2020-11-9 “HEATPUMP”-webinar

Contents of CHAT and Q&A

Excellent tutorial (28 minutes)  on heatpumps

<https://www.youtube.com/watch?v=wDPw6YsMrFM>

The speaker runs an HVAC consulting firm for residential buildings with heating/cooling problems

TIME (min)   HEATPUMP TOPIC

0-7:       heatpump basics

7:        geothermal

13:         mini-split

17:         electric strips reqd for  cold days

19:         heatpump stand-alone pros/cons

20:        requirement: blower test ($49 special in NJ, followed by leak sealing) and heat load calculation

21:        hybrid heatpump plus furnace

 25:31 to 27:50 SUMMARY

SLOGAN: Never again buy a house A/C.  Instead, buy a heatpump!

Q&A ANSWERS

Anthony DeCaro 07:40 PM

I recall that there is a certain temperature differential for heat pumps to be efficient (Carnot engine). Are there certain temperature differential where a heat pump does not work best?

Hap Haven (NJCEP) 07:59 PM

trandition peat pumps lost efficiency in the 30s. Cold Climate heat pumps hold their efficiency below zero.

Harvey Cohen 07:47 PM

Define "zero energy ready"?

Hap Haven (NJCEP) 08:02 PM

The new house is ready for solar PV. If the new owner installs PV, the net annual energy usage will be zero.

Harvey Cohen 07:49 PM

What is "ductless"?

Steve Miller (You) 07:50 PM

THe blower is on the inside wall, and connected by freon lines to the outside heatpump compressor

Michael Winka 07:52 PM

What is a typical Cold Climate HP installation cost ? What is the heat pump cost

Hap Haven (NJCEP) 08:03 PM

Depends on the size and configuration, $2,000 to $6,000 for the unit. Installation costs depend on the contractor.

David Dvorin 07:53 PM

Thank you for calling out that NJ’s temperature range is such that a “cold climate heat pump” is needed because as you called out, a non-cold climate version is not efficient and therefore, expensive for when it gets really cold in NJ.

Hap Haven (NJCEP) 08:18 PM

Lots of great heat pumps now!

Anthony DeCaro 07:53 PM

One of my companies that I invest in, uses biogas coupled with fuel cells to generate electricity. Is New Jersey doing anything like this with waste water?

Hap Haven (NJCEP) 08:14 PM

Our C and I (commercial and industrial) program has a combined heat and power program. Check it out on our website.

Mike Hornsby 07:54 PM

Hap: What do you think about ground source heat pumps?

Hap Haven (NJCEP) 08:10 PM

Great heat pumps but maybe not worth the extra cost now that we have cold climate heat pumps.

Michael Winka 07:55 PM

For the fuel cell you have to have heat recovery to get a rebate - not likely for residential installations

Hap Haven (NJCEP) 08:15 PM

Right, that should change soon. (Hope, Hope)

William Silverman 07:56 PM

Can a heat pump reduce the humidity of the inside air during summer cooling?

This question has been answered live

William Silverman 07:59 PM

David Hoh,...FYI: The quality of your image is terrible. A bit blurry and very poor contrast. No bright white or dark balck areas. The image is washed out.

Steve Miller (You) 08:05 PM

yes, just like a standard A/C

David Hoh 08:46 PM

Private answer

Thanks, I see that as well.

Susan Kenen 08:03 PM

Will this presentation be available to see again? I hope you're saving it so we can share it. Please advise. Thanks!

Lauren Skowronski (Sustainable Jersey) 08:17 PM

There will be a few places to view the recording:1) Sustainable Jersey will post it on our website at: https://www.sustainablejersey.com/resources/presentations/webinars/2. Atlantic-Cape May Hub will post on YouTube page: https://www.youtube.com/channel/UCojn33vpoEYw6VLHEYD6XfQ

3. Each of the three hubs hosting this event will post on their respective Basecamps.

Kathy Hackler 08:04 PM

What’s the name of David Hoh’s company?

Steve Miller (You) 08:07 PM

Dr. Energy Saver

Nancy 08:12 PM

Here is the link to his website

https://www.drenergysaverjerseyshore.com/about-us.html

David Hoh 08:45 PM

Home Comfort & Energy Experts. Belmar NJ

sylvia rabacchi 08:06 PM

We have gas-heated hot water radiator system: is it possible to use the heat pump with this system?

Hap Haven (NJCEP) 08:17 PM

Yes, we have a rebate for heat pumps the connect with water systems.