

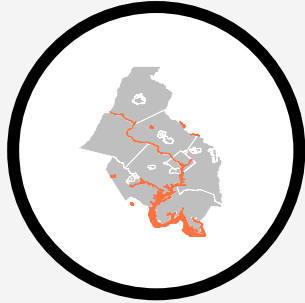
# Regional Climate Action Review



CEEPC, May 28, 2014

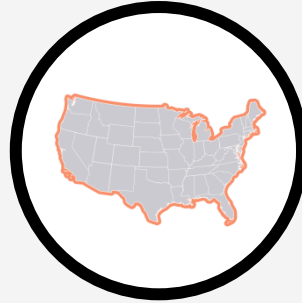


# Review



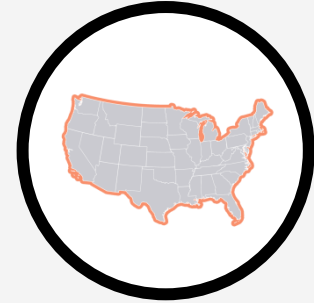
## NCR Progress

Review draft survey results on climate and energy action progress in the National Capital Region



## Comparison

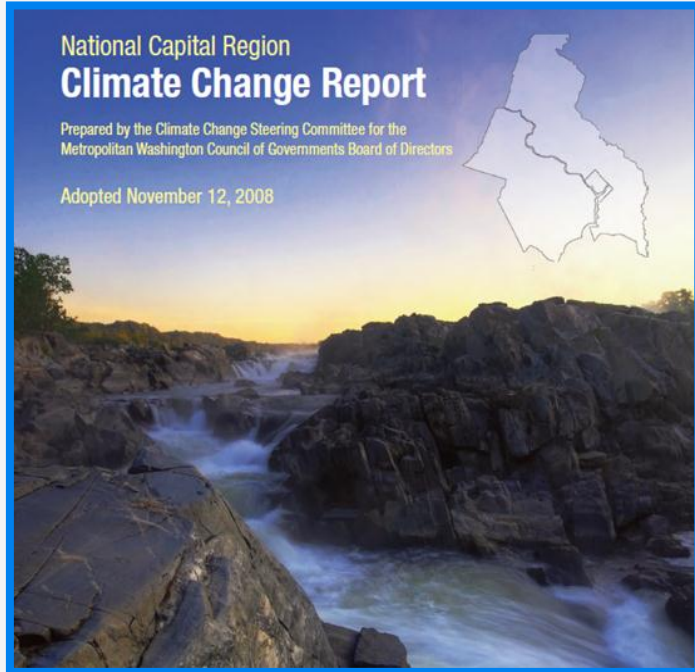
Review LEED, Energy Star and Green Power Partner Draft Statistics for region's across the country



## Best Practices

Review best practices for climate action planning from regions across the country

# National Capital Region



## **NCR CLIMATE CHANGE REPORT (2008)**

Set regional goals to reduce greenhouse gas (GHG) emissions to 10% below business as usual levels by 2012, 20% below 2005 levels by 2020 & 80% below 2005 levels by 2050.

## **REGION FORWARD (2010)**

COG's vision and mission. Draws its climate and energy related goals from the 2008 Climate Change Report.

## **CLIMATE & ENERGY ACTION PLAN (2013)**

Short-term actions to help move the region toward achieving long-term GHG reduction goals. It's the 2<sup>nd</sup> addition of a CEEPC Action Plan. Original plan timeframe was 2010 – 2012.

# Local Jurisdiction Actions

Local Government	2013 Census Population Estimate <sup>1</sup>	Energy Improvement Plan - Govt Operations	Walk-Through Energy Audits	EPA Green Power Partner	EPA Green Power Community	Employee Commute Option Program	Complete Streets Policy	Green Streets Policy	Assess Community Vulnerability	Develop Community Resiliency Strategies	Promote EERE Incentives	Employee Sustainability Education
District of Columbia	646,449	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓	✓✓
<b>Suburban Maryland</b>												
Charles County	152,864	✓✓	-	NR	NR	✓✓	✓	-	-	-	✓	✓
Frederick County	241,409	NR	NR	NR	NR	✓✓	-	NR	NR	NR	✓	NR
City of Frederick <sup>2</sup>	66,893	-	-	-	-	-	✓	-	-	-	✓	-
Montgomery County	1,016,677	✓	✓	NR	NR	NR	NR	NR	-	-	✓✓	NR
City of Gaithersburg <sup>2</sup>	65,690	-	✓✓	✓✓	-	-	N/A	N/A	-	-	✓✓	-
City of Rockville <sup>2</sup>	64,072	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	-	-	-	✓✓	✓
City of Takoma Park <sup>2</sup>	17,721	✓	✓✓	-	-	-	-	-	✓	✓	✓	-
Prince George's County	890,081	✓✓	✓✓	N/A	N/A	-	✓✓	✓✓	✓	-	✓✓	✓✓
City of Bowie <sup>2</sup>	56,759	✓✓	-	-	-	-	-	-	✓✓	✓	✓	✓
City of College Park <sup>2</sup>	31,274	✓	✓✓	✓✓	✓✓	✓✓	-	-	-	-	-	✓
City of Greenbelt <sup>2</sup>	23,753	✓	✓	✓✓	✓	-	N/A	N/A	N/A	N/A	✓	-
Town of Bladensburg <sup>2</sup>	9,433	NR	NR	NR	NR	✓	NR	✓	-	-	N/A	-
<b>Northern Virginia</b>												
Arlington County	224,906	✓	✓✓	✓✓	-	✓✓	✓✓	-	✓	✓	✓✓	✓✓
Fairfax County	1,130,924	✓✓	✓✓	✓✓ (not current)	-	✓✓	✓✓	✓	✓✓	✓	✓✓	✓✓
Loudoun County	349,679	-	✓	-	-	✓✓	-	-	-	-	-	✓✓
Prince William County	438,580	✓	✓	✓	-	✓✓	N/A	N/A	-	-	-	✓
City of Alexandria	148,892	✓✓	✓✓	✓✓	-	✓✓	✓✓	-	✓	✓	✓✓	✓
City of Fairfax	23,973	✓	✓✓	-	-	-	-	-	✓	-	✓	✓
City of Falls Church	13,508	NR	NR	✓✓	✓✓	NR	✓	NR	NR	NR	-	NR
City of Manassas	41,705	✓	✓✓	-	-	N/A	✓✓	✓✓	-	-	✓	-
City of Manassas Park	16,149	-	✓	NR	NR	✓	-	-	-	-	-	-
<b>Percent Jurisdictions Implemented</b>		27%	50%	41%	18%	45%	32%	14%	9%	0%	32%	23%
<b>Percent Jurisdictions In Progress</b>		41%	23%	5%	5%	14%	14%	9%	27%	27%	41%	32%
<b>Implemented + In Progress</b>		<b>68%</b>	<b>73%</b>	<b>45%</b>	<b>23%</b>	<b>59%</b>	<b>45%</b>	<b>23%</b>	<b>36%</b>	<b>27%</b>	<b>73%</b>	<b>55%</b>
<b>CEEP Action Plan Goal</b>		<b>75%</b>	<b>75%</b>	<b>75%</b>	<b>25%</b>	<b>75%</b>	<b>75%</b>	<b>50%</b>	<b>40%</b>	<b>40%</b>	<b>75%</b>	<b>50%</b>

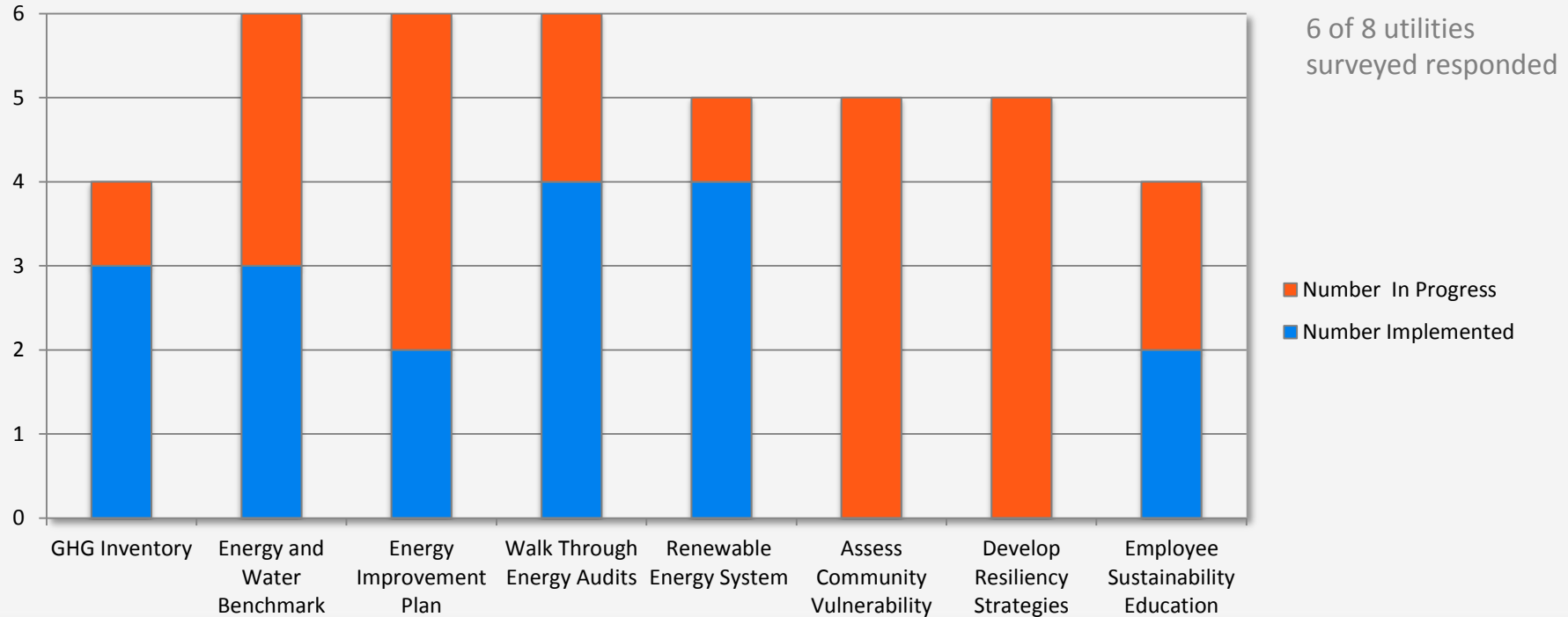
✓✓ = Implemented    ✓ = In progress    - = Not Started    N/A = Not Applicable    NR = No Response

<sup>1</sup> Annual Estimates of the Resident Population: 4/1/2010 - 7/1/2013 Source: U.S. Census Bureau, Population Division

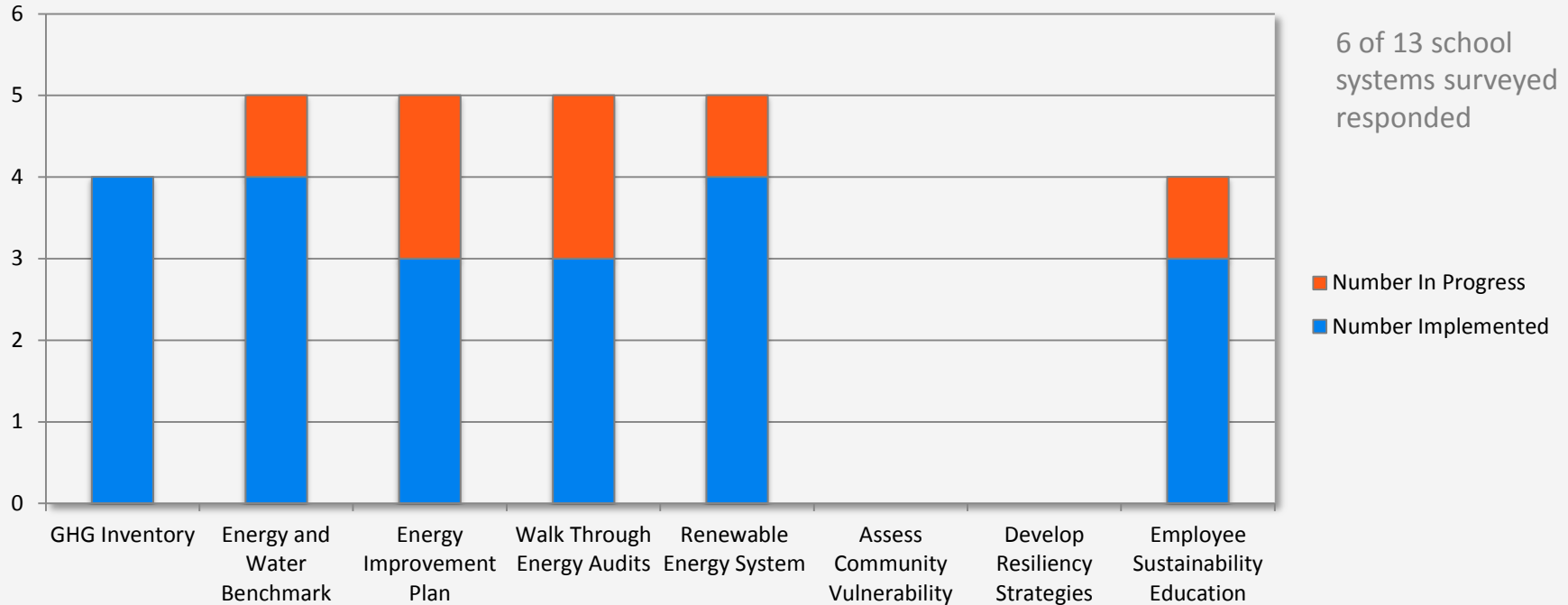
<sup>2</sup> Population in Maryland cities is included in appropriate county totals.



# Water Utility Actions



# School System Actions



# Alternative Fuel Vehicles Survey



Including:

- 1,928 ethanol
- 244 electric
  - 196 hybrid (not plug-in)
  - 28 all battery
  - 20 plug-in hybrid



Including:

- 562 biodiesel
- 17 electric
  - 9 hybrid (not plug-in)
  - 8 all battery



Including:

- 506 biodiesel
- 26 electric
  - 25 hybrid buses
  - 1 plug-in hybrid bus

## Cooperative Interests

#1 – Electric vehicles and charging infrastructure

#2 – CNG vehicles, fuel, and stations

#3 – Biodiesel vehicles, fuel, and stations

(E-85 fuel cooperative reverse auction already underway)



Hybrid electric has combustion engine back-up (Ex. of non-plug-in is Toyota Prius; Ex. of plug-in is Chevy Volt)  
All battery electric has no back-up combustion engine (Ex. Nissan Leaf)

# Green Contracts Database



## Recycling/Reuse

- Paper Products
- E-Waste
- Toner
- Batteries
- Tires



## Facilities Mgmt.

- Cleaning
- Energy Management
- Lighting
- Furniture
- Appliances
- Carpet



## Office Equip/Supplies

- Computers
- Printers/Copiers
- Recycled-Content Paper



## Fleet

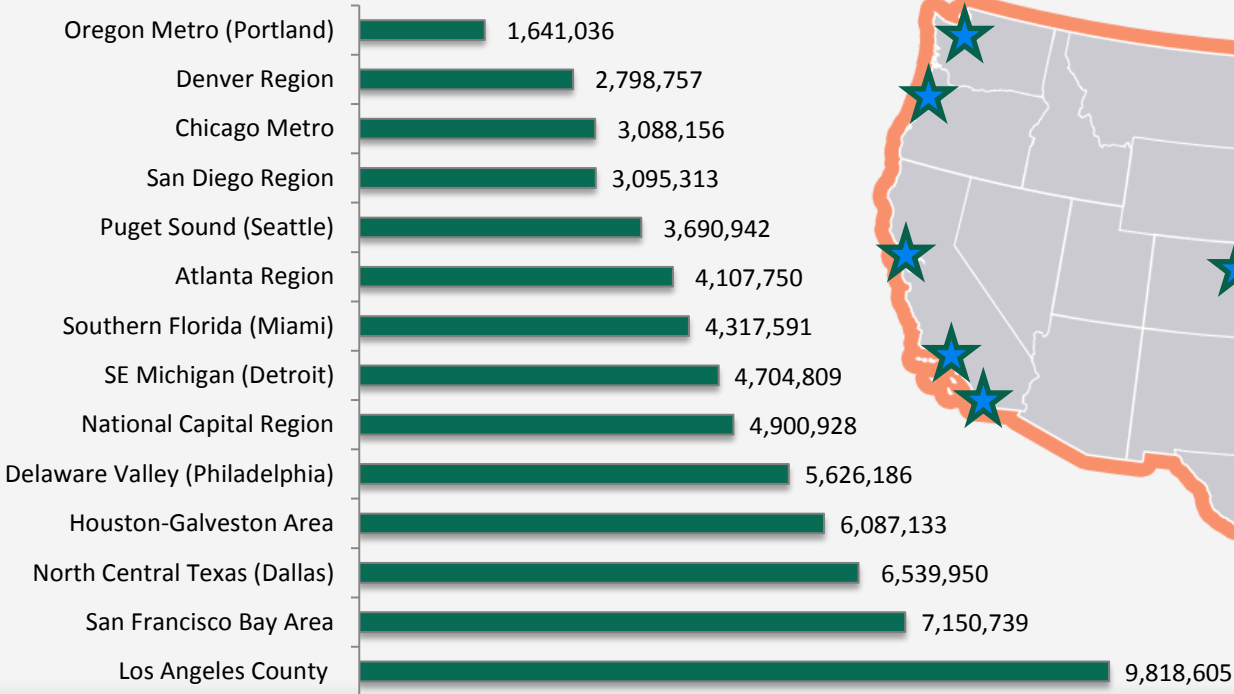
- Hybrid vehicles
- Fuel Efficient Vehicles
- Green Car Washing Services





# Regional Comparison

## 2010 Census Population



# NCR Rankings and Stats



1<sup>st</sup>

1560

Total # of LEED Certified Buildings



4<sup>th</sup>

74

# of LEED Platinum Certified Projects  
(tied for 4<sup>th</sup>)



3<sup>rd</sup>

896

Total # of ENERGY STAR Rated Buildings



1<sup>st</sup>

103

# of EPA Green Power Partners



2<sup>nd</sup>

686

# of LEED Certified Homes



1<sup>st</sup>

13

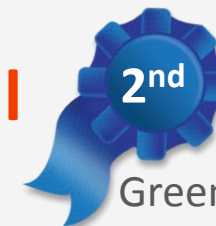
# of LEED Projects Certified for Neighborhood Development



1<sup>st</sup>

>203mil

FT<sup>2</sup> of ENERGY STAR Rated Floor Space



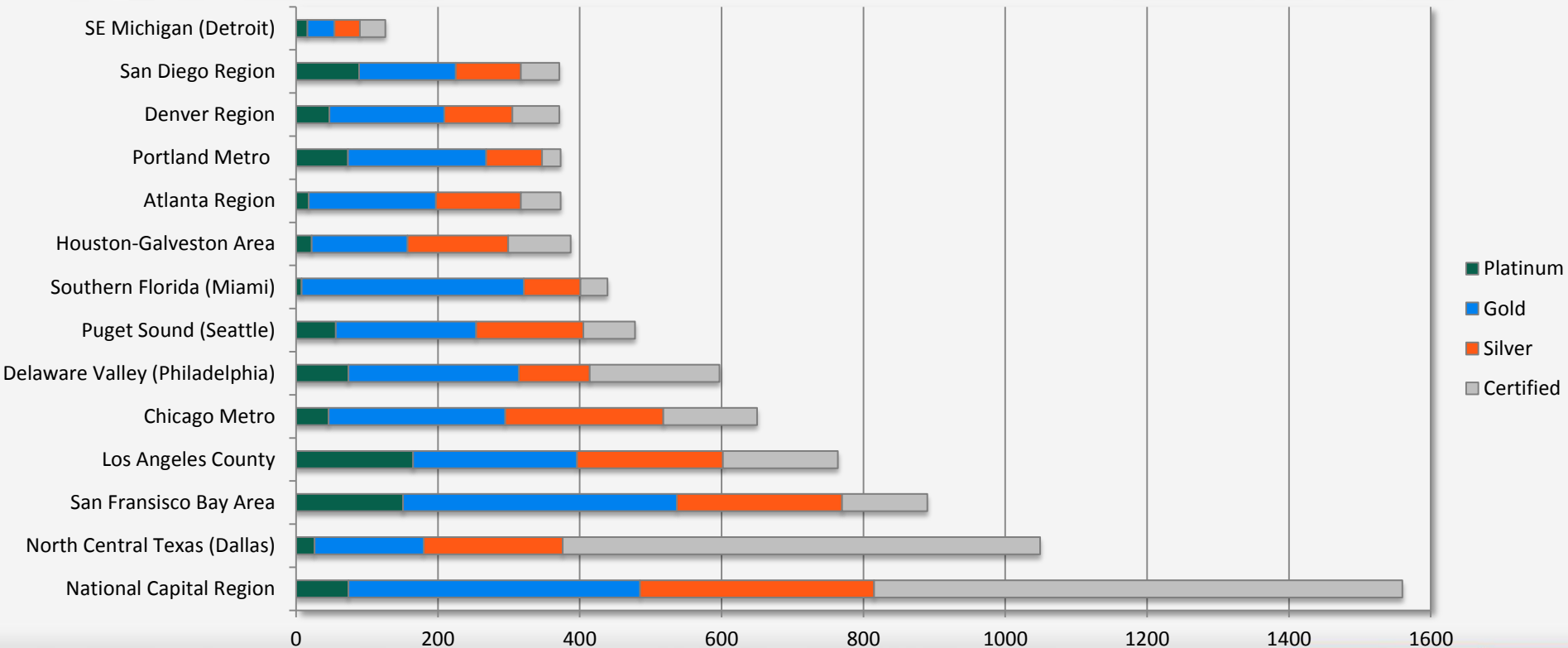
2<sup>nd</sup>

>3.3bil

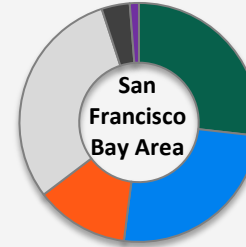
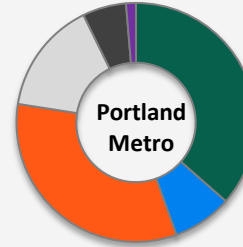
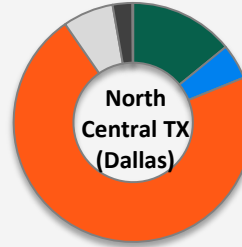
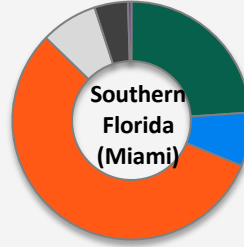
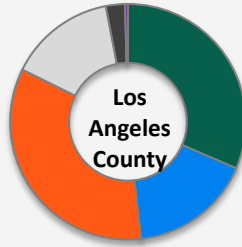
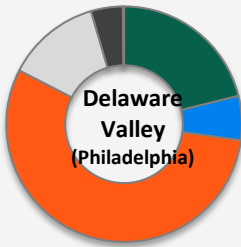
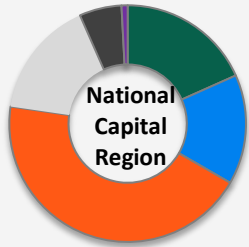
Green Power (kWh) by EPA Green Power Partners



# LEED Certification Levels



# LEED Rating System



LEED-NC

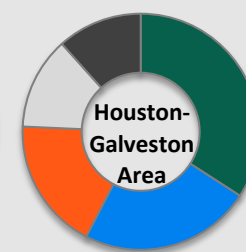
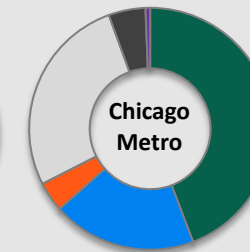
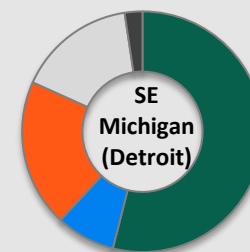
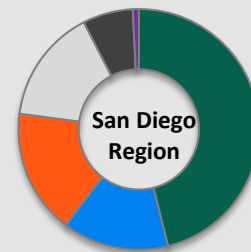
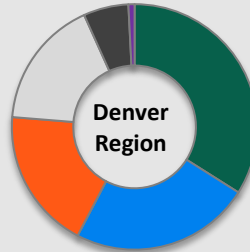
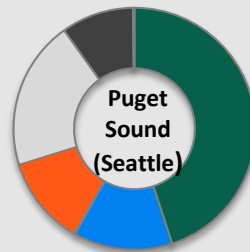
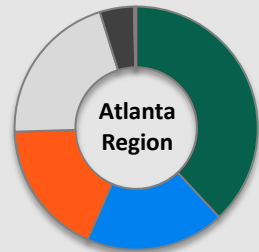
LEED-EB

LEED Homes

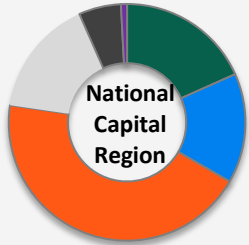
LEED-CI

LEED-CS

LEED-ND

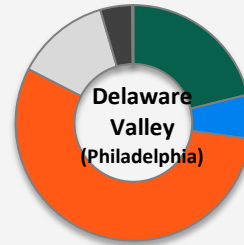


# Green Home Certifications



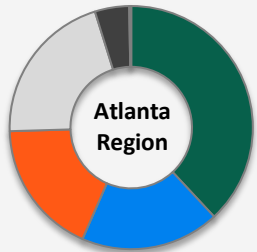
Main LEED for Homes Developments:

- Mosaic Townhomes in Fairfax
- Chancellors Row in DC
- Capital Quarter in DC
- Old Town Commons in Alexandria
- James Bland in Alexandria



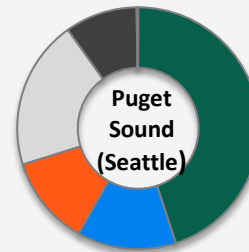
Main LEED for Homes Developments:

- Kendal Retirement Community
- Affordable Housing Redevelopments:
- West Philadelphia Real Estate
  - Sheridan Street Housing
  - Norris Apartments
  - Temple N. 16 St and Temple II



EarthCraft Certification is more prevalent than LEED for Homes

- EarthCraft was established in 1999 with Greater Atlanta Home Builder Ass.
- > 25,000 certified homes
- Hundreds of EarthCraft builders, home renovators, real estate professionals



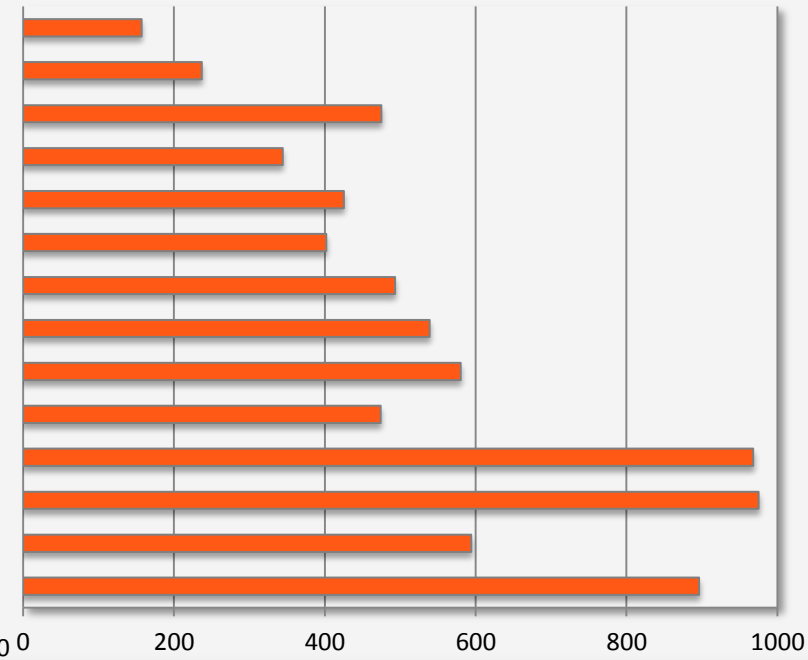
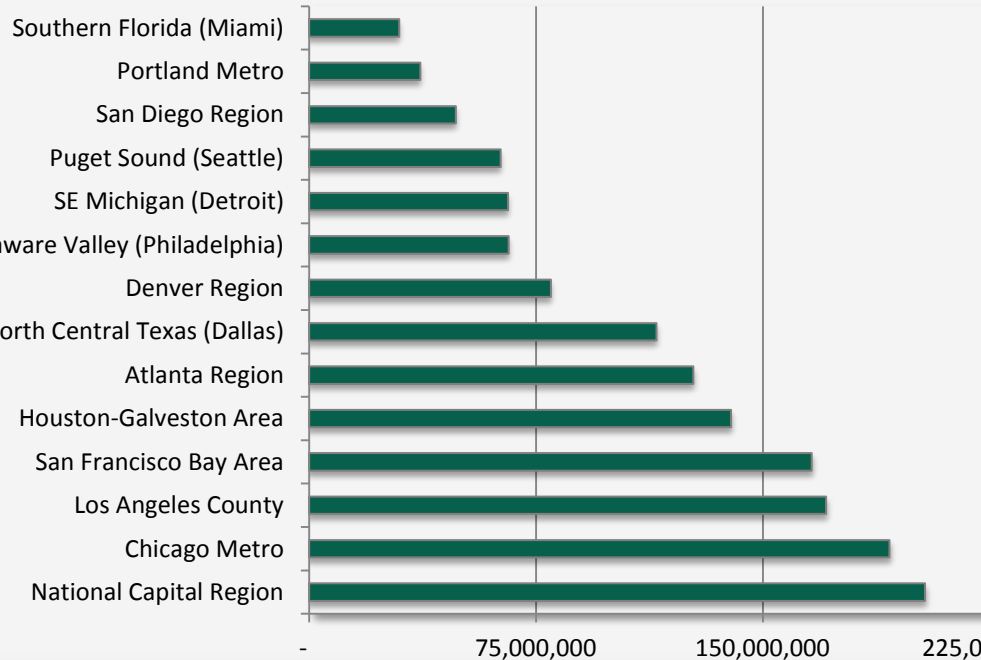
Built Green Certified Homes is more prevalent than LEED for Homes

- Built Green was established in 1999 with the Master Builders Association of King and Snohomish Counties
- > 15,000 certified homes
- 300 Built Green builders and remodelers

# ENERGY STAR Rated Buildings

## Floor Space (FT<sup>2</sup>)

## Number of Buildings



# EPA Green Power Partners



Region	Number of Partners	Green Power (kWh)	Top Green Power Partners
Southern Florida (Miami)	3	17,490,486	Intercontinental Hotel
Southern Michigan (Detroit)	5	18,187,280	General Dynamics Land Systems Central Office
San Diego Region	6	50,342,606	City of San Diego
Atlanta Region	8	121,267,914	Coca-Cola
Houston-Galveston Area	10	653,099,719	City of Houston
Los Angeles County	15	74,328,741	Los Angeles World Airports
Puget Sound (Seattle)	19	2,090,093,464	Microsoft
Denver Region	25	228,268,191	White Waves Food Company
North Central Texas (Dallas)	30	652,943,953	City of Dallas, Dallas-Fort Worth Airport
Portland Metro	34	191,016,670	Port of Portland, City of Portland
Delaware Valley (Philadelphia)	38	862,964,426	TD Bank, U Penn
Chicago Metro	42	1,186,652,530	Metro Pier and Exposition Auth, Chicago Public Schools
San Francisco Bay Area	80	5,491,057,765	Intel, Google, Apple, Cisco
National Capital Region	103	3,389,656,517	Federal Agencies, District of Columbia



# Regional Best Practices





# Transportation/Land Use Strategies



## SF Bay Area

2035 Transportation Plan focuses on climate-friendly investments dominate spending, including a \$400 million for Transportation Climate Action Campaign.



## LA Region

Transportation Plan supports a \$35 million zero emission truck freeway demonstration and initial deployment project and green construction techniques that reduce GHGs.



## San Diego Region

Climate Action Strategy served as a basis for policies in the Regional Transportation Plan (RTP)'s Sustainable Communities Strategy.



## Sacramento Area

Transportation Plan calls for development of regional climate action plan, construction energy conservation plan, transportation pricing policy, and alternative fuel local govt toolkit.

# Transportation/Land Use Strategies



## Portland Metro

Scenarios Project - Developing comprehensive strategy that's considering community design, pricing (pay as you drive), and more.



## Puget Sound

Transportation 2040 includes a 4-part GHG reduction strategy - land use, user fees, transportation choices, and technology.



## SE Florida

Climate Action Plan provides common sustainable communities and transportation planning framework.

# Resilient Regions

## CA COLLABORATION OF REGIONAL CLIMATE ADAPTATION NETWORKS

- Convened 4 regional climate adaptation networks in California and identified priorities for regional climate resiliency planning including actions such as:
  - Work with stakeholders to create regional resiliency vision
  - Identify and map responsibilities parties for adaptation action
  - Develop local government policy templates for resiliency action
- Example initiatives within those regional networks include:
  - [Sea Level Rise Strategy for San Diego Bay](#)
  - [San Francisco Bay Area Climate Resiliency County Snapshots](#)
  - [Resilient Sacramento](#)



## HOUSTON-GALVESTON FORESIGHT PANEL OF ENVIRONMENTAL EFFECTS

- Report identified 25 specific resiliency strategies that would address the goals of protecting human health, property (including infrastructure) and the natural environment. Strategies also address transportation efficiency and urban heat.

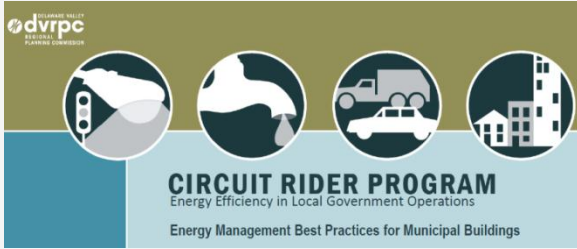


# COGs in the Community



## MID AMERICA GREEN IMPACT ZONE

- National model for place-based investment in a 150-square block area of Kansas City, Mo.
- Green projects: smart grid innovation park/project, 14K smart meters, 50 LEED certified affordable housing units
- Jobs and Training: 395 job training certifications and 151 job placements



## DELAWARE VALLEY CIRCUIT RIDER FOR ENERGY EFFICIENCY IN GOVT OPS

- No-cost assistance to small-medium sized local governments to reduce energy costs in their municipal buildings, outdoor lighting, water/sewage treatment facilities, and vehicle fleets.
- Serves as a "one stop shop" for practical tools, relevant training, and direct technical assistance for reducing energy costs in municipal operations.

# Sustainability Certifications



## Detroit Region

Unique categories for local actions, such as:

- Economic Prosperity
- Resiliency
- Fiscal Sustainability
- Reliable, Quality Infrastructure



## Atlanta Region

Unique Local Actions:

- Bicycle Friendly Community designation
- Walk Friendly Community designation



## Go Green VA

Unique Local Actions:

- Climate protection resolution
- Establish energy manager or team
- Farm to School Programs

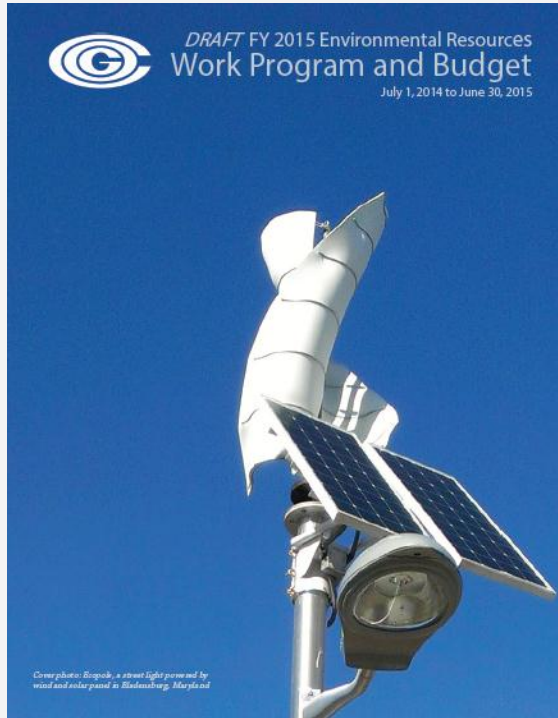


## Sustainable MD

Unique Local Actions:

- Buy local campaign and preference policy
- Local business directory and roundtable
- Economic analysis of procurement practices

# Next Steps



- Incorporate regional comparison and local survey results into Climate and Energy Progress Report.
- Use this climate and energy review information to help inform the upcoming FY2015 Regional Environmental Resources Workplan
- Other ideas?

# Thank you

[mdavis@mwcog.org](mailto:mdavis@mwcog.org)

