

**Draft Meeting Summary**  
**COG Climate Energy and Environment Policy Committee (CEEP)**  
**January 26, 2011**

**Members and Alternates**

Hon. Roger Berliner, Vice Chair, Montgomery County Council  
Hon. "J" Davis, City of Greenbelt  
Hon. Jay Fiset, Chair, Arlington County  
Hon. Penelope Gross, Fairfax County Council  
Hon. Andrea McGimsey, Loudoun County  
Hon. Del Pepper, Alexandria  
Hon. David Snyder, Falls Church

Laine Cidlowski, District Office of Planning  
Kristin Haldeman, WMATA  
Matt Orlins, District of Columbia Council, for Hon. Mary Cheh  
Howard Simons, Maryland Department of Transportation  
Dr. Dann Sklarew, George Mason University  
Christophe Tulou, District Department of the Environment  
Harriet Tregoning, District Office of Planning  
Didian Tsongwain, Prince George's County  
Hilari Varnadore, Frederick County

Melissa Adams, Washington Gas  
Donald Briggs, Frederick County Sustainability Commission  
Bob Grow, Greater Washington Board of Trade  
Suseel Indrakanti, Cambridge Systematics  
Caroline Keicher, Institute for Market Transformation  
Julia Koster, National Capital Planning Commission  
Julie Locascio, DC Sierra Club  
Dale Medearis, Northern Virginia Regional Commission  
Samuel Parker, M-NCPPC- Prince George's County  
Stephen Pattison, Maryland Clean Energy Center  
Dr. Lise Van Susteren, Chesapeake Climate Action Network

**Others Present**

Kambiz Agazi, Fairfax County  
Erica Bannerman, City of Alexandria  
Jes Christensen, Danish Board of District Heating  
Terry Daly, Maryland Clean Energy Center  
Michael Davidson, COWI  
Rich Dooley, Arlington County  
Peter Garforth, Garforth International  
Susan Hafeli, Fairfax County  
Joan Kelsch, Arlington County/ IGBG  
Jenee Kresge, National Association of Regional Councils

Dave Molchany, Fairfax County  
Joe Orlando, Mid Atlantic Clean Energy Center  
Brendan Shane, District Department of the Environment  
Kanti Srikanth, Virginia Department of Transportation  
Bob Owolabi, Fairfax County DOT  
Erica Shingara, Rockville  
Steve Sinclair, Fairfax County  
Tim Stevens, Falls Church  
Rob Thornton, International District Energy Association  
Jonathan Wisbey, Climate Communities

### **Staff Present**

Jeannine Altavilla, Environmental Planner, COG DEP  
Monica Bansal, Transportation Planner, COG DTP  
Leah Boggs, Environmental Planner, COG DEP  
Maia Davis, Environmental Planner, COG DEP  
Stuart Freudberg, COG, Director, Department of Environmental Programs  
Jeff King, Principal Environmental Planner, COG DEP  
Joan Rohlf, Chief, Environmental Resources, COG DEP  
Daivamani Sivasailam, COG Department of Transportation Planning

### **1. Call to Order/Introductions/Chair Remarks**

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Chair Fisetto called the meeting of the Climate, Energy, and Environment Policy Committee (CEEPC) to order at 9:50 a.m.

Mr. Fisetto welcomed newly appointed CEEPC members:

- Elected Officials
  - Blaine Young, President, Frederick County Board of Commissioners
  - Mary Lehman, Council member, Prince George's County Council
  - John Britton, Councilmember, City of Rockville
  - Fred Schultz, Council member, City of Takoma Park
- State Environment, Energy and Transportation Agencies
  - Christophe Tulou, Director, District Dept. of Environment
  - Dr. Teresa Lawrence, Acting Deputy Director of DDOE's Energy Administration
  - Terry Bellamy, Interim Director, District Dept. of Transportation
  - Bob Summers, MD Dept. of the Environment
  - Renee Hamilton, Assistant Director Administrator, VDOT
- Stakeholders
  - Julia Koster, National Capital Planning Commission
  - Caroline Keicher, Institute for Market Transformation
  - Julie Locascio, DC Sierra Club
  - Stephen Pattison, Maryland Clean Energy Center/ Kathleen Magruder
  - Suseel Indrakanti, Cambridge Systematics
  - Donald Briggs, Frederick County Sustainability Commission
  - Howard Ways, University of the District of Columbia

Chair Fisetto reminded the committee that Peter Garforth gave an exciting presentation about district energy planning at the November meeting. His presentation stimulated a lot of interest in District Energy. Today's meeting will have several speakers to provide case studies about District Energy, including a special speaker from Denmark: Jes Christensen, Director of the Danish Board of District Heating.

Chair Fisetto announced to the committee that there will be a workshop on district energy following the meeting today at 12:30 pm. This will give technical staff an opportunity to ask questions of the experts. About 60 people are registered for the workshop. Members are invited to stay and learn more about this topic.

## **2. Approval of Meeting Summary for November 17, 2010 and Amendments to the Agenda**

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The meeting summary for the November 17, 2010 meeting of the Climate, Energy, and Environment Policy Committee (CEEPC) was approved with no changes. There were no changes to the agenda.

## **3. US Examples: District Energy, Combined Heat Power, Microgrids (Joe Orlando, Mid Atlantic Clean Energy Application Center)**

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Mr. King described the task force assembled to look at district energy, microgrid, and combined heat and power (CHP) opportunities in the COG region. Joe Orlando comes from the Mid Atlantic Clean Energy Application Center which is a federally funded institution that can provide the region with help as they consider these options.

Mr. Orlando gave a presentation describing some of the basic concepts of CHP, as well as some existing examples in the region that already take advantage of the benefits CHP has to offer. He also discussed the benefits of microgrid, such as adding quality to the power that is provided. The systems do not always make economic sense, but can be beneficial in this region due to high electricity rates.

The Regional Clean Energy Application Centers (RACs) will help with the three step process. The RAC will lead the walk through process to document what needs an area has and whether or not it is a good candidate for CHP. They will co-sponsor a screening study to look further if the location seems to be a good fit for CHP. The RAC can then help find a contractor to do a detailed design study.

The University of Maryland campus uses diesel engines for distributed generation. Maryland Department of Energy allows diesel engines to run and not count towards the annual limit when they are helping to control grid demand. The engines at UMD are part of their district energy system. A site in Bethesda uses diesel engines for cogeneration and received payback on the investment in less than three years.

Public policy can support CHP initiatives to help encourage adoption. Mr. Orlando noted that many renewable and efficiency programs do not recognize CHP, but it should be included as a green energy technology. Future design studies should include consideration for CHP to see if it will be advantageous.

Performance contracting can also help to install CHP systems and provide distribution after construction. There are federal and state incentives. Most contracts are at least ten years. There are some utility limitations, but utility affiliates can do performance contracts, as well as private companies.

Ms. Tregoning noted that the District is looking at several sites for development of public buildings. CHP development follows the District's green building law and is extremely helpful for LEED certification points.

Mr. Berliner noted that these systems provide great improvements in reliability and self-sufficiency.

Mr. Fisetto noted that Arlington is seriously considering CHP and has not found any regulatory obstacles so far, but will need cooperation from the private sector.

## **4. Denmark's District Energy Planning (Jes Christensen, Director, Danish Board of District Heating)**

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Mr. Christensen discussed the situation that initiated development of CHP in Denmark as a solution for national security and economic worries. The country suffered greatly during the oil crisis in the 1970's because they did not produce any

of their own energy sources domestically. It was a matter of economic viability and national security. Legislation required communities to develop energy plans to determine a strategy. Many found district energy to be cost-effective.

Some systems, only 2%, have seen an increase in the price of services, but those systems are being addressed. New systems guarantee a 10% savings over natural gas for the life of the system. Today over 60% of Denmark's homes use district energy, including 99% in Copenhagen. Some systems are natural gas, some are district heating. The Danish goal is to eliminate oil.

Most systems in Denmark are public, but about 20% are cooperatives, and 2% are private. Banks now compete to offer the best terms on these loans. The companies are all nonprofits and sell heat at the cost of production. The US uses more energy on heat than they do on powering other systems. Think of district energy as a way to prioritize heat rather than a power system.

Mr. Agazi noted that these systems can be campus-oriented or holistic for an entire community. There could be some potential legal problems with these systems in the US. A future workshop could address these issues, including public rights of way. NVRC has funding to explore the legal issues; the call for proposals finishes at the end of January and work will hopefully be completed by June.

There are over 100 downtown district energy systems in the US. They are private, public, municipal and cooperative. Water can be sold, usually requiring a franchise, but electricity can only be sold by a utility. There are 3,500 district energy systems in the US. Since 1990 there have been more than 40 completely new, greenfield, systems built in downtowns. These systems are largely for district cooling. St. Paul, Minnesota is a very efficient system. Most of these are private or investor-owned.

Ms. Locascio noted that a Dupont Circle energy-related project had signs that advertised the project cost \$3 million. It covered three blocks. If this is the estimated cost of such systems this is far too expensive to expand regionally. The cost of the systems is largely in the construction, not the piping. Coordination with other improvements is key to getting the most efficient costs for new systems within existing infrastructures.

## **5. Progress Report on 2012 Goals: Data Collection (Maia Davis, COG DEP)**

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The goal of DEP's data collection efforts was to consolidate and simplify the process for local governments. This year all survey requests have been incorporated into one document. The surveys were sent out on January 7<sup>th</sup> and will be returned by February 4<sup>th</sup>. The survey asks questions on items in the 2012 Action Plan, alternative fuels, and green building.

Results from the survey will be used to create the Annual Progress Report on the Climate Action Plan, as well as inform other committee work and reports for COG. This year school systems are also being surveyed to collect information about their green building policies and alternatives fuels use.

Governments with commitments for the air quality SIP will receive additional surveys in their survey package to fulfill this commitment.

Mr. Agazi noted that Fairfax County appreciates this format; it is much easier to use.

## **6. Federal Policy/Legislative Update (Jonathan Wisbey, Climate Communities)**

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In the State of the Union President Obama mentioned clean energy several times. There is large bipartisan support for clean energy. Many of Climate Communities programs this year will be defensive and advocating for programs to be funded. Showcasing success in these programs and fixing PACE (Property Assessed Clean Energy) financing are some areas where Climate Communities is looking to be proactive. These programs include: the Department of Energy's Energy Efficiency and Conservation Block Grants (EECBG) and Clean Cities Programs, Environmental Protection Agency's

Climate Showcase Communities, Housing and Urban Development's Sustainable Communities Initiative, Department of Transportation's TIGER Grants program, and Economic Development Administration's Global Climate Change Mitigation Incentive Fund. For the upcoming budgets, Climate Communities is suggesting to direct funds that had gone to earmarked program into a general competitive funding program, similar to EECBG, which would allow programs to continue to be effective at even a lesser amount of funding than through earmarked projects. Under program guidelines suggested, COG would be eligible to receive funding. Representative Freylinghusen (R-NJ) is the target for support in the House on this effort.

A CEEPC subcommittee on legislation will meet to discuss what CEEPC can do, and who should attend the March local governments Climate Communities meeting. The committee already exists, but Mr. Snyder will be an additional member. COG is a Climate Communities member. The COG Board may also be interested in hearing CEEPC's interests in legislative priorities. Mr. Snyder suggested that COG have a rep at the Climate Communities local government summit March 4-5.

## 7. Projects and Subcommittee Updates

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- a) **WE CAN update:** The ad hoc work group met on a call January 18 to discuss how results would be reported, and how prizes would be determined. The program is still looking for prize sponsors. The group also discussed the possibility of a regional expansion.
- b) **Sustainable Purchasing Workshop:** COG held a sustainable purchasing workshop on December 3 with Alicia Culver of the Responsible Purchasing Network. The workshop was well-attended by purchasing officers and other government staff. Alicia returned to speak with COG's Chief Purchasing Officers' Committee to discuss a COG membership in the network.
- c) **Green Jobs Conference:** There will be a Green Jobs Conference held in DC February 8 to the 10<sup>th</sup> with a broad range of topics covered. Leah will be attending for COG staff. She will bring the COG Board's taskforce report on creating and retaining jobs in the region. Registration is open through January 31<sup>st</sup>.
- d) **NOAA Workshop: Adapting to Coastal Risks:** COG is hosting NOAA for a workshop on adapting to coastal risks on March 3<sup>rd</sup>. Local Government staff from various sectors represented by COG committees will be invited to learn a basic process to address risks posed by climate change in this region. Staff will use this training as the basis for the EPA Smart Growth Implementation Project creating a regional guide to adaptation planning.
- e) **Electric Vehicle Workshop:** COG will be hosting an electric vehicle workshop on March 14<sup>th</sup>. The half day workshop will look at business models for deployment in the region, the role of utilities, and a national perspective.
- f) **Integrated Energy Workshop:** Following the CEEPC meeting, at 12:30pm today, COG is hosting an integrated community energy workshop, focusing on how district energy, combined heat and power, and microgrids can be adopted in the metropolitan Washington region. The Chesapeake Crescent Initiative is hosting a working group meeting at COG on March 9<sup>th</sup> to introduce a report on community energy in the region.

## 8. Adjourn

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The next meeting is scheduled for March 23, 2011 from 9:45am to noon. There being no other business, the meeting was adjourned at 12:05pm.