

Arlington County E2C2 Energy Committee

Meeting Summary

Wednesday, August 5, 2020

7:30 am – 9:30 am

Held via [Conference Call on MS Teams](#) Due to COVID-19 Emergency Status

Present: Jonathan Morgenstein (Chair), Claire Noakes (Vice-Chair), Amy Jacks, John Bloom, Cathy Lin, Kevin Vincent, Michael Herbert, Rick Keller, Scott Brideau, Scott Dicke, Scott Sklar, Stephanie Burns, Tim Effio, Vince Plaxico

Guests: Priya Swamy, John Mayemik

Staff: Demetra McBride, Adam Segel-Moss, Jessica Abralind, Joan Kelsch, John Morrill, Rich Dooley

Agenda Items

1. Greetings and introductions (7:30)

- We welcome a new Energy Committee (EC) member – Michael Herbert. He is a former FERC Commissioner and has a strong background on energy storage. He is Co-Founder of an energy storage development company – Delorean Power.
- Also, Kevin Vincent, who joined the EC during our meeting break, joins us today. Mr. Vincent was with the Chief Counsel of the National Highway Traffic Safety Administration (NHTSA) in the Obama Administration. Now, he is an independent consultant and focuses on EVs.

2. Review/approve agenda and July meeting summary (7:35)

- Today's agenda was approved and the July meeting summary was tentatively approved. EC members will send Rich any edits by the end of the week to finalize the summary.

3. Public Comment on General Topics (7:40)

- None

4. Building Electrification Speaker, [Jack Mayernick \(National Renewable Energy Lab\)](#)

- a. Introduction – **Jonathan Morgenstein (7:45)**
 - b. How viable is 100% building electrification (residential & commercial) in technology and cost effectiveness? – **Jack Mayernick (7:47)**
 - c. Q&A – **Jack Mayernick (8:00)**
- There are three end-uses in terms of technology: heating, water heating and cooking.
 - There are many types of heat pumps, depending on what you need. Energy Star has approved many heat pumps.
 - There are numerous electric heating systems for use in large commercial buildings.

- An electric heat pump water heater is generally three times more energy efficient than a corresponding natural gas water heater.
- For cooking, electric resistance and induction technology can be used instead of natural gas stoves. Electric resistance is about 2x and induction technology is about 2.5x more energy efficient than using natural gas.
- The cost depends on whether the technology is used in new construction vs. retrofits. For the former, using electric is often comparable in cost to alternative technologies. For new construction, you save on labor costs and installation by not installing piping and equipment for natural gas. RMI has a good study on that. For retrofits, more studies are needed.
- Demand Charge considerations: Commercial customers pay for energy usage, and pay based on the maximum amount of electricity demanded over a 12-month period. This is something a customer wants to take into account when choosing a technology.
- Questions asked:
 - Ductless vs ducted systems?
 - Is nuclear considered a clean fuel?
 - Heat pumps: What is best – air or ground heat pumps?
 - Amount of air space heat pumps need to operate? 1000 CF of air space needed for a water heater? Are such space requirements a challenge for space-constrained commercial buildings?
 - Water heating: Viable for large commercial buildings? Developers say the electric option is not scalable, thus creating the need for natural gas.
- Scott Sklar offered examples of successful projects:
 - This one in Silver Spring uses geothermal heat pumps: <https://qz.com/1771906/the-innovative-design-of-one-of-the-worlds-largest-net-zero-buildings/>
 - Also the Bullit Foundation building in Seattle - <https://www.archdaily.com/363007/the-world-s-greenest-commercial-building-opens-in-seattle-today>

5. *Community Energy Plan Implementation Framework (CEPIF) Letter*

- a. Brief update on status of CEPIF update process – **AIRE Staff (8:15)**
- b. Discussion & Vote on Letter to County Manager’s Office – **Jonathan Morgenstein (8:20)**

- The EC draft letter on the draft CEPIF is available for other on the EC to comment on the letter. It is important for the EC to determine what this letter is aiming to do.
 - There is value in itemizing comments, ideas, concerns and sharing those with AIRE staff.
- It would be helpful for the EC to see the draft CEPIF after it goes through various County departments.
- Some EC members would like to see more specificity on priority strategies.
- Let staff know what the members would like to see in the CEPIF; be more specific.
- Delete the text that goes into the CEPIF development history, be more forward-thinking.

- Does the current EC need to morph into a larger Task Force including County and external stakeholders? Or, should there be an interdepartmental County group that gets together regularly to holistically address CEPIF issues?
- What should be the immediate areas of focus we think the County staff should take on given the challenges brought to us by Covid-19?
- Adding metrics to the CEPIF would be helpful.
- How do we ensure all of the four CEP lenses are taken into account as we develop and implement each strategy?
- ACTION: Refine the draft letter and share it with the AIRE staff as an expression of EC wishes in hopes of changing the draft CEPIF before it goes to the public.

6. *Legislative Priorities for Arlington General Assembly Delegation in 2021 Session*

- a. Introduction to, and discussion on, list of legislative priorities to be passed to E2C2, for letter to County Board to recommend to Arlington's General Assembly Delegation in 2021 Session - **Claire Noakes (8:50)**
 - b. Vote on list of legislative priorities for E2C2 submission to Board - **Claire Noakes (9:15)**
- Goal is to provide input to E2C2 that then can be shared with Pat Carroll.
 - Claire used the last two years of recommendations as a jumping-off point. Nice to see that many past requests could be deleted since they've been passed in previous legislative sessions.
 - Shift focus to EVs, building envelope improvements in this letter.
 - Need to improve building codes since those codes point to all buildings being built that will be around for many years. Move that suggestion up in the letter to increase emphasis on that topic.
 - There is benefit to benchmarking given the public-facing ability on energy matters for specific buildings.
 - There is a direct connection between building codes and benchmarking. Possibly link the two and have those linked at the top of the letter.
 - Item #5 – note the distinction between on-bill financing vs. on-bill repayment using a Green Bank.
 - Change *conversion* of buses to the *purchase* of new electric buses.
 - Motion was made for approval, given changes suggested, and motion was seconded.
 - Note that the content of this letter would be woven into a larger, more comprehensive legislative priority letter coming from E2C2 to the County Board.
 - Note that not everything in this letter may make it into the eventual E2C2 letter.
 - Important for the EC letter to prioritize items in this letter to E2C2 to help E2C2 understand what the EC thinks needs to go into the E2C2 letter, at a minimum.
 - E2C2 is aiming to finalize its legislative letter at the next E2C2 meeting. E2C2 will share links to its draft legislative letter to EC members so EC members can weigh in, if needed, to E2C2 members on that draft.
 - Unanimous vote to proceed as the motion stated.

7. *Vote on Two Letters on CEP Building Compliance*

- a. Vote on [draft letter to George Mason University](#) on CEP compliance for new building being built in Clarendon. - **Jonathan Morgenstein (9:20)**
 - b. Discussion on [draft letter to Greystar](#) on CEP compliance for new building being built in “Landmark Block” - **Jonathan Morgenstein (9:23)**
- The group voted to approve both letters.

8. New business/ Other member updates **(9:25)**

- John Bloom noted that SPRC meetings are occurring. There are many projects to track throughout the County. E2C2 has submitted comments to each of the four projects. The Crystal City Sector Plan has as its central sustainability section carbon neutrality in Crystal City, and that goal is amplified by the latest CEP update. However, sustainability has not been addressed adequately during project review. E2C2 is working to change that.
- Jonathan will send out an updated CEPIF draft letter, taking into account input thus far. Comments are encouraged before it is sent on to AIRE staff.
- Aug 31 – E2C2 meeting, time TBD. Everyone is welcomed to join the public meeting.

9. Adjourn (9:30)

- Meeting adjourned at 9:29 am.