

# **COG CLIMATE and ENERGY WORK PROGRAM**

**Prepared for COG Climate Change Steering Committee**

**March 23, 2009 Staff Draft**



**Note**

*This draft of COG's Climate and Energy Work Program from April, 2009 through June, 2010, includes elements of different COG programs. Many of these programs, such as the transportation initiatives, as well as many of the environmental initiatives are included in other COG work programs and have been approved, funded, and are underway. Proposed projects that support COG's Climate Change initiative but require additional funding are also identified in this document.*

*The American Recovery and Reinvestment Act (ARRA) of 2009 potentially provides new sources of grants and funding for energy efficiency, conservation and transportation projects to be completed in the next year. The Climate and Energy Work Program may need to be revised once grants for localities in the Washington region are announced.*

## **COG Climate and Energy Work Program** (April 1, 2009- June 30, 2010)

### **A. Background**

This document presents COG's Climate and Energy work program to be carried out between April 1, 2009 and June 30, 2010. It is based upon COG's Climate Change Report approved by the COG Board of Directors in November, 2008.

This document describes the work to be carried out by the staff of the Metropolitan Washington Council of Governments (COG) for which funding support has been identified in COG's FY 2009 and FY 2010 budgets. The tasks outlined in this work program are designed to ensure a regional approach to meeting climate change goals in the metropolitan Washington region. Through the activities described for the coming year, several important steps will be taken towards reducing greenhouse gas emissions while simultaneously helping meet energy and transportation needs in the Washington region consistent with climate policy goals.

#### Organizational Structure

The National Capital Region Climate Change Report recommends that a Climate and Energy Work Program be developed. The Climate and Energy Work Program will be under the auspices of a new committee created by the COG Board for this purpose. Final decisions on organizational structure are pending. In the interim the COG Board extended the Climate Change Steering Committee to advance COG's climate and energy programs.

#### Staff Support

The lead role staff for the Climate and Energy Work Program will be from COG's Department of Environmental Programs (DEP), including the Director, Chief of Air Quality and the air quality staff, Energy and Green Building program staff, plus support from Recycling and Solid Waste staff, water resources program staff, as well as from COG's transportation and community planning departments.

### **B. Work Program Objectives**

In the coming year the new committee will guide implementation of a variety of recommendations from the National Capital Region Climate Change Report. Recommendations include developing programs and regional climate change plans to meet the adopted greenhouse gas reduction targets for 2012 and 2020. Regional programs will include public outreach and education, energy and transportation sector initiatives, developing tools to measure progress, fostering adaptation initiatives, tracking legislation and regulations, and developing advocacy positions.

### Role of COG Staff

Staff will play a major role in developing emission inventories, analyzing possible mitigation options, developing plans to meet the regional reduction goals, tracking progress, and developing projects to reduce emissions from the energy sector. Staff will work closely with COG's Department of Transportation Planning staff on mobile emissions inventories and mitigation strategies.

Staff will also support the committee in designing and implementing a regional education and outreach program, tracking legislation and preparing advocacy positions, and providing support to COG's members as they advance their own programs in climate and energy. Staff will coordinate with state agencies, the federal government, and stakeholders from the public and private sector.

### Proposed Work Program Elements

This document is intended to guide COG's climate and energy activities through the fifteen month period from April 1, 2009 to June 30, 2010. In subsequent sections the reader will find descriptions of the major work program areas that are included in this proposed work program. The major work areas are presented in more detail as tasks in the work program. The major work areas are as follows:

1. Development of Regional Climate Change Plans
2. Energy Initiatives
3. Transportation Initiatives
4. Measuring Progress/Technical Tools
5. Adaptation Initiatives
6. Legislative Tracking and Advocacy
7. Outreach and Education
8. Committee Support
9. Proposed New Initiatives

## **C. Proposed Work Program Task Descriptions**

### **1. Development of Regional Climate Change Plans**

COG adopted emission reduction targets of 10 percent reduction below business as usual in 2012 and 20 percent below 2005 levels by 2020. Staff will develop plans to meet the 2012 and 2020 goals. For the 2012 plan, staff will quantify greenhouse gas reduction benefits from adopted energy efficiency measures and proposed individual and household actions; will prioritize regional and local measures by cost and benefit; and will develop steps to implement measures to achieve benefits by 2012. Staff will also begin analysis of measures to achieve 2020 reduction target. In developing regional climate and energy plans, staff will:

- Track climate and energy initiatives at the federal, state and local level;
- Coordinate with utilities to promote energy efficiency programs;

- Identify regional priority projects and provide support for local projects seeking funding from American Recovery and Reinvestment Act of 2009 (ARRA);
- Aggregate or “bundle” member local government projects for ARRA funding;
- Coordinate with business community through the Greater Washington Board of Trade Green Committee initiatives and other projects and other private sector stakeholders.
- Retool economic development priorities to encourage workforce development in green industries in coordination with the Greater Washington board of Trade;
- Identify transportation priorities through the “What Would It Take” scenarios to include in regional plans to achieve target reduction goals.
- Incorporate outreach and education program information into the plans to connect actions by citizens, businesses, and governments with the regional climate change plans.

**Deliverables**

Identify regional priority projects for ARRA funding  
Bundle projects for ARRA grant funding  
Coordinate with utilities’ plans  
Coordinate with Greater Washington Board of Trade and other private sector stakeholders plans  
Coordinate with states and local government plans  
Plan for 2012  
  
Plan for 2020

**Deadline**

April 2009  
April-Sept 2009  
ongoing  
  
ongoing  
ongoing  
Draft 9/09  
Final 12/09  
Draft 5/10

**2. Energy Initiatives**

The COG Climate Change Report included recommendations to improve energy efficiency and increase production and use of renewable energy in the region. This task will support local government efforts to attract stimulus funding as well as develop and track local government energy efficiency and renewable energy initiatives and assist local governments to lead by example. Staff will begin implementation of the following projects:

- Street Light Project. Replace old technology with new energy efficient technology. Develop regional guidelines or standards. Implement pilot projects.
- Support local projects submitted for ARRA Clean Cities funding (i.e., alternative fueled vehicles and associated infrastructure.)
- Green Fleet Project. Develop Green Fleet policy. Hold Hybrid fleet/AFV Workshop.

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- Promote energy performance contracting, such as working with the Energy Partnership of Greater Washington (Pepco Energy Services, Hannon Armstrong and Virginia Tech).
- Coordinate with District’s Sustainable Energy Utility to promote energy efficiency programs in the District of Columbia.
- Renewable Energy Initiatives. Support local government renewable energy initiatives (e.g., windpower purchase).
- Home Energy Audits and Retrofits. Develop a regional approach, working with utilities, local governments. Develop web resource.
- Green Building Codes, Standards (with support from COG’s Intergovernmental Green Building Group-IGBG). Recommend Residential Standard(s).
- Green Job Training. Coordinate with new COG Board Work Force Competitiveness Task Force regarding advancing regional green job training program supported by ARRA Dept. of Labor stimulus funding and coordinate with state green job initiatives.
- Commercial Building Energy Efficiency. Partner with Greater Washington Board of Trade and others.
- Survey of local government energy efficiency and renewable energy projects funded through Community Block grants.

**Deliverables**

**Deadline**

Street Light Improvement Project Pilots	6/09
Street Light Improvement Project Report	Draft 10/09
Green Fleet Policy	TBD
Hybrid fleet/AFV Workshop	10/09
Support Local Government Renewable Energy Initiatives	Ongoing
Regional Approach for Home Energy Audits and Retrofits	TBD
Web Resource for Home Energy Audits and Retrofits	6/09
Coordinate with COG Board Work Force Competitiveness Task Force and States on Green Job Training	Ongoing
Support Green Building Codes, Standards (IGBG)	Ongoing
Recommend Residential Green Building Standard(s)	6/09

Coordinate with DC Sustainable Energy Utility	Ongoing
Commercial Building Energy Efficiency Partnership	TBD

### 3. Transportation Initiatives

The COG Climate Change Report included recommendations to reduce emissions from the transportation sector in the region. Close coordination with the National Capital Region Transportation Planning Board is a primary assumption for this task. This work effort will involve developing and analyzing scenarios to mitigate emissions from mobile sources, with input from the public. It also involves consideration of new approaches for reducing greenhouse gas emissions as part of the regional transportation planning process recently adopted in California (“SB375”) and potentially to be considered in the federal transportation re-authorization legislation this year. COG’s Dept. of Transportation Planning staff is currently or soon will begin implementation of the following projects:

- Scenario Analysis. Review strategies in “What Would It Take” scenario to assess combination of measures necessary to achieve significant reductions in CO2 emissions by 2020, 2030, and 2050.
- Reduction Measures. Analyze greenhouse gas reduction measures in three categories:
  - Fuel efficiency (CAFÉ, CAL LEVII)
  - Fuel Carbon Intensity (alternative fuels, ethanol)
  - Travel Efficiency
    - VMT reduction from smart growth
    - VMT reduction, TDM strategies (Commuter Connections)
    - Operational Efficiency (TDM, Signals, Incident Management)
- Public Outreach. Conduct public outreach to get feedback on scenarios and get recommendations for incorporating scenario planning activities into regional planning process.
- Track SB375 implementation in California; track federal transportation reauthorization and possible inclusion of regional approaches for reducing transportation sector greenhouse gas emissions.

<b><u>Deliverables</u></b>	<b><u>Deadline</u></b>
Analysis of Reduction Measures	6/09
Public Outreach	10/09
Scenario Analysis	6/10
California and federal legislative tracking	ongoing

#### 4. Measuring Progress/Technical Tools

A Climate and Energy Technical Committee is proposed to be created to provide technical support to the policy committee charged with implementing COG's Climate Change Report. One of the technical committee's tasks will be to measure progress, assist local governments with greenhouse gas (GHG) inventory development and develop appropriate metrics. Two methods, a regional GHG emissions inventory and regional metrics, will be used to track progress in meeting the region's greenhouse gas emissions goals. To track annual progress, regional metrics will be used. To address the need to develop systems to measure progress, including within individual local governments, staff will begin implementation of the following projects:

- Develop Regional Metrics. Include electricity generation, utility EE programs, EIA fuels consumption, VMT data.
- In partnership with ICLEI, provide workshops for developing local government greenhouse gas emissions inventories
- Refine Regional GHG Emissions Inventory. Add detailed emissions for waste water and drinking water plants, update transportation emissions.
- Mobile CO2 Emissions. Calculate mobile source CO2 emissions inventory. Include years 2002, 2005, 2010, 2012, 2020, 2030.
- Energy Efficiency Protocol. Develop local government protocol to measure benefits (AQ and CO2) from energy efficiency measures.
- Conduct water/wastewater workshops with aim of developing consensus on inventory among stakeholders on GHG inventory protocols.
- Survey of local government energy efficiency programs and tree canopy programs, including plans to increase the regional tree canopy.

#### **Deliverables**

Develop Regional Metrics  
Local Governments Inventory Assistance Workshop  
Refine Regional GHG Emissions Inventory  
Updated Mobile Source Emissions Inventory  
Energy Efficiency Protocol/Wastewater emission  
inventory Workshops  
Energy Efficiency and Renewable Energy (EERE)  
Program Survey  
Tree Canopy Program Survey

#### **Deadline**

Annually  
Spring 2009  
9/09  
6/09  
10/09  
Spring 2009  
Annually



## 5. Adaptation Initiatives

The Climate Change Report recommended a series of workshops to address the potential need for adaptation strategies. Staff will coordinate with research universities to provide technical workshops on expected impacts to the region from climate change and to address anticipated adaptation needs such as water supply, public safety and health and other issues. Some local governments are contracting for analysis of their climate change adaptation needs and development of adaptation strategies. Staff will survey the local governments about their adaptation initiatives, track them and coordinate them within a regional context. Initial efforts on adaptation will include implementation of the following projects:

### Deliverables

Workshop: Regional impacts from climate change  
Workshop: Regional infrastructure: Adaptation Needs  
Survey local government adaptation studies  
Track and coordinate local adaptation analyses and strategies

### Deadline

Fall 2009  
Fall-winter 2009  
April – Sept. 2009  
Ongoing

## 6. Legislative Tracking and Advocacy

Tracking legislation and developing advocacy positions is an important part of the regional effort to address greenhouse gas emissions. Topics that will be tracked include development of a federal cap and trade program to reduce greenhouse gases, and state legislation to provide incentives for energy efficiency and renewable energy. COG is a member of Climate Communities, an organization providing frequent updates on federal legislation that provides funding and support for local government efforts to meet greenhouse gas reduction targets. Climate Communities will be a resource for developing advocacy positions at the federal level. COG will also work closely with the National Association of Regional Councils, the International City and County Management Association, National League of Cities and National Association of Counties on federal legislative issues, and state associations with respect to state initiatives. With respect to the stimulus funding, the COG Board of Directors may develop regional actions and a direction for ARRA funds in the Washington region. Staff will focus on the following tasks:

- Track federal, state and local climate change initiatives and regulations.
- Track American Recovery and Reinvestment Act programs that benefit local government
- COG Board action regarding regional ARRA initiatives
- Provide workshops about stimulus funding opportunities and distribute information to local governments
- Develop and coordinate advocacy positions for local, state, and federal action.

### Deliverables

Workshops about stimulus funding opportunities

### Deadline

Ongoing

Projects submitted and or awarded funding	April –May 2009
COG Board action regarding regional ARRA initiatives	April 2009
Legislative and Regulatory Tracking - federal, state, local	Ongoing
Advocacy Positions – state	Fall '09/Winter '10
Advocacy Positions - federal	Ongoing

## 7. Outreach and Education

An important task in the near term is to develop effective public education and outreach campaigns. Staff is working with several resources to develop a coordinated approach to climate and energy outreach. DEP staff is working with COG's Institute for Regional Excellence (IRE) class on a project to survey local government outreach programs and to recommend a regional outreach approach. Staff is also coordinating with George Mason University's Center for Climate Change Communication to develop a regional approach to outreach. Staff will implement the following projects:

- Regional Outreach and Education Campaign. Convene outreach coordination meeting of local, state agencies and utilities to discuss outreach campaigns for energy efficiency.
- Survey local government climate and energy outreach plans and messages.
- Coordination with Existing Public Outreach Initiatives.
- Recommend every day actions for citizens to reduce their carbon footprint
- Coordinate with COG's IRE, GMU, Clean Air Partners and Commuter Connections regarding messaging.
- Promote Green business/green jobs.
  - Follow-up on March 2009 Green Affordable Housing conference.
  - Coordinate with COG Board Work Force Competitiveness Task Force
- Re-design the Climate Change Web site to focus on the public and draw them to the site. Use digital video clips of citizens discussing how their communities can make a difference for climate change/energy conservation on the Web site for several weeks after each outreach session.
- Outreach sessions for community and stakeholder groups in each COG jurisdiction. Topics could cover energy use in everyday life, and how every citizen and family can make a positive difference for the environment.
- Develop a Climate Change (or COG general) Web and/or Facebook page that would engage those who support the goal of reducing GHG. Include material from COG web site as well as new material developed for outreach.

### Deliverables

Convene outreach coordination meeting  
Messaging Coordination  
Collaborate w/ IRE and GMU, Clean Air Partners

### Deadline

4/28/09  
Spring 2009  
Spring 2009

Green Affordable Housing Conference	3/09
Green Affordable Housing/Green Jobs conference followup	Ongoing
Outreach sessions for community and stakeholders	TBD
Workshops for Members	TBD
Develop Climate Change Web/Facebook page	6/09

## **8. Committee Support**

The proposed work program provides for COG staff support for the regional Climate Change initiative. Staff support includes organizing and staffing meetings, preparing agendas, addressing issues as they arise such as new initiatives or legislation, coordinating with other COG committees, and addressing outside requests for information. Staff includes environmental planners and engineers, and transportation planners and engineers within COG's Department of Environmental Programs and Department of Transportation Planning. In addition, staff within COG's Legal Department will assist with legislative and regulatory tracking. COG's Contracting and Purchasing Office will assist with cooperative purchasing initiatives as necessary to support implementation of this work program. Coordination as needed with COG's Department of Community Planning and Services and COG's Public Health and Safety Department will also take place. COG personnel will be available to provide staffing support for the following:

- Climate Change Steering Committee (through 4/09)
- New committee to be named by COG Board of Directors (4/09 – 6/10)
- Technical Committee (4/09 – 6/10)

## **9. Proposed New Initiatives (additional funding needed)**

There are several possible new initiatives that could be developed if additional funding is identified. This list may change as a result of grants awarded to projects to local governments as part of the stimulus funding. Proposed new regional initiatives include:

- Regional energy/climate outreach campaign.  
A regional outreach campaign would focus on energy use in buildings (home and office) and potentially for the transportation sector.
- Regional climate impacts report/adaptation strategy  
Staff would work with research universities in the region to summarize research and modeling results to predict climate impacts on the metropolitan Washington region and propose adaptation strategies.
- Update Best Practices Report  
The Best Practices Report (2008) can be updated with results of the latest survey of local government programs.
- Regional Green Power Jobs, Survey  
A survey of regional green power jobs would define the term "green power job" for the Washington region and include a survey of the number of green power jobs by industry category and jurisdiction.

- Cost benefit analysis of measures  
Staff would analyze the costs and greenhouse gas reductions for the recommendations in the Climate Change Report. The McKinsey Report contains general costs for energy efficiency measures that vary from negative costs to high investments. This report would attempt to prioritize measures in COG's report by the cost and benefit over the long term.

#### **D. Proposed Funding Sources and Projected Budget for COG Staff**

The proposed CEPC Work Program for FY2009 is a 15-month work program and budget for the period from April 1, 2009 to June 30, 2010. The work program will be funded using existing resources.

##### Existing Resources Supporting COG's Climate Change Work Program

*COG/DEP Regional Environmental Fund and COG Membership Fees*  
Supports Categories 1, 2, 4, 6, 7 and 8

*COG Community Planning and Services Department*  
Supports categories 1, 2, 3, and 4

*Intergovernmental Green Building Group (IGBG)*  
*Energy Advisory Committee (EAC)*  
*Regional Alternative Fuels Strategy (Alternative Fuels Partnership)*  
*COG's Recycling Committee*  
Supports Category 2

*COG/DEP Regional Water Fund*  
Supports Category 5  
Including in-kind contributions/collaboration with WEF/WERF/AWWA/AwwRF

*COG/DEP Grant Projects*  
Supports Categories 1, 4, and 7  
DMME/DOE Clean Energy and Air Quality in the Washington Region

*Human Services and Public Safety Policy Committee (HSPSPC)*  
Supports Category 5

*Health Officers Committee*  
Supports Category 5

*Metropolitan Washington Air Quality Committee (MWAQC) Local Measures Funding*

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Supports Categories 1 and 4

*Metropolitan Development Policy Committee (MDPC)*

Supports Categories 1 and 4 including regional cooperative forecasting

*National Capital Region Transportation Planning Board (TPB)*

Supports Categories 3 and 4. These tasks are funded in the Unified Planning Work Program and are performed by TPB staff in coordination with DEP staff.

Regional Studies, Scenario Study Task Force