

Climate Change, Energy, and Environment Commission (C2E2)

Summary of January 22, 2024

Hybrid meeting

Members Present: Joan McIntyre, chair; Mark Greenwood, Cindy Lewin, Kevin Vincent (V), Eric Gibbs, Mikaila Milton, Rob Sandoli, Elizabeth Whitney, Suzanne Swink, Doug Snoeyenbos, Johnathan Morgenstein

Members Virtual: David Evans

Members Absent: Majdi Shomali

Guests Present: Dan McGee, Joe Trivette

Guests Virtually: Judith Collins (League of Women Voters Alexandria City), Lauren Hall, Susan Cunningham

Staff Present: Jenna Peabody (DES-AIRE)

Public comment

None.

Review December summary.

Doug suggested sticking with past tense, identify speakers when they ask questions and answer, and add his comment to Takis. All approved summary.

Zero Carbon Buildings Presentation – Dan McGee, Redbrick LMD

Dan McGee is from Redbrick real estate company, which is in DC, doing a lot of development, and aiming to get to zero carbon certification. Joan prompted everyone to focus on: what are the challenges they face? What are some of the incentives and things that we can think about as we look at the updated Green Building Incentive Policy as to what strategies might work to push the envelope on getting developers to move toward decarbonization?

Dan primarily focused on the Douglas building, which is under construction now. It is the largest multifamily building in the world pursuing ILFI zero carbon certification. He spoke to a case study to give C2E2 a sense of being a private for-profit developer achieving heavy decarbonization in real estate development. He spoke about the Bridge District, which is going to be about 2.5 million square feet of mixed-use development. The whole site is going to be built to a zero carbon standard. The first phase is the Douglas building, which will be about 1 million square feet, 757 units of multifamily rental. The land is all opportunity zone which incentivizes Redbrick to develop for long term hold. They are planning to hold onto the asset for 10 years and think about the long term value creation and think of the community.

Jonathan Morgenstein asked if by retaining it, does Dan mean he'll be renting out the units or going to own the building in general, but they'll be condo units within being sold? Dan responded that they will be owning the building and hire a partner to manage the property, but they will own for rental for that period.

Dan discussed the total lifecycle approach to decarbonization. He accounts for the carbon emissions from mining raw material to decommissioned state at the end of buildings' life. They take a reduction approach as they budget carbon emissions. Throughout this process, first they try to reduce as much as possible, then offset the rest of the emissions on the embodied carbon side. This building will be powered by 100% renewable energy. This approach matches the ILFB zero carbon certification. They plan to get all of Bridge district done through ILFI certification.

Eric Gibbs asked if the operational energy provided 100% by renewables will be on site or are they just committed to purchasing? Dan responded it's a combination of on site and off site. They will be buying bundled power. Elizabeth Whitney asked how much negotiation do you need to do with Pepco to be allowed to sort of chart your own destiny with respect to the offsite generation? Dan responded they are involved partly if the solar developer cooperates with Pepco on the generation side.

They are using a carbon accounting program called Athena while they make installations. They ask for EPDs (environmental product declaration) for products in this project. Joan asked how do they account for negative emissions for the kind of stored carbon? He responded that on the Douglas they have some carbon sequestering concrete which is a 0 + 0 approach vs. a -1 +1 approach which minuses a credit at the beginning and adds at the end of life. John Morgenstein asked if the institution or supplier provides guidance on supply chain carbon accounting? Dan said they do. They might use a combination of data and assumptions.

Dan discussed the embodied carbon emissions through construction and the operating energy use associated with that. For construction, it is 130 feet high made out of concrete and steel. They used EC3 tracking database baseline. They have a team dedicated to tracking embodied carbon. They have achieved a 36% reduction in concrete component to date. Jon Morgenstein asked what percentage of tons of actual concrete not only to save carbon emissions but save actually materials that go into this building? Dan responded that they haven't captured all reductions. Elizabeth Whitney asked if it saved them money or cost them money. Daniel said it saved money on concrete because they are doing this on a scale of 1m sqft. If it were a smaller job, probably not. They paid up front.

Rob Sandoli asked about building lifespan – if building to 100 instead of 50, if they had carbon embodied for longer in the building would that change any construction methods or the strength required for the concrete or the calculations for the lifecycle carbon emissions to the building? Dan said the 50 years was arbitrary. One of the challenges he faced was getting

accurate data on the submittals. It wasn't until they actually received the bags that the team decided what would be cheapest. It's a complex process to balance multiple budgets.

Jon Morgenstein asked in terms of steel was it totally just reduction in the amount of steel or did they find that some suppliers make it with less carbon? Dan said it's the latter on the steel side. The key is finding a steel producer that uses electric furnaces rather than coal or gas burning plant. John Morgenstein asked if that still didn't cost significantly more. Dan said no. The overall cost on a first cost basis was 5% more than what we would have thought to pay, the DC energy codes are aggressive, even the minimums gets you a LEED Silver or Gold. He discusses the costs, teams, and onsite solar production. He said Atlas Brewing is expanding their operations on the ground floor.

Jon Morgenstien asked what happens if the brewery goes out of business. Dan said it is operating in a standalone mode. Joan asked if there were any challenges or incentives for development in general. Dan discussed macro trends topics of long term value creation: residents will require their building to match their values; carbon tax; attractiveness to future investors; ESG goals of real estate; responsible development. Eric said he hopes that Dan is documenting and sharing this project.

Jon Morgenstein said that we get involved with the large scale multifamilies in Arlington and address questions about water heating and in large scale residential buildings and have been told it's not economically feasible and he was curious about is that something that would be an economic hit or would it offset it? Dan faced a lot of pushback originally but it took effort to find a supplier that would do it without the premium. Cindy said she works in Saint Elizabeths and was wondering if there are different incentives in Ward 8 because of different rules and how much that drove decisions? Dan said that the Bridge District was pushed to scale by the opportunity zone designation which incentivizes the minimum 10 year holding period. Dan will be back to speak on a webinar to another Arlington group on February 15.

AIRE Update – Federal grants and budget preview

Demetra provided a slides overview of all Federal Grants prior to the meeting for C2E2 to review and provide Jenna with questions on. The overview included all grant opportunities being pursued or, in the case of the early-breaking EPA Environmental Justice G2G Project, already awarded, etc. The slides included a breakdown of the Programs/Projects developed for each of the MWCOG, for the Climate Pollution Reduction Grant and for the Commonwealth. Joan is excited about the awards and fingers crossed we get them and get funding to advance the issues C2E2 has been pushing and setting up mechanisms. Mark Greenwood asked if there was going to be enough staff to cover. David Evans said every opportunity should be taken. This program is probably not designed for homeowners and asked the group whether they want to keep pushing separate programs to take advantage of rebates. Joan will share the budget when it's out.

Finalize 2024 Plans and Priorities and Meeting Schedule

Rob Sandoli went through and made language more specific. Question was addressed on stormwater utility by Joan as not needed. Joan wants to keep an eye on the credit program. Discussion on trees. Eric Gibbs asked what's the point of Green Banks? Eric made edits and comments. Doug Snoeyenbos inserted the meeting schedule for the Energy Committee (EC) subcommittee. Joan requested someone to chair the Solid Waste Committee. No one volunteered. Joan said after the solid waste plan is passed, they will restart the process, which meets and is driven by AIRE updating on whatever their doing in solid waste bureau, which she says is not the engaged and active component like the EC is; she is frustrated by the cycle; she asked the group what to do when they ignore most of the comments made. She asked again for a volunteer. No one volunteered. Mark Greenwood had a question on the first section of the Comprehensive climate action.

Joan will be meeting with Cindy and Susan Cunningham and will need support from Bill Eger on an exchange with the key commissions. Suzanne Swink resigned from the EC due to personal health issues. Joan asked again for volunteers for SWC. No one volunteered. Motioned to approve notes. All in favor.

Review and approve the 2023 Annual Report

Reviewed. Motioned to approve. All in favor.

Brainstorming on Arlington Visioning Initiative and Climate Action Planning

All agreed to spend time on approving letters. The meeting went over on time so there was not enough time to brainstorm.

Approve letters –

Columbia Pike FBC Ordinance

Elizabeth Whitney drafted the letter. Group reviewed and suggested edits. Motioned to approve. All in favor.

Goodwill

Joan drafted the letter. Group reviewed and discussed. Motioned to approve. All in favor.

Updates

a. Review Assignments

- b. Susan Cunningham joined the meeting to say she can tell the group about what she knows about the Arlington 2050 visioning which is probably more than anyone else knows. Joan was invited to attend the kickoff meeting which is with the community. Climate will probably be the anchor for one of the visions.

Next meeting: Feb. 26 Virtual