Built Environment and Energy Advisory Committee Meeting
Washington Metropolitan Council of Governments
777 North Capitol Street, NE, Washington, DC

July 18, 2013 Draft Meeting Highlights

Attendance:
Joan Kelsch, Arlington County, Co-Chair
Olayinka Kolawole, DDOE, Co-Chair
Charles Satterfield, DDOE
Sosina Tadesse, DDOE
Bill Topper, JFHQ-NCR
Kambiz Agazi, Fairfax County
John Andreoni, IMT
Luisa Robles, Greenbelt
Rich Dooley, Arlington County
Dave Ager, Townscape
Tiffany Lockhart, WMATA
Daniel Lee, WMATA
Tim Stevens, Falls Church
Harry Misuriello, ACEEE
Emil King, DDOE
Tyler Espinoza, Optony
Jeff Bond, Prince George's County
Khoa Tran, City of Alexandria
Steve Walz, NVRC

Phone:
Larisa Dobrianski, General Microgrid
Lisa Orr, Frederick County
Najib Salehi, Loudoun County
Eric Coffman, Montgomery County
Said Said, Prince William County
Marie Genevieve, Loudoun County

Staff:
Julia Allman
Leah Boggs
Amanda Campbell
Jeff King
Joan Rohlfs

President's Climate Action Plan, Julia Allman, COG DEP

- On June 25, President Obama released a national Climate Action Plan to reduce greenhouse gas emissions and improve climate resiliency without the need for Congressional action.
- The centerpiece of the plan is a set of new regulations on greenhouse gas emissions from new and existing power plants. Regulations on new power plants are now being finalized, and regulations for existing plants are being developed. Additionally, to reduce emissions the President calls for gains in energy efficiency in federal operations and increases in the use of public lands for renewable energy generation.
- The Plan also expands the Better Buildings Challenge to include multifamily buildings. This will open opportunities for greater regional participation in the program, as currently on commercial and government buildings are eligible to participate. CEEPC's Climate Action Plan calls for 50% of member jurisdictions to participate in the BBC, with the intention that their involvement will help lead locally-based businesses to commit as well. The expanded program will also support the adoption of state and local policies to reduce energy waste.
- The Plan also supports ongoing local and regional climate adaptation efforts by reducing federal regulatory barriers to local resiliency investments, updating flood risk reduction standards, and promoting sustainable and resilient hospitals through a public private partnership.

DC Community Energy Plan, Olayinka Kolawole, District Department of the Environment

- The District of Columbia is now in the process of updating its Comprehensive Energy Plan. The initiative is called EnergySmart DC.
- The CEP is a component of the larger Sustainable DC effort, and will be a component of the City's Comprehensive Plan. The CEP will include a broad study of energy in the District for the next 5 years and will put forth goals to reduce energy consumption, increase local clean power generation, improve energy reliability, and create more green jobs for District residents. The effort is being led by DDOE in close collaboration with many other departments and agencies, including the Office of the Mayor.
- The plan development process includes input from multiple sectors of the community, including businesses, residents, and low-income service providers. The public can track progress and participate in the process by visiting www.energysmartdc.com.
- The plan's recommendations will be guided by two studies—an Energy Profile study and a Market Potential study. Both are in the draft stage.
- DDOE is planning to launch EnergySmart DC in December.
- The structure of the plan will include a vision, strategies, key initiatives and actions needed to achieve energy goals. It is intended to be a "living document" that will evolve over time.
- Some key themes that will be included in the plan are expanding renewable energy through the RPS with a solar carveout; improving transportation options, including better walkability, public transit, biking, and alternative fuels; creating and strengthening District government plans to improve energy use in public buildings; studying federal government impacts; exploring financing initiatives to implement the plan; conducting education and outreach; and tracking and reporting progress on the plan's indicators.

DISCUSSION:

- How is the DC SEU tied into this effort?

- DC SEU is a private entity contracted with the District that has its own performance goals. These will be integrated into the plan. For example, 30% of the SEU's budget has to go to low-income projects. This is a key part of how the District will achieve its CEP goals in this area.

- How is the District funding the plan, and what you hope to be the outcome of the plan?
  - Most parts of plan are funded through the Sustainable Energy Trust Fund – collected from energy customers in District. Other funding sources include a state energy program grant.

Arlington Community Energy Plan, Rich Dooley and Chris Somers, Arlington County

- In June, the Arlington County Board unanimously adopted the Community Energy Plan as an element of the County's Comprehensive plan. Its overarching goal is to reduce per capita energy use by 75% by 2050.
- This initiative started in 2010, as the Board addressed the importance of energy in preserving day-to-day life, communications, and public safety. It was seen as an opportunity to highlight the work of the AIRE program (Arlington Initiative to Re-think Energy) and emphasize that energy can be used more wisely and less wastefully.
- The CEP was formulated with three "lenses" in mind: Competitiveness, Security, and the Environment. A team of County staff, stakeholders, and consultants developed this plan over the past three years, and are in the process of developing metrics to measure progress toward goals.
- The initiative began in January 2010 with town-hall meetings and the formation of a Task Force. In 2011, the Task Force presented a report and draft plan to the board, and the County Manager was directed by the Board to create a final plan. The Task Force engaged with diverse communities to ensure that input from across the county was included. There was a robust engagement plan to reach underserved groups and those that didn't regularly attend County meetings. The key strategy was to "go where they are," attending other community groups and places that didn't necessarily deal with energy issues.
- The plan includes 6 main goals:
  1. Increase building energy efficiency in the residential and non-residential sectors and reduce the carbon intensity of fuels. Buildings are seen as the most important piece of the plan, as industry is not a large part of Arlington's community, and there are already good transportation options available.
  2. Increase the local energy supply and improve distribution efficiency. This will primarily be achieved through CHP and District Energy. Infrastructure planning efforts for these systems will focus on dense urban corridors.
  3. Increase locally generated renewable energy. The goal is to reach 160 MW of rooftop solar, and pursue other renewable technologies. This will not have the biggest GHG impact, but will produce a significant benefit through peak-shaving.
  4. Improve transportation infrastructure and operations. This goal is focused on refinements to the existing system, which already includes public transit and walkability options. The goal is to increase alternatives to single vehicle travel, increase vehicle efficiency and reduce fuel GHG intensity.

5. Integrate CEP goals into all County government activities, by improving the County vehicle fleet, improving building efficiency, using green power purchasing, pursuing LED street lighting and traffic signals.
6. Advocate and support personal action. Beyond making changes to the physical energy system, the plan strives to empower individual residents and businesses to reduce their energy use. One example is Green Games, a business energy challenge.

- The Implementation Framework is a companion document to the CEP. It provides a menu of approaches that the County could take to implement the goals. It includes working with the Economic Development department to develop financial tools, and raising energy literacy among County staff.

DISCUSSION:

- How did you assess technical potential for the solutions included in the plan?
  - We worked with consultants to conduct feasibility studies. For solar, we looked at the rooftops in commercial corridors. For District Energy, we looked at integrated energy master plans, which include neighborhood-level assessments and economic case studies. One has been completed for Crystal City, and we are exploring additional studies.
- Where are you in the process? Has the County conducted a CEP before?
  - This is the first time an energy plan has been included explicitly in the comprehensive plan, but in the past we have included transportation, land use, etc. , which are closely related concepts.
- How can we follow progress on the plan?
  - Visit www.Freshaireva.us or contact Arlington County staff.
- Can you give more information about Green Games?
  - Businesses compete for a year to reach energy goals. The County offers information and trainings, but no rewards or incentives. A third of the county's office space has participated.
- How do you address federal buildings in the plan?
  - The plan does not include the Pentagon or National Airport, but we do look to collaborate with them and other federal spaces.

Building Codes: International Code Council Public Comment Hearing, Leah Boggs, COG DEP, John Andreoni, Institute for Market Transformation, and Harry Misuriello, ACEEE

Leah Boggs

- The 2015 Building Code Development Cycle is now in progress. The International Code Council's "I" codes are developed over a 3-year cycle. The BEEAC will focus on the International Energy Conservation Codes (IECC), the energy portion of the "I" codes.
- COG committees were active in the previous 2012 code cycle. We secured grant funding for jurisdictions to attend the final action hearings, and local representatives participated in approving the "30% solution" that greatly improved the efficiency of building model codes.
- In October 2013, the ICC's Public Comment Hearing will be held in Atlantic City, and COG members have the opportunity to participate. A number of salient issues will be addressed at the hearing, and we hope that members will consider attending.

- During the last hearing, we secured $96,000 for a 63-person cohort to attend. We may be able to secure funding again this year.

John Andreoni

- Building codes are an important way to address energy efficiency, using a tool that is already at local governments' disposal. IMT has found that every $1 spent on energy code compliance results in $6 of energy savings. Through participation in the hearings, we want to prevent backsliding to ensure that the codes stay as efficient as they are now, and continue to raise the bar.
- IMT's objectives for the 2013 Hearings are:
    - No backsliding from the 2012 Code
    - Win modest improvements
    - Maximize local/state Governmental Member Voting Representative (GMVR) attendance in Atlantic City
    - Link public policy with GMVR voting (i.e., the USCM resolution)
    - Mount an educational campaign about the benefits of building codes beyond just energy, such as mold, damage, and safety
- The Model Code Development Process includes the following steps:
    - Code change proposals submitted
    - Code development committee hearing held
    - Public comments collected
    - Public comment hearing held (October 2013) – Where proposed changes to the model code are accepted or rejected. Final votes determine 2015 IECC; only governmental members can vote.
    - New model code published

- The Public Comment Hearing will be held October 2-10, 2013 in Atlantic City, NJ. It will include 3-5 days of voting.

Harry Misuriello, ACEEE

- Voting member eligibility:
    - Each local government may send 4-12 representatives to the Hearings, based on the jurisdiction's population.
    - Government employees and public officials in the areas of public health/safety, sustainability, energy, or planning/zoning/building are eligible to participate as GMVRs.
    - The local government must be in good standing with ICC membership.
    - Representatives must be nominated through the ICC process by August 30.
- The 2015 IECC faces the threat of rollback on important efficiency standards set in the 2012 IECC. There are a number of seemingly innocuous proposals that could add up to potentially huge losses in energy efficiency, but these can be defeated by a simple majority vote. We want to prevent backsliding on the 2012 IECC that will hurt homebuyers and lock in building inefficiencies for 3 to 4 generations.
- There are two proposals to advance efficiency being considered at the Hearings:
    - The "Flexpoint" Proposal offers a menu of more efficient options with assigned point values. It requires buildings to achieve a specified number of efficiency points above the

2012 code. It addresses the home builders concerns over the economics of efficient building by allowing flexibility.
    - The "HERS-like" Proposal sets a Home Energy Rating Score based on climate zone that must be achieved.
- How to participate:
    - Review government member voting roster – review officials' votes and send members who have voted in line with local policy
    - Submit voting members – you can initially submit more members than your jurisdiction will eventually send
    - Apply for travel support through COG or ICLEI
    - Attend code proposal trainings and webinars
    - Ask questions

DISCUSSION:

- Review the fact sheet, and contact Leah (lboggs@mwcog.org) with any questions. Note that scholarship funding is on a reimbursement basis.
- Joan Kelsch: Arlington staff attended the 2010 hearings, and it was a valuable experience. It is easy to apply.

Regional GHG Emissions Methodology, Steve Walz, NVRC

- NVRC is developing a protocol that all jurisdictions can use to conduct GHG inventories. It is being developed to encourage consistency across the national capital region. I am soliciting feedback on the protocol today, have another meeting in Arlington to discuss the protocol, then making modifications before circulating for final comment.
- The methodology is based on the 2012 ICLEI community protocol. It differs from other inventory approaches in that it is based on *activities* taking place within a jurisdiction rather than just *sources* of emissions located within a jurisdiction. It seeks to identify and control drivers of emissions, so any resulting GHG reduction plan should be focused on what can be controlled at the local level. The methodology modifies the traditional Scope 1, 2, and 3 approach. It identifies direct and upstream emissions, with options to include indirect emissions.

- The methodology includes six broad areas:
    1. Electricity use to support activities taking place in the community
        - Data Sources: COG consumption data from utility providers
        - Accounts for upstream transmission and distribution losses
        - Accounts for upstream generation efficiencies
    2. Energy use in stationary combustion equipment
        - Data sources: natural gas utility providers; VA liquid and solid fuel consumption data from EIA
    3. On-road transportation
        - COG will calculate using EPA MOVES model; consistent with methodology used for air quality emission modeling

4. Non-road transportation
    - Does not include upstream impacts, just emissions from fuel use
    - Includes emissions from rail, recreational marine, off-road vehicles, and air travel
5. Solid Waste
    - Based on tonnage of waste generated in each locality. This information is available through a regional waste management report that includes VA, DC, and MD.
    - Emissions from recycling are included in electricity and fuel consumption data; composting is not included in the ICLEI protocol.
6. Water and Wastewater
    - Calculate based on volumes generated in each locality, and treatment technologies. Data is collected from operators. Data on emissions from water conveyance may be included in electricity emissions.
7. Agricultural operations
    - Only applies to Loudoun and Prince William Counties in VA.
    - ICLEI only looks at livestock, but NVRC will calculate based on USDA Census of Agriculture data

- Exclusions:
    - "De minimus" exclusions are sources that account for up to 5% of total emissions.
    - HFC and PFC emissions from refrigerant leakage are very small. For example, they are 0.0015% of Arlington GHG emissions.
    - Upstream impacts of materials used by the community (such as concrete, food, carpets, etc) are counted as activity in localities where they are produced.

- Schedule:
    - Establish methodology and scope in July.
    - Gather data, perform calculations, and draft report in July/August
    - Perform local review/comments in September.
    - Provide final report in October.

EnergySage Marketplace, Tyler Espinoza, Optony

- The EnergySage marketplace is essentially an "Expedia" or "Priceline" model for buying residential solar. It allows homeowners and businesses to compare apples-to-apples quotes across multiple solar vendors.
- EnergySage was founded in 2009 as an independent clean energy advisory firm. They received funding through DOE's SunShot grant program for simplifying the process for consumers to buy solar. It is a sister project to Optony's Solar Roadmap. It is under the same umbrella as solar outreach partnership that ICLEI and others are heading up.
- The objectives of the EnergySage Marketplace is to remove barriers by simplifying the buying and selling process of solar. It also promotes market stability through transparency and competition. It can be used to supplement tools provided through municipal solar programs, such as Solarize Frederick.
- To use EnergySage Marketplace, customers list their property and provide basic specs. They are connected with qualified installers, then are able to compare and analyze quotes. The platform includes installer ratings and reviews to help customers decide.
- For municipalities, the program is easy to set up, has low costs, and has no need for RFPs or consultants. It can help reach local clean energy and climate targets.

- If COG members are interested in advertising about this opportunity, connect with Tyler at tyler.espinoza@optony.com

DISCUSSION:

- Are vendors in the DC region in the database?
    - The program is up and running, but it is not yet populated with DC installers and customers – we are asking local jurisdictions to help connect us. The website has a strong presence in the Northeast, and is based in Massachusetts. It launched February 2013, so it is still building the database. The goal is to expand nationally. Optony has teamed with EnergySage to offer the tool to the residential market, and we are helping manage it.

Roundtable

- Lisa Orr, Frederick County – The Solarize program is going really well. 42 contracts have been signed after 2.5 months. Leafkey.com is a list of installers in region that Frederick helped populate, we can share this with EnergySage.
- Eric Coffman, Montgomery County – We're getting close to the aggregate solar procurement.
- Luisa Robles, Greenbelt – We've received an MEA grant to reduce energy consumption, increase local renewables, or change transportation. We have selected to increase renewables and are interested in partnering with Optony to promote solar and fulfill the grant requirements. We're also taking advantage of Pepco rebates to switch parking lot lights to LED. Additionally, the first draft of sustainability master plan framework has been completed.
- Daniel Lee, WMATA – We are looking into an energy storage program, which will generate energy when the train brakes, then store at West Falls Church station.
- Jeff King, COG – There may be interest in COG supporting smaller jurisdictions on GHG inventories. We can talk after meeting about COG performing a parallel inventory for smaller jurisdictions.
- Leah Boggs, COG – The next Electric Vehicle workgroup meeting will be held July 31, to focus on group purchasing and mass installation of charging stations. There has been some interest in cooperative purchase, and the meeting can help facilitate that.