



# CLIMATE AND ENERGY INITIATIVES OVERVIEW

METROPOLITAN WASHINGTON COUNCIL OF  
GOVERNMENTS  
OCTOBER 9, 2013

# COG AND CEEPC MISSION

## *Region Forward*

*Region Forward* is COG's vision and mission. It's a commitment by COG and its member governments, who together seek to create a more accessible, sustainable, prosperous, and livable National Capital Region.

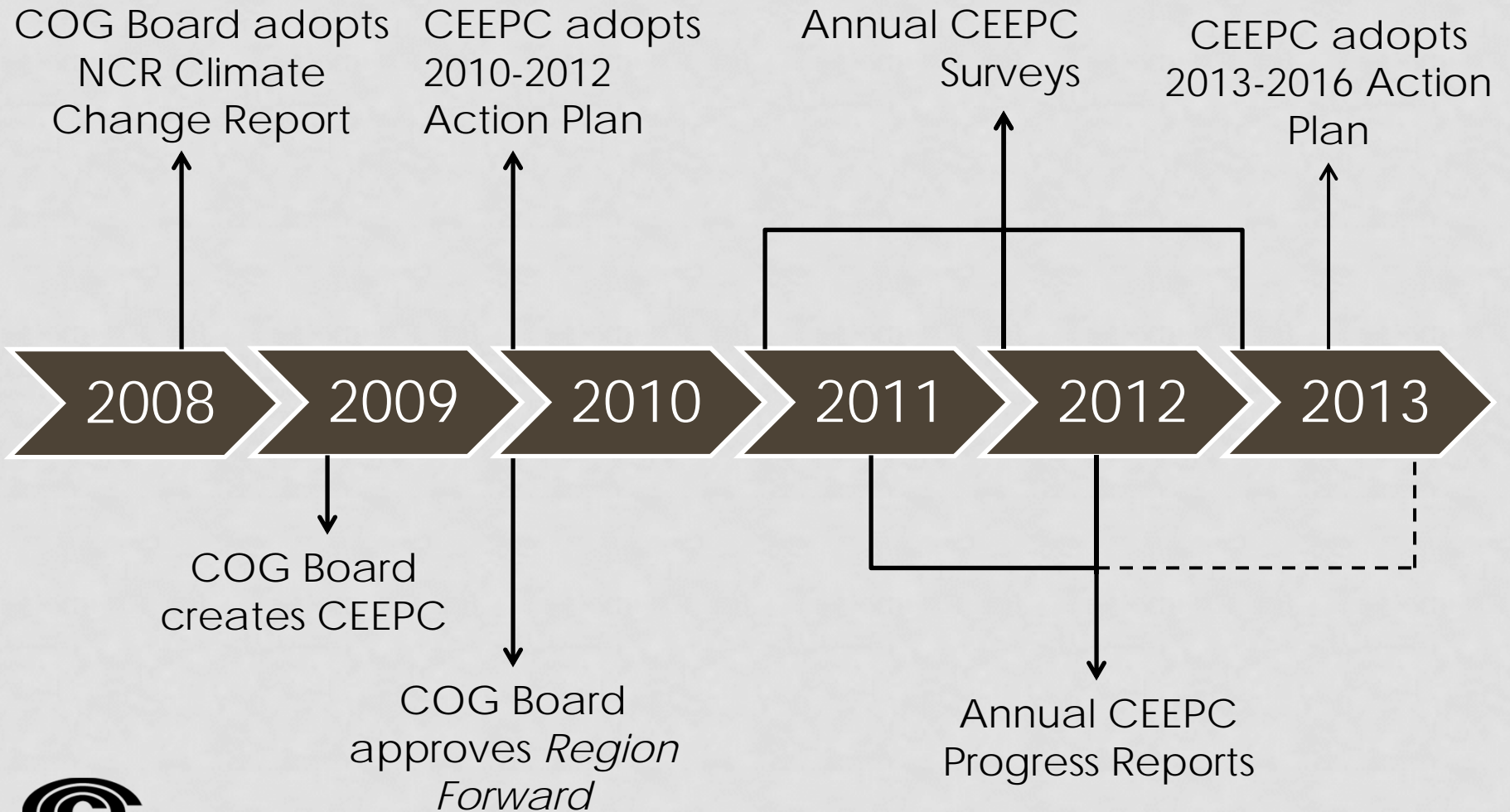


## *Climate, Energy and Environment Policy Committee*

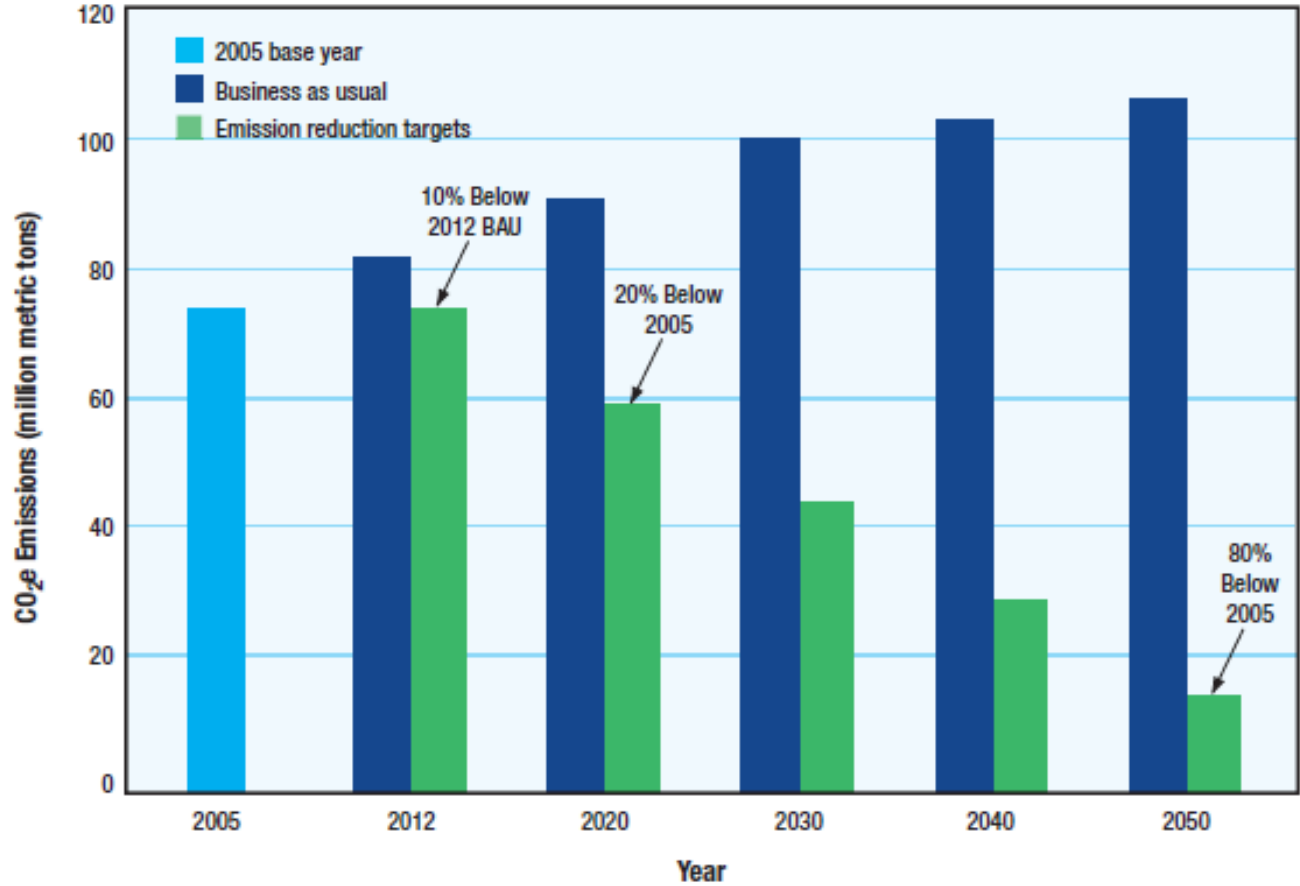
COG's CEEPC supports the *Region Forward* vision and mission by providing leadership on climate change, energy, green building, alternative fuels, solid waste and recycling issues and support to area governments as they work together to meet *Region Forward* goals.



# OVERVIEW



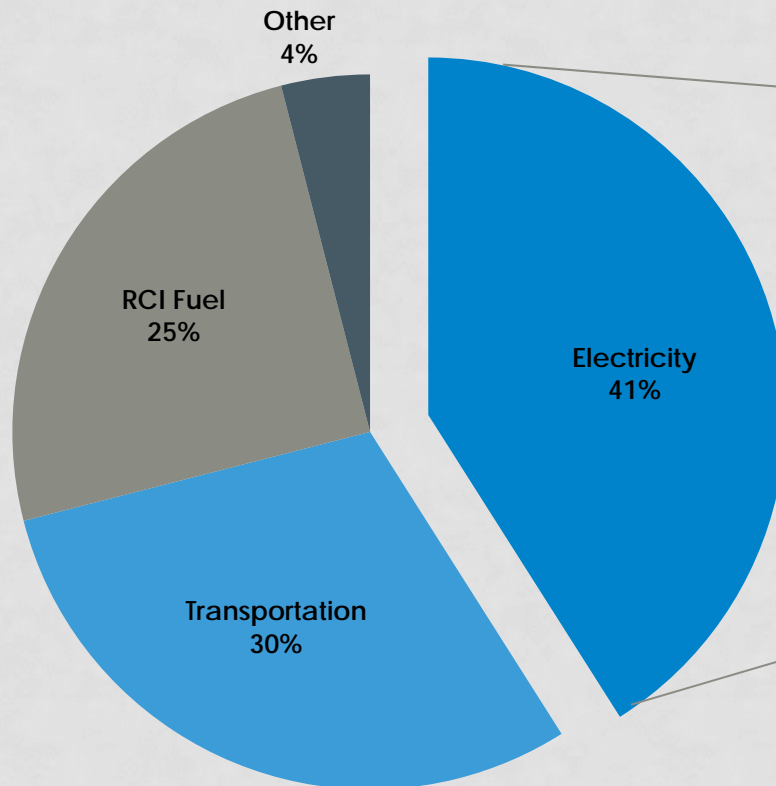
# REGIONAL GREENHOUSE GAS EMISSION REDUCTION GOALS



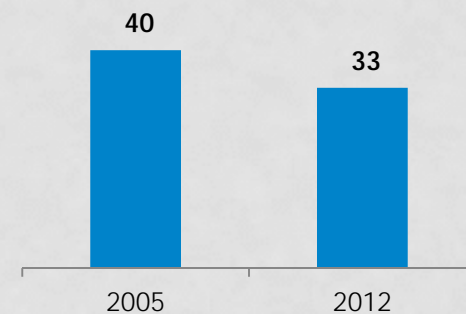
# GHG EMISSIONS

The National Capital Region recorded a **17 percent reduction** in CO<sub>2</sub> emissions from the electricity sector between 2005 and 2012.

2005 GHG Emissions by Sector



Electricity Emissions Reductions 2005-2012 (MMT CO<sub>2</sub>)



# ENERGY EFFICIENCY RENEWABLE ENERGY

## Regional Highlights

- USGBC named DC, MD and VA in the **top 10 states** for LEED in 2012<sup>1</sup>
- Over **700** LEED certified buildings<sup>2</sup>
- Over **800** ENERGY STAR buildings<sup>3</sup>
- **600%** increase in renewable energy capacity from 2009 – 2012<sup>4</sup>



Green Roof at Walter Reed Community Center  
Photo Credit: Arlington County

<sup>1</sup> Source: [Top 10 States for LEED in 2012](#)

<sup>2</sup> Source: [Public LEED Project Directory](#)

<sup>3</sup> Source: [Energy Star Certified Buildings and Plants Database](#)

<sup>4</sup> Source: COG Annual Energy Utility Surveys



# ENERGY EFFICIENCY RENEWABLE ENERGY

## Solar Photovoltaic Cooperative Procurement

- EPA, Optony, and COG is working with COG members to collaborate on a cooperative procurement of solar.
- EPA paid for 170 on-site solar feasibility surveys of public agency facilities in the region.
  - potential for over 15 megawatts in solar photovoltaic capacity, which could double the region's total capacity.
- Round 1 will wrap up in 2013. Currently, seeking member interest in Round 2.



City of Takoma Park



Arlington County Central Library



# ELECTRIC VEHICLES

## Regional Highlights

- Over **500** estimated electric vehicles are owned in the region<sup>8</sup>
- **15,000 to 30,000** electric vehicles are projected to be in the region by 2015<sup>9</sup>
- **332** chargers at **133** publically accessible EV charging stations are located in the region<sup>10</sup>



Electric Vehicle Charging  
Photo Credit: Melissa Hinch-Ownsby

<sup>8</sup> Source: # of registered EVs according to data provided by VA, MD and DC Motor Vehicle Departments

<sup>9</sup> Source: Plug-in Electric Vehicle Estimator, Electric Power Research Institute, Palo Alto, CA: 2012. Projection is based on past hybrid sales, production estimates, and other studies

<sup>10</sup> Source: COG Electric Vehicles in the Metropolitan Washington Region Report. Analysis as of April 2012





# ELECTRIC VEHICLES

## Electric Vehicle Workgroup

- 2012: [Electric Vehicles in Metropolitan Washington Report](#)
- *EV adoption offers environmental, economic, and energy security benefits*
- *Regional strategy needed to address obstacles to infrastructure planning*
- 2013-2014: Potential electric vehicle cooperative procurement for local government fleets



Electric Vehicle Charging Station at Dulles Town Center  
Photo Credit: EVGO Network



# CLIMATE RESILIENCY

## Regional Highlights

- 2012 brought record heat waves, the Derecho thunderstorm, and Superstorm Sandy.
- Moving forward, the Chesapeake Bay Area is virtually certain to have higher sea levels and will very likely see higher temperatures and precipitation concentrated in heavier events<sup>11</sup>



Derecho Storm Damage in Falls Church, VA  
Photo Credit: ClintJCL



<sup>11</sup> Source: [Dr. Raymond G. Najjar's Cleaning Up the Bay in a Warmer World presentation at COG's 2012 Climate Impact Symposium](#)

# CLIMATE RESILIENCY

## Defining Climate Resiliency

- Addressing climate risks = preparing for unavoidable impacts of climate change
- Prepared public = resilient community

## Regional Adaptation Planning

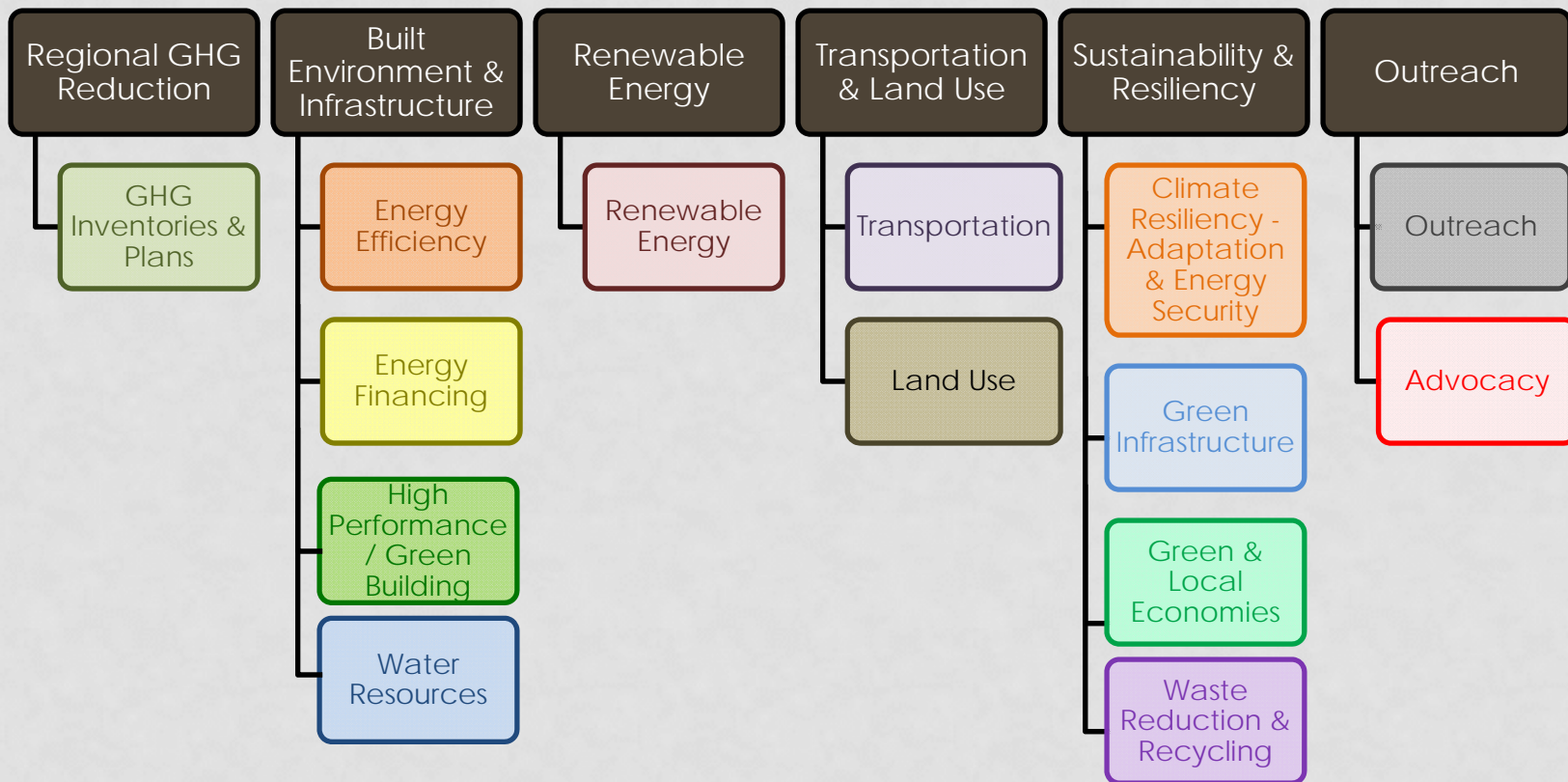
- 2010 – 2012: Awarded EPA Smart Growth Implementation Technical Assistance and trained hundreds of public sector leaders
- 2013: [\*Summary of Potential Climate Change Impacts, Vulnerabilities, and Adaptation Strategies in the Metropolitan Washington Region Report\*](#)



Washington Harbour Flooding  
Photo Credit: Paulo Ordoveza



# 2013-2016 ACTION PLAN CATEGORIES



# WHY CREATE A SUSTAINABLE PURCHASING INITIATIVE

- Apply benefits of Cooperative Purchasing Program to sustainable products and services by reducing costs through economies of scale through volume buying.
- Take the guess work out of sustainable purchasing.
- Push the market, create economic opportunities and reduce costs for local governments.



# SUSTAINABLE PURCHASING INITIATIVE: NEXT STEPS

- Create Regional Green Contracts Database to identify existing opportunities.
- Analyze potential to “green” existing cooperative contracts through COG’s Cooperative Purchasing program and Mid Atlantic Purchasing Team.
- Share promising practices, resources and explore opportunities through Cooperative Purchasing Officers Committee and Mid Atlantic Purchasing Team.
- Sustainable Procurement Webinar—sharing successful procurements in the region.



# RESOLUTION R44-2013

1. The Board commends the COG membership and stakeholders for the outstanding progress in achieving the regional sustainability established in the CEEPC 2010 -2012 *Climate and Energy Action Plan*.
2. The Board endorses the CEEPC 2013-2016 *Climate and Energy Action Plan*.
3. The Board directs CEEPC to work with COG staff to implement a green purchasing program as an enhancement to COG's cooperative purchasing program.

