

Environment and Energy Conservation Commission
Draft

Summary of November 16, 2017 Meeting
2100 Clarendon Blvd, Azalea Conference Room

Members Present: Claire O'Dea, Irwin Kim, John Bloom, Gabriel Thoumi, Michael Mesmer, John Seymour, Sarah Meservey, James O'Connell, Kimberly Fedinatz

Members Absent: Christine Ng, Jessica Skerritt, Virginia Castro

Guests: Maren Taylor, Barbara Swart, Dean Amel, Alice Redhead

Staff Present: Adam Segel-Moss (DES), Jessica Abralind (DES), Phil Bresee (DES), Erik Grabowsky (DES)

1. Public comment

None

2. Green Building Update (Jessica Abralind)

Jessica Abralind presented an update on the County's green building incentive density program.

The purpose of Arlington County's green building density incentive policy is to encourage private developers of large office, high-rise residential and mixed-use projects to design, construct, and operate environmentally preferable buildings. The bonus density program applies to special exception site plan requests for bonus density and height. The program uses the U.S. Green Building Council's (USGBC) LEED green building rating system as a standard for measuring the comprehensive green approach of each project.

Over the past 15+ years this program has significantly transformed the construction community in Arlington. LEED has been accepted broadly in the building design and construction community. The program is being revised to continue to push the market further and align the program with adopted community energy plan goals.

Jessica noted that staff have been working on data analysis to review program performance and share that info back with stakeholders. Ms. Abralind noted that over 20 million square feet of new buildings have been constructed in Arlington since 2006, including LEED certified and non-LEED certified buildings. She also noted that population is also increasing with over 20,000 new residents since 2006.

The participating incentive density projects have reduced energy use in new development, equivalent to taking 1,600 homes off the electric grid in Arlington. Projects are also saving approximately 40,000,000 gallons of water annually due to the high performance water fixtures installed.

Jessica also detailed waste reduction, recycling, urban heat island reduction, green job creation, and more that have been knock on effects from the program. She noted that a final brochure will be ready for release late 2017 or early 2018.

John Seymour asked what the cost of LEED certification amounted to for projects. Mike M. and Jessica both noted it was approximately 2% above the final building cost, but notable ROI occurs from this investment.

John S. asked if the program can allow for projects to install solar onsite. Jessica noted that it is a possible compliance path with some caveats.

Jessica also detailed the energy reporting that is required to ensure that projects perform as designed. She noted the program's focus on metric as well as performance.

Jessica noted that an impending announcement will occur to note Arlington as the first LEED Platinum certified city.

3. Solid Waste Update (Phil Bresee and Erik Grabowsky)

Phil Bresee and Erik Grabowsky provided an update to the Commission regarding solid waste.

Facts noted included:

14.3 million SWB operating budget

2% increase over FY 2017

Funding sources:

Fees=\$11.1 million

Taxes = \$3.2 million

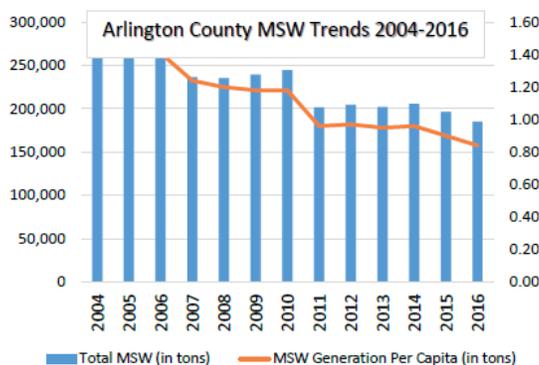
2016: 185,000 tons of waste collected

2006: 250 tons of waste collected

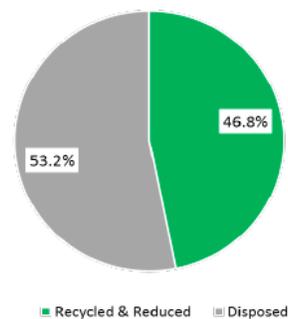
2004: 275,000 tons of waste collected

1993: First commercial recycling contract

Phil noted that the total solid waste and solid waste per capita are trending downward, and have for years due to continued focus on programs, services, education, and compliance.



Arlington County MSW Management in 2016



Municipal Solid Waste (MSW) = EPA term for regular household and commercial solid waste

- 185,000 tons of MSW generated in 2016
- Multi-family & commercial sector makes up 2/3 of overall MSW generation
- Recycling rates by sector:
 - Residential = ~55%
 - Multifamily and commercial = ~40%

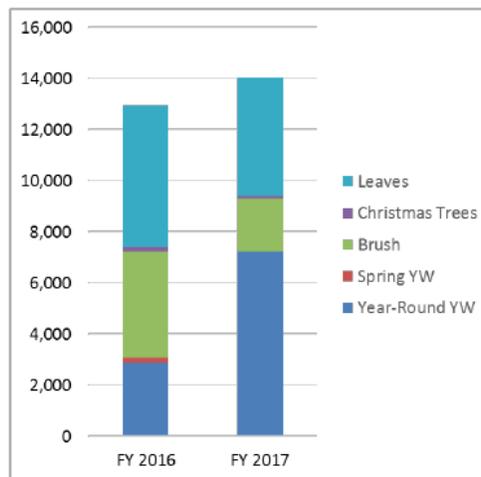
Phil noted that Arlington residents are creating less garbage. He noted a 6.4% year-over-year decrease in overall MSW general and a 14% decrease in disposal FY 2017 vs. FY 2016

Mr. Bresee also noted that Arlington is among the best in the U.S. regarding per-household yields of recyclables. Arlington households dispose of 830 lbs of recyclables per year.

Do to the increase in curbside composting, the County saw a sharp increase in yard waste collection in FY '17 as compared to FY '16. 1,090 tons or 8.4% total year-over-year increase in organics.

Yard trimmings 2016 = 25%
 Yard trimmings 2017 = < 3%

	FY 2016	FY 2017
Year-round Yard Waste	2,883	7,242
Spring Yard Waste	215	n/a
Brush	4,124	2,075
Christmas Trees	190	87
Leaves (total)	5,545	4,644
TOTAL	12,957	14,047



- 1,090 tons or 8.4% total year-over-year increase in organics
- Includes seasonal tonnage shifts to green carts

Phil noted that garbage is changing.

- Less paper
- More cardboard
- More plastics

SWB performs waste audits to observe and analyze materials trends and resident participation. This also allows the SWB to determine the effectiveness of services and make informed program and policy decisions.

Phil noted that the SWB continues to explore broader composting that would include food scraps. He noted the importance of getting wet items out of the garbage. Dry garbage is needed in order for the fuel energy to be higher and more effective when it arrives at the waste-to-energy Covanta plant.

The County is still exploring a zero waste goal and aligning programs around that goal. Actions were delayed due to project funding questions. Recently action was OK'd to move forward with the zero waste planning using FY 2018 funds. An RFP is being drafted. The County needs to evaluate level of consultant support vs. staff effort.

John S. asked why school recycling rates are so low. Phil noted that they are aware of this issue and are actively working with staff. He also noted a lack of ownership, differing levels of commitment in each school, and a transient student and teacher population; challenges are being addressed.

The Commission discussed the direction of solid waste in Arlington. They agreed that Zero Waste was a goal worthy of reaching for. Mike M. volunteered to draft and circulate a letter for review/approval at the December E2C2 meeting.

4. Ready for 100 Presentation

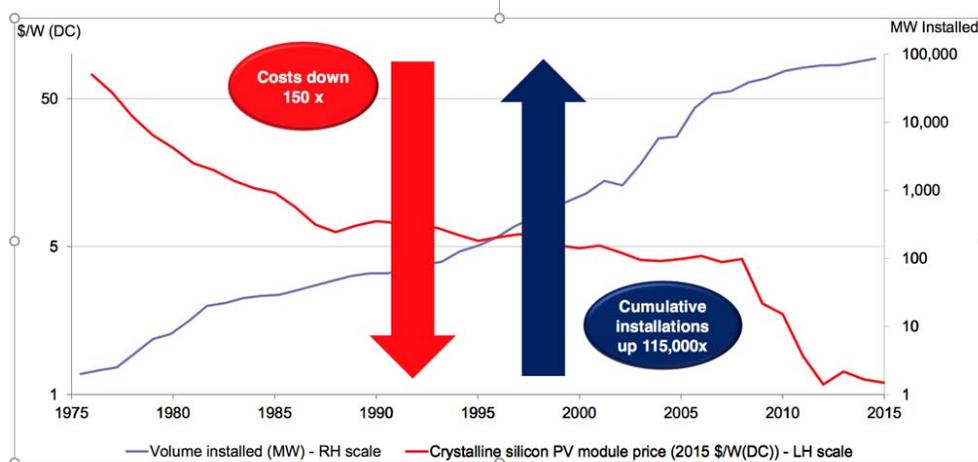
Dean Amel gave a presentation on the Sierra Club's Ready for 100 initiatives. Barbara Swart and Alice Redhead also supported and participated in the presentation.

Dean noted that he and others were present to ask the Commission to push the County Board to adopt 100% renewable energy.

Dean noted that the Sierra Club is focusing on electricity because 64% of energy used in Arlington is from electricity, which has a higher carbon impact. There is overwhelming scientific consensus that we must transition to renewable energy as soon as possible. Dean noted that renewable sources were the clear solution. He noted that renewable costs are falling quickly. The costs to install, maintain, and 'fuel' are quickly eclipsing traditional power plants.

WHY RENEWABLES ARE THE FUTURE

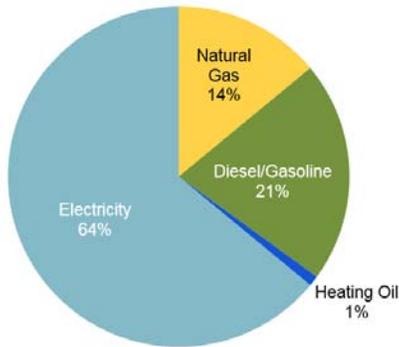
Solar costs are falling fast



Electricity accounts for approximately 2/3 of the energy used in Arlington. The energy uses and fuel mix to create the electricity are both noted in the charts below.

ELECTRICITY USE IN ARLINGTON

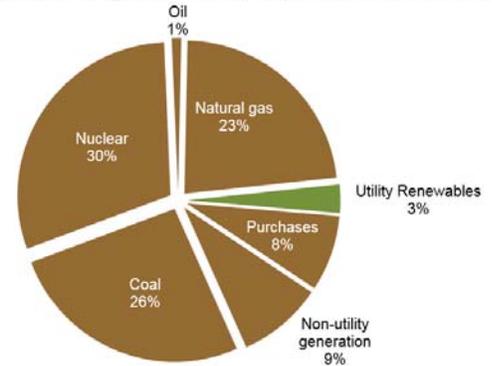
Electricity use is about two-thirds of Arlington’s total energy use



Arlington County Community Energy Plan, p. 6 (2007 data)
<https://environment.arlingtonva.us/energy/community-energy-plan-cep/>

ELECTRICITY USE IN ARLINGTON

Dominion supplies Arlington’s electricity from these sources:



2015 Energy mix
 Dominion Integrated Resource Plan (2016) at 37, available online at
<http://dom.com/library/domcom/pdfs/electric-generation/2016-irp.pdf>

Dean noted that policy challenges and opportunities exist to reach a 100% renewable energy goal by 2035, but he noted it is very doable. He also noted that this goal would be a great complement to the County’s Community Energy Plan. He noted that the Plan is intended to be reviewed and updated over time as technology changes, new information becomes available, and the world changes. He noted the importance of having a goal to set policy direction, as the CEP has done. Dean noted that efficiency would still be important as a focus but that focusing on electricity is a unique opportunity to scale one specific change and have an enormous impact.

John S. asked for clarity regarding VPPA, PPA, RECs, offsets, etc. Dean noted that RECs are not part of the initial ready for 100 proposals. Ivy clarified that this would be new solar, at scale, associated with a specific entity that could be within the County (e.g. PPA) or elsewhere as other companies have done (e.g. VPPA).

Sarah M. asked about other communities that are taking action and are similar to Arlington. Dean noted that numerous communities have already agreed to reach for 100% renewable by 2035 and 5 communities are already there. St. Petersburg and Sarasota are somewhat comparable. The growing list of communities are noted below:

RENEWABLE CITIES

- 49 U.S. cities and counties are committed to 100% renewable electricity
- 5 already 100% RE
- 7,477 jurisdictions worldwide (including Arlington County) have committed to climate leadership by joining the Global Covenant of Mayors for Climate and Energy

Rock Port, MO	Nederland, CO
Greensburg, KS	Nevada City, CA
Kodiak Island, AK	Orlando, FL
Aspen, CO	Palo Alto, CA
Burlington, VT	Park City, UT
Abita Springs, LA	Portland, OR
Angel Fire, NM	Pueblo, CO
Atlanta, GA	Questa, NM
Boulder, CO	Red River, NM
Cambridge, MA	Salt Lake City, UT
Columbia, SC	San Diego, CA
Del Mar, CA	San Francisco, CA
Eagle Nest, NM	San Jose, CA
East Hampton, NY	Santa Barbara, CA
Georgetown, TX	Sarasota, FL
Hanover, NH	Solana Beach, CA
Hillsborough, NC	South Lake Tahoe, CA
Madison, WI	Southampton, NY
Menlo Park, CA	St. Petersburg, FL
Moab, UT	Taos, NM
Monterey, CA	Taos Ski Valley, NM

John B. asked if this was a commitment to do it or to figure out how to achieve it? Dean clarified that it is to agree to the goal, set a roadmap, and with all long-term plans, make tweaks along the way as opportunities and road blocks occur.

The Commission agreed to draft a letter. John. B. volunteered to draft and circulate a letter in advance of the December meeting.

5. Old/New Business

Sarah noted that the Commission has been considering writing a letter for Benjamin Banneker Park. She noted that questions were posed to staff but responses hadn't been received at this time. She also noted that tree impacts are still conceptual and meadows would be integrated into future stages. She noted that this may not be the best time to step into the project with a letter.

John S. provided an update on the Solids Master Plan Update. He noted that a letter would be needed soon and volunteered to draft it when appropriate.

Gabriel noted that ACPAC is looking for new members and would circulate applications.

John B. raised the issue of snow melting at Bluemont park. He noted several impacts, a petition, and asked if staff could attend the next meeting to discuss further. He noted that a letter from the Commission may be useful to address this unresolved issue.