**2022-5-5- BE TEAM MEETING NOTES, PLUS SUBSEQUENT INPUT ON AGENDA**

**Indexed near the top of** <https://climate.smiller.org/BE>

**E:\websites\climate\BE\Presentations-Petitions-Letter-Announcements\2022-5-5-BE team meeting notes.docx (copy George Moffit, who couldn’t get into 5/5 organization meeting.)**

**CLEAR WITH GUEST PRIOR TO EVENT:**

1. **Time allowed;**
2. **record? (negotiate in advance)**
3. **send slides ahead of event?**

**DRY RUN (1 day prior to event): who does what; timing**

**Pre-assignments: TIME KEEPER; alert when 15 min; then 5 min remain; NOTE TAKER (reminds us of agreements, at end of talk; INTRODUCER (what values does our team bring to table); MODERATOR (to ensure answers from the GUEST : Are the recommendations doable? What is path forward to execute? ) PRESENTER(s); CLOSER (identify synergies and next steps)**

**STANDARD FORMAT: Individual intros; introducer; objective speaker1; objective speaker2; Guest presentation; closer**

**Attendees 5/5/2022: Jeff Rapaport, (NOT avail for next 2 weeks); Ken Dolsky, Sylvia Kay, Bob Erickson, Eric Benson, Steve Miller, Hap Haven, Greg Gorman (in EU, week of May 16); Bob Erickson**DRY RUN MEETING FOR KENNEDY: meeting Fri, May 13 at 4PM Attendees: Sylvia Kay, Eric Benson; Steve Miller; Pat Miller;…

**IN PROGRESS:**

* EJ input on letters: Melissa Miles plans feedback by Fri, May 6 – not yet received.
* Eric provided some EJ names: Pat has forwarded for comments

HAP HAVEN: BPI Building Performance Institute. Provides certification: their website lists “gold Star contractors” for upgrades of existing building (This answers the questions by potential heat pump purchasers, attending monthly heat pump webinars, asking how to find a good HVAC contractor who knows heat pumps).

**May 10, 1PM meet with Jennifer Senick, Senior Exec. Dir., Rutgers Green Building Center (1 hour)  
ZOOM meeting:** <https://us02web.zoom.us/j/89130141626?pwd=cnV4b0hNVUVHNjAvRkxTbUNvZ3VkQT09>  
Audio-only 1 929 205 6099 ID: 891 3014 1626  PW 750851

**On Mon, 5/9, Steve will**

* **email 2 documents: the May 2 letter/position paper; and the Affordable Housing Letter (draft)**
* **verify time allowed**
* **Jennifer’s preference for number of attendees**
* **determine if allowed to record**

**DRY RUN: Monday 4PM (using above Zoom)**

**Attendees (to be verified): Ken Dolsky, Sylvia Kay, Bob Erickson, Steve Miller, Pat Miller, Greg Gorman Eric Benson, Hap Haven; Bill Amann (if room); Mike Winka**

INTRODUCER (Steve) (5min): [create 5 min intro from contents of last page] Our group is “autonomous” with over members from several environmental and professional organizations. We are the concerned public. Our objective is to move faster on Building Electrification, for the sake of our children and grandchildren

PRESENTER 1 (Pat) (10min): -  subject: [May 2 letter and position paper](https://climate.smiller.org/REF/2022-5-2MurphyBuildingElecLetterMerge.pdf) on accelerating building electrification See GROUP: USE [Pat/Greg’s slides](https://climate.smiller.org/BE/Supporting-Docs/2022-5-10-Miller-gorman-slidesMurphyRecs.pptx) in you talk?: Steve is using the slide on “building code”; Ken might use the slide “Affordable Housing letter”; GREG- which slides would you choose to give (if Pat is not fully recovered)

PRESENTER 2 (Ken): (10min): Review/get feedback on the [affordable Housing letter](https://docs.google.com/document/d/10_xT-YgGqpMJMuJdWZ14smPhlSACs2hk/edit?usp=sharing&ouid=106813769595971619355&rtpof=true&sd=true) to Gov. Murphy. Create outline and

* (MODERATOR (Greg) feedback-: Are the recommendations doable? What is path forward to execute?  elicit comments/guidance and answer questions – does Jennifer agree on our priorities)

MISCELLANEOUS Steve (5min):

1. Rec 4. Adopt Strong BE Codes for 2021, 2024, 2027 with No Weakening Amendments: (Pat/Greg’s slide deck)
2. BE members will attend Andrea Krim’s next NEEP presentation. The BE team would then provide immediate input during the “listening session”
3. Is NJ legislation still required to use “Zero Code” from 2021 IECC Appendix CC – now a voluntary option (a “stretch code”?). This might meet the requirement of (a “national model code”) and used for “Zero Net Carbon” commercial, institutional, and mid- to high-rise residential building
4. California adopted [CA 2022 Building Energy Efficiency](https://climate.smiller.org/BE/Buillding-Codes/CA%202022%20Building%20Energy%20Efficiency%20Standards.html) Standard (incentives but NO mandate for new construction) Is there a possibility of applying this principle to NJ?

DETAIL: IECC allows local communities to take action on climate change through building codes.Jurisdictions (States? Cities?) that adopt the Appendix (to the IECC) can make zero-net-carbon the standard for operations.Is this already an allowable stretch code in NJ?   
<https://www.iccsafe.org/building-safety-journal/bsj-hits/the-future-has-arrived-how-the-zero-code-will-help-build-a-carbon-neutral-future/>[**Zero Code Renewable Energy Appendix Added to the 2021 International Energy Conservation Code – ZERO Code**](https://zero-code.org/new-model-building-code-empowers-local-jurisdictions-to-require-zero-net-carbon-operations/)

1. Legislation

A1440 (Asm. Kennedy) would allow municipalities to specify stretch codes. (INSERT BILL LANGUAGE HERE)

ASK if Jennifer is looking for related legislation– for our use in subsequent discussions with Asm Kennedy and other legislators

1. Select town(s) for trial building electrification

**JENNIFER SENICK:** (20min): (agenda is continued from previous page)

* Jennifer reviews her work: policy impact plans, BE roadmap plans, Building code roadmap

**ALL**

  -            identify synergies and next steps. How can BE aid Jennifer’s projects?

**JENNIFER SENICK BACKGROUND**

Senior Exec. Dir., Rutgers Center for Green Building

[Background](https://climate.smiller.org/BE/Buillding-Codes/meet-Jennifer-Senick.docx) (bio and published papers),

Jennifer’s testimony begins ~44 min into [4/21/2022 NJ Senate Energy Hearing](https://www.njleg.state.nj.us/archived-media/2022/SEN-meeting-list/media-player?committee=SEN&agendaDate=2022-04-21-10:00:00&agendaType=H&av=A)

**May 12, 1PM, Stacy Richardson NJ BPU, et al (Mike Winka review)  
Attendees: Mike WInka, Steve to invite Anjuli, Bob Erickson, Steve Miller, Pat Miller; Corey Katz (he wrote:** Corey Katz: It would be my first of such a meeting, so perhaps I will just introduce myself. But I could also present a "piece" of what we would like to say if that would help. For example, I wrote a bit in the part about incentives in the position paper.

REPEAT THE COMBINATION/PRACTICE THAT WORKED BEST DURING May 10 MEETING

**ZOOM meeting:** <https://us02web.zoom.us/j/89130141626?pwd=cnV4b0hNVUVHNjAvRkxTbUNvZ3VkQT09>  
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**On Mon, 5/11, Steve will**

* **email 2 documents: the May 2 letter/position paper; and the Affordable Housing Letter (draft)**
* **verify time allowed**
* **Stacy Richardson’s preference for number of attendees**
* **determine if allowed to record**

**DRY RUN: Wed (time TBD) (using above Zoom)**

**Attendees (to be verified): Ken Dolsky, Sylvia Kay, Bob Erickson, Steve Miller, Pat Miller, Greg Gorman Eric**

INTRODUCER (Steve) (5min): [create 5 min intro from contents of last page] Our group is “autonomous” with over members from several environmental and professional organizations. We are the concerned public. Our objective is to move faster on Building Electrification, for the sake of our children and grandchildren

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5. Legislation A1440 (Asm. Kennedy) would allow municipalities to specify stretch codes. (INSERT BILL LANGUAGE HERE) ASK if Jennifer is looking for related legislation– for our use in subsequent discussions with Asm Kennedy and other legislators
6. Select town(s) for trial building electrification
7. **May 18, 11AM meet with Asm James Kennedy and staff (Greg in EU) Ken attends**

**ZOOM meeting:** <https://us02web.zoom.us/j/89130141626?pwd=cnV4b0hNVUVHNjAvRkxTbUNvZ3VkQT09>  
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**DRY RUN: Friday, May 13, 4PM (same ZOOM as above)**

NOTE: THIS WILL HAVE A UNIQUE AGENDA: to be fleshed, and then used as boilerplate for other legislative visits

* Background: (Eric Benson). Ask if he wants help us dig up co-sponsors. Facing uphill anti-bills
* 1. Reach agreement on enhancements.
* Proposed specific language changes to [A1440](https://legiscan.com/NJ/bill/A1440/2022) (Sylvia Kay)
* Discussion of opportunities ((short direct points why important. OR send a copy as models
  + - [A1440](https://legiscan.com/NJ/bill/A1440/2022) with modifications to be a foundational bill like NY ["All-Electric Building Act", together with a suite of 3 other bills](https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fclimate.smiller.org%2FBE%2FNY-Climate-Act%2FRHN-legislative-package_final.pdf&data=05%7C01%7Chap.haven%40clearesult.com%7Cb22890bd915c4e66208008da2e45bf10%7Cc505a74550c6477fa1107be89b513acc%7C1%7C1%7C637873174363744194%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=EZG8LmbyEEH%2Bbc9v7Mv3pq5854Wr7quYdG8liW6KHnY%3D&reserved=0) (Steve M or Greg Gorman)
  + - The possibility of creating a NJ-version of  [The “Renewable Heat Now” Coalition](https://nam12.safelinks.protection.outlook.com/?url=https%3A%2F%2Fclimate.smiller.org%2FBE%2FNY-Climate-Act%2FRHN-legislative-package_final.pdf&data=05%7C01%7Chap.haven%40clearesult.com%7Cb22890bd915c4e66208008da2e45bf10%7Cc505a74550c6477fa1107be89b513acc%7C1%7C1%7C637873174363900438%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=gZrEpjgqOjg6sK7SdQ94PxYggI3Obu78zMNegKSY6hk%3D&reserved=0) of 200+ NY environmental organizations supporting a total of 4 NY State bills on related topics
  + The package of Global Warming Response Act (updated 2020), the NJ Energy Master Plan, the 80x50 Report, and other documents - - ALL THESE could be the NJ equivalent of the NY “[Climate Act”](https://climate.ny.gov/) of 2019, which established a 22 person “Council”, with firm requirements to issue a “Scoping Plan” by 1/1/2022 for review by all, and a firm date of 1/1/2023 to finalize the scope of the climate plan??.
  + Discuss CA bill.

OUR BE TEAM NEEDS TO DECIDE:

* Is the legislative subgroup aligned on what we want from the bill and any changes we are seeking? (Sylvia supplies next week- Fri, May 13 4PM)
* We wouldn't want to bring a huge group, so who are the correct people, 5-6 max? (Kennedy likes an audience)
* What are the materials and resources we would to provide the Assemblyman in support of electrification?

BACKGROUND

[Working document](https://docs.google.com/document/d/1rFueHjH3bxkqm4Ewdg1fwrZj-X8irBaWXgR3eBhpma0/edit) for the 5/18/2022 meeting

Asm James Kennedy is Vice Chair of "Assembly Science, Innovation and Technology Committee"

Establishes A1440 "Zero Energy Construction Act"; requires all new residential and commercial developments to be zero energy ready; requires developers to offer zero energy construction (this is a carry-over from 2021.

The [Senate S1170](https://legiscan.com/NJ/text/S1170/2022) is the Senate counterpart <https://legiscan.com/NJ/text/S1170/2022>, referred to the Senate Community and Urban Affairs Committee

March 13, 2022 (per Eric Benson)

* Staff said this bill was carried over from last session, a nonprofit or think tank approached and provided some base language
* Assemblyman Kennedy is supportive, but thinks it needs more work, so it is not a top priority for him at this time. That means it is not likely moving this May / June. The Legislature takes the summer off and are not likely to meet again until Sept or Oct. The good news is he seems willing to engage and this gives us time to build public support
* Asm Kennedy hasn't asked or run it by leadership (4 or 5 people) (IMPORTANT: approval from leadership is first required; no bills get hearing without approval.
* A1550 is NOT in Kennedy’s committee, it is in Assembly Housing Committee, where ~150 other “introduced” bills currently (5/5/2022) await hearing

BACKUP:

SPECIFIC language changes on bill  A1440:

1.Clarify definitions  esp ”Zero Energy Ready Building”:   Currently, builders are taking many different short cuts /ways around “zero energy ready”.

·       We expect it will take a while to get definitions worked-out, both before bill is signed, and then after- as the various NJ organizations fine tune, operationally.

·       We expect that with time, the NEEP/BPU work will fine tune the “NJ Zero Energy Roadmap” for building codes.  We believe that A1440 will benefit from that work.

·       In particular, the roadmap shows the possibility of a 2 step program: by 2024-2025, NJ will offer benefits, and builders will get discount, if gas connection is not offered.  Then using the 2027 code,  “Zero Energy” requirements are in place in NJ in 2028.

2.This bill focuses on new construction; we suggest being more specific and explicitly address existing buildings (Section 7 “Section 5 of P.L.1975, c.217…” is not clear)

3.“Commissioner” was defined once, but reused many times, and the original connection  (Commissioner o fthe Dept of Community Affairs) fades.

4.The public-facing web site will significantly affect success of this program.  We suggest looking at successful principles adopted by the Maine web site

GENERAL COMMENTS:

1 Look at related California laws.  Those have been refined over 2 decades - can these be applicable in NJ?

ERIC BENSON “Chat” NOTES:

Chat" from Eric Benson to Everyone:

its up to Kennedy to put the bill before 'leadership', this meeting is good time to take his pulse.

This is exploratory at this point.

A committee hearing would be a good first step! but there would still be 10 more steps to go before it goes anywhere

At our Friday, May 13 4PM meeting, we will decide what materials we want to send in advance to Kennedy?

Eric Benson assumes this is a 1 hr call, but will confirm Fri or Monday, just in case we need to squeeze into 1/2 hour

After gathering info from Kennedy, we can request to AMO (assembly majority office)

AMO are the staff of experts, who help facilitate conversations with 'leadership', and provide technical feedback.

**Steve NTRODUCTION COMMENTS (to be cut to 5 min)**

Our value: members environmental members representing owners of HVAC firms, engineering firms, contractors, and residents and business, and professional organizations. We are the concerned public, and desire to help in any way we can. Our group is “autonomous” with relationships with a number of environmental organizations. We have no specific axe to grind except to speed Building Electrification.

We thought your input could be very helpful in determining our next steps with the Murphy administration and hope we can discuss some of these points at our meeting today.

We have looked at other states for models for NJ.:

NY Started with the 2019 “Climate Act”. Now a year-long public review of the “Scoping Plan”, to be final in 2023.

“RenewableHeatNow” campaign, with over 200 environmental groups, pushing for a suite of 4 legislative bills. The first bill, “all-electric building act” is being considered by Senate and Assembly Others are stalled by legacy fossil fuel .

87% of NJ GHG emissions originate in transportation, buildings and electricity.: 42% transportation is well underway with heavy advertising and incentives for EVs; electricity is 3rd largest at 19% of total – NJ continues slow progress in increasingly clean electricity - The RPS (Renewable Portfolio Std) rises each year thru 2030, now about 23% of our NJ grid is Renewable. Offshore wind will cause a significant jump in the renewable contribution to the grid.

But the clear laggard is buildings. Buildings emit 26% of the NJGHG emissions. Nj has the 5th oldest houses in the nation, at about50 years average age. So the houses tend to need weatherization, and the appliances such as furnaces are old. The NJ Energy Master Plan states that there is concern that replacement of aging heating systems will lock in decades of continued emissions and risk financing the future stranded assets. It further states that delaying the transitition poses a missed opportunity to replace existing equipment with more efficient electric options. Over 80% of buildings rely on natural gas. The modeling in Integrated Energy Plan (part of the EMP) shows that delaying building electrification will result in higher economic costs and limited flexibility to further reduce NJ GHG emissions.

The least cost scenario in the 2019 EMP required 90% of buildings be converted to 100% clean energy systems to meet 2050 emission goals. The 80x50 report said that 22% conversion by 2030 is required, and we need building codes and enabling legislation to decarbonize both new and rehabbed construction. The 1st primary strategy is to develop a building electrification roadmap.

NJ is NOT a unitifed state for building electrification. Certain areas have oil heating. Other regions have propane heat. Also, the economics of heatpumps varies, depending upon relative price of gas and electricity. PSEG has low price gas, and high priced electricity. Viability of heat pumps depends on how high gas prices increase. On the other hand, NJNG has high gas and JCP&L has low electricity prices- and heat pumps are an obvious winner. AND GROUND SOURCE heat pumps should always be encouraged for jointly owned, or district heating for the increasing numbers of building constructed for multi-family and mixed commercial and resident occupancies. We have architects and construction engineers on our team starting to design this way, and need to get these good design principles to ALL of NJ architects, engineering firms, and HVAC contractors.. As recommended by the 80x50 report, we need to eliminate incentives for efficient fossil appliance, and strengthen incentives for electric heat pumps for space and water heating. And we need to increase the financial modeling to 10 years , instead of modeling only 7 years.

The 80x50 report requests projects to identify viability of technology and electrification barriers, beginning with state buildings, and we are also looking to select NJ cities which are leading climate activities to also feature building electrification..

The NJ Uniform Construction code requires NJ to adopt the most current national model codes. But we need even stronger standards. And we need enabling legislation to ensure stronger codes. We know we can adopt the ICC Appendix that enables net zero multifamily and commercial RIGHT NOW!

One important area: Operational costs (past, present, future) by region of NJ of heat pumps vs fracked gas heating.