

## Built Environment and Energy Advisory Committee (BEEAC)

Meeting Summary: April 16, 2015

### Members and Alternates in Attendance:

Michelle Vigen, Montgomery County (Chair)  
Bill Eger, City of Alexandria (Co-Chair)  
Jeannine Altavilla, Arlington County  
Rich Dooley, Arlington County  
Joan Kelsh, Arlington County  
George Nichols, DC SEU  
Kenley Farmer, DDOE  
Garick Augustus, Fairfax County  
Ellen Eggerton, Fairfax County  
William Marsh, Fairfax County  
Tim Stevens, City of Falls Church (by phone)  
Louisa Robles, City of Greenbelt (by phone)  
Jessica Wessell, Loudoun County (by phone)  
Said Said, Prince William County (by phone)  
Dave Good, Independent Contractor  
Earnest Jennels, Eden Team (Independent Contractor)  
Abby Johnson, Abacus Property Solutions  
George Caraghiaur, PACENow (by phone)  
Bracken Hendricks, Urban Ingenuity  
Jackie Weidman, Urban Ingenuity

### COG Staff in Attendance:

Leah Boggs, COG DEP  
Amanda Campbell, COG DEP  
Maia Davis, COG DEP  
Isabel Ricker, COG DEP  
Steve Walz, COG DEP

### 1. Call to Order and Approval of March 19 Meeting Summary

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A motion was made to approve the minutes, and seconded. The minutes were approved unanimously.

### 2. Jurisdiction Roundtable, Discussion and Updates

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**Arlington:** Recently completed an analysis of energy use by square foot for various building types, including residential and commercial. This was done by taking the total energy use from utility data and disaggregating by square footage. Contact [Jeannine Altavilla](#) for more information.

**Montgomery County:** Commercial PACE legislation recently passed the Council unanimously. They are now in process of setting up the program.

### 3. PACE Financing Progress in the Region

#### **National PACE Update – George Caraghiaur, PACENow**

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PACENow is a nonprofit, foundation-funded organization that provides information on PACE financing legislation, programs and markets for policy makers, financiers, investors, contractors, program administrators, and others.

George gave a brief overview of how a PACE deal works and PACE programs around the country. PACE can be used to finance many different building improvements or technologies, including: water efficiency, heating and cooling, stormwater management, pumps and motors, fuel cells, etc. if allowed in the enabling legislation.

PACE financing is a decentralized market with several different models and a mix of providers. Models in the US include (from least centralized to most):

- PACE Platform, municipality as the “loan servicer” – e.g. Ohio
- Sole Municipality Programs
- Multi-county consortium – e.g. California, Florida, Michigan, New York
- Statewide – e.g. Connecticut: one program and administrator for whole state

Thirty states have passed PACE legislation, covering about 80% of US population. Most of the legislation is in good shape, but in some areas there are problematic clauses or provisions that PACENow is working to improve. Several states have programs in place and there are over 305 funded projects complete across the nation. The PACE project pipeline is around \$300 million, and is expected to increase dramatically in coming months.

Many still have questions about Residential PACE financing after the FHFA expressed concerns several years ago. Four states now have residential PACE programs, and these have done over \$500 million in home PACE loans. These have been securitized, which indicates that the market is getting much more comfortable with PACE.

Advantages of PACE include:

- Because it is on the tax bill, it is a very secure form of financing. The payback period can be up to 20 years, which means that projects can be financed through savings, e.g. a project with 12 year payback would have positive cash flow if the deal is done over 20 years.
- Makes it easier for property owner because the obligation to repay travels with the property.
- Under most lease terms, PACE enables removal of split incentive between tenant and landlord. Because repayment is through tax bill, the landlord pays for upgrades that improve their property value, but can allocate part of this to tenants who see utility bill savings.

**Discussion:**

Montgomery County is interested in promoting or using PACE as an economic development opportunity, and asked whether there is data on PACE increasing property values. As long as a project increases the net operating income (NOI), it will increase the resale value of the property. Purchase prices and appraisals are based on NOI, so any project that increases NOI will increase property value. PACENow is working to collect this type of information across the nation.

Another question was asked about energy efficiency being valued in the real estate market. When estimating operating cost, some appraisers and realtors use a fixed value of utilities per square foot. The financial community has low understanding of energy efficiency, but they do understand accounting and NOI, so if that is improved the market will value it accordingly. Parts of the industry are improving: the Appraisal Institute is starting to value energy efficiency upfront and Fannie Mae has high performance building program in NY, taking energy efficiency into account on a discounted basis.

Recently a PACE deal was done in CA for a new building based on modeling prospective savings, which demonstrates a growing appreciation for the benefits of energy efficiency improvements. DC PACE has done a new construction pro forma built on price per square foot, modeling baseline energy use. Adding solar and better efficiency demonstrated significant savings, more free cash flow and reduced operating costs, allowing them to get investors comfortable with the project. Initially, regional banks were reluctant to give lender, but as the market sees appraisal prices going up for those properties, banks are now actively seeking out PACE projects.

#### **DC PACE Program Update – Kenley Farmer, DDOE & Bracken Hendricks, Urban Ingenuity**

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The new mayor and new DDOE director are very supportive of the Sustainable DC goals. These include aggressive targets of reducing energy use 50% and increasing renewable energy use 50%. PACE is a key tool for achieving these goals, and currently DC's only energy financing program for commercial sector.

PACE has long history in DC, going back to legislation passed in 2010. Long lead times are pretty common for the first programs, but this is getting shorter as financiers get more comfortable with it. DC's PACE legislation gave the City \$250 million of bonding authority for the program. This sets a cap on the program, but it is not a loss reserve and there is no obligation for DC to repay the note whatsoever - that is entirely the property owner's obligation.

PACE financing works because it is a municipal bond with low repayment risk, a high credit rating, etc. but DC's program was designed to be privately administered and to operate as a market-based program so that it didn't feel like part of bureaucracy. DC oversees the program, approves the underwriting, initiates the PACE note, and is responsible for collection. Urban Ingenuity is the administrator, responsible for marketing and outreach, working with investors, building owners, contractors, manages data collection and measurement and verification.

They are working with the benchmarking program to direct those with underperforming buildings to PACE to make the needed improvements. It also works for non-profits, by establishing a payment in lieu of taxes agreement, which works exactly like tax bill but doesn't affect nonprofit status. Market demand is strong, but awareness and comfort with the tool takes time to build.

PACE tends to appeal to two users:

1. Sophisticated property managers that don't want to spend their own money on projects. PACE uses third party funds and improves NOI.
2. Those with good credit but little access to capital such as churches and affordable housing owners. They find it tough to borrow and the improved operating income is very appealing.

Lessons learned from the DC PACE program:

- Third party administrator model creates motivation for stronger project pipeline, and is scalable with no cost to local government. Urban Ingenuity is paid out of transactions, with some of the original program administration costs paid for by an ARRA grant.
- Local government commitment is very valuable.
- Contractors are the conduit to most projects. It is key to make them comfortable selling PACE.
- Owners need a product, technical assistance and a clear path to define the project.
- Lender consent works and is not a barrier once banks are familiar with PACE.
- Regional markets are stronger.

Towards a regional program

- Encourage common program features – to enable securitizable financial debt in DC market.
- Allow program guidance to adopt –standardized programs are good, but rigid requirements reduce the number of projects possible. Specific requirements should be in regulations rather than legislation.
- Local resource commitments help – some staff will need to work on this. Local government can play helpful role in marketing as well.
- Program administration has many features – be strategic about what should be done in-house and what should be outsourced.
- Focus on financial efficiency – pricing drives customer decisions; standard requirements and processes will help reduce costs.

### **Virginia PACE Update – Abby Johnson, Abacus Property Solutions**

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Previous PACE enabling legislation did not allow PACE lien to have priority on the property. However, in order for PACE to work, the lien needs to come before the first mortgage, so a coalition came together to fix this and a few other issues, including:

- The voluntary special assessment is now treated like property tax
- Lender subordination - you no longer need consent of all mortgage holders, just the first

The Virginia Bankers Association was the major group that had concerns, but they worked closely with them to come to a solution everyone agreed on. The Governor signed the bill into law at the end of March. Residential PACE is not allowed in this legislation. They hope to do this in the coming years as comfort with PACE as an instrument grows.

DMME is applying for a grant to provide seed money to get programs going around the state. DMME will be convening a group to establish state guidelines or create state standards, sample documents, etc. by the end of the calendar year. PACE programs are authorized to begin by July 1, and the state will find out about the grant in July.

A regional workgroup at COG group can help shape some of the forthcoming VA guidelines by acting early. Richmond, Lynchburg, Charlottesville, Roanoke, Arlington County, Fairfax City and County, and others have expressed interest in establishing C-PACE programs. The state still needs to figure out what program model to use, but should also be flexible on implementation and program requirements.

#### **4. Establishing a Regional PACE Workgroup**

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CEEPC has asked BEEAC to establish a regional PACE financing workgroup. There has been a huge increase in interest in PACE from local governments in last six months. There is also interest in residential programs, but hesitancy remains, and it is not legal yet in Virginia, so getting commercial programs going is the current priority.

COG staff have drafted a framework for the group's mission, functions, members, etc. for BEEAC feedback. Please send any comments or suggestions on the framework to Isabel Ricker at [iricker@mwcog.org](mailto:iricker@mwcog.org) and let us know if you would like to participate or recommend others to invite.

#### **5. SunShot Prize: Race to 7-Day Solar – [Dr. Ammar Qusaibaty](#), US DOE**

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DOE's new Solar Grand Challenge aims to get solar cost competitive with other sources of energy (e.g. reach grid-parity) by 2020. This is about a 75% reduction in solar cost to \$.06/kWh. In the past two years, the US has deployed 20 MW of solar – equivalent to about 12 nuclear power plants or 4 million households worth of electricity. Solar now employs 174,000 people across the country.

We are 68% toward the goal, but soft costs still account for 64% of solar installation costs. The value of this delay in 2015 is \$4 million per day. The SunShot Prize project is meant to empower leaders, specifically local governments, to work with utilities and installers to solve this problem, because it cannot be solved by any one group alone.

The goal of the "Race to 7 Day Solar" is to decrease the total time from pre-contract to post-integration (including permitting, installation, inspection, and interconnection) to:

- 7 days for small systems (2kW -100kW).
- 7 weeks for larger systems (100kW to 1MW).

- 1<sup>st</sup> place prize is \$3 million, 2<sup>nd</sup> place is \$1 million.
- Starting September 2015, up to 20 teams will receive \$100,000 in seed funding to help set up program and hire people to coordinate the effort.
- DOE is looking for innovation at scale: entrants for the small systems prize must do 10 MW in 18 months, and entrants for the large systems prize must do 15 MW in 18 months.
- Groups get points for speed, number of systems, replicability and geographic diversity.
- Applications due July 22, initial registration is due May 24.
- Program runs September 22, 2015 – March 17, 2017. Winners are announced in 2017.

## 6. COG Program Updates

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- Climate Action Champions
  - COG submitted two TA applications, one for efficient street lighting and improved utility tariffs, and another for a grid vulnerability assessment and DERCAM modeling.
  - Webinar on climate resilience toolkit this afternoon
- SRII and Solarize programs
  - Solar co-ops are taking off across the region. The Bowie and Arlington Co-ops recently selected installers, and the Rockville co-op, open to all Montgomery County residents, has its first official meeting this weekend (April 18). Solarize NoVA launched earlier this month in Falls Church, Herndon, Vienna and Loudoun County.
  - COG is also working with Arlington and potentially DC to organize a solar workshop for large commercial property owners in the region to help encourage PV on large roofs and across building portfolios.
- MSWG Update
  - COG is accepting comments on all strategy lists until April 22.
  - The Energy and Built Environment subgroup met on Monday to review the strategy list, and there will be a joint meeting of land use transportation subgroups April 17.
  - The full group meets on May 8, after which the consultant will do the initial analysis, and bring the draft results back to the full group July 16.
- Climate and Energy Awards Program
  - The 2015 awards program has launched – see website for more information and to apply: <http://www.mwcog.org/environment/climateawards/>

## 7. Upcoming Meeting Dates, Adjournment

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- BEEAC planning call – May 7
- Full MSWG meeting – May 8
- CEEPC meeting – May 27
- BEEAC-MSWG Energy & Environment Subgroup joint meeting – July 16