2022-3-17-chatQandA.docx (see Recording for answers to other questions)

**HEAT PUMP GENERAL QUESTIONS:**Q: Heat pumps mounted high on the wall -- doesn't the heat rise to the ceiling?
A: From Scott Nelson: the deflector (in the wall unit) modulates the air with a motorized baffle

**FIND AN HVAC CONTRACTOR:**Q: How does one go about finding the experienced professionals in your area who could take the project from soup to nuts?
 A: email Scott Nelson for a contractor in your area:

**CONVERT EXISTING RADIATOR TO HEAT PUMP:**Q: Can an existing hot-water and steam radiator system be adapted to heat pumps?
Q: Northeast New Jersey has a lot of homes 70-100 years old. Most have steam radiators, with either oil or natural gas furnaces. Suggestions?
Q Can you convert a gas furnace/steam system with a heat pump?
 A; Scott Nelson: you can with a cold climate heat pump system
A: Alexander Brown: Changing from steam heat to low temperature heat system is doable with Runtal low-temperature radiators.
A: From Scott Nelson: there are many options to move from steam to cold climate heat pumps
A: from Hap Haven: Try the Sanden hi temperature CO2 heat pump for cast iron radiator systems.

**BUILDING CODE INSPECTION**Q: How did you get a home brew controller through the building inspection system?
A: The homemade controller is the equivalent of a Nest thermostat as far as inspectors are concerned.

**HOME ENERGY AUDIT**Q: How do we arrange for an energy audit?
A: from Steve Miller: NJ “Home Energy Assessments” are [described here](https://njcleanenergy.com/residential/programs/home-performance-energy-star/what-expect-home-energy-assessment). Energy Audits are arranged by your [local electric and gas utility contacts listed here.](https://njcleanenergy.com/transition)
You might be able to schedule a $99 whole house energy audit <https://www.cielpower.com/schedule-home-energy-audit>
Encourage your town’s Green Team to arrange for low cost energy audits in your town. (as low as $49).
Q: Did anyone have a home energy audit done before changing heat sources?
A: from Steve Miller: yes, I had an energy audit, followed recommendations, and sized a heatpump for my newly sealed/insulated house.

**TO LOCATE AN HVAC PROFESSIONAL:**Q: What is the name of Scott Nelson’s company that installs these systems:
A: (from Scott Nelson): Oceanside Services, Allenhurst, NJ, 714-453-4646 email oceandoc@air-doctors.com.
if anyone has any questions on a cold climate heat pump don’t hesitate to reach out to me @ oceandoc@air-doctors.com we can help you find a contractor in your area

**HEAT PUMP QUESTIONS**Q: I think a couple of you said that heat pumps still work in very low temperatures…is this correct?
A: yes, cold climate heat pumps are rated to 5 degrees F, and other models of low temperature heat pumps are rated well below zero F.
Q: has anyone seen the anti-heat pump commercials running on tv lately?
From Greg Gorman: Yes sponsored by the fuel oil companies!
Q: Why do you need more than one heat pump. I have had one heat pump since 2006 and one works fine.
A: See recording, beginning 1:16:14:05
Q: Can't you do zone systems with a single heat pump.
A: Newer heat pump designs can have one unit which modulates to handle the varying needs from multiple zones
A: See the recording which discusses energy savings when rooms have their own controller .
A: Alexander Brown With my hydronic low temp radiant… yes- it handles multiple zones.
A: (anonymous) They make heat pumps now that replace gas furnaces and use existing ductwork. Mr Cool Universal is one and Gree Flexx and Fujitsu has one also.
Q: I have a 20 year old central AC system and a baseboard hot water heating system. Can they be combined?
A: from Steve Miller. First sign up for an energy audit, and follow thru on recommendations (see questions on “Home Energy Audit”). Then explore alternatives with an HVAC contractor who is familiar with heat pumps.
One low cost solution (depending on your house): I swapped my outside AC condenser with a the right sized heatpump. I sized the heatpump to handle heating down to 20 degrees F, and kept my 9 year old gas furnace as the auxiliary heater for lower temps. (I live in climate Region 4 of NJ, and this eliminates ~ 90% of my annual fracked gas usage). In your case, you might consider using your current baseboard hot water heating system as auxiliary heat for lower temps (in the future, you could upgrade to a cold weather heat pump to heat your baseboard water- see discussion “C**ONVERT EXISTING RADIATOR TO HEAT PUMP”**).

**WHAT ARE THE AMOUNTS OF REBATES** A: from Hap Haven: rebates vary by utilities. Lookup contacts for you NJ utility: www.njcleanenergy.com/transition

**BATTERIES**Q: What is the latest and greatest EV battery tech that's on the horizon? (I've got a 2017 Chevy Bolt EV - that I am one payment away from owning! - and I'm on the list to get a brand new battery for it next month, so I'm going to be good for a bit.)
Q: What is the latest and greatest EV battery tech that's on the horizon?
A: From Alexander Brown: Solid state batteries will not be ready for another 5-10 years, but they have a lot of promise.

**RECOMMENDED SOLAR COMPANIES**Q: do you recommend a solar panel company?
A from Steve Miller: always get bids. shop with EnergySage https://www.energysage.com/local-data/solar-rebates-incentives/nj/
Sierra Club has vetted solar companies, and has a special partnership with SunPower (both homeowners and Sierra Club get rebates upon completion)
<https://www.sierraclub.org/new-jersey/sierra-clubs-home-solar-power-partnership>