E:\websites\climate\50x30\2021-11-22-script.docx

“80x50 Report, 10/2020, Executive summary, page 5:

ZOOM LINK: <https://calendly.com/events/dadce7fa-692f-4537-82ad-05ee4b5c034f/google_meet>

2006 GHG emissions in NJ: 128 MMT (after subtracting 6.7 MMT sequestered by forests) SOURCE: Table 1, page 3, of <https://www.nj.gov/dep/aqes/ghgarchive/GHG%20Inventory%20Report_2009.pdf>

50% is 64 MMT

Good morning. We are setting up a webinar on Electrifying buildings on Dec 16 at 7PM.

I called this meeting to discuss the audience and content.

BACKGROUND: 1 year ago, we worked with Sustainable Jersey, and held a heat pump webinar for green teams in all 4 Atlantic Coast counties.

It was well-received, gave useful info to green teams in local municipalities. It sets the stage, but I think achieved little in actually deploying heatpumps

We plan to use the core of that successful program, and ADD what we know of NY rollout, and what is possible in NJ

I WOULD LIKE YOUR INPUT TO CREATE SC EVANGELISTS, who will help push NJ to speed up GHG reduction

TURN ON POWERPOINT PRESENTATION

For our Dec 16 webinar, the current audience is the 20K+ NJ Sierra Club members and supporters. I would like this to be positioned to motivate NJ evangelists to push NJ to take action on electrification

Independently, I found that NY State, is quickly electrifying buildings across the state. This is driven by NYSERDA (200 employee: New York State Energy Research and Development Authority) (which is equivalent to the ~20 staff in the Energy Portion of the NJ BPU. I have attended webinars and read NY State documents. Multi- pronged approach: $2 to $3Million in direct marketing to home and business owners to get them to reply to HVAC contractors; electrification referrals to ; training for HVAC vendors- NY State pays 50% of their training. TOOLS for HVAC contractors to size the job from satellite views, and quickly estimate payback times for both air source and ground-source heat pump solutions.

 NJ, on the other hand, presently holds off electrifying buildings until a rapid start in 2030.A first step is to write an electrification ROADMAP (not done, as far as I know) A reason may be the gas industry, which is questioning burdening homeowners with conversion to expensive heat pumps. HOWEVER, there is a potential game-changer: on Nov 10, Gov Murphy announced a NJ goal of 50% GHG reduction by 2030 due to pressure from NJEmpower and our “50x30” team and others which wrote letters to him and the NJ DEP.. Today, I will show that NJ will have to cut between 12% and 25% more GHG emissions than previously anticipated. I believe this will speed building electrification

Here are two charts- the first is from the 80X50 Report (10/2020). It shows NJ will need to cut about 25% more than planned (about 16 million metric tons)

Residential and commercial buildings account for the second largest share (26%) of the state’s GHG emissions,
accounting for 24.6 MMT CO2e in 2018.

To significantly speed, I believe NJ would need to reuse electrification principles that are being perfected by NYSERDA (New York State Energy and Research and Development Authority-- it has “authority” to create its own financing). The NJ BPU Energy Office and NYSERDA (NY state energy office) work closely together, under a NATIONAL UMBRELLA ORGANIZATION ( NASEO – National Association of State Energy Officials).
 MY HOPE: NJ could work out deals with NY to use/tweak NY State platforms to rapidly electrify NJ buildings

Education is one objective. Another objective is to excite activists, to subsequently help us push NJ to meet its goal for a 50% Green House Gas reduction by 2030 by simultaneously speeding the acceleration toward EVs, Clean Electricity, and Building Electrification. NJ currently plans is to start aggressive Building Electrification in 2030. However data shows this date is way too late. We might suggest that NJ build upon New York State's platforms/models/tools/marketing, which has placed it well ahead in electrifying New York state building stock.

We will have a distinguished panel of experts:

- Tom Schuster (not confirmed) tom.schuster@sierraclub.org, (814) 915-4231NorthEast Regional Manager, won the "Beyond Coal" campaign

- Mike Winka- 30 year career as senior policy advisor with the NJ BPU. Retired after several years as the senior energy policy advisor to the BPU President

- Retired manager (not confirmed), NYSERDA (NYState Energy Research and Development Authority) - now a NJ-based consultant

- Dave Hoh (not confirmed) "Home Comfort and Energy Experts" - focuses on well-sealed home comfort...

- Spot testimonials: homeowners transitioning to clean electricity: Nancy Blackwood (confirmed), ...

NOT INCLUDED: Hap Haven, NJCEP is working on new construction rebates, etc. Wants to have a webinar in early 2022 focused exclusively on new construction

TURN OFF SCREEN SHARE PPT SLIDES

To achieve the 80x50 goal, emissions from the residential and commercial building sectors must be reduced by 89% to 2.7 MMT CO2e by 2050. Space and water heating account
for the majority of emissions from these sectors, with 87% of residential buildings and 82% of commercial buildings
relying predominantly on natural gas. The least cost scenario modeling performed for the 2019 EMP calculated that
90% of buildings must be converted to 100% clean energy systems to meet the 2050 emission goals

Full scale conversion must begin by 2030. To achieve the level of reductions needed, policies requiring net-zero emissions for new construction must be paired with aggressive requirements for electrification of older residential and commercial buildings as soon as practicable. The latter plan should begin with conversion of buildings that currently rely on propane and heating oil (approximately 10% of New Jersey residences). To support a steady conversion of the building inventory, legislation or BPU directives could be pursued to meet the building conversion rates in the 2019 EMP of 22% conversion by 2030