

**MEETING MINUTES OF THE HYBRID MEETING**  
**ARLINGTON COUNTY C2E2 ENERGY COMMITTEE**

**1/18/2023**

The **C2E2 ENERGY COMMITTEE** convened its hybrid meeting at **7:30 AM** on **January 18, 2023**.

**PRESENT (IN-PERSON)**

Claire Noakes  
Gregg Brozak  
Doug Snoeyenbos  
John Bloom  
Stephanie Burns  
Scott Dicke  
Aaron Kocian  
Stephanie Gagnon  
Scott Brideau  
Rick Keller  
Scott Sklar

**PRESENT (VIRTUALLY)**

Vince Plaxico, participated virtually from home (via Teams)  
Kip Malinosky, participated virtually from home (via Teams)  
Jonathan Morgenstein, participated virtually from home (via Teams)

**ABSENT**

Tim Effio  
Vasu Nambeesan  
Kevin Vincent

**STAFF**

Rich Dooley  
Demetra McBride  
Shahriar Amiri  
Mike Hamilton  
Linda Baskerville

**SUMMARY OF PRESENTATIONS/DISCUSSIONS**

### **1. Greetings and introductions (7:30) – Claire Noakes**

- Claire Noakes welcomed everyone and thanked everyone for joining the meeting.

### **2. Review/approve meeting agenda and December meeting summary (7:35) – Claire Noakes**

- The Energy Committee unanimously approved the January meeting agenda and the December meeting summary.

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

- None

### **4. The nexus between building codes and resiliency (7:45) – Shahriar Amiri (Chief Building Official)**

- Arlington is the only VA jurisdiction with Energy Plans Examiners
- We have to follow the State building code
  - To the contrary, unlike Montgomery County (MD) which is in a Home Rule state and was able to adopt the IGCC, we in Arlington do not have that ability to require anything beyond State code
  - Codes are often about ten years behind technology advancements
    - Shahriar will often run through a mental checklist when it comes to reviewing and approving innovative technologies
- State Board of Housing is responsible for adopting the building code
- VA has made improvement in the last ten years, but we are not as stringent as the national codes are and the localities that have adopted those national codes without amendments
  - Anything that increases the costs for home building is dead on arrival in Richmond
  - The Home Builders Association of Virginia (HBAV), Building Owners and Managers (BOMA), and the Virginia Realtors are all very powerful groups at the State level and generally against any codes that add to the cost of construction
- There are challenges from a safety perspective for electrification
  - There are concerns about Li-Ion batteries in battery storage systems and in EVs
  - We want to ensure we are able to address a Li-Ion fire to prevent thermal runaway
    - Fumes are toxic, forcing responders to wear HazMat suits
    - Incidents have shown that it takes 2-4 hours and up to 30,000 gallons to put out EV fires. In addition, water runoff is toxic with heavy metals.
  - S. Sklar – Notes that he installs large battery banks for storage that are not Li-Ion, which he specs out for his clients
  - C. Noakes – Could the County provide saltwater battery storage options?
- Regarding the code review process:
  - American National Standards Institute (ANSI) process will become the standard for code review. This allows for outside people to weigh in more readily into the process.
  - State level: next cycle will happen in about 2 years
  - National level: Shahriar will send the link for anyone to participate in the ANSI process – either in the Committee or a non-Committee member (interested individual)
    - Editor’s Note: The open and fair ANSI process ensures that all directly and materially interested parties have an opportunity to participate in a standard's

development. ANSI created an ANSI Essential Requirements document located [here](#) for more information.

- S. Sklar – FEMA has a host of programs regarding resiliency. These are ways for the County to enhance resiliency. Can Shahriars’ team look at these options to enhance resiliency in Arlington buildings? Scott often gets called in by customers when diesel backup generators fail. He’d like to set up a team to pursue grant money to help property owners convert to cleaner and more reliable backup power technology on a voluntary basis.
  - A: Shahriar is looking at the FEMA grant toward education and training. The AIRE Team would be the right people to look at the FEMA grant for policy issues.
- Linda: It is important to note that the VA codes are a minimum standard – they set the floor. They’re not as progressive as the national codes. There are other ways for us to enhance resiliency in buildings.
- S. Dicke – For commercial buildings, what are some resiliency measures Shahriar often sees?
  - A: Shahriar offered one example where a property owner requested large battery storage systems to support their 5G network. We also see single family homes with backup battery packs, to back up solar PV systems.
  - In addition, PenPlace has 200 EV chargers in their garage. They need 480V coming in for those chargers. We are space-challenged to site the transformers to have the grid meet the demand.
  - D. McBride – Even though Dominion Energy has stated the grid has the capacity to accommodate EVSE, she questions whether the costs will be borne by the property owners to be able to connect to the grid and ensure the grid at that connection point is adequate.
  - Arlington County schools (APS), the Lubber Run Community Center, and other public facilities have battery backup systems.
- J. Bloom – John testified at a Board of Housing and Community Development (BHCD) meeting. He thinks VA is capable of much more, but that the current process provides certain commercial interests with an effective veto over energy improvements. He thinks Code Officials are quite influential and hopes they can help us address energy matters.
- The Arlington County Building department is one of only 24 out of 7000 building departments in the US that is accredited by International Accreditation Services (IAS). [In 2021, the Arlington County Code Enforcement Section of the Inspection Services Division \(ISD\) is the first property maintenance enforcement agency in Virginia to have obtained accreditation from the IAS.](#)
- S. Sklar – For EVs – requiring a 240V line outside the building, and making the building solar PV-ready, all of these are much cheaper when a building is being built versus once the building is already built. Thanks to the team for all that you do.

## **AIRE Update**

- Rich Dooley provided in advance of the meeting the AIRE Update slide deck (see Attachment 1).
- ARTBus Feasibility Study:
  - There was a meeting yesterday with Joan McIntyre, John Bloom, Chris Slatt. The topic is also on the C2E2 agenda for this coming Monday.
  - When will the report be circulated – expected to be late Spring (?)

- A: Demetra stated that the report will be available in late Spring. Demetra said that the report is not draft as of now for us to circulate. While there is a wealth of data and information being massaged, that information and analyses are still being crafted to create a draft report. There has been a shift in the project schedule. There is near-term decision-making that needs to be made.
- J. Bloom – Yesterday he heard that the staff proposal is to continue purchasing CNG buses through 2027 instead of transitioning to battery electric buses as planned.
  - A: The AOMF will not be operational until 2025. There is a pilot proposed to test out hydrogen-powered buses beginning in 2026 to see if those should be considered for future bus purchases. In 2027 the County could decide to pursue hydrogen or battery technology, depending on what it has learned.
- J. Bloom – When is the County committed to buying its last CNG/RNG bus?
  - A: Demetra notes that the County Board (CB) decides which type(s) of buses the County purchases. We are trying to make projects and purchases flexible for the CB to make the best technological decision at the time such a decision needs to be made.
- **ACTION:** Update the graphics to note it is CY, not FY. – DONE
- **ACTION:** Get back to the EC on the Quarterly Energy meetings and how they will happen, APS's involvement. – DONE.
- **ACTION:** Ask CPHD representative to come to a future EC meeting for a Q&A session about the PFRC. - DONE

## EV TCO Study

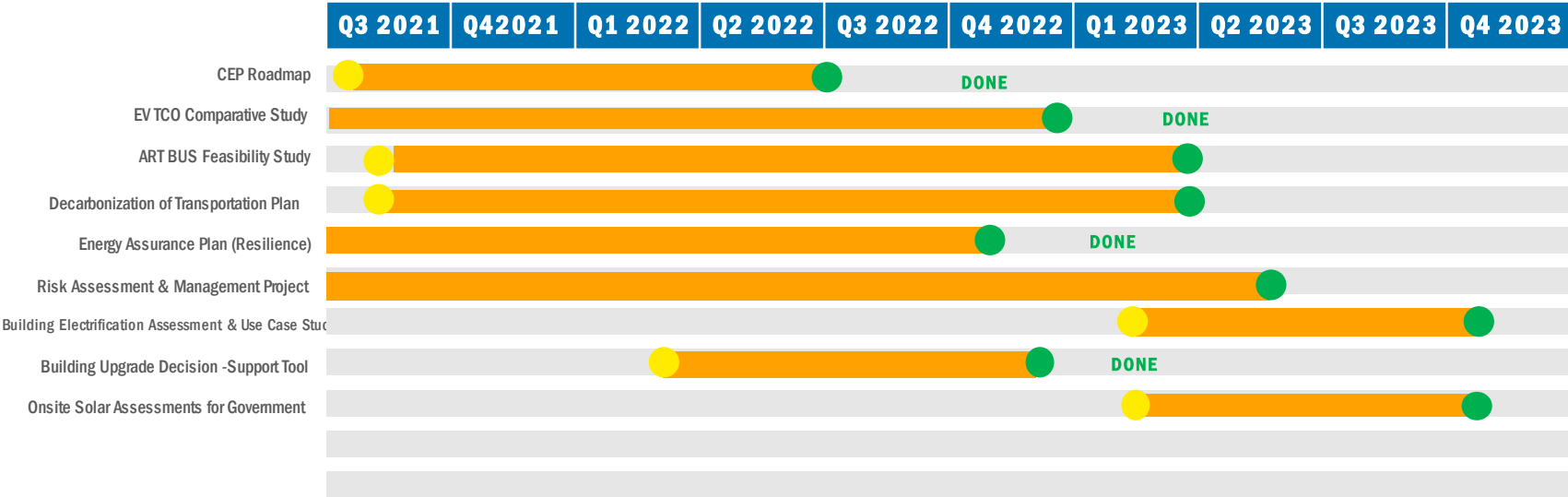
- J. Morgenstein led the discussion
- V. Plaxico provided County staff with comments on the document
- Small SUV = 20% TCO savings; sedans 2% TCO savings
- Low cost for ICE (State contracts) plus low mileage for County vehicles make the cost savings challenging
- We need to keep equity in mind as we site future EVSE
- The report did take into account the Inflation Reduction Act (IRA). Changes have happened in the EV industry and with the IRA since the report was written.
  - S. Sklar – there are multiple EV and battery manufacturing plants being built around the country as we speak.
- Demetra – There is a Total Cost of Ownership (TCO) study for the County fleet, and there's the TCO study for privately-owned vehicles.
- During last night's County Manager discussion about the budget – a different Commission member asked the County to consider focusing on e-bikes and other personal mobility devices
- C. Noakes – We might want to write a letter about this study.
  - Would someone be willing to take notes of issues raised and drafting a letter?
- Demetra – we are moving into the EVSE siting study for the DecTrans Plan. So, please hold on for more about that.
- We used sedans, small and large SUVs given that is what we had for data

- We are gathering data regarding use of DPR's Ford Lightning truck
  - A. Kocian - how does the County plan to incorporate GHGe into the replacement cycle?
- 
- The EC meeting adjourned at 9:08 am since the in-person quorum was no longer met.

ATTACHMENT 1

AIRE UPDATE

# Progress Report on Studies and Plans



Start ● In progress ■ Estimated Completion ●

# Progress Report Notes

## Amendments:

- **CEP Roadmap:** Final Roadmap is on the CEP webpage:  
<https://www.arlingtonva.us/files/sharedassets/public/environment/documents/ceproadmap07-26-2022-with-cover.pdf>
- **EV TCO Comparative study:** Report finished.
- **ARTBus Feasibility Study:** Study to be done by Q1 2023 to allow for engagement
- **Decarbonization of Transportation (DecTrans) Plan:** Is in progress with KH. Q4 2022 for draft plan, and Q1 2023 for final plan.
- **Energy Assurance Plan (EAP):** Report provided to County staff.
- **Risk Assessment & Management Plan** RAMP Task 5 (Vulnerability/Risk Assessments) presentation delivered. The Task 5 Technical Memorandum draft is under staff review. The Task 10 (Market and Trends Report) delivered in draft, reviewed and redacted with comments (estimated final delivery in Oct. 2022).
- **Building Electrification Assessment and Use Case Studies:** Builds on previous SWA report. With FY23 funding available, project will move forward after the Energy Services Contract RFP is completed. Report slated for Q4 2023.
- **Building Upgrade Decision-Support Tool:** Draft internal tool ready for use by the County staff.
- **On-Site Solar Assessments Project** With FY23 funding expected to be available, project will move forward after the Energy Services Contract RFP is completed. Report slated for Q4 2023.