

Regional Climate and Energy Action Plan

DRAFT CONCEPT

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Climate, Energy and Environment Policy Committee (CEEPC)
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Draft Concept

1. Region Forward Goals
2. Principles
3. 2020 Objectives and Outcomes
 - Tracking Progress
4. Local Actions Menu



Region Forward Goals



Land Use

- Preservation of neighborhoods, historic sites, and resource lands
- Transit oriented mixed used growth in Activity Centers



Transportation

- Accessible, affordable transportation choices
- Maximize community connectivity



Climate and Energy

- Reduce GHG emissions, focus on built environment and transportation
- Efficient use of energy, rely on renewables and alternative fuels



Environment

- Meet/exceed standards for air, water, and land
- Preserve/enhance open space, green space, and wildlife preserves



Public Safety

- Safe communities
- Partnerships that manage emergencies, protect the public health, safety, welfare



Education

- Greater access to the best education at all levels
- Region a pre-eminent knowledge hub



Housing

- Variety of housing types and choices
- Production, preservation, and distribution of affordable housing



Health and Human Services

- Every person enjoys health and well-being



Economy

- Diversified, stable, and competitive economy
- Minimize economic disparities



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Regional GHG Emission Goals

- 10% by 2012
- 20% by 2020
- 80% by 2050



Principles

- Build an ecosystem to support application at scale
- Flexibility and innovation to be best in class leader
- Integration in plans and operations
- Local economic growth and resiliency
- Equity in planning and implementation
- Outreach, education and partnerships



2020 Objectives and Outcomes

Objectives	2020 Outcomes
Reduce Greenhouse Gas Emissions	↓ 20% (below 2005 levels)
Reduce Energy Consumption	↓ 1% per year
Increase Share of Renewables	↑ 20% of generation from renewables ↑ 25K grid-connected renewables
Advance Sustainable Regional Mobility	↓ 5% transportation sector GHG emissions ↑ 150,000 EV & hybrid owners ↑ 800 EV charging stations
Increase Sustainable Urban Development	↑ rate of growth occurs in activity centers (73% jobs, 59% housing, 53% population)* ↑ 5,000 high performance buildings
Move Toward Zero Waste	↑ 50% diversion rate

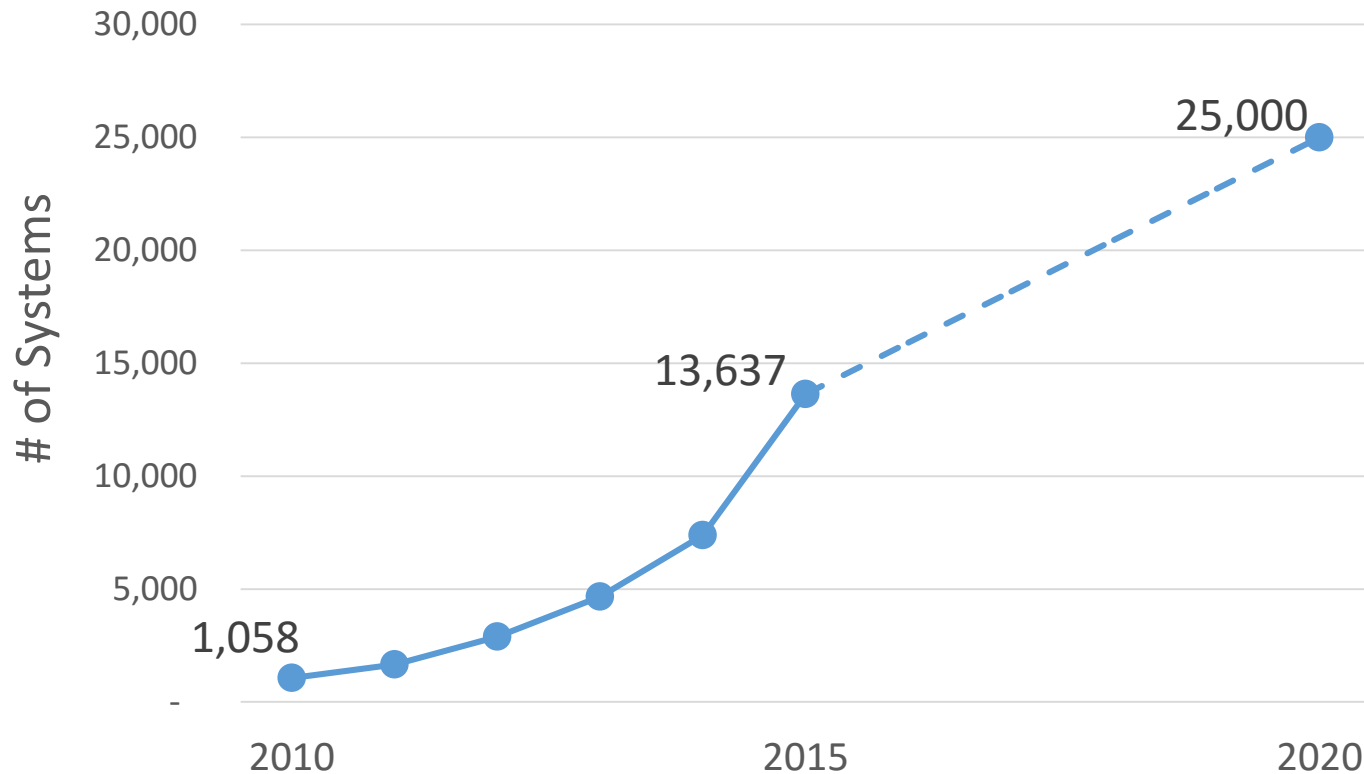
* Draft Cooperative Forecast 9.0

Tracking Progress 2.0



DASHBOARD EXAMPLE: RENEWABLES

13,637 grid-connected renewables in 2015,
with 132.2 megawatts of capacity



Tracking Progress 1.0

Local Jurisdictions	Community Inventories	Govt Energy Plans	Govt Energy Audits	Encourage Private-Sector Benchmarking	Energy Assurance Planning	Bicycle/ Pedestrian Plans	Green Streets Policies	Green-space Plans	Tree Canopy Goals	Green Business Challenge	Govt Employee Education
District of Columbia	√√	√	√√	√√	√√	√√	√√	√√	√√	√√	√√
Suburban Maryland											
Charles County	√√	√√	-	-	-	√	-	-	√	-	√
Frederick County	√√	NR	√√	NR	NR	√	NR	√√	√√	√	NR
City of Frederick	√√	-	√√	-	-	√	-	√	√√	-	-
Montgomery County	√√	√	√√	√	√	√	NR	√√	√	√	√
City of Gaithersburg	√√	√	√√	-	N/A	√√	N/A	√√	√√	√√	√
City of Rockville	√√	√√	√√	√√	√√	√√	√	√√	√√	√√	√
City of Takoma Park	√√	√√	√√	√	-	√	-	√	√√	√√	√
Prince George's County	√√	√√	√√	√	√	√	√√	√√	√√	√	√
City of Bowie	√√	√√	√√	-	√√	√	-	√√	√√	√√	√√
City of College Park	√√	√	√√	N/A	NR	NR	-	-	-	N/A	√
City of Greenbelt	√√	√√	√√	-	N/A	√√	√	√√	√√	-	-
Town of Bladensburg	√√	-	-	-	N/A	NR	√	-	-	-	-
Northern Virginia											
Arlington County	√√	√√	√√	√√	-	√√	-	√√	√√	√√	√√
Fairfax County	√√	√√	√√	-	-	√	√	√√	√√	√√	√
Loudoun County	√√	-	√√	-	-	√√	-	√√	√√	√√	√√
Prince William County	√√	√	√√	-	-	√√	NR	√√	√√	√	√
City of Alexandria	√√	√√	√√	-	√	√√	√	√√	√√	√√	√√
City of Fairfax	√√	√	√	-	-	√	-	-	-	√	√
City of Falls Church	√√	-	√√	-	-	√	-	√	√√	-	√√
City of Manassas	√√	√	√√	-	-	√	√√	√	√√	N/A	-
City of Manassas Park	√√	√	√	-	-	-	-	√	-	-	-
# Implemented + In Progress	22	17	20	6	6	19	8	18	18	14	16
% Implemented + In Progress	100%	77%	91%	27%	27%	86%	36%	82%	82%	64%	73%

√√ = Implemented

√ = In Progress

- = Not Started

N/A = Not Applicable

NR = No Response

Local Action Ideas Menu

Purpose

1. Shopping list of options to consider for the final Regional Climate and Energy Action Plan.
2. Provide ideas for local climate planning and action.

INCREASE RENEWABLES	
12	<p>TRACK</p> <ol style="list-style-type: none">a) Track percent generation from renewables for government operations and community-wide.^{2,3}b) Track renewable energy projects community-wide (e.g. via grid-connected renewables utility data, community solar map, etc.).^{3,4}
13	<p>PLAN</p> <ol style="list-style-type: none">a) Conduct feasibility studies to evaluate renewable energy potential at public facilities or community-wide.³b) Adopt a net zero energy plan or policies.⁴
14	<p>INVEST</p> <ol style="list-style-type: none">a) Install renewable energy systems on local government property.¹b) Achieve and maintain EPA Green Power Partnership for government operations (minimum percentage standards for renewables that can be met through both on-site generation and green power purchasing).¹c) Implement innovative pilot initiatives and partnerships to advance new renewable technologies, including deployment and testing of energy storage and recovery technologies.^{3,4}d) Deploy clean, local power sources for off-road equipment use.²
15	<p>REQUIRE</p> <ol style="list-style-type: none">a) Adopt solar access ordinances and similar regulations to provide a more stable investment environment.^{2,3}b) Require new buildings to be solar-ready.³



DRAFT Action Plan and Next Steps

- Draft Regional Climate and Energy Action Plan will blend the dashboard and top actions from Local Action Ideas Menu
- Input from BEEAC and ACPAC September/October
- Draft Plan presented to CEEPC in November, CEEPC asked to adopt

Item #4d

SECTION 3

Increase Renewables
Outcome: Meet 20% of regional electricity consumption with power from renewable sources by 2020.

RENEWABLE ENERGY CONSUMPTION
Growth in overall regional renewable energy consumption is an important indicator to show progress towards the regional greenhouse gas emission (GHG) reduction goals. An analysis was conducted as part of the Multi-Sector Work Group project to estimate and project the potential growth of renewable energy consumption for the region. A summary of the results in Table 1 shows 11% of total regional energy consumption is from renewables in 2016, with a potential of reaching 20% by 2020.¹ COG and its members will continue to support actions to reach this potential.

Table 1: 2020 Outlook for Renewable Energy Consumption

Year	% of Renewable Consumption
2015	11%
2016	12%
2017	14%
2018	16%
2019	18%
2020	20%

Source: Renewable Energy Supplemental Analysis

GRID CONNECTED RENEWABLES
Installation of grid-connected renewables support growth in overall renewable energy consumption. Table 2 on the next page shows the number of grid-connected solar and wind systems, according to data provided to COG by the region's electric utilities. As of 2015, region has 13,637 grid-connected solar and wind systems, with a total generating capacity of 132.2 megawatts. Distributed renewable energy deployment has been growing at a tremendous rate. If this rate of growth continues the region could have 25,000 or more grid-connected renewables by 2020.

¹ ICF International. (2016). Multi-Sector Approach to Reducing Greenhouse Gas Emissions in the Metropolitan Washington Region: Renewable Energy Supplemental Analysis Technical Report. Metropolitan Washington Council of Governments Washington D.C.

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Discussion Questions

1. Does the *DRAFT* Dashboard track the right/useful data?
2. Questions/comments on the *DRAFT* Local Action Ideas Menu?

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