



**Sustainability, Energy
& Resiliency Committee**
City of Salem, MA

**Minutes
October 26 2022, 6:30 P.M.
Remote Participation**

Board Members Present

John Hayes, Chair
Chris Cantone, Vice Chair (left at 7:25PM)
Doug Bowker
Rick Nye
Erin Casey
Jeff Cohen, City Council Liaison

City Staff Present:

Stacy Kilb, Sustainability Engagement Coordinator (recorder)
Vanessa Pineda, Energy Manager

Board Members Absent

Phil Koch
Elvis Alvarez

Public:

SATV (recording)
Jack Nessen
Jared Perkins
Andy Varela (Ward 7 City Councilor)

Introductions

- Board Members incl. Erin Casey, our newest SERC member
- Members of the public

SERC Update: Scenes from SERC's August 2022 potluck and stormwater management tour of the Willows (John Hayes)

- Social gathering with food, beverages



- Jason Babowski, Senior Project Manager of Hatch, led a tour of sustainability and stormwater features at Willows Phase 1 Improvement project
- Presentation of “Friend of the Earth” Plaque (from SSU) to Pat Gozemba of SAFE [due to the original SSU Earth Day awards ceremony being virtual during the pandemic].

City Council Liaison Report (Jeff Cohen)

September Liaison update:

- Polystyrene Ordinance goes into effect next year
- Improved Wetlands Ordinance is now in place and includes climate change as a consideration
- Urban Agriculture Ordinance is also in effect; this sets rules for lots, such as bees, chickens, sales at property, and setback
- Municipal Green Building Ordinance passed at the beginning of the year
- The climate bill Governor Baker signed in the 11th hour in August includes a provision for 10 communities to pass ordinances prohibiting future fossil fuel installations. Brookline passed an ordinance in 2019, was sued by National Grid, and AG Healey ruled unconstitutional without an enabling act by the legislature.
 - Not as good as the Green Futures Act; does not address retraining people from fossil fuel to renewables and lacks funding for EJ communities
 - Although some believe it unfair that only 10 are allowed and that once we have a new Governor, the legislature may amend the bill to make all communities eligible with certain parameters, the goal is to get as many communities as possible interested in promoting this concept
 - In the bill as written, communities must file a home rule petition in the General Court (legislature) and the DOER will decide which 10. Prior to the signing, 10 communities had home rule petitions and since, Somerville and Boston (9/14) passed them. Jeff did a motion at the 9/15 Council meeting, and it passed 11-0, so Salem will be in consideration.
 - Of those in, 3 won't meet the affordable housing criteria in the bill and Salem is currently the only Gateway City and is an EJ community as well
 - DOER will probably not set rules until we have a new administration, and must do so by July 2023
- Also, Jeff is continuing to write a Green Building Ordinance for non-municipal properties/private developments (the municipal one passed Council in January). It will include language for EV chargers and bicycle parking and will determine whether to include language for fossil fuel installations depending on whether we're accepted by 1st quarter and when we will submit the green building ordinance to Council. If not, will do a standalone
 - He will ensure that language is presented to SERC for review
- Jeff congratulates the new and re-appointed members of SERC.
- Many on this call are aware of the Peabody Peaker plant that is about to be constructed; he submitted a resolution to the City Council which passed 10-0, directed to the State, which has not conducted the necessary health and environmental studies. This resolution will go to legislators, Mayor, governor, and Environmental Affairs Secretary



- o [Salem News: Councilors Call for Stronger State Review of Peabody Plant](#)
- o John commented that SERC has had presentations from Breathe Clean North Shore and SERC members have signed petitions circulated by Breathe Clean NS and others.

Public Comment

-

Guest Speaker: John Dalzell, Senior Architect for Sustainable Development, Boston Planning & Development Agency.

Link to presentation slides:

Link to meeting & presentation recording: [SERC Meeting Recording 10.26.2022](#)

Passcode: H@y4?2Ng

Topics:

- *New and recent developments in Boston related to green buildings (including zero carbon buildings)*
- *Climate change resiliency*
- *Building energy use reporting - Building Emissions Reduction and Disclosure Ordinance (BERDO)*

Slide Presentation:

- Article 25 Coastal Flood Resiliency zoning; looking forward using computer modeling and Woods Hole Oceanographic Group expertise to forecast flood conditions with sea level rise
 - o Differentiating between base flood for commercial (1') and residential (2' above base flood elevation). Changing baseline conditions using computer modeling
- Article 37 Green Building/IGBC review
 - o Most buildings approved achieve LEED Gold outcomes
 - o Focus on climate change and carbon reduction means 27-33% performance increase above code
- Smart Utilities Article 80 Policy
 - o Utility infrastructure being planned for the future
- Heat Resiliency
 - o Heat Resilience Solutions for Boston Final Report
- Precipitation & Stormwater Management
- Coastal Flooding Vulnerability: Not just along the coast. Lots of areas have been filled and are especially vulnerable
 - o New buildings expected to do fortifications that benefit their projects and more, planning for edge fortification
 - o City has capital projects for fortification and other improvements
- Article 37 & Zero Net Carbon (ZNC) Policy Review
 - o [Proposed Article 37 Zoning Update and ZNC Policy & Standards - DRAFT for Public Comment](#)
 - o [Zero Net Carbon Building Zoning Initiative](#)
 - o Thresholds reviewed; Covered Buildings & Building Requirements



- All new buildings become “existing” – same compliance standards for those built under Zero Net Carbon zoning, must report under BERDO but carbon limit is Zero
- Projects can only account for emissions with alternative compliance payment to City (kind of like a carbon offset). \$234 per ton to start in exchange for using fossil fuels onsite. Most projects will probably rely on renewable onsite but can make alternative compliance payments for other things
- ZNC Policy Framework
 - Low carbon buildings
 - Renewable Energy – Solar PV
 - Renewable Energy – Procurement
 - Overview of Bunker Hill Housing
- ZNC and BERDO (ZNC Reporting, Policy & Standards)
- Article 37 and ZNC Review Process
- BERDO 2.0 Key Features
 - [BERDO Policy and Procedures](#)
- Emissions Standards
 - Preferred approach is for buildings undertaking capital improvements will move toward low and later zero carbon options
 - Buying renewables is not preferable
- Options to Retrofit & Fuel Switch
- Options to Purchase Renewable Energy
- Alternative Compliance Payments
- ZNC Building Programs/Mass Timber Accelerator
- Other Useful Links:
 - [Climate Resiliency Checklist and Guidance](#) - Current version, but will be updated
 - [Climate Resilient Building Case Study](#) - Including several Zero Net Carbon buildings

John Hayes comments on heat resiliency. In some hotter cities, when a new apartment building goes up, they have a mandatory AC requirement to reduce heat stress on occupants. This can be controversial due to the refrigerant used in AC. AC is needed but can contribute to greenhouse gases. Boston has considered this. Refrigerants in heat pumps have high global warming potential, so are examined carefully. It would be good to go back and look at LEED rating systems for Salem as there are credits and criteria for different refrigerants; state code may not differentiate between awful and better refrigerants. Some are using CO2 instead.

The other part is the way we’re building residential developments, we are focusing on efficiency which reduces the amount of heating and cooling needed. If properly done, HVAC systems can be small and lend themselves to combined systems (mini splits).

Developers are figuring out how to build better buildings and save money at the same time. We want to flatten the curve with high performance buildings; there should be no peak demand requiring a Peaker plant. They also lend themselves to thermal drift or demand management.



Jeff Cohen: the new Mass Save incentives do not consider the former heating source. They are also now available for retrofits, not just new construction. The ratio of rebate to cost for commercial is better than for residential. It may be cheaper to build a high-performance home since the utilities and Mass Save have updated incentive programs and tailored toward zero net carbon building/zoning.

The updated stretch code requires that 20% of spaces have EV charging capacity. This has already been the standard in Boston. Some have noted that 100% would be ideal, however the reality is that 100% of vehicles do not need to be plugged in 100% of the time. The percentage should eventually be increased, but there are limitations. Adding EV charging is a major increase to the electrical service going to the building. Utilities and the required electrical connections can get intense, so they are comfortable stopping at 20% for now. There is a range of EV charging equipment/tiers available that consume different amounts of electricity. There will be lots of innovation in the future. Private entities are coming in that will provide EV charging structure and service for buildings, as well as customer billing. This gives building owners a way to prepare for the future without having to come up with the capital and manage new systems and technologies.

Jeff Cohen notes that he has been speaking to a company that does leasing of EV charges. He wonders about the impact of the cost on affordable housing/overall construction.

Jeff Cohen is working on the GBO (private sector Green Building Ordinance) since the original would have limited affordable housing. We may be able to write something into the Ordinance that, based on % affordability in the building, or if there are condos, there will be different levels/ratios of EV charging. Right now, we are used to an EV charger that looks like a gas pump, with 1 charger for 2 parking spaces, however Melrose has them on light poles. Having public stations dispersed on the streets is a positive development. Salem is partnering w/National Grid to look into this option. There would be two chargers on a light pole. Melrose has 9 such chargers and no one in Melrose has to walk more than 10 minutes to get to one of these chargers. This could be a boon to all types of multifamily housing for those who do not have access to EV charging on their property. Salem is one of 10 municipalities selected to look into this.

Re affordable Housing: John Dalzell notes that Boston has been trying to reduce minimum parking requirements and replace them with limits, but affordable housing developers say that their residents need cars too. They want to see parking and more than what the City thinks should be provided. The same is said for EV charging – a small EV could allow for local trips, so there is an equity and social justice aspect to policies and affordable housing. There are many happy mediums.

ZNC buildings: The Affordable housing community in Boston is building “the most amazing buildings” with constrained budgets, but they see upfront construction cost savings as well as operational savings that they can pass onto tenants. Some oppose these new building standards out of concern for their adverse impact on affordable housing. However, developers of affordable housing are making the best buildings in the City, not private developers. It is the same in Salem. However, private developers say, “We want to build it the way we built the last building/it costs more/we don’t want to do “different.”” Municipalities are trying to overcome



this, as if it costs more, it should be re-thought, since others have figured it out. The message must be promulgated that there is little cost difference. The code is there, comments John Hayes.

The architects, technology, and code are all there. Between Salem being a Green Community and adopting the Specialized Opt-In Stretch Code, it will be harder to build a “non-green” building. John Dalzell notes that a huge amount of work is being done in Boston.

John Dalzell asks about Salem’s Green Building standards for new private construction in the City and Jeff Cohen notes that there is an Ordinance separate from the Municipal Ordinance that would cover new construction and retrofits on the private side.

Stacy Kilb notes that while this Ordinance and the Stretch Code/Specialized Opt-In Stretch Code are being developed, the City requires private developers to fill out a Net Zero Energy questionnaire to be shared with and reviewed by the Sustainability and Resiliency Department, which would make recommendations to the Planning Board during Site Plan Review. It is a work in progress but knowing what Boston is doing is helpful. Stacy will share the form with John Dalzell, who will share Boston’s Climate Resiliency Checklist.

He notes that being focused on carbon emission reduction, and looking back at requirements for LEED outcomes, he is pleased b/c of LEED comprehensiveness. This is moving the practice to new focus areas, but already there has been a lot of change re carbon reduction, greenhouse gasses, and refrigerants as well as where other carbon emissions come from, such as location and density of buildings, etc. It’s been an interesting moment – Boston has been building LEED buildings for so long, we don’t spend a lot of time working on that but it is doing a huge amount of work for Boston really well, such as it is not his focus which is now ZNC standards. Do we need LEED? Yes; he says it is “Like having your teenager take care of everything in your house.” Don’t take it for granted.

Jared Perkins, resident, comments: We talk about electrical generation from solar and climate change, but people ignore parking lots. Is there anything about making parking lots with solar canopies? Also, stadiums consume massive amounts of electricity – what is being done on this front?

John Dalzell notes that ZNC zoning includes onsite renewable energy requirements, and like the updated stretch code, is formulaic. 50% of the roof area less mechanical, shading, setbacks, and safety access should be Solar PV. However, they start from the position of wanting all buildings to be planned and designed to optimize onsite renewable generation and are trying to lean into it. The hope is that the minimum standards deal with those who don’t want to do this – what we are seeing is impressive. Boston is updating its zoning so that it’s easier to put PV (photovoltaics) on an existing parking garage. 90% should be covered with PV, and they have a piece for surface parking but there is not a lot.

Jeff Cohen: Salem passed a solar ordinance in the spring. Many parking lots where this would be appropriate are schools or the City lot outside the hospital parking lot. It is zoning and an enabler for canopy solar. The Inflation Reduction Act increases the Solar Investment Tax Credit (ITC) to enable communities and private



entities to do more large scale solar. The federal tax credit is going up to 30%. Zoning will now enable almost every part of Salem to do solar canopies.

City Updates

Outreach Events (Stacy Kilb)

- Not discussed

Other updates

- Sustainability & Resiliency Dept. Director Update: HR has received 8 applications, which must be vetted by the Mayor before being passed on to SRD. Our Department has no updates since Esmeralda spoke to the Mayor a few weeks ago.
 - Jeff Cohen notes that he recommended a couple of Applicants to the Mayor. The ones he knows of are high quality applicants. Also that the Mayor will be the Lt. Governor in a couple of weeks and we may not see action on this item until after Nov. 8th. He also notes that with the Mayor leaving, there are retention issues in the City. There will be a 3–4-week period after the election where she can make this decision
 - It is noted that we risk losing qualified candidates by not moving forward and keeping them updated.
 - Doug Bowker motions for Chair John Hayes to write a letter to Mayor expressing SERC's concerns re the Director position, encouraging her to move forward. It is seconded by Rick Nye, and the motion passes unanimously in a roll call vote:
 - Rick Nye: Yes
 - Erin Casey: Yes
 - Doug Bowker: Yes
 - John Hayes: Yes
 - Elvis Alvarez: Absent
 - Phil Koch: Absent
 - Chris Cantone: Left 7:25PM
 - Stacy Kilb to keep John Hayes and Chris Cantone advised of progress

New Business

- None

Approve Meeting Minutes – July 27, 2022

A motion to approve the minutes is made by Rick Nye, seconded by Doug Bowker, and passes 4–0.

Upcoming City Committee Meetings

Recycling Committee: First Tuesday of the month, 11/1/22, 6:30-7:30PM

Tree Commission: Third Monday of the month, 11/21/22, 6:00PM

Conservation Commission: Third Tuesday of the month, 11/15/22, 6:30PM

Upcoming Events



98 WASHINGTON STREET, SALEM, MASSACHUSETTS 01970 ♦ TEL: 978.745.9595 FAX: 978.740.0404 ♦
WWW.SALEM.COM

Commented [SK1]: August

Salem Safety Day (Tabling)

Ice Scream Bowl (Tabling)

Serve Up Savings Restaurant Canvassing for Beverly Salem

Energy Challenge (NGrid Community Solutions)

Salem Planning Board Net Zero Energy Training brief

overview (10 minutes)

September

Homeworks Energy at Farmers Market, Farm Direct Coop,

and "pop up" tabling

Filmed informational videos on Heat Pumps with

HomeWorks Energy (Vanessa Pineda and Jeff Cohen

(ductless mini splits for his rental units)

Presented to Athenaeum via zoom; 10 participants

Trails and Sails: 4 events at Forest River

Sat. 17th: "What Have These Trees Seen?" History of the

Park and Tree ID with Chris Burke. 21 participants

Sat. 17th: "When You Know Better, Do Better." Overview of

Pioneer Village and challenges/sea level/move to Willows,

outline of parking lot and ball field improvements, tour of

new pool & bath house facility and native plantings. 10

participants

Sat. 24th: "Helping the Earth, Helping Ourselves," Plant

Walk and overview of historic and currently "useful" plants

at Pioneer Village and Outdoor Recreation & Nature Center;

we also made pemmican and dandelion tea

Sat. 24th: "Welcome to the Anthropocene," a quick tour

through 600 million years of geologic history at Forest River

Park, including how humans are currently shaping the

geologic record

Did not attend Food Truck and Beer Festival though it was

planned

October

Tues. 12th: Massachusetts Tribe temporary Fish Weir

construction, Cat Cove Postponed to May 2023

Tues. 11th: "Be a Hero in Getting to Zero" City Staff and

Board Member Net Zero Energy Training (Stacy Kilb and

Weston & Sampson Engineering)

Thurs. 13th: Massachusetts Association for Floodplain

Management Conference (Esmeralda Bisono and Woods

Hole Group)

Fri. 14th: "Be a Hero in Getting to Zero" Developer Net Zero

Energy Focus Group (Stacy Kilb and Weston & Sampson

Engineering)

Thurs. 20th: Salem City Academy Presentation (Stacy Kilb)

Next SERC Meeting - **Wednesday, November 9th, 2022, at 6:30PM on zoom** Note the date change to accommodate the holiday later in the month. The same zoom link will be used.

Adjournment

A motion to adjourn is made by Rick Nye, seconded by Doug Bowker, and passes with all in favor. The meeting ends at 8:15PM

Respectfully Submitted,
Stacy Kilb
Sustainability Engagement Coordinator
Clerk, SERC

Persons requiring auxiliary aids and services for effective communication such as sign language interpreter, an assistive listening device, or print material in digital format or a reasonable modification in programs, services, policies, or activities, may contact the City of Salem ADA Coordinator as soon as possible and no less than 2 business days before the meeting, program, or event.

Know Your Rights Under the Open Meeting Law, M.G.L. c. 39 §23B, and City Ordinance Sections 2-2028 through 2-2033. Please contact Jenna Ide at jide@salem.com or 978-619-5699 for more information.

