Climate Action Champions Application Template

Part 1: Administrative Detail

Project Title
Organization
Principal Investigator

National Capital Region Climate Action Champions	
Metropolitan Washington Council of Governments (COG)	
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Part 2: Current Approach and Strategic Plan

Please describe the local or tribal government's accomplishments to date, existing approach/strategy to reduce greenhouse gas emissions and enhance climate resilience (particularly efforts that address both goals together) that demonstrates innovation and leadership. This should include identification of existing policies, systems planning, etc. that demonstrate a commitment to cutting greenhouse gas emissions and preparing the community for the potential effects of climate change, including increased resilience to extreme weather. Include key metrics and milestones.

The Metropolitan Washington Council of Governments (COG) is an independent, nonprofit association that was formed in 1957 to bring area leaders together to tackle metropolitan Washington's biggest challenges. As early as the 1960s, COG and our members have been leaders in conservation - from ramping up efforts to address smog pollution in the '60s to providing leadership on climate policy development today. COG solves these tough metropolitan challenges through effective, collaborative partnerships. It was a COG-federal partnership that brought the region our Metrorail system. A regional collaboration on air quality got us to no Code Red air quality action days. With the opportunity to collaborate with a national network of climate change champions, COG is well positioned to advance efforts to deliver clean, reliable low-carbon solutions in our community and across the country. COG is applying to Climate Action Champions as a consortium of governments on behalf of its member local governments in the District of Columbia, suburban Maryland and northern Virginia.

COG and our member governments are pioneering efforts to address and prepare for climate change and are recognized national leaders in that regard. In 2008, the COG Board of Directors adopted the *National Capital Region Climate Change Report* as regional policy. The report includes a baseline regional greenhouse gas (GHG) inventory, examines potential climate change impacts, evaluates mitigation and adaptation strategies and establishes regional GHG emission reduction goals of: 10% by 2012 (to spur early action), 20% by 2020 and 80% by 2050, as compared to a 2005 baseline.

The COG Board established the Climate, Energy and Environment Policy Committee (CEEPC) in 2009 to provide leadership and support area governments as they work together to meet the Climate Change Report goals. To help move the region toward these goals, CEEPC developed a regional Climate and Energy Action Plan, which contains six goals and 59 implementation actions addressing: energy use and GHG inventories, buildings and infrastructure efficiency,

renewable energy expansion, transportation and land use integration, sustainability and resiliency, and outreach and education.

COG annually surveys its local jurisdictions, school systems, and energy and water utilities to report progress toward Action Plan goals. This year's Climate and Energy Progress Report notes that the region out-performs every other region of similar size in the nation in total number of LEED certified projects (>1500), ENERGY STAR-rated square footage (>203 million ft²) and features the highest number of EPA Green Power Partnerships in the country (>100). The report also highlights the tremendous 10-fold growth in net-metered renewable energy systems since 2009 - from 460 to over 4,600 systems. The following are examples of the many mitigation and adaptation measures tracked in the Progress Report:

- More than 75% of COG members have GHG inventories and over 50% have action plans to reduce emissions. COG has supported these efforts through a series of hands-on inventory trainings. In 2012, the District of Columbia reported a 12.5% reduction of community-wide GHG emissions (below 2006 levels) and Arlington County, VA reported an 11.7% reduction (below 2000 levels).
- The COG Board adopted a regional green building policy in 2007 and over 50% of COG members have established green building policies.
- Over 80% of COG members have on-site renewable energy. COG partnered with EPA
 Green Power Partners to provide solar assessments at >140 public facilities in region,
 identifying 70 MW of total solar potential. In 2013, the Washington Suburban Sanitary
 Commission installed two 2 MW solar arrays at water treatment plants. Prince George's
 County, MD has adopted legislation requiring clean energy systems on new and renovated
 county buildings.
- Over 40% of COG members are developing vulnerability assessments. COG has helped lead several trainings to help our members identify climate vulnerabilities and resilience strategies, as exemplified by Alexandria, VA's Climate Action Plan and the District Department of Transportation's Climate Adaptation Framework.
- Over 33% of COG members have green street policies and 50% have green street
 initiatives. COG has provided policy templates, training and a guidance document, and the
 COG Board adopted a Regional Green Streets Policy in 2014. Prince Georges County, MD
 has adopted a comprehensive Complete and Green Streets Policy.

At the heart of our region is the District of Columbia, a leader among U.S. cities in taking actions to cut carbon pollution and preparing for the impacts of climate change. A coalition of District agencies, residents, and local and regional environmental organizations created a plan, Sustainable DC, which sets goals to protect public health, create sustainable green jobs, build resilient infrastructure, and greatly increase the use and purchase of clean energy.

Explain the strategic plan for future actions that either initiate new or further existing efforts, including policies, systems planning, etc. that demonstrate a commitment to cutting greenhouse gas emissions and preparing the community for the potential effects of climate change, including increased resilience to extreme weather. Include key metrics and milestones.

Last year, CEEPC adopted the 2nd edition of the comprehensive short-term Regional Climate and Energy Action Plan. The 2013 Action Plan contains six goals:

- 1. Regional GHG Reduction: Reduce GHG emissions to 20% below 2005 levels by 2020.
- 2. <u>Built Environment/ Infrastructure:</u> Reduce non-transportation energy consumption, (responsible for 70% of regional GHG emissions) 20% below 2005 levels by 2020.

- 3. <u>Renewable Energy:</u> Meet 10% of regional electricity consumption with power from renewable sources by 2016.
- 4. <u>Transportation and Land Use:</u> Minimize the climate impact of our transportation system (responsible for 30% of regional GHG emissions) by reducing vehicle miles traveled and increasing the use of alternative fuel and high efficiency vehicles.
- 5. <u>Sustainability and Resiliency:</u> Increase the resiliency and sustainability of the region's infrastructure, economy, and environment.
- 6. <u>Outreach:</u> Improve public understanding of climate change and promote positive change in individual and institutional behaviors.

The plan contains 59 implementation actions, each tied to a goal to be reached by 2016. Actions include: GHG inventories and community-wide reduction plans; integrated community energy planning initiatives (e.g., microgrids, district energy systems); climate vulnerability assessments; local energy assurance plans; resilience and energy security strategies or enhancements for critical infrastructure; natural resource management and green infrastructure plans. The Action Plan also promotes implementation of federal programs, such as ENERGY STAR, Portfolio Manager, the DOE Better Buildings Challenge, and the EPA Green Power Partnership, as well as other national programs, such as LEED. CEEPC and associated committees also serve as an effective forum for knowledge sharing and regularly bring in experts to inform and inspire members to implement solutions that meet Action Plan goals.

List any recognitions or awards that have been received related to climate preparedness, resiliency to increasing threats/hazards, sustainability, clean energy, drought response, etc. (e.g., C40 city) in the last five years.

Multi-agency recognitions/awards:

- 40% of COG member jurisdictions are current EPA Green Power Partners District of Columbia is currently ranked #2 nationwide and Rockville is #26.
- There are 7 EPA Green Power Communities in the region.
- 7 COG members are Maryland Smart Energy Communities.
- 7 COG members have earned the Sustainable Maryland Community Certification.
- 70% of COG members have Tree City USA designations.
- American Planning Association Awards include: Arlington County Community Energy Plan, Sustainable DC Plan, Fairfax County's Comprehensive Plan for Tyson's Corner, National Capital Planning Commission's (NCPC) Southwest EcoDistrict Initiative, and NCPC's Federal Triangle Stormwater Drainage Study.
- 100 Best Fleets of North America: Prince George's County Fleet ranked #18 in 2014 and #15 in 2012; DC Water ranked #66 in 2014 and #93 in 2013; Prince William County, VA ranked #96 in 2013 and #91 in 2012; Montgomery County, MD #22 in 2012
- Government Green Fleet Award Winners: DC (#8) in 2013; Arlington County (#34) in 2013 and #7 in 2012; Montgomery County, MD (#2) in 2009
- COG recently announced the award recipients for a pilot Climate and Energy Leadership Award Program. The winners were: City of Falls Church's green power initiative, City of Rockville's Energy and Green Building Program, Prince William County's Landfill Gas to Energy Project, and Loudoun County Public Schools Energy & Environment Program.

Single Agency Recognition/Awards:

- <u>District of Columbia:</u> 2013 and 2014 US Conference of Mayor's Climate Leadership Award honorable mention; 2014 Finalist C40 and Siemens City Climate Leadership Award; STAR Communities 4 Star Rating (currently 3rd Highest in the U.S.); three projects accepted by Ecodistrict's Target Cities Program; RiverSmart Washington award.
- Frederick County, MD: EPA Climate Showcase Communities.
- <u>Gaithersburg, MD</u>: 2011 MD Chapter of the U.S. Green Building Council (USGBC) award for Gaithersburg's Youth Center in Olde Towne; 2009 EPA Building Healthy Communities for Active Aging Commitment Award.
- <u>Arlington County, VA</u>: 2014 "Outstanding Leadership" from the Virginia Recycling Association for notable waste reduction efforts.
- Falls Church, VA: 2014 Virginia Municipal League Achievement Award for tree planting
- <u>Loudoun County</u>, VA: 2009 Green Building of America Award for the Loudoun County Homeless Shelter.
- <u>Loudoun County Public Schools (LCPS)</u>: 2010-2014EPA ENERGY STAR "Partner of The Year"; 2009-2014 Virginia School Boards Association Platinum Level Certified Green School; 2014 Silver Governor's Environmental Excellence Award.

Communicate any potential risks or challenges to successfully completing the strategic plan described above, including measures that have been taken to mitigate those risks or address those challenges:

The region is already experiencing the effects of climate change. People, property, and natural resources are being affected, changing and potentially disrupting the way we live and work in the region. Climate change may make it harder to meet air quality and Chesapeake Bay water quality goals, impact treasured landscapes and tree canopy, and affect historic and cultural assets. Two of the more significant challenges to advancing the plan goals include government and public support for climate action, and funding to support new initiatives. The region is mitigating these risks by taking action to develop climate action plans and other sustainability initiatives. This has resulted in significant actions, including that more than half of the region adopting communitywide climate action plans, and governments such as the District of Columbia, Arlington, and Frederick County increasing citizen participation in activities such as home energy efficiency upgrades and solar PV deployment. Further, the City of Gaithersburg and NCPC are integrating climate strategies into their comprehensive plans, recognizing co-benefits and the nexus between climate action and other planning areas, as well as the business case for adaptation initiatives. Montgomery County and the District are also working to advance activities supporting grid modernization and finance for large building retrofits through programs such as PACE. The entire region is facing the need to fund investments to meet stormwater management requirements. Billions of dollars will be spent over the next ten years on stormwater infrastructure in the Chesapeake Bay watershed. The region is looking for ways to fold resiliency into that process, including a prioritization of green infrastructure.

Outline potential replicability/scalability of the current approach and strategic plan to other communities who may seek similar outcomes:

The 2013 Regional Climate and Energy Action Plan is a simple voluntary roadmap with clear implementation guidance provided in the Action Plan Resource Guide. The Action Plan is a reflection of best practices localities are implementing both within the region and across the

country. It encourages implementation of national programs and standards. The Action Plan is a menu of options to help localities decide which actions are most fitting to their community. Although the Action Plan is mainly geared toward local jurisdictions, other entities (such as water utilities, school systems, non-profits, etc.) from across the region are using its guidance.

COG's plan and committee forums serve as a model for advancing local climate policy on a metropolitan and regional scale. COG and our member governments are committed to mentoring and sharing lessons, and to help create a model for future Champions to follow. In order to scale up this commitment as a Champion, COG, with our members, plans to develop a Climate Champions Training Initiative as a mechanism to disseminate the federal technical assistance and resources to stakeholders across the region. The initiative can also serve as a replicable model to regions across the country. COG will continue to share our model and provide assistance nationally through the National Association of Regional Councils (NARC), EPA Region III Mid-Atlantic Sustainability Network (MASN) and the Institute of Sustainable Communities, among others. COG was also an active participant in the U.S. State Department's Climate Fellows Program, which facilitated sharing of climate solutions with Fellows in China.

Part 3: Resources and Partnerships

Describe participation in existing Federal government programs, particularly those associated with energy and water efficiency, water reuse, renewable energy deployment, and climate resilience, including, but not limited to the following: EV Everywhere, Rooftop Solar Challenge, WaterSMART Basin Studies, Hurricane Sandy-related competitive grant programs, Federal Transit Administration or Federal Highway Administration climate adaptation pilot programs, Federal Green Challenge-Water, WeatherReady Communities, and Partnership for Sustainable Communities. Demonstrate how the local or tribal government's engagement in these efforts could be leveraged or amplified through designation as a Climate Action Champion.

COG recognizes the need to establish effective, collaborative partnerships with diverse stakeholders in order to solve tough regional challenges. This is reflected in CEEPC's composition: the policy committee contains representation from federal government agencies, the environmental community, universities, utilities, and transit agencies. This includes federal leadership from US EPA, US DOE, US GSA and NCPC. COG's efforts benefit greatly from the support of federal initiatives, two of which are highlighted below.

Partnership for Sustainable Communities: COG received a Smart Growth Technical Assistance Grant from the U.S. EPA Office of Sustainable Communities in 2010. Through this opportunity COG was able to leverage (at no cost) the expertise of the NOAA, FHWA, NCPC, Georgetown Climate Center, University of Maryland, Penn State University, Water Environment Research Foundation, Concurrent Technologies Corporation, CH2M HILL, and NOBLIS. COG developed preliminary vulnerability assessments for the transportation, land use, buildings and water sectors and worked with stakeholders prioritize potential win-win (i.e., mitigation and adaptation) and no regrets strategies. Through this process, we helped build the capacity of more than 200 regional leaders to address climate adaptation. COG was also able to leverage the partnerships developed during this project to implement a second related initiative led by NASA, which led to completion of vulnerability assessments by >40 federal and local agencies.

<u>Procurement Initiative and the DOE Rooftop Solar Challenge:</u> COG partnered with EPA to adopt the Santa Clara, CA model for municipal solar aggregation in the National Capital Region (NCR). To date, the effort has led to procurement efforts exceeding 15MW in the region. In 2013, COG received funding under the U.S. DOE SunShot Initiative Rooftop Solar Challenge II through partnership with two national awardee teams: the American Solar Transformation Initiative (ASTI), led by Optony, Inc., and Solar Ready II, led by the Mid-America Regional Council (MARC) and the National Association of Regional Councils (NARC). Through these programs, the ten participating COG members track progress toward national best practices via the Solar Roadmap platform, gain access to resources and models to help with implementation, and address issues collaboratively with nine other leading regions.

As a designated Climate Action Champion, COG will make full use of the resources provided to leverage and expand our existing knowledge sharing networks and accelerate market and process transformation to encourage renewable energy adoption. By establishing a new Climate Champions Training Initiative, COG will be able to provide new training opportunities, expose stakeholders to new tools, have new policy discussions, and develop new initiatives. Further, the assistance and tools available to us as a Champion will help us to break down barriers and better collaborate with officials in disaster preparedness, emergency response and recovery, and public health, as well as better position us to reach out to the private sector.

Please describe the local or tribal government's commitment to the current approach and strategic plan and any additional resources it plans to pursue and/or commit to support the desired objectives:

COG and our member governments and stakeholders are pioneering climate champions, with a strong commitment to finding innovations and implementing solutions to address climate change. The region's climate goals were first adopted by the Board in 2008 and reaffirmed in 2010 with our members' commitment to Region Forward, an overarching vision for a more sustainable, prosperous, accessible and livable region. In October 2014, COG members and regional stakeholders requested all COG policy bodies reaffirm their commitment to the regional climate goals. COG's Action Plan also asks for jurisdictions to prepare both government and community climate action plans, more than half of which have already been adopted. COG devotes significant resources to this challenge. The COG annual work program and budget contains funding for a regional climate and energy program, including a dedicated Climate and Energy Team of six staff to help the region meet its climate change goals.

Please describe how the local or tribal government plans to engage key program partners and stakeholders including any local Federal facilities.

COG's success as a climate change pioneer is rooted in our ability to bring together the region's outstanding network of climate, energy, and sustainability experts to tackle this important challenge. COG provides an important forum for these practitioners and stakeholders to come together to develop a roadmap for action, and serves as a clearinghouse for local and regional climate tools, trainings, and information. COG will continue to use its technical and policy workgroups and committees to advance activities that will result in real and lasting change.

Many federal, regional, and local agencies and organizations are individually exploring and

implementing climate adaptation strategies. Recognizing that no single entity can address all of its climate change risks working alone, these agencies are coming together through COG to build capacity, networks, and leverage partnerships that will expand on work already underway. Last year COG engaged with 19 federal agencies on a NASA-led climate adaptation initiative called "Building a Climate Resilient National Capital Region." More than 20% of DC's land area is federal property; therefore, our federal partnerships are key to assessing and addressing climate impacts. We will continue to work with the federal agencies via an NCPC working group, and plan to develop a regional resilience network including environmental and business groups.

In addition, COG has several ongoing critical infrastructure and energy security initiatives. COG coordinates a Critical Infrastructure Protection Workgroup to manage risks and reduce vulnerabilities of critical infrastructure through public/private partnerships. COG coordinates with FEMA, GSA, EPA, DOE, the National Labs, DoD and CEQ on integrating renewables into advanced microgrids. COG is also setting up a series of three regional energy emergency workshops and tabletop exercise in coordination Pepco, Dominion, Washington Gas, Verizon, AT&T, DC Water, WSSC, WMATA, Amtrak, VRE, MARC, CSX.

Previously, COG engaged in a year-long collaborative effort to develop an Electric Vehicle Readiness roadmap, which includes plans and activities to promote deployment of electric vehicles in the region. Similar on-going efforts exist in nearly all relevant sectors, including solar power, green buildings, green cooperative procurement, and green infrastructure planning.

Other notes – if there is any other relevant information the local or tribal government would like to convey, please include it below:

COG and its members' existing climate mitigation and resiliency initiatives well-position us to hit the ground running as a Climate Action Champion. The designation would help us to better coalesce the various activities to achieve more comprehensive and sustained implementation.

- <u>Emergency Response and Critical Infrastructure</u>: FEMA support could significantly improve extreme weather preparedness and encourage renewables, microgrids and survivability strategies for critical infrastructure.
- Access to Renewable Energy Experts: This could assist with broader implementation region-wide of solar energy incentives, policies, process improvements, and aggregation programs under development.
- Resilience Partnership with Federal Facilities: COG has partnered with NASA on a preparedness pilot focused on the downtown D.C. monumental core where there is a concentration of federal facilities. Other federal facilities and communities throughout the region could benefit from this process.
- <u>Networking and Coaching</u>: The National Resource Network and Partnership for Sustainable Communities tackle cross-cutting issues and could better position COG and its members to integrate climate impacts and strategies into existing plans and capital improvement programs, as well as to develop a Climate Champions Training Initiative.
- <u>Data for Decision-Making:</u> COG members have expressed the need for more specific data to clarify how climate impacts and goals need to change how they plan, design, and implement projects. Data and tools could be brought to stakeholders across the region through the Climate Champions Training Initiative or through COG committees.