Progress Report on Eco-City and Environmental Action Plan 2030

City Council Legislative Session April 14, 2015





Eco-City Alexandria – Partnership Between the City, Alexandria Environmental Policy Commission, Virginia Tech and the Community



2007: Eco-City project started

2008: Eco-City Charter

2009: Environmental Action Plan 2030







Environmental Indicators

ENVIRONMENTAL INDICATOR (EI)	CURRENT PERIOD		LAST YEAR FY2012 or CY2012	% CHANGE Latest vs. Last Year	
	2014	2013		Latest vs. Last Tear	
Air Quality Days - number of days with code red/ orange	4	4	7	-42.9	
Per capita energy use, MWh per person per year	NA	20.31	20.31	0	
City government operations energy use, MWh per year	NA	120,697	116,608	+3.5	
Per capita greenhouse gas emissions, metric tons of CO ₂ per year	NA	11.4	12.3	-7.3	
Percent of new developments committing to green building standard	99.9%	TBU	84%	+18.9	
Percent tree canopy	34%	33%	33%	+3.0	
Number of acres protected since approval of Open Space Master Plan in 2003	103	TBU	100.5	+2.5	

Environmental Indicators

ENVIRONMENTAL INDICATOR (EI)	CURRENT PERIOD		LAST YEAR FY2012 or	% CHANGE Latest vs.
	2014	2013	CY2012	Last Year
Percent solid waste recycling rate	NA	48.8%	48.7%	0
DASH Public transit ridership - number of mass transit commuters per year	4,238,784	TBU	3,882,022	+9.2
DASH Total passengers per mile / Total passenger per hour of service	2.77 / 22.0	TBU	2.6 / 24.6	+6.5 / -10.6
Per capita water use, gallons per person per year	37,900	TBU	36,718	+3.2
Per capita waste water treated, gallons per person per year	42,762	39,974	37,723	+13.4
Number of stormwater Best Management Practices (BMPs) in the City	449	TBU	376	+19.4
Number of respiratory health complaints received by the Alexandria Health Department	33	TBU	76	-56.6

New Metroway Bus Service on Crystal City - Potomac Yard Transitway

- Opened in August, 2014
- Washington metropolitan area's first right-of-way dedicated to premium bus operations, designed to encourage transit use
- Already surpassed pre-launch projections, resulting in a 23% increase in ridership as compared to the previous bus route 9S, according to WMATA





DASH & CAPITAL BIKESHARE

- In July, ATC started the new AT9 crosstown route using hybrid-electric buses
- In 2015, ATC will be taking delivery of 14 additional hybrid-electric buses which will bring its fleet of hybrid-electric buses to over 50% of total bus fleet.





 In August, the Capital Bikeshare system in Alexandria doubled in size with the addition of eight new stations in Carlyle and Del Ray areas



City's Green Building and Energy Management Initiatives

- More than 19% of the City government's electricity use was offset or generated by renewable energy in 2014
- City completed LED lighting retrofits at the Beatley, Duncan and Burke Libraries, Chinquapin Recreation Center, Ramsay House, Black History Museum, and the Lyceum



ECO-CITY ALEXANDRIA

- City substantially completed construction of the Eisenhower Fire Station 210 which is expected to be certified for LEED Gold in 2015
- 99.9% of square footage for new developments committed to green building standards

Alexandria Participated in DOE Weatherization Innovation Pilot Program

- Brent Place Apartments, a 207-unit building, participates in DOE Weatherization Innovation Pilot Program
- An energy service company performs an investment grade audit to identify energy savings opportunities and recommends energy efficiency improvements
- City supported Brent Place's participation in this program by agreeing to subordinate payment on an existing City loan for 10 years



ECO-CITYALEXANDRIA

 The energy efficiency measures to be undertaken will result in 10-year savings of \$226,060.

Solid Waste Management

- Solid waste recycling rate for 2013 increased fractionally to 48.8 %, a new record level
- City is aiming for 65% recycling rate by 2020



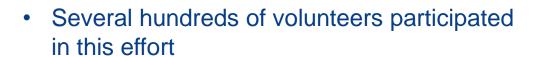


- Yard waste is now collected separately and composted at a regional facility
- Food waste recovery stations at four City Farmers' Markets collected a total of 35 tons of food waste to be composted

ECO-CITY ALEXANDRIA

City's Initiative on Removing Invasive Plants

- City reclaimed and restored 40 acres of City natural areas and parkland through removal of decades-old, pervasive nonnative invasive plants
- Standout sites include the 3.5 acres of managed native meadow at the Telegraph Road and Duke Street interchange, INOVA Alexandria Hospital Scenic Easement, Rynex Natural Area, Fort Williams Park







Stormwater Retrofit

- City received \$1.75 million financial assistance from the VDEQ through the Stormwater Local Assistance Fund Grant
- This grant helps fund the \$3.5 million stormwater retrofit project to enhance the treatment efficiency of stormwater and improve aquatic habitat of the Ben Brenman Pond





Updating the EAP and Green Building Policy

Staff plans to work with the Environmental Policy Commission to update the following policy documents aimed at furthering goals of the Eco-City Alexandria

- Environmental Action Plan 2030
- Green Building Policy



Emerging Issues & Challenges

- Short and long term issues related to impacts of TMDLs (Total Maximum Daily Loads) and City's new stormwater and combined sewer permits
- Hunting Creek bacteria TMDL requires updating the City's Long Term Control Plan for the combined sewer system





City's strategy to meet 5% reduction in TMLDs by 2018 required by stormwater permit includes installation of pond 19 and retrofit of Lake Cook using a \$1.2 million grant

Emerging Issues & Challenges

- Implementation of the Energy and Climate Change Action Plan
 - Continue to reduce the City's and community's energy use
 - Monitor scientific information on sea level rise and adaptation strategies



City of Alexandria
Energy and Climate Change Action Plan
Local Actions to Save Energy,
Reduce Greenhouse Gas Emissions, and
Prepare for the Impacts of Climate Change



June 2011



Office of Environmental Quality
Department of Transportation and Environmental Services