

Electrify Your Home: Heat Pump 101

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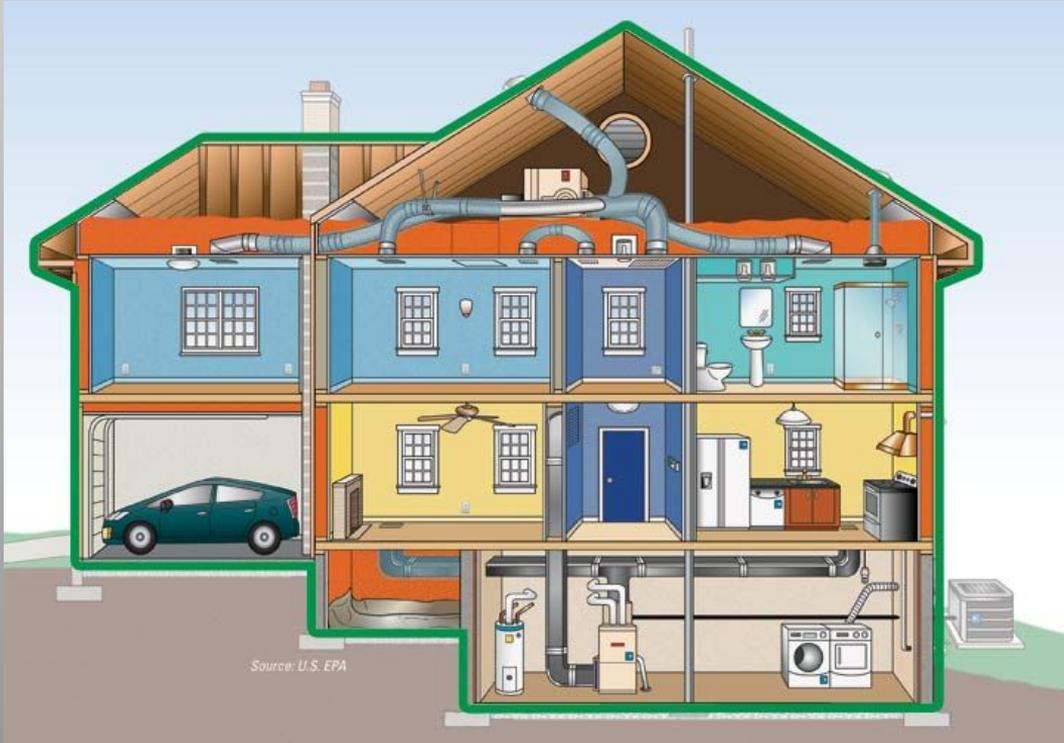
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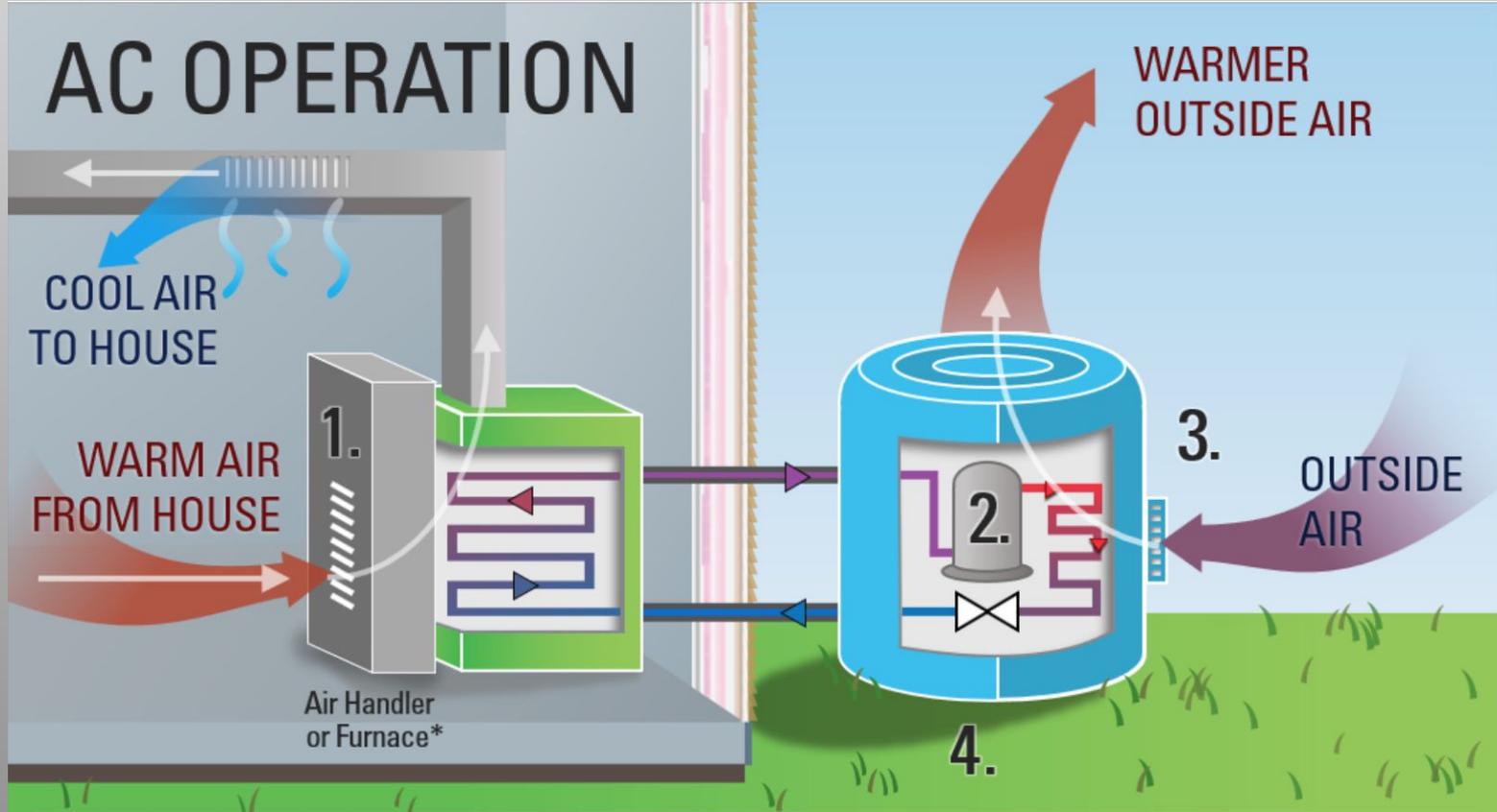
Agenda & Objectives

- House as a system
- Heat Pumps
- Best practices Case Study
- FAQs
- QnA
- Additional Resources
- Thank you!

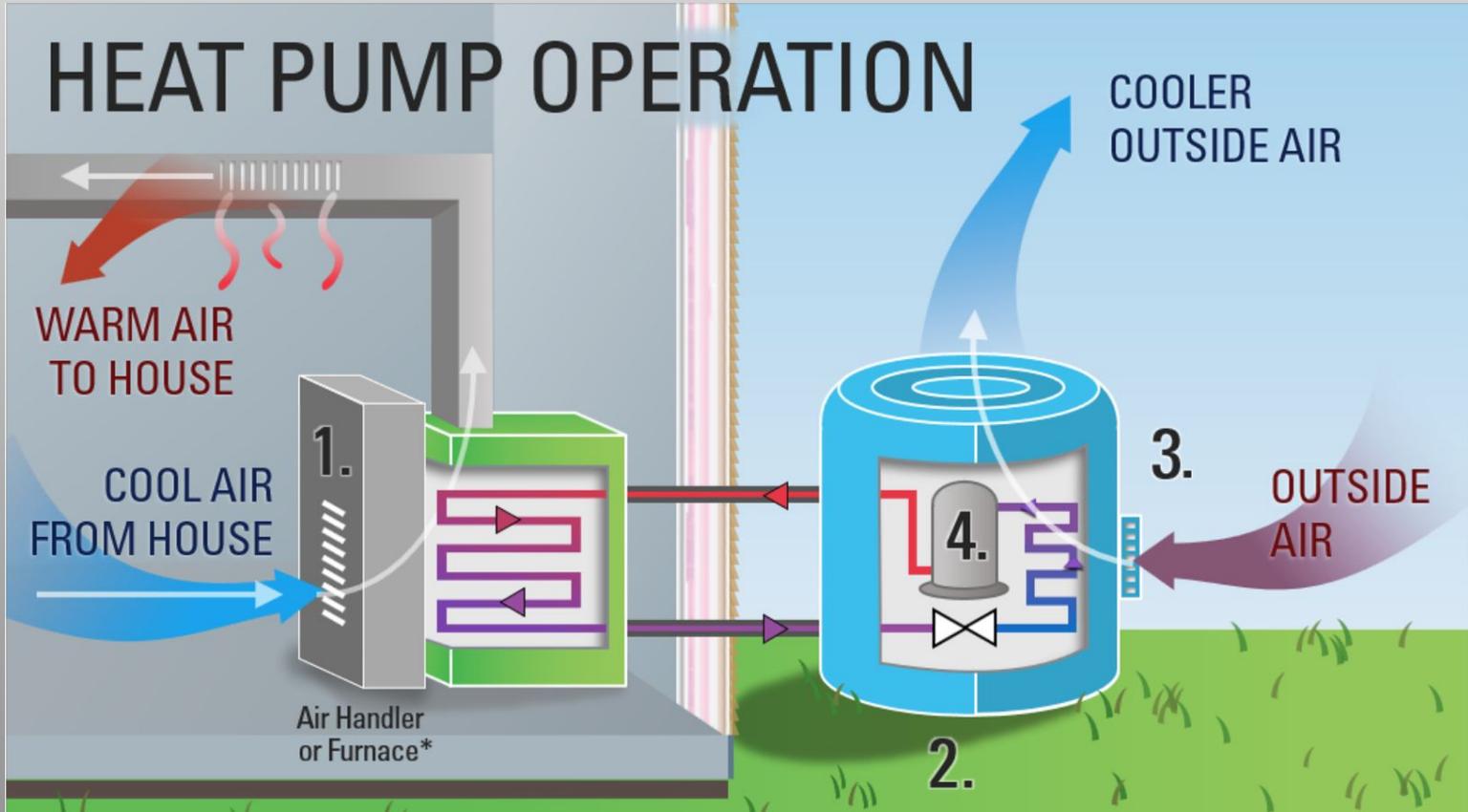
House as a System



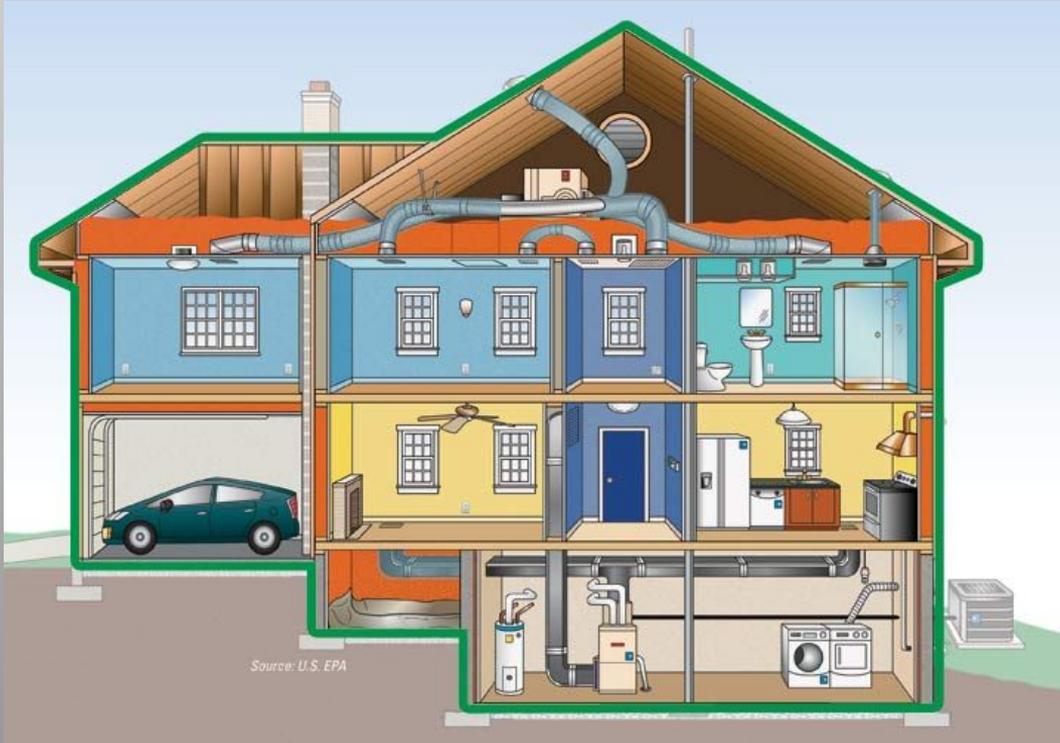
Heat Pumps



Heat Pumps



CASE STUDY



Efficiency ratings to be on the look out for - 1) Heating season performance factor (the higher number the better, 9.5 or higher) and 2) SEER (Seasonal Energy Efficiency Ratio) and again the higher the number, the better,

FAQs & “It depends...”

1. Do they work in our climate?
2. What kind of heat pump do you recommend?
3. Are they more expensive to buy?
4. Are they more expensive to operate?
5. Are there incentives for Heat Pumps?

Resources

1. Pepco
2. Montgomery County DEP and My Green Montgomery
3. NEEP
4. Rewiring America
5. Inflation Reduction Act

Resources

1. <https://montgomeryenergyconnection.org/>
2. <https://www.pepco.com/WaysToSave/ForYourHome/Pages/Maryland.aspx#>
3. <https://www.montgomerycountymd.gov/dep/>
4. <https://neep.org/high-performance-air-source-heat-pumps/air-source-heat-pump-installer-and-consumer-resources>
5. <https://www.rewiringamerica.org/>
6. <https://www.rewiringamerica.org/app/ira-calculator>
7. [https://www.aceee.org/policy-brief/2022/09/home-energy-upgrade-incentives-programs-inflation-reduction-act-and-other\](https://www.aceee.org/policy-brief/2022/09/home-energy-upgrade-incentives-programs-inflation-reduction-act-and-other)
8. <https://www.dsireusa.org/>

Questions from chat

Q: What is the status of heat pump refrigerants? Which ones are being discontinued? Which are most environmentally friendly?

A: R-410A is the refrigerant that doesn't mess with the ozone, R23 isn't mandated yet. They have sunset timers.

Q: Can a heat pump be used with a radiator heat system?

A: Yes, it can - air to air may work for you or air to water, they are more of a specialty.

Q: For air source heat pumps, are cold climate models recommended in MoCo?

A: Yes, cold climate models are recommended for our area.

Q: Could you talk about the need to plan an electrical panel upgrade (which is necessary for many to do gas stove replacement with electric - or for an electric heat pump that fully replaces the gas furnace.)

A: The HVAC contractor will be able to tell you what needs to happen. Most homes have enough amperage (~220) to not require any new upgrades. You would need to make sure you have enough circuits available.

Q: Would mini-splits be the solution for a second story that stays too warm in a home with an open staircase? Are they still very expensive?

A: They may be a solution but you want to make sure that air sealing and insulation are addressed first.

THANK YOU

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