

## **Appendix D: Climate Action Plan Progress**

Estimated GHG emissions reduction at end of 2014 using available data entered into ICLEI's CACP and ClearPath Programs = **about 1.6% total reduction compared to 2007 levels**

**Residential Energy Emissions** ↓ by 2%      **Transportation Emissions** ↓ by 2.5%  
**Commercial Energy Emissions** ↑ by 2.7%      **Waste Emissions** ↓ by 1.2%

### **State of Maryland Climate Action Progress**

- 8.2% of In-State Energy Generated from Renewable Sources, Target is 20% by 2022
- 8% Decrease in Maryland's Annual Greenhouse Gas Emissions since 2006, Target is 25% by 2020

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## **48 Actions in City's Plan to Complete by 2020**

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### **Short-Term Action Progress**

#### 15 Short-Term Actions

- All have been implemented
- 14 of 15 Actions are at least 70% complete

### **Mid-Term Action Progress**

#### 20 Mid-Term Actions

- 6 are currently in progress
- 6 are planned for FY 2016
- 8 are planned for FY 2017

### **Long-Term Action Progress**

#### 13 Long-Term Actions

- 2 currently in progress
- 9 planned for FY 2018
- 2 planned for FY 2019

SECTOR: Energy	Action	Time-Frame	Status	
	<b><i>Goal A. Promote and expand new and existing residential energy efficiency and conservation programs</i></b>			
	1. Enhance outreach efforts and increase participation in existing low-income energy audit and weatherization assistance programs.	Short-Term	- Implemented - Goal 230 energy audits and weatherization projects - 168 audits/weatherization completed for seniors through the City’s Residential Energy Efficiency Program, updated for FY 2015 info. - 24 audits/weatherization projects completed with MEA Municipal Collaboration updated with FY14 info. <b>About 83% Complete (192 out of 230 audits)</b>	
	2. Provide financial incentives for City residents that complete energy audits on their homes.	Short-Term	-Implemented -Goal 1,000 households to complete BGE energy audits -149 BGE energy audits completed through incentive program - About 825 BGE QHECS and HPWES audits completed in Bowie since 2009 (used Bowie area percentage and zip code only data) <b>974/1000 = about 97% Complete</b>	
	3. Promote residential energy audits at green team events and on City website.	Short-Term	- Implemented - Residential energy audit webpage created - Residential energy audits promoted at 3 City events in FY 2014 - Residential energy audits promoted at 4 City events in FY 2015 and will continue to promote at future City events along with Bowie’s Energy Audit Program <b>Mostly Complete</b>	
	4. Develop common energy efficiency improvement recommendations for Levitt house designs. Distribute information to Levitt community homeowners.	Mid-Term	- Collect information about Levitt house designs as part of the FY 2016 BGE energy audit incentive program, add question to application - Goal is to have 770 homes make improvements - Send out mailing in FY 2017 and track responses to mailing <b>To Be Implemented – FY 2017</b>	
	5. Work with homeowner and condo association management companies that have properties in Bowie to educate residents about energy efficiency.	Mid-Term	- Set up meetings in FY 2016 and track number of households reached - Goal to educate 1,034 households <b>To Be Implemented – FY 2016</b>	
	6. Promote energy efficiency programs available for rental and multi-family residence buildings.	Mid-Term	-Set up meetings in FY16 and track number of households reached - About 420 units completed as part of BGE multi-family program (used area percentage and zip code data) <b>To Be Implemented – FY 2016</b>	
7. Provide information to potential homebuyers regarding the County’s program for an Energy Efficiency Mortgage and regarding utility bill disclosure ordinance.	Mid-Term	- Add Energy Efficiency Improvement Info to City Welcome Packets - Set up meeting with local real estate agencies and track number of meetings. <b>To Be Implemented – FY 2016</b>		

SECTOR: Energy (cont)	Action	Time-frame	Status
	8. Work with energy providers and the County and State to maximize use of existing financial incentives and other resources that assist residents in promoting energy efficiency.	Mid-Term	- Set up meetings with State/County and track number of meetings - Publicize State/County Programs <b>To Be Implemented – FY 2017</b>
	<b><i>Goal B. Promote and expand new and existing commercial energy efficiency and conservation programs</i></b>		
	1. Establish a Green Bowie Business Recognition Program that promotes energy and GHG reduction efforts of local businesses.	Mid-Term	- Implemented in June 2015 - Goal is to certify 65 businesses - Zero businesses certified yet <b>In Progress</b>
	2. Promote the State of Maryland’s Green Registry for businesses.	Mid-Term	- 2 Bowie Businesses on Maryland Green Registry as of April 2015 - Link to Green Registry Program on City website - To be implemented heavily with roll out of Green Bowie Business Certification <b>In Progress</b>
	3. Work with energy providers and the County and State to maximize use of existing financial incentives and other resources that assist businesses in improving energy efficiency.	Mid-Term	<b>To Be Implemented – FY 2017</b>
	4. Benchmark and disclose energy performance and improvements of commercial buildings.	Long-Term	-Track number of businesses using Portfolio Manager <b>To Be Implemented – FY 2018</b>
	<b><i>Goal C. Increase green building projects for new and existing buildings</i></b>		
	1. Establish a City policy regarding green building standards for commercial and residential buildings.	Long-Term	- Policy to affect 1,870,812 sq. ft. of building space <b>To Be Implemented – FY 2018</b>
	2. Track and showcase green building projects throughout the community.	Mid-Term	- City green buildings highlighted on City website - Need to start tracking other green buildings – schools, businesses, organizations as well - Plan Green Building Tour <b>To Be Implemented – FY 2016</b>
<b><i>Goal D. Increase installation of renewable energy projects</i></b>			
1. Track and showcase innovative renewable energy projects throughout the community (city, schools, businesses, individuals).	Short-Term	- Implemented All renewable energy projects are tracked and showcased on the City’s website - MWCOG solar presentation on November 20, 2015 - January and March Solar Co-op information sessions attended by Bowie residents who already installed solar on their home - <u>Look into having Bowie homes on DC Metro Solar Tour in October</u> <b>Mostly Complete</b>	

SECTOR: Energy (cont)	Action	Time-frame	Status
	2. Increase number of residential and commercial solar systems installed by promoting solar technology.	Short-Term	<ul style="list-style-type: none"> <li>- Implemented</li> <li>- Heavily promoted solar co-op from Jan. April 2015</li> <li>- Worked with resident on solar opinion piece in March/April 2015</li> <li>- Solar Co-op Completed</li> <li>- As of June 2015, there are 510 residential solar systems that are on average 8 kW in capacity, and one business (Target) with a 513 kW system.</li> <li>- Goal is 24,758 kW of capacity</li> <li>- Solar installations have been increasing by over 50% every year since 2010</li> <li>- County property incentive funds spent into 2017</li> </ul> <p><b>About 19% Complete</b> (4,593 of 24,758 kW goal)</p>
	3. Complete Solar Roadmap goals.	Short-Term	<ul style="list-style-type: none"> <li>- Implemented</li> <li>- Remaining goal to encourage financial stakeholders to provide solar loan programs</li> </ul> <p><b>About 89% Complete</b> (8 of 9 goals met)</p>
	<b>Goal E. Decrease use of natural gas lawn mowers</b>		
1. Incentivize purchasing of electric and push reel lawn mowers.	Short-Term	<ul style="list-style-type: none"> <li>- Implemented</li> <li>- Publicized on City website, Facebook page, and Green Bowie e-newsletter</li> <li>- As of July 2015, there were 8 push reel mower rebates issued and 10 electric mower rebates issued</li> </ul> <p><b>Mostly Complete</b></p>	

Tables continue on next page.

SECTOR: Transportation	Action	Time-Frame	Status
	<i>Goal F. Reduce single occupant vehicle trips</i>		
	1. Work with major employers in the City to promote multiple-occupant commuting. Encourage car-sharing, Dial-a-Ride, RideSmart, RideFinders, preferred parking for carpooling employees.	Mid-Term	- Track number of businesses and employees that participate in multiple occupant commuting - Publicize available programs - Goal is 349 people carpooling/vanpooling <b>To Be Implemented – FY 2017</b>
	2. Investigate opportunities for additional commuter parking lots and more effective use of the existing park and ride lot on Northview Drive.	Long-Term	- Investigate/install additional commuter parking lots - Get data of usage for Northview Park and Ride <b>To Be Implemented - FY 2019</b>
	3. Consider expanding shuttle services for senior and disabled residents.	Long-Term	- Get ridership data from Community Services - Goal is 174 daily ridership increase from 2007 <b>To Be Implemented - FY 2018</b>
	<i>Goal G. Reduce vehicle miles of travel</i>		
	1. Work with WMATA and Prince George’s County to evaluate route restructuring for City areas, and expand new service, including the Bus, to employment areas and other generators efforts of local businesses.	Long-Term	- Get ridership date updated data from WMATA - Goal is 523 additional daily riders from 2007 <b>To Be Implemented - FY 2018</b>
	2. Promote walking and biking through events such as Bike to Work Day and Car Free Day.	Short-Term	- Both promoted through City resolutions and City media sources using flyers, Facebook, Twitter, Website, local newspapers, and cable ads <b>Mostly Complete</b> ( need additional data)
	3. Apply the City’s Development Review Guidelines and Policies in land use and planning and urban design, in order to create bike and pedestrian friendly communities.	Short-Term	- Implemented - Guidelines are being used <b>Mostly Complete</b> (need additional data)
	4. Increase bicycle and pedestrian mode share through bike-sharing systems, bicycle racks, bicycle lanes, pedestrian trails, reprogrammed traffic signals, and improved pedestrian access to bus stops, rail stations.	Long-Term	- Goal is 3,489 additional weekly bike trips from 2007 <b>To Be Implemented – FY 2018</b>
5. Continue to inventory pedestrian and bicycle facilities and identify pedestrian safety projects, (e.g. Safe Routes to School), sidewalk linkages and hiker-biker trail improvements to encourage walking and bicycling.	Short-Term	- City staff currently completes these inventories <b>Mostly Complete</b>	
6. Encourage Transit Oriented Development at Melford and Bowie Regional Center.	Long-Term	- Currently working with Melford developers - About 2,623 Melford/Regional Center units being created <b>In Progress</b>	

SECTOR: Transportation (cont)	Action	Time-Frame	Status
	7. Work with WMATA to expand transit service along the MD 450 Corridor and to Old Town Bowie as identified by the Bowie and Vicinity Master Plan.	Long-Term	<b>To Be Implemented - FY 2018</b>
	8. Work with the State, County, and M-NCPPC to implement roadway infrastructure priorities identified by the Bowie and Vicinity Master Plan.	Long-Term	<b>To Be Implemented - FY 2018</b>
	<b><i>H. Increase electric vehicle use and the efficiency of existing transportation</i></b>		
	1. Partner with MWCOG and other stakeholders to develop and increase electric vehicle and other alternative fuel vehicle infrastructure.	Short-Term	- Implemented - State incentives available for purchasing electric vehicle stations and charging stations - State electric vehicle incentives highlighted at Nissan of Bowie Booth at Bowie Green Expo - Goal to have 5 electric charging stations in the City of Bowie - 4 electric charging stations installed within City limits as of April 2015 – Bowie Town Center, Semacconnect, City Hall, Nissan of Bowie <b>About 80% Complete (4 out of 5 installed)</b>
	2. Promote the locations of alternative fuel charging stations.	Short-Term	- City website has link to EPA map of electric charging stations in the U.S. - Bowie Town Center and City Hall electric charging stations promoted on City Facebook page - 2 marketing strategies utilized to promote charging station locations <b>Mostly Complete</b>
	3. Explore the possibility of a Zipcar drop off point at the Northview Park and Ride.	Long-Term	-Goal to have 1,117 participants <b>To Be Implemented - FY 2018</b>
	4. Educate the public about eco-driving techniques.	Mid-Term	<b>To Be Implemented - FY 2016</b>
	5. Explore the potential for reserving hybrid vehicle parking spaces at shopping centers.	Mid-Term	-Reserved hybrid spots currently at City Hall <b>To Be Implemented - FY 2017</b>
6. Investigate and apply Transportation Systems Management.	Long-Term	<b>To Be Implemented –FY 2019</b>	

SECTOR: Waste	Action	Time-Frame	Status
	<b>Goal I. Increase recycling rate, reduce the generation of waste, and promote reuse of materials</b>		
	1. Provide additional opportunities for residents and businesses to recycle cardboard, glass, paper, and plastic products in the community, such as once-a-month paper shredding and Styrofoam collection events at revolving locations throughout the City.	Mid-Term	<ul style="list-style-type: none"> <li>- Larger recycling bins provided to all Bowie households</li> <li>- One held on June 20, 2015 for Styrofoam /paper</li> <li>- By increasing recycling tonnage from 23% to 35% of the waste stream by 2014, it was estimated that the City would avoid an additional production of 396 metric tons of CO<sub>2</sub> equivalent emissions – this is included the municipal climate actions, however anything beyond 35% rate should be included in community climate reductions</li> <li>- Goal to divert 300 lbs per person per year</li> </ul> <p><b>In Progress</b></p>
	2. Initiate a backyard composting program that provides rebates to residents for composting bins and rebates to homeowner or condo associations that create and use compost piles.	Mid-Term	<ul style="list-style-type: none"> <li>- Ordered 320 backyard compost bins to sell to City residents for \$20</li> <li>- Goal to divert 300 lbs per person per year</li> </ul> <p><b>In Progress</b></p>
	3. Encourage use of reusable grocery bags.	Short-Term	<ul style="list-style-type: none"> <li>- City webpage created with info. about reusable bags</li> <li>- Green Team participated in baseline study for Bowie reusable bag use in FY14 – 8% reusable bag use as of 2014</li> <li>- Highlighted reusable bag use in the May 2014 Bowie Spotlight</li> <li>- Large signs promoting reusable bag use at FY 2014 and FY15 Green Expo events</li> <li>- Nearly 500 bag tags encouraging reusable bags used were passed out at various Green Bowie events</li> <li>- Over 100 reusable bags passed out at each FY 2014 and FY 2015 Green Expo events, over 200 passed out in total</li> <li>- Farmers’ Market reusable bags distributed annually</li> <li>- Highlights in city-wide mailing about new County Plastic Bag Recycling Law</li> </ul> <p><b>Mostly Complete</b></p>
	4. Give educational notices to residents that are not recycling large items.	Mid-Term	<b>To Be Implemented - FY 2017</b>
	5. Work with the County to conduct one or more hazardous household waste collection days per year.	Mid-Term	<ul style="list-style-type: none"> <li>- An electronics recycling event was held on Saturday, December 6, 2014, at Public Works. Over 200 vehicles arrived at Public Works and approximately 6.25 tons of electronic equipment was collected and recycled.</li> </ul> <p><b>In Progress</b></p>
	6. Educate public on services such as electronics recycling, hazardous waste collection and disposal, batteries, old paint and other hard to dispose of or recycle items for which the county offers services.	Mid-Term	<ul style="list-style-type: none"> <li>- A City-wide mailing that detailed new recycling laws as well as electronics recycling and hazardous waste collection went out in June 2015</li> </ul> <p><b>In Progress</b></p>

SECTOR: Waste (cont)	Action	Time-Frame	Status
	6. Educate public on services such as electronics recycling, hazardous waste collection and disposal, batteries, old paint and other hard to dispose of or recycle items for which the county offers services.	Mid-Term	-A City-wide mailing that detailed new recycling laws as well as electronics recycling and hazardous waste collection went out in June 2015 <b>In Progress</b>
	7. Explore cooperation with Prince George’s County in enforcing aspects of the Solid Waste Master Plan.	Long-Term	<b>To Be Implemented - FY 2018</b>
	8. Work with the Greater Bowie Chamber of Commerce to advise local businesses of County recycling requirements.	Mid-Term	<b>To Be Implemented - FY 2016</b>
	<b><i>J. Improve the carbon footprint of the waste collection system</i></b>		
	1. Gain support from residents for once a week trash and recycling pick up.	Long-Term	- Public Works Dept. completing study in FY 2016 <b>In Progress</b>
2. Install a solar power trash compactor at Jericho Park as a demonstration project and promote this technology to commercial businesses.	Mid-Term	- Solar powered self-contained compacting/recycling receptacles are proposed for City Hall and the Ice Arena in FY 2016 <b>To Be Implemented - FY 2017</b>	

SECTOR: Land Use	Action	Time-Frame	Status
	<b><i>K. Increase tree canopy</i></b>		
	1. Increase tree canopy by providing financial incentives to residents, HOAs, and organizations for planting trees.	Short-Term	- 77 trees planted as part of the City Tree rebate program as of June 2015 - 40 trees planted at All Saints Church in May 2014 - About 35 trees planned to be planted at Yellowstone Place in FY 2016 - No participants from Bowie yet in Tree ReLeaf as of June 2015 - 1,328 street trees planted in Bowie from FY 2008 - FY 2014 - Goal 1800 trees including street trees planted <b>About 80% Complete</b> (1,445 out of 1,800 trees)
	2. Encourage the replacement of trees removed from residential properties.	Mid-Term	- Work with Chesapeake Bay Trust to receive marketing grant for tree plantings/replacements in Bowie <b>To Be Implemented - FY 2017</b>
3. Publicize local tree planting grants available for businesses, churches, and local organizations.	Short-Term	- Provided Tree ReLeaf information to Northridge HOA in 2015 and to Princeton Square Townhouses HOA - Included information about Tree ReLeaf program in Green Bowie e-newsletter - No participants from Bowie yet in Tree ReLeaf as of June 2015 <b>Mostly Completed</b>	