

Location: Virtual (via Zoom)

Participants:

- Members Present: Christina Christodouloupoulos (Vice-Chair), Joeth Barlas, Debbie Bentley (Chair), Launa Zimmaro (left early), Bob Zogg, Eric Balles (arrived late/left early), Dave Boettcher (arrived late/left early), Dan Cook (arrived late), Kath Hardcastle (arrived late)
- Members Absent: Glenn Reed
- Non-Members Present: Sue Thomas (Sustainability Coordinator), Barney Arnold (Select Board liaison), Robert Egri

Summary of Action Items:

<i>Description</i>	<i>Resp.</i>
Invite Claude von Roesgen to assist with RTSD	Bob
Secure RTSD volunteer to staff battery lawn/garden equipment display	Christina
Bring battery chainsaw and snowblower to display at RTSD	Dave
Assist Christina with RTSD ads	Joeth
Check with Aubrey Thomas about RTSD plugs in Town Newsletter along with committee articles	Christina
Secure volunteers for RTSD, including volunteers to assist with kid's activities	Kath
Submit request for RTSD volunteers for publication in Town Newsletter	Sue
Check if opt-in stretch code allows wood heat	Debbie
Address comments made for stretch code presentation to the Select Board	Debbie

Chair Debbie used visual aids to guide meeting facilitation (see attached).

1. Call to Order and Public Input

- a. Debbie called meeting to order at 4:34 PM
- b. Public Input:
 - i. Debbie instructed our guest to put any inputs into chat

2. Minutes Approval

- a. Bob moved to approve the 01/26/2023 minutes, subject to adding two missing names. Joeth seconded the motion.
- b. Votes:
 - i. In favor: Joeth, Bob, Christina, Debbie, Launa
 - ii. Opposed: None
 - iii. Abstained: None
 - iv. *The 01/26/2023 minutes were approved unanimously, as amended.***
- c. Sue submitted a correction to the 02/23/2023 minutes—change “committees” to “staff” in Sue’s action item. Bob moved to approve the 02/23/2023 minutes, subject to the correction that Sue submitted. Launa seconded.(Eric, Dave, Kath)
- d. Votes:
 - i. In favor: Joeth, Bob, Christina, Debbie, Launa, Eric

- ii. Opposed: None
- iii. Abstained: Dave, Kath
- iv. *The 02/23/2023 minutes were approved, as amended***
- e. Christina submitted a correction to the 03/01/2023 minutes—insert missing closing bracket. Eric moved to approve the 03/01/2023 minutes, as amended. Joeth seconded.
- f. Vote:
 - i. In favor: Eric, Dave, Kath, Joeth, Bob, Debbie, Launa
 - ii. Opposed: None
 - iii. Abstained: None
 - iv. *The 03/01/2023 minutes were approved unanimously***

3. Town Report Approval

- a. Christina moved to approve the ESC 2022 annual town report as drafted by Joeth. Eric seconded.
- b. Vote:
 - i. In favor: Joeth, Bob, Christina, Debbie, Launa, Eric, Kath
 - ii. Opposed: None
 - iii. Abstained: Dave
 - iv. *The ESC annual report was approved to be submitted to Town Hall for publication***

4. HomeWorks Energy (HWE): Discussion on Progress with MOU

- a. Bob is comfortable with HWE
- b. Dave will circulate sample MOU. Dave suggests the MOU is straightforward.
- c. Dave indicates that, while there may be an occasional complaint, he expects the vast majority of residents will be happy with HWE's services.
- d. Launa asked if it's OK that we make clear people are free to go elsewhere. Dave said, yes, and the customers will be made aware that they have options.
- e. Dave indicated that, under the Mass Save program, the contractor performing the energy assessment does any resulting weatherization work, but the pricing for that work is standardized across all participating contractors. For work beyond Mass Save weatherization, HWE would be obliged to mention that residents are free to choose another contractor/installer.
- f. Dan: Has had good experience with HomeWorks Energy in his own energy assessments.
- g. Dave: HWE probably has 10 energy specialists who work in this area.
- h. Eric moved that the ESC recommend to the Select Board and Town Administrator that Carlisle partner with HWE. Dave seconded the motion.
- i. Vote:
 - i. In favor: Joeth, Bob, Christina, Debbie, Launa, Dan, Eric, Dave, Kath
 - ii. Opposed: None
 - iii. Abstained: None
 - iv. *The recommendation to partner with HWE was approved unanimously.***

5. Route to Sustainability Day (RTSD) Planning—Christina’s Report

- a. Received planning updates from the “energy” team
- b. Bob to invite Claude von Roesgen to assist with RTSD
- c. Battery lawn equipment: Will get volunteer to watch so that people don’t run equipment.
 - i. Don’t run equipment at RTSD (safety concern)
 - ii. OK to display chain saw
 - iii. Dave to bring chain saw
- d. Beantown Kitchen is confirmed, and will use induction cooktop
 - i. Beantown bringing materials/displays
- e. Fire Dept has banner—will hang first week of April
- f. One block of School St. will be closed—police will do this.
 - i. Need to leave access for emergency vehicles
- g. Dan Scholten writing history of Earth Day for Mosquito, and will promote RTSD
- h. Bob suggests going big on Mosquito ads
- i. Joeth: Recommends small ad for now. Week before event, use 5 x 7 ad.
- j. Launa: Reminds us of school vacation week—Mosquito may not publish that week
- k. Barney: Submit for Mosquito Event List as well (back page of Mosquito)
- l. Barney: Can submit Mosquito ads all at once
- m. Barney: Letters to editor catch more readers than ads. List who/what will be at RTSD. She doesn’t see value in large ads.
- n. Christina: Mary-Lynne Bohn is helping with graphics. First ad will be “save the date”.
- o. Joeth offered to assist.
- p. Debbie: Include something in Town Newsletter highlighting who’s coming to RTSD? Departments/committees could say “see us at RTSD”, and include RTSD logo?
 - i. Christina will check with Aubrey Thomas on this
- q. Aubrey will start outreach soon
- r. Kid engagement at canopy:
 - i. Christina suggests purchasing energy-related toys and other items.
 1. Joeth: Need volunteer to oversee this
 2. Kath will help get volunteers
 - ii. Face painter—tailored to native flora/fauna—for part of the time. \$125/hr. x 3 hours
 - iii. Members agreed with these expenses
- s. Ferns doing box lunches. Could do as table service, or at the restaurant.
 - i. Donations: Could go to Carlisle general fund. Ferns is willing to collect donations. Will discuss further later.
 - ii. Barney: Ferns wants table set up. Will use their electronic payment system (\$10/lunch). One can add a donation when buying lunch. Can’t use cash. Barney checking with accountant to see if we need any approvals. Ferns will use compostable containers and parchment paper. Will have non-vegetarian option also. No utensils needed. Will provide boxed water.
- t. Launa: Boxes for water are not recyclable. We need to compost waste.
- u. Launa: What about leftover meals? Can we donate?

- v. Barney: Can give leftover food to town staff.
- w. Launa: Encourage participants to bring reusable water bottles
- x. Christina: Seeks volunteer to look into water stations, or just advertise locations for water.
- y. Talking to other food vendors as well.
- z. Christina: Good to have a few animal-based options to satisfy everyone.
- aa. Kath to organize volunteers
- bb. Transfer Station Action Committee will handle trash station volunteers
- cc. Christina circulated rough budget prior to meeting
- dd. We need to develop content for assembly that CPS has offered to hold prior to spring vacation, with a flyer for students to take home. Christina requested help with this. Christina and Launa will share the age groups of the assemblies so ESC can help identify appropriate educators.
- ee. Dave will float around at RTSD, filling in as needed in the energy areas. He doesn't need table/chair.

6. Outreach Planning (Website, Newsletter, RTSD Promotion)

- a. Town Newsletter:
 - i. Christina: Ask for volunteers for RTSD?
 - ii. Debbie likes idea
 - iii. Need submittal by next Wednesday
 - iv. Sue can do this. Christina will send list of volunteer needs for RTSD. It's due Wednesday.
- b. Webpage Blog:
 - i. Monthly need
 - ii. Debbie to send sign-up to ESC members. Watch for email.
- c. Resident Testimonials
 - i. Debbie got one reply. Can put these on webpage
 - ii. May get more volunteers at RTSD
- d. Letter to Mosquito
 - i. Already discussed
- e. Advertisement in Mosquito for RTSD
 - i. Already discussed
- f. Information for RTSD Participants
 - i. Christina working on this
- g. COAHS Presentation:
 - i. Sue: Postponed to April 5 due to weather.

7. Update on MA Issues / Proposed Town Budget / Governance Issues

- a. Not covered

8. Updates from Sustainability Coordinator

- a. Community Choice Aggregation (Sue):
 - i. Contract coming up for bid
 - ii. Glenn, Bob, and Sue meeting with brokers and preparing recommendation
 - iii. Selected broker will help us secure electricity supplier.

- iv. Pretty close to finishing informational stage. Two more meetings next week.
- b. RTSD: Working with Christina (as treasurer). Spending Cultural Council funds first, then ARPA funds.
- c. Green Communities Reports: Waiting to find one more answer to questions due March 17.
- d. Green Communities (GC) Upcoming Application:
 - i. Discussing projects. Carlisle should be eligible for up to \$200K. Corey Theatre lighting is possible project. Would probably need 50% cofund from Carlisle. HVAC units on Town Hall might be good project, too.
 - ii. The MA DOER hasn't released application package, but Sue will double-check status
 - iii. Barney: She will let us know about Select Board decision on Corey lighting project. ESC should vote to take a position at Town Meeting on the resulting warrant article.
 - iv. Bob: Mentioned quandary of proposing a GC project that might be approved at Town Meeting.
 - v. Sue: Our former contact at DOER implied that DOER doesn't evaluate proposed projects based on whether the applicant has already voted for funds. However, GC is getting more competitive.
 - vi. Barney: Will run this by Ryan and Town Counsel
 - vii. Barney: Select Board intends to vote on all warrant articles on 03/28
 - viii. The town submitted a MVP action grant letter of interest. Got very positive feedback, especially for a review of regulations/bylaws for potential climate changes. Town will likely propose this project.
 - ix. Sue taking vacation end of next week/beginning of following week.
 - x. Westford is preparing for Town Meeting as well. The Select Board agreed to fund full-time sustainability position with a blend of ARPA and operating budget monies. ARPA money is approved. The Town Budget will go to Annual Town Meeting 03/25. Strong public advocacy for the position.
 - xi. Debbie: Thanks to Joeth for great Mosquito Eco Zone article.
 - xii. Barney left meeting.

9. Approval of the Presentation to Select Board on Opt-in Specialized Stretch Code

- a. Earlier in the meeting, Dave reported that he reached out to ICF (Mass Save program consultant) on stretch code. They are checking with the MA DOER to see what support they can provide. Sue is also checking with the MA Department of Energy Resources (DOER) on this.
- b. Debbie ran through draft presentation to the Select Board
- c. Comments on draft presentation:
 - i. Dan: Drop discussion of house size
 - 1. Do heat pumps require alternative heating source?
 - 2. Can use wood stove back up
 - 3. Are wood stoves allowed?
 - a. Debbie will check.

- ii. Sue:
 1. Battery energy storage (such as Power Walls) can provide emergency power for house, or one can use certain EVs for back-up power.
 2. Operating costs will more than compensate for any first cost improvements.
 3. Agrees we should take out possible impacts on home size.
- iii. Bob:
 1. Heat pumps won't need back up, but back-up heat may be beneficial during power quality events or power outages.
 2. Predicting impacts on home size is too speculative. Debbie will take out.
 3. Add comment that it is potentially more difficult to power an all-electric home during a grid power outage.
- iv. Christina:
 1. Remove comma in text box on chevron chart
- v. Debbie:
 1. Will add incentives to chevron chart

Replies to comments that Robert Egri submitted via chat:

- a. Robert doesn't see what health issues are associated with fossil fuels. Bob mentioned that incomplete combustion and side reactions during combustion can produce pollutants.
- b. Robert pointed out the fire/explosion hazards of batteries. Bob concurred with this safety risk, but added that batteries should get safer over time. Also, there is no requirement in the opt-in stretch code for battery energy storage.

Next Meeting: 03/23/2023 at 4:30 PM

Adjournment: Bob moved to adjourn. Joeth seconded. Debbie adjourned meeting at 6:33 PM.

Minutes:

- Minutes prepared and submitted by Bob Zogg
- Minutes approved by the CESC on March 23, 2023

Attachments:

- Meeting Package

Attachment—Meeting Package

Environmental Sustainability Committee

9th March 2023 Meeting: 4.30-6.00pm

- I am Debbie Bentley chair of the Environmental Sustainability Committee and I call this meeting to order.
- This committee meeting is convening by Zoom as posted on the Town's website identifying how the public may join.
- Committee Members present remotely are: Bob Zogg, and Launa Zimarro, Joeth Barles, Dan Cook, Christina, Christodouloupoulos, Eric Balles, Dave Boettcher, Kath Hardcastle and Barney Arnold (Selectboard)
- Glenn Reed is absent
- Staff member, Sue Thomas, is also present remotely.
- This meeting is being recorded, so be aware that other participants may be able to hear you and anything that you broadcast may be captured by the recording. All audience members should keep their microphones muted unless recognized by the chair.
- Each vote taken in this meeting will be conducted by a roll call vote.

PUBLIC COMMENT



Visitors, please type your name into the chat for the minutes.

The Agenda is full today and we will have to move diligently through the agenda to finish on time. If you would like to comment on the please use the chat function and we will review this at the end of the meeting.

Agenda Running Order.

1	Minutes	4.30- 4.35pm
2	Town report approval	4.35- 4.40pm
3	Homeworks Energy: Discussion on progress with MOU	4.40-4.50pm
4	Route to Sustainability Day Planning	4.50-5.10pm
5	Outreach planning	5.10-5.30pm
6	Update on MA issues/ proposed town budget/ governance issues	5.30-5.40pm
7	Updates from sustainability coordinator.	5.40-5.45pm
8	Approval of the presentation to Select board on opt in specialized stretch code.	5.45-5.55pm
9	New Business	5.55pm

26th January
23rd February
1st March Minutes

- Motion to Approve
- Second
- Any Discussion
- Vote
- Authors to issue approved minutes to the Town Clerk.





Motion to Approve the Annual Report 2022.

Annual Report

HOMWORKS ENEGRY



MOU progress and discussion

ROUTE TO SUSTAINABILITY DAY



PRESENTING	LOGISTICS	TOWN HALL COORDINATION
VOLUNTEERS	LIABILITY INSURANCE	BUDGET
SCHOOL ASSEMBLY CONTENT	PRINTING	DONATIONS

UPCOMING OUTREACH

Needed	Author
TOWN NEWSLETTER	
WEB PAGE BLOG	
WEBPAGE CONTENT	
RESIDENTS TESTIMONIALS	
LETTER TO THE MOSQUITO	
ADVERT IN THE MOSQUITO for RSTD.	
INFORMATION FOR RTSD PARTICIPANTS.	



UPDATES AND SHOUT OUTS

COAHS Presentation on 28th February.

CCA update.

Carlisle Budget Deliberations:

Corey Lighting Proposal: Green Community Grant Position.

Liaison with Jeremy to help if needed.

Joeth authored the **Eco Zone** in this weeks Mosquito.

Launa : MA proposed budget

MCAN : Embodied Carbon campaign

Building Energy Boston Conference (NESEA) March 28- 29 in Seaport District

Carpooling?

MA Residential Building Code Changes

Spring 2022



Environmental Sustainability Committee
SELECT BOARD MEETING 14th March 2023

THE FOCUS OF THE 2023 CODE

HEALTHY ENERGY EFFICIENT BUILDINGS



AIR-TIGHT BUILDINGS



WELL INSULATED



HEAT/ENERGY RECOVERY VENTILATION



ELECTRIC VEHICLE READY



PROMOTES ALL ELECTRIC BUILDINGS AND PV ON ROOFS

'OPT-IN' SPECIALIZED STRETCH CODE

- Included in the MA Climate Bill 2021
- Additional requirements for future electrification, if you install fossil fuels systems in new / extensively refurbished buildings
- Must be voted in at a Town Meeting, and will be implemented a minimum 6 months after the vote, on January or July 1st
- Green Communities will help with the presentation at Town Meeting

Stretch code implementation timetable

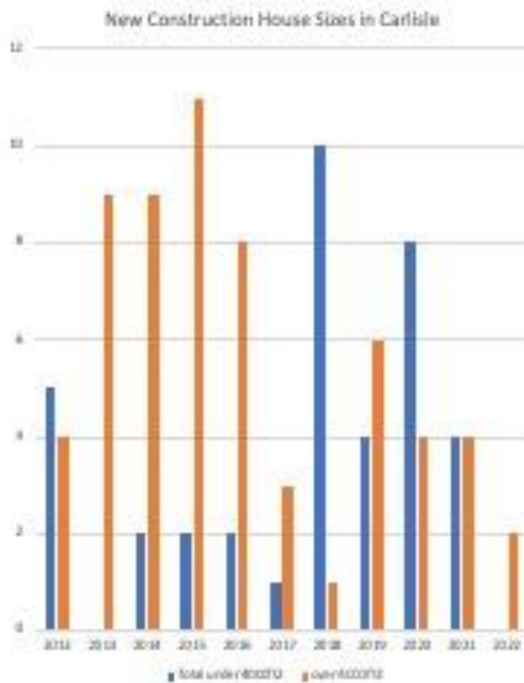
January 2023-July 2024.

Residential HERS rating drops to 52/55. Major home alterations /additions over 1,000 ft 2 and change of use of will have to be HERS 65/70

July 2023 new commercial stretch code

July 2024 –HERS requirement 42 fossil / HERS 45 electric. Major home alterations /additions over 1,000 ft 2 and change of use of will have to be HERS 52/55

* HERS 52= fossil fuel HERS 55= all electric



New House Sizes 2012-2022

- 38 under 4000ft 2 of which 14 were condos
- 61 above 4000ft 2
- Does not include Benfield Farms with 26 units with apartments 530-820 ft 2

There are approximately 66 plots left with the current Zoning.

22 are ready for development

How new homes are heated in Carlisle 2012-2023



Hanover Hill-35 homes-

Gas Heating

Greystone Crossing-22 homes-

Gas Heating

Garrison Way -16 homes-

Propane Heating

Chestnut Lane-7 homes-

Propane Heating

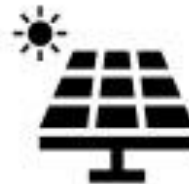
Woodward Village -18 homes

All electric

Still Meadow Farmland –
first house is using propane.

SPECIALIZED ‘OPT-IN’ COMMERCIAL CODE

- New Electric Commercial Buildings are the same as the Stretch Code.
- New Fossil Fuel Commercial Buildings must be pre-wired to become electric, and have photovoltaic onsite generation.



See commercial handout in meeting package for specific detail.



New Multi-family buildings built to the Commercial Specialized Code must achieve precertification to **Passive House** standards (either from PHI or Phius).

Upsides of the Opt-in Specialized code

- Easiest way for Carlisle to reduce its future carbon footprint.
- Complies with Masterplan Action Item # 15 C, 15D, 15E, and 16A (partially)
- Encourages even healthier all electric buildings as fossil fuels emit toxic gas as well as carbon.
- We would adopt the higher Stretch code 6 months early. (May vote) reducing the HERS rating to 42 for new houses.
- New homes in Carlisle may become smaller which is better for our carbon emissions especially if they are all electric.

Neutral

- Net Zero Fire Stations and Police stations are being built in MA . If designed as net zero from the start costs can be controlled.
- Passive House Fire Stations have been built in N. America.

Downsides Opt-in Specialized code

- Energy bills may be more due to high electricity prices, if the building is not well designed.
- Restricts fuel choice for new large houses over 4000 ft2 (No Gas Fireplaces)
- New homes in Carlisle may be less than 4000 ft2 and therefore have lower valuations.
- Passive House designs may result in additional soft costs.

Massachusetts is required to reduce its carbon emissions by 50% by 2030, from the 1990 baseline.*

Eliminating fossil fuel from new and extensively refurbished buildings with adopting the Specialized Stretch Code is essential to reach that goal.

Questions?



*. <https://www.mass.gov/info-details/massachusetts-clean-energy-and-climate-plan-for-2025-and-2030>



New Business

Any Public input?

ESC meeting March
23rd at 4.30pm.

