

Environmental Stewardship Initiative City Council Update



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

Presentation Outline

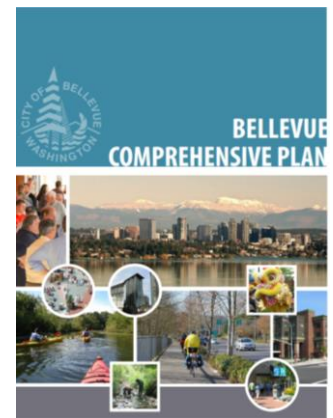
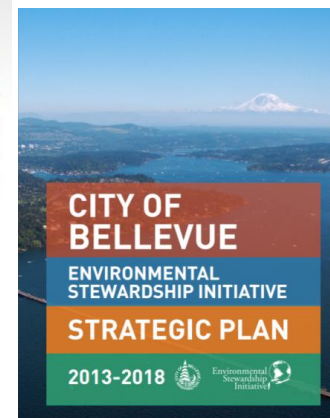
1. ESI Strategic Plan
Implementation Progress
 1. Energy and Climate
 2. Mobility – EV Charging
 3. Tree Canopy
 4. EnviroStars Green Business Program
2. Green Building Update
3. Advanced Green Building Pilot Program
4. Discussion



ESI Policy Drivers

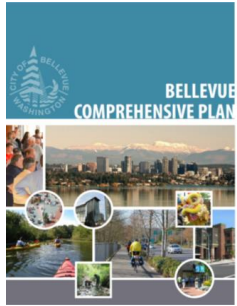
- Council Vision – regional leadership and high quality built and natural environment
- Comprehensive Plan Environmental Element:
 - Reduce countywide GHG emissions, 25% by 2020, 50% by 2030, and 80% by 2050
 - Establish a GHG emissions inventory and measurement framework
 - Citywide GHG reduction target
 - 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



**Policy directives referenced on this slide, refer to EN-4, 6, 7, 8, 9, 12, and 54 in the Comprehensive Plan.*

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

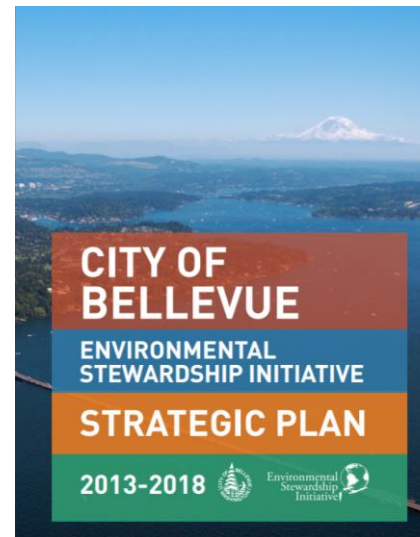
Energy & Water

Materials Management & Waste

Ecosystems & Open Spaces

Plan includes:

- 17 Sustainability Indicators
- 57 Actions



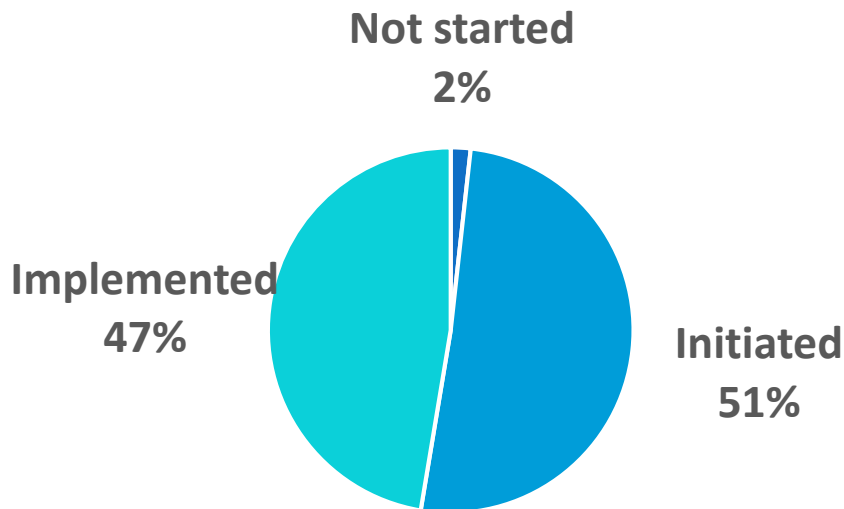
KEY PERFORMANCE INDICATORS
A Snapshot of Current Conditions

KEY PERFORMANCE INDICATOR	TARGET	2011	% REDUCTION NEEDED	TRENDS (2005-2011)
GREENHOUSE GAS EMISSIONS				
Greenhouse gas emissions (metric tons CO ₂ e)	11,285	14,311	22%	Improving
Greenhouse gas emissions (metric tons CO ₂ e)	1,138,203	1,577,500	22%	Steady state
MOBILITY & LAND USE				
Per Capita emissions (metric tons CO ₂ e)	2,498	3,119	20%	Improving
Emissions from vehicle miles traveled (metric tons CO ₂ e)	683,836	772,600	11%	Steady state
Commuter trip reduction - Drive-Along Rate (%) at large employers	56.9%	63.9%	11%	Mixed (not meeting plan goals - not increasing)
ENERGY & WATER				
Emissions from kWh and therms consumed (metric tons CO ₂ e)	5,444	9,969	45%	Improving
Emissions from kWh and therms consumed (metric tons CO ₂ e)	618,736	873,600	30%	Mixed (meeting overall, decreasing per capita)
Gallons of water used	Decrease	106,498		Mixed
Gallons of water saved per day	355,000	566,453	37%	Improving
Renewable energy installed in Bellevue	Increase	123		Improving
MATERIALS MANAGEMENT & WASTE				
Emissions from landfilled solid waste (metric tons CO ₂ e)	117	96	22%	Steady state
Emissions from landfilled solid waste (metric tons CO ₂ e)	7,578	8,100	7%	Improving
% of total waste recycled and composted	50.0%	42.3%	16%	Improving
ECOSYSTEMS & OPEN SPACES				
Citywide tree cover (%)	40%	36%	11%	Declining (not meeting plan goals - not increasing)
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	77% of forest in Class 1 or 2 condition		Improving

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

ESI Strategic Plan Implementation Progress

**98% of Actions
Implemented or
Initiated**



Key Next Steps:

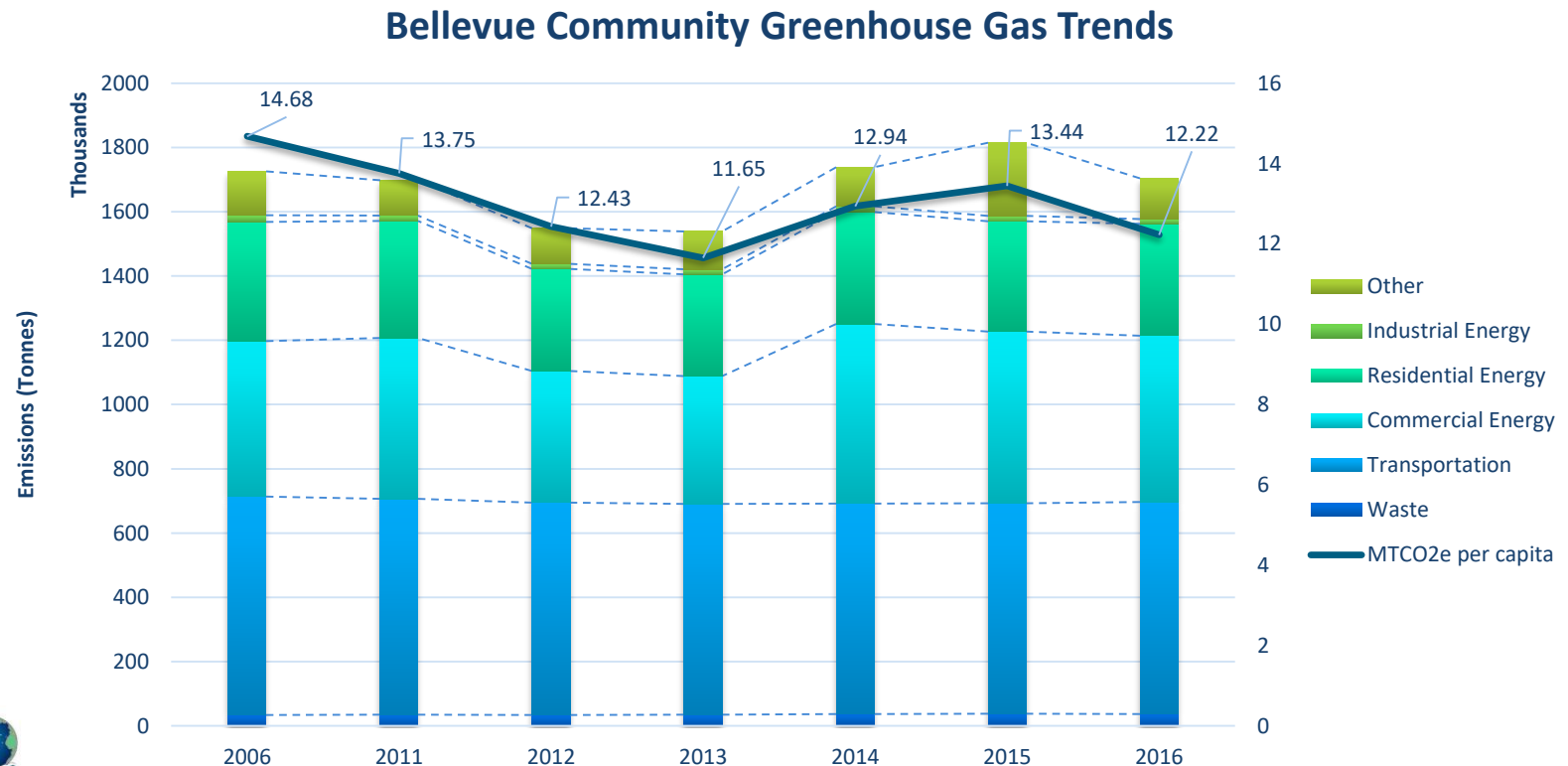
- Update GHG Reduction Target
- Climate Resiliency Planning
- Greening Fleet Plan
- Green Building Incentives
- Remove Code Barriers to Green Building

ESI Program Updates:

Initiated U.S. DOE Energy Analysis project

Greenhouse Gas Emissions

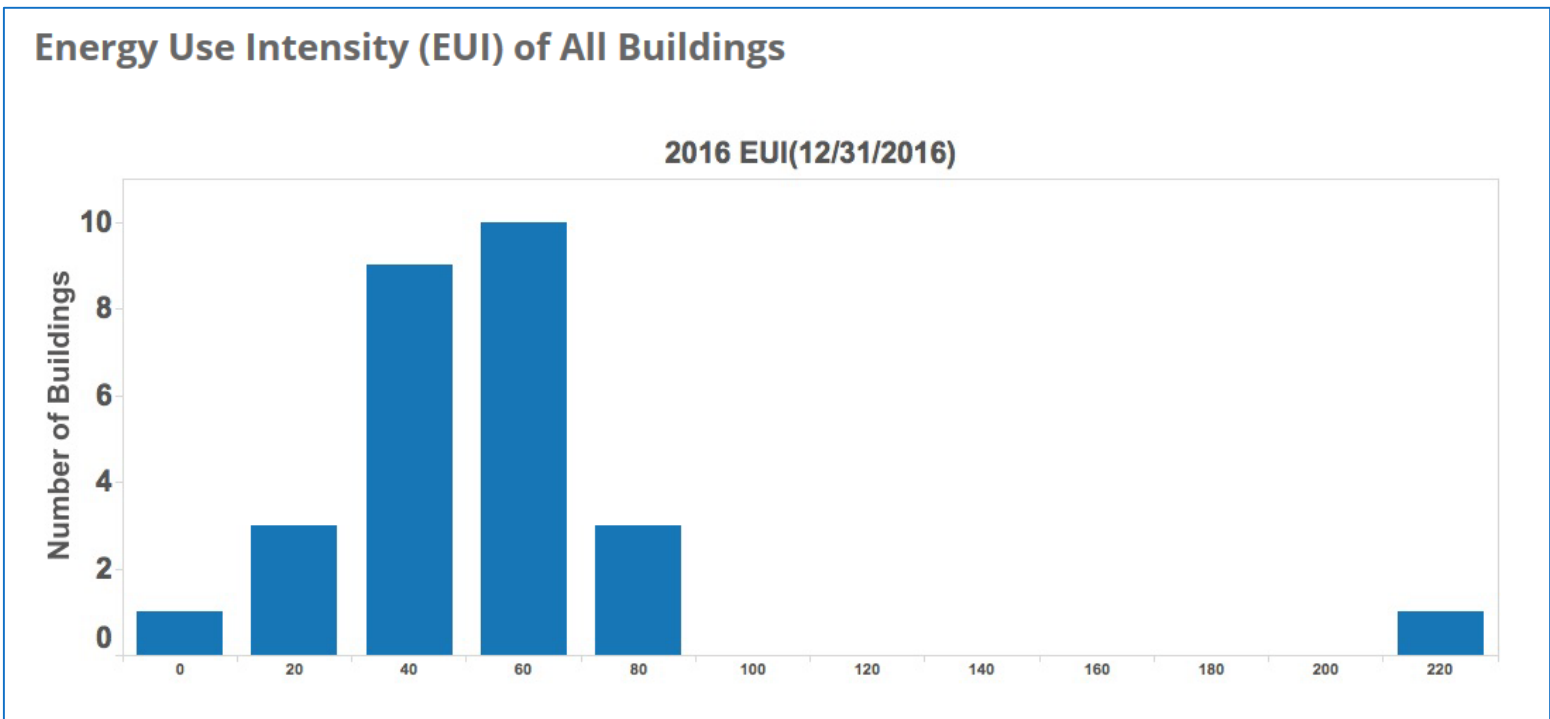
- Leading a team of local governments with a nonprofit partner and consultant support
- Updating our greenhouse gas emissions inventory using latest data and methodologies



ESI Program Updates: K4C and Partnership Updates

Greenhouse Gas
Emissions

- 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



**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



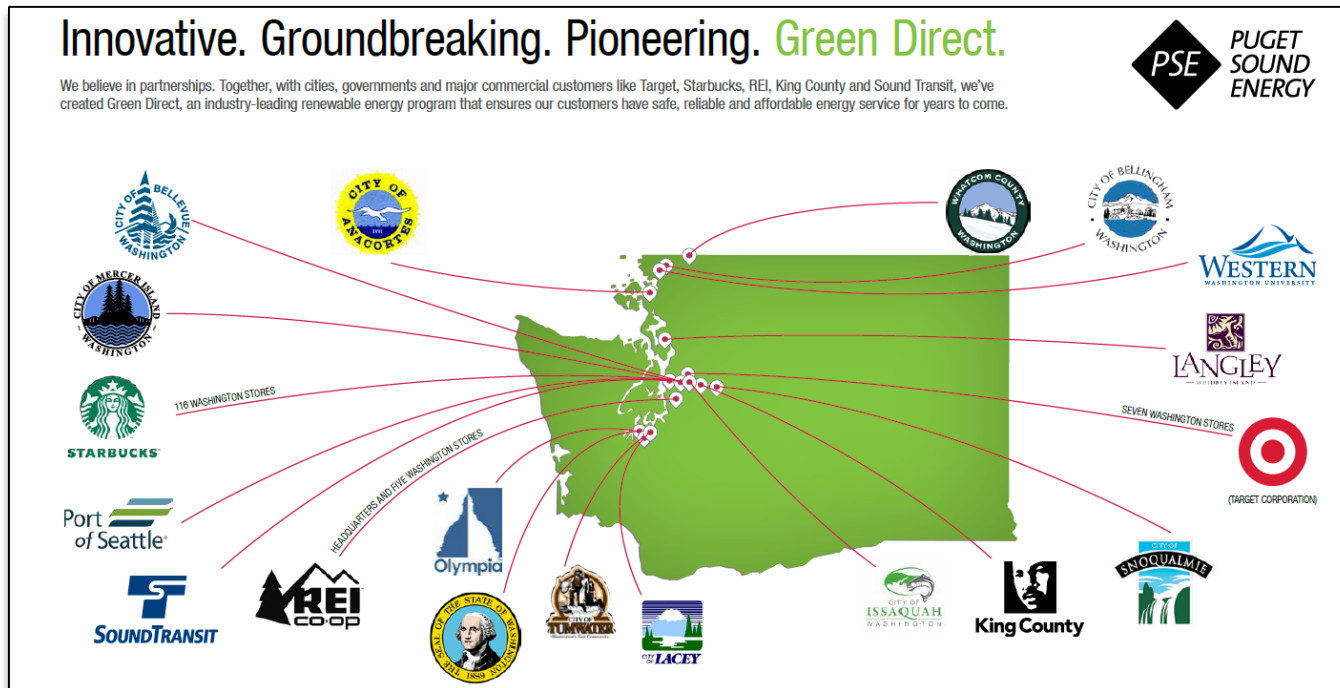
Learn more at:
www.bellevuewa.gov/energysmart.htm

ESI Program Updates: Energy

Other program updates

Energy & Water

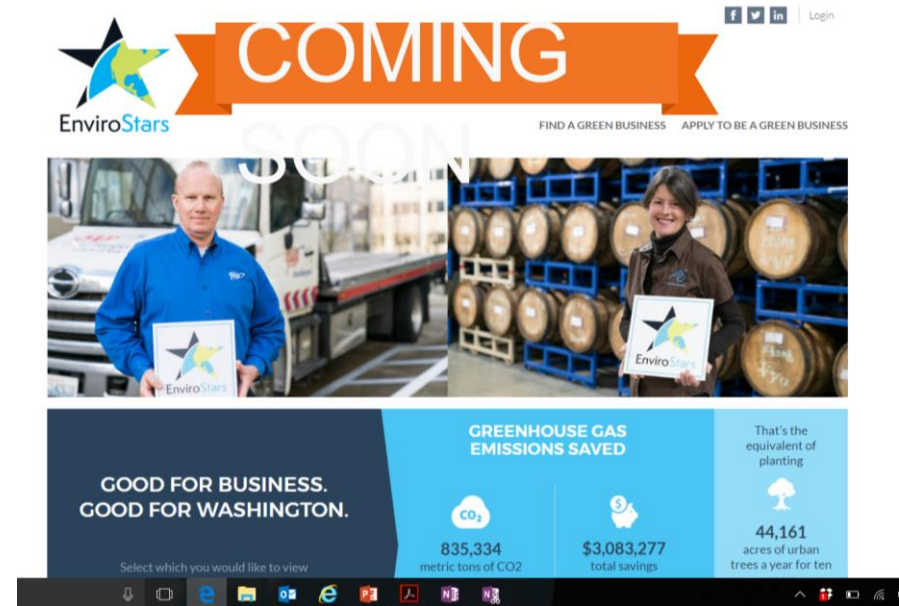
- PSE Powerful Partnerships Grant awarded to the Mercer Slough Environmental Education Center
- Urban Smart Bellevue achieving results:
 - 98 participants; 7% energy savings on average
- PSE Green Direct Program



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



Tree Canopy Update

Ecosystems & Open Spaces

- 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

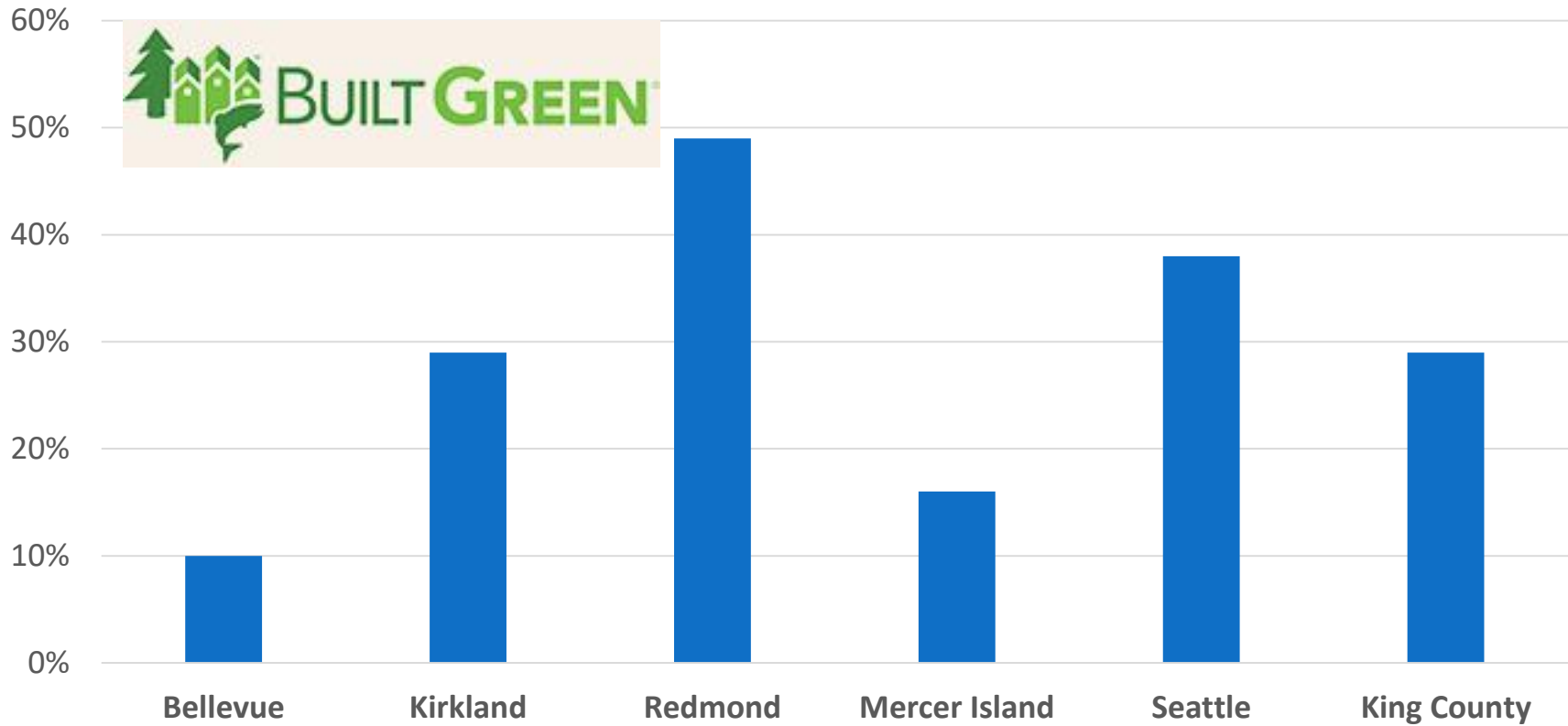


Green Building Incentives in the Region

	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)



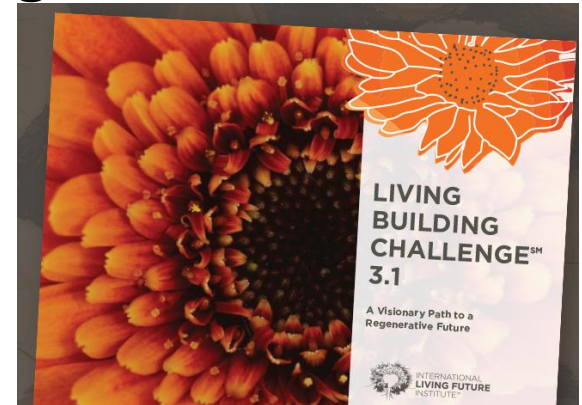
Current Green Building Strategies in Bellevue

- 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



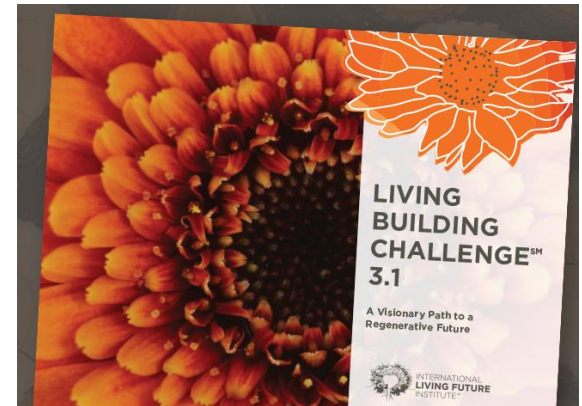
Potential Advanced Green Building Pilot

- 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

