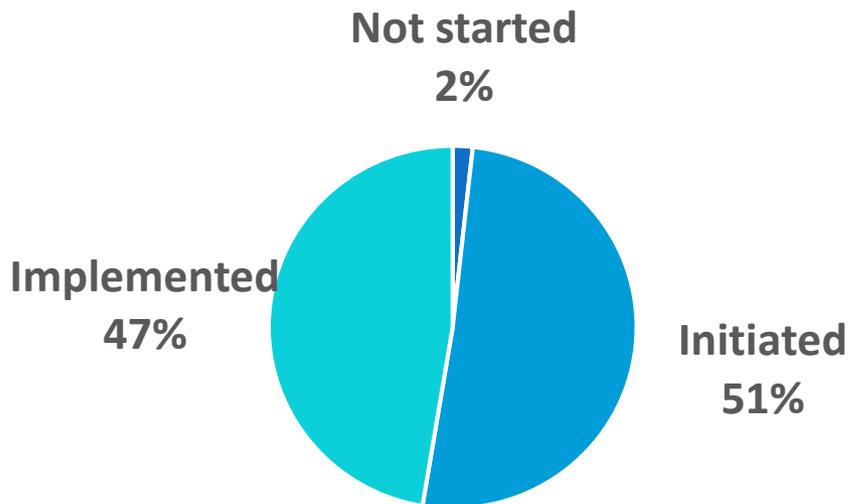
KEY PERFORMANCE INDICATORS
A Snapshot of Current Conditions

KEY PERFORMANCE INDICATOR	TARGET	2011	% REDUCTION NEEDED	TREND	STATUS
GREENHOUSE GAS EMISSIONS					
Greenhouse gas emissions (metric tons)	11,246	14,511	22%	Improving	
Greenhouse gas emissions (per capita)	1,218,203	1,577,500	22%	Steady state	
MOBILITY & LAND USE					
Peak Grid emissions (metric tons)	2,498	3,119	20%	Improving	
Emissions from vehicle miles traveled (metric tons)	683,836	772,600	11%	Steady state	
Commuter trip reduction - Drive Alone Rate (%) at large employers	56.9%	63.9%	11%	Mixed	Peak commuting time (not environmental)
ENERGY & WATER					
Emissions from kWh and therms consumed (metric tons)	5,444	9,969	45%	Improving	
Emissions from kWh and therms consumed (per capita)	610,736	873,600	30%	Mixed	Decreasing overall, increasing per capita
Gallons of water used	Decrease	106,498		Mixed	
Gallons of water saved per day	355,000	566,423	37%	Improving	
Renewable energy installed in Bellevue (MW)	Increase	123		Improving	
MATERIALS MANAGEMENT & WASTE					
Emissions from landfilled solid waste (metric tons)	117	96	22%	Steady state	
% of total waste recycled and composted	50.9%	42.3%	16%	Improving	
ECOSYSTEMS & OPEN SPACES					
Citywide tree cover (%)	40%	36%	11%	Declining	20% reduction in tree cover (2000-2010)
Stream habitat	Improve			Mixed	
Acres of open space and parks	Increase	2,551		Improving	
Public urban forests in class 1 and 2 condition (Class 1 is healthiest)	Transition 10 acres per year from Class 3 and 4 to Class 1 and 2 condition	72% of trees in Class 1 or 2 condition		Improving	

*Percentage increase from 2011. Actuals needed to reach target.
% Reductions are based on Mayor's Climate Reduction Agreement and other City adopted targets.

ESI Strategic Plan Implementation Progress

**98% of Actions
Implemented or
Initiated**



Key Next Steps:

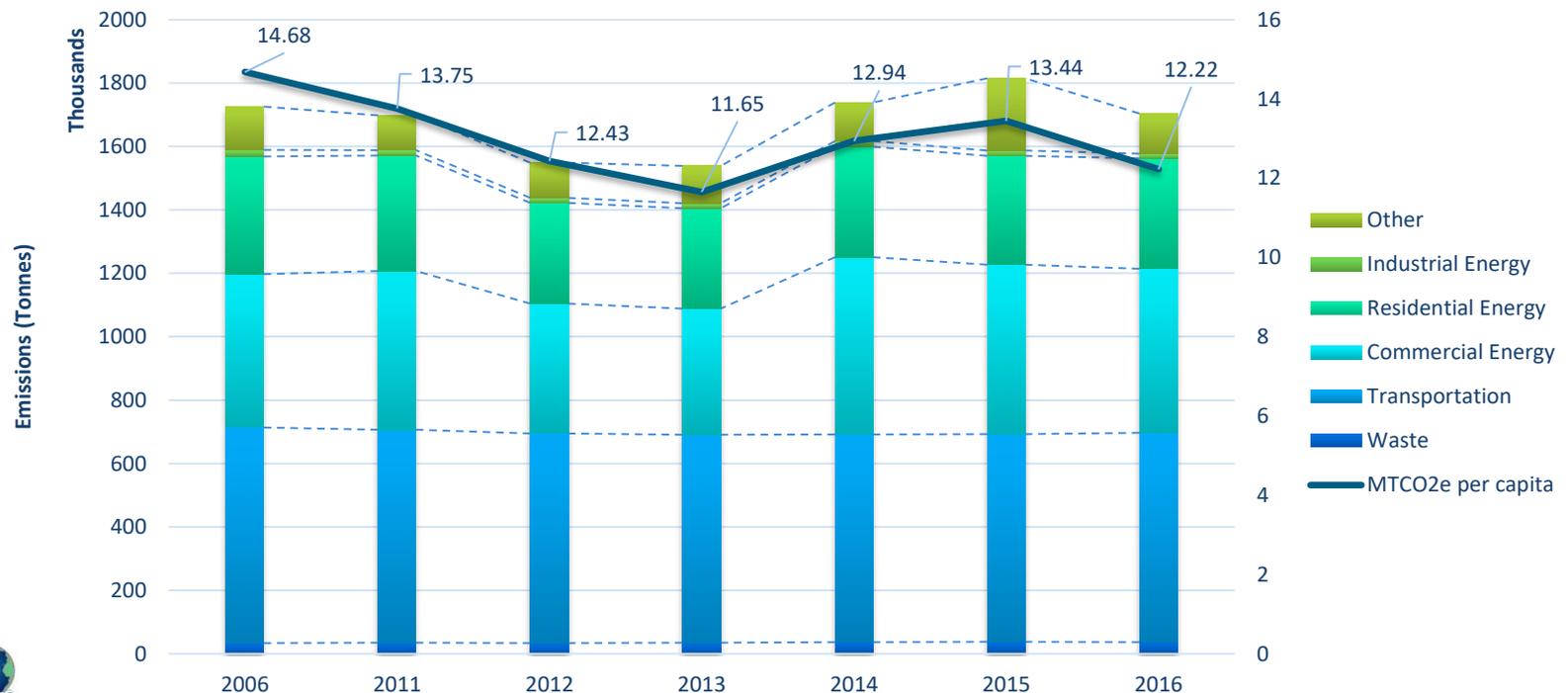
- Update GHG Reduction Target
- Climate Resiliency Planning
- Greening Fleet Plan
- Green Building Incentives
- Remove Code Barriers to Green Building

ESI Program Updates: Initiated U.S. DOE Energy Analysis project

Greenhouse Gas
Emissions

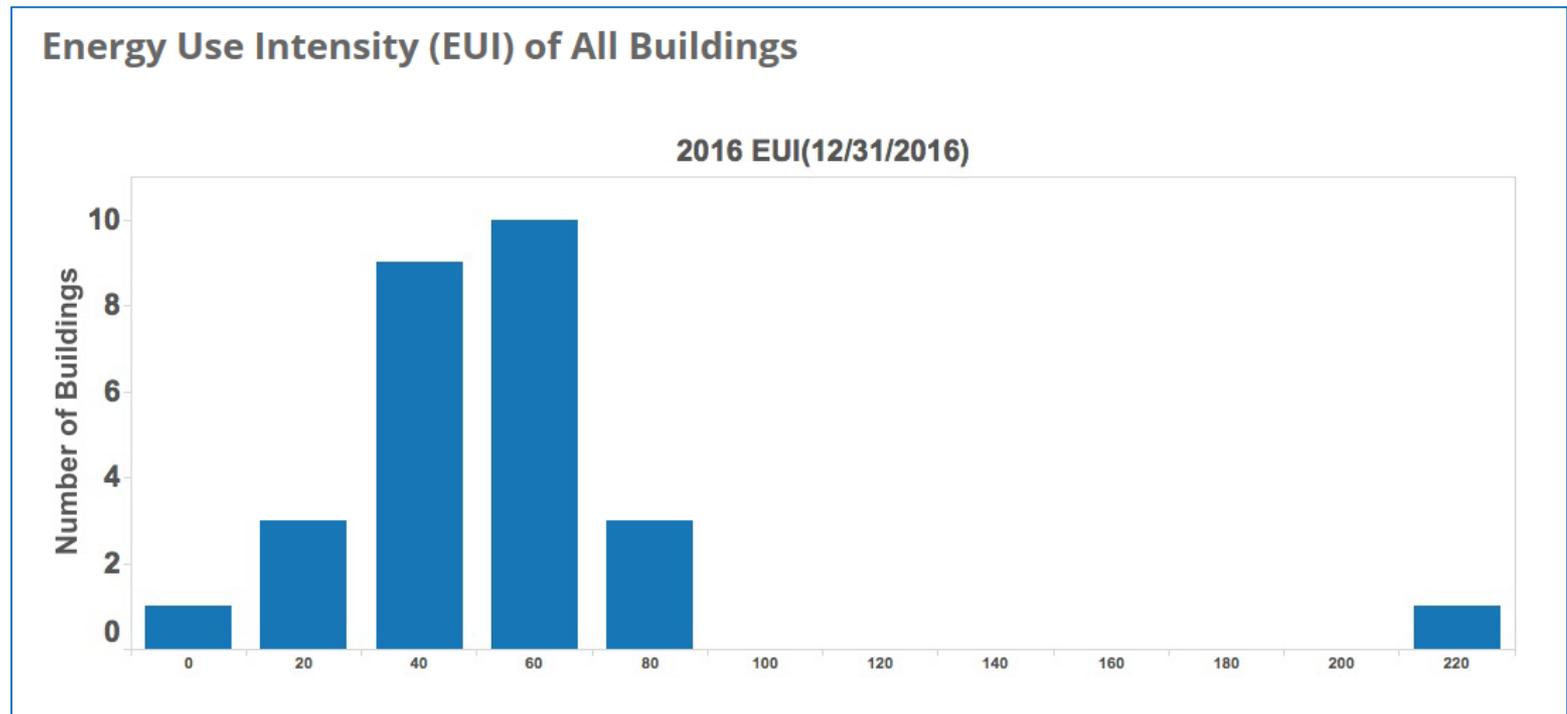
- Leading a team of local governments with a nonprofit partner and consultant support
- Updating our greenhouse gas emissions inventory using latest data and methodologies

Bellevue Community Greenhouse Gas Trends



ESI Program Updates: K4C and Partnership Updates

- Municipal Building Energy Benchmarking
- Scope 5 Partnership Dashboard
- K4C Elected Official Meeting in April 2017



ESI Program Updates: EV Charging and Alternative Vehicles

Mobility & Land Use

- VW Settlement Electrify America EV charging
- Department of Ecology VW Settlement funding
- Identifying sites for new stations



ESI Program Updates: Georgetown University Energy Prize

Energy & Water

- 1000 residents took the Energy Smart Pledge
- Distributed 2100 LED light bulbs
- Partnered with PSE, Hopelink, Mini City Hall, King County Housing Authority



Bellevue Energy Smart Lighting Kit

Two LED A19 60W bulbs inside!

Install and save up to **\$25/year!**

For more energy saving tips, go to bellevuewa.gov/energysmart.htm

Want to save money this holiday season?

Commit to being Energy Smart by taking simple steps to conserve energy and resources in your home!



Turn off and unplug electronics when you leave the house



Turn on lights only in rooms you are in



Shower for 5-7 minutes with a high efficiency shower head



Turn holiday lights off at bedtime



Turn down your thermostat to 65°F at bedtime



Call Puget Sound Energy to schedule a Home Energy Assessment



Learn more at: www.bellevuewa.gov/energysmart.htm

ESI Program Updates: Energy

Other program updates

- PSE Powerful Partnerships Grant awarded to the Mercer Slough Environmental Education Center
- Urban Smart Bellevue achieving results:
 - 98 participants; 7% energy savings on average
- PSE Green Direct Program

Innovative. Groundbreaking. Pioneering. Green Direct.

We believe in partnerships. Together, with cities, governments and major commercial customers like Target, Starbucks, REI, King County and Sound Transit, we've created Green Direct, an industry-leading renewable energy program that ensures our customers have safe, reliable and affordable energy service for years to come.

PSE PUGET SOUND ENERGY

STARBUCKS 116 WASHINGTON STORES

REI REI coop

PORT OF SEATTLE

SOUND TRANSIT

OLYMPIA

CITY OF ISSAQUAH

KING COUNTY

SNOQUALMIE

WESTERN WASHINGTON UNIVERSITY

LANGLEY

TARGET SEVEN WASHINGTON STORES (TARGET CORPORATION)

CITY OF BELLEVUE

CITY OF TACOMA

CITY OF EVERETT

CITY OF BELLINGHAM

CITY OF MERCER ISLAND

1630 PARTNERS AND FIVE WASHINGTON STORES

EnviroStars Green Business Program Update

Materials Management
& Waste

- Launch in Sept 2017
- Green Business Recognition for achievement in waste reduction, energy efficiency, water conservation, pollution prevention, sustainable transportation.
- 20 businesses on Business Advisory Committee



EnviroStars **COMING SOON** [f](#) [t](#) [in](#) [Login](#)

FIND A GREEN BUSINESS APPLY TO BE A GREEN BUSINESS

GOOD FOR BUSINESS. GOOD FOR WASHINGTON.	GREENHOUSE GAS EMISSIONS SAVED	That's the equivalent of planting
Select which you would like to view	835,334 metric tons of CO2	44,161 acres of urban trees a year for ten
	\$3,083,277 total savings	

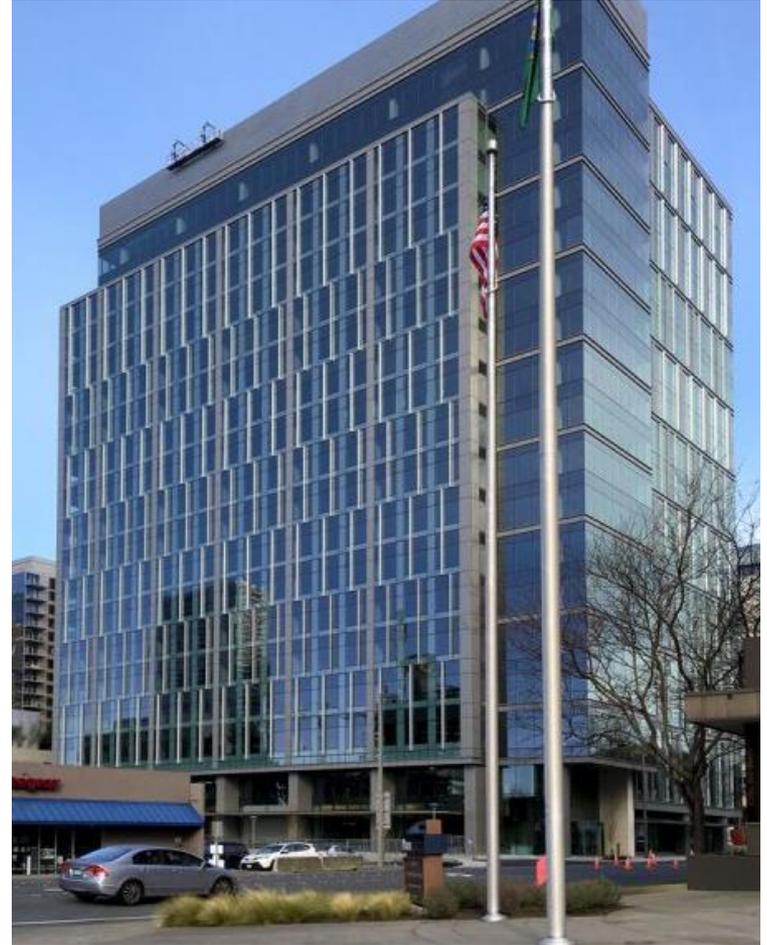
Tree Canopy Update

- Comprehensive Plan goal of 40% tree canopy
- Value of trees education and outreach campaign – \$25k King Conservation District funding
- Initiated Tree Canopy Interdepartmental Working Group
- Mitigation pre-planning for major infrastructure projects



Benefits of Green Building

- Decreased operational costs over the lifetime of building
- Reduced energy and water use
- Stormwater management
- Smart Building technologies
- Key differentiator for tech company real estate decisions

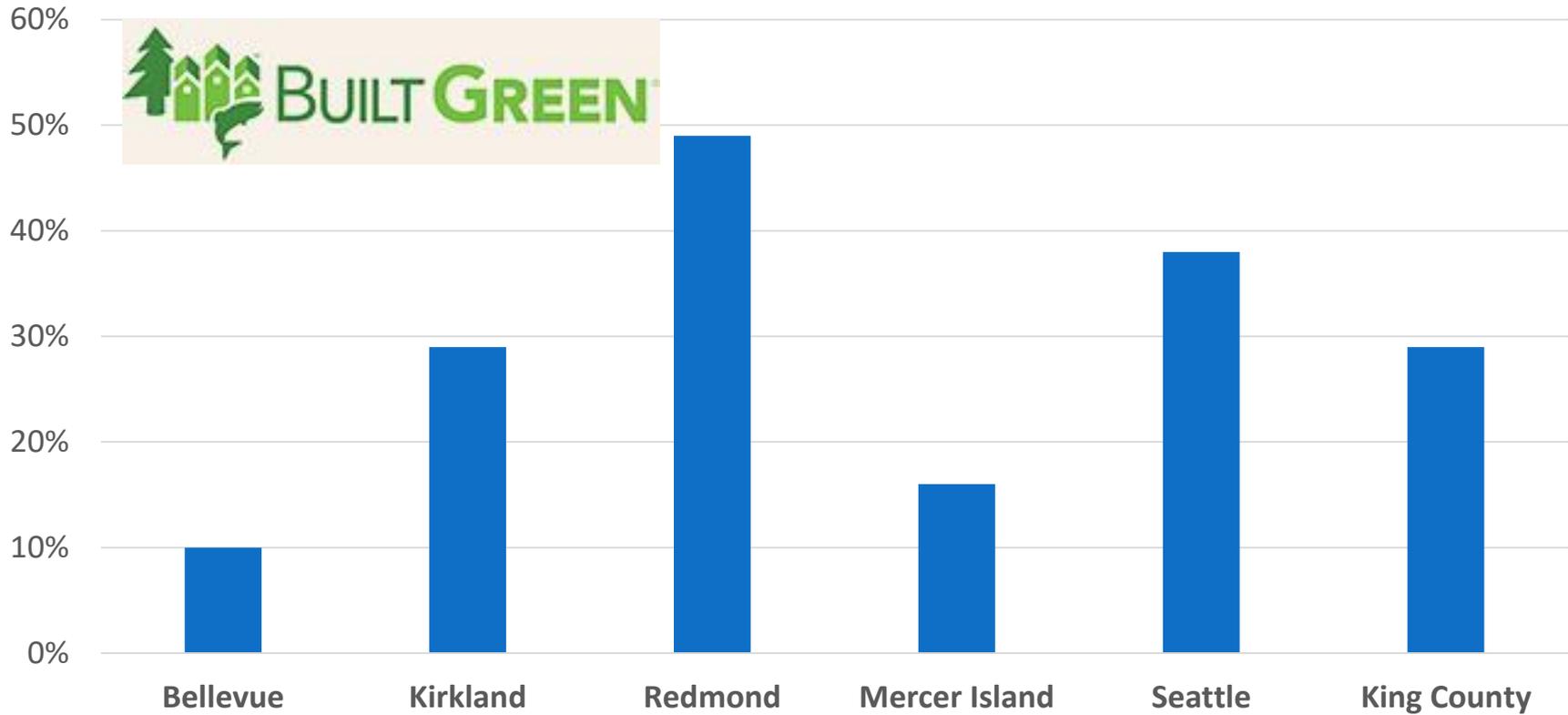


Green Building Incentives in the Region

	Density Bonus	Parking minimum reductions	Expedited Permitting	Fee Reductions	Advanced Green Building Program	Technical Assistance
Seattle	X	X	X		X	X
Shoreline	X	X	X	X	X	
Kirkland			X			X
Redmond	X	X	X			
Issaquah			X	X		
Bellevue	X	X*				

“Built Green” Certifications in the Region

Percent of New Construction Residential Units with
MBA “Built Green” Certification (2014 - 2016)



Source: Data Provided by the Master Builders Association Built Green Program

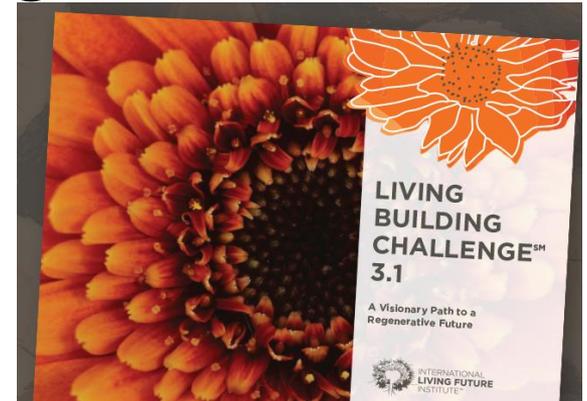
Current Green Building Strategies in Bellevue

- Green Building Incentives in Bel-Red and in draft downtown code
- Green and sustainability factor in draft downtown code, to promote site sustainability
- Streamlined permitting for EV charging stations and rooftop solar
- Adopted “solar readiness” voluntary code in 2016 building code update



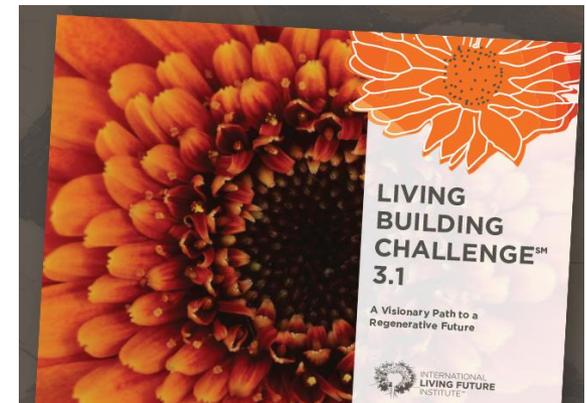
Potential Advanced Green Building Pilot

- Further encourage advanced green building
- Address increasing high-tech demand for green building
- Continue to remove barriers to advanced green building development
- Assess potential impacts to codes, permits, and fees for net zero energy and water buildings



Advanced Green Building Pilot Next Steps

- Develop proposed program recommendations with DSD and Utilities
- Gather input from key stakeholders (e.g. BDA, MBA, Green Building developers, Bellevue developers)
- Any identified recommendations for code amendments, fee or rate adjustments would be presented at a future date.



Wrap-Up and Discussion

