WORKING WITH CONTRACTORS CHEAT SHEET:

HOME HEATING & COOLING

This worksheet is designed to help you plan for your heating and cooling system replacment.

*For more resources, videos, and inspiration go to www.cooldavis.org/HomeEnergy **(Updated May 2023)***

BASIC MAINTENANCE HELPS SYSTEMS LAST LONGER AND CAN LOWER BILLS

- Check your system filters (located at the return) every other month and more frequently if you have allergies, pets, or lots of foot traffic that brings in outdoor debris and dust.
- An annual service check up by a heating and cooling professional will also help to keep your system running smoothly and lasting as long as possible.

QUESTIONS TO ASK HVAC PROFESSIONALS

- Is the contractor licensed by the State of California to perform the work requested?
- **Check the Contractors State Licensing Board:** www.cslb.ca.gov/
- Will the contractor handle pulling the permit for the work?
- Does the contractor:
  - ✓ Handle only home heating and cooling projects?
  - ✓ Handle only energy efficiency improvements?
  - ✓ Handle both home heating and cooling and energy efficiency projects?
- Does the contractor have a local track record?
- What type of warranty does the contractor offer?
- Does the contractor do Load Calculations and Right Sizing of HVAC equipment and ducts?
- Is the contractor familiar and comfortable with replacing old gas heating equipment with heat pumps?
- If you want to engage the contractor to do energy efficiency retrofit work, is the contractor certified to conduct home energy efficiency assessments (including a Blower Door test or building leak detection)?
- Is the contractor approved to participate in PACE-financing and/or utility/TECH rebates?
- Will the contractor handle the paperwork if the project is eligible for financing and rebates?
- Besides heating and cooling system evaluations, does the contractor also handle:
  - ✓ Home energy assessments (such as using a Blower Door test or building leak detection)
  - ✓ Insulation evaluation and repair/replacement
  - ✓ Building sealing evaluation and repair
  - ✓ Duct sealing evaluation and repair
  - ✓ Installation of heat pump water heater

NOTE: If you are considering installing rooftop solar photovoltaics (PV) on your roof or installing an electric vehicle (EV) charger at home now or in the future, be sure to mention this to the contractors you talk to. You may be able to size the PV system differently once you have first addressed your home's energy efficiency and heating and cooling system loads.

HELP, MY SYSTEM IS DOWN: Should I Repair It or Replace It?

1. Do a band-aid repair

Doing a band-aid repair may get you through a season or longer. This buys you some time and allows you to start planning ahead and saving for a more expensive repair or replacement. This can include electrical panel upgrades or electric runs that may be required when installing a heat pump. Unfortunately, not all breakdowns can be fixed easily.

2. Do a thorough repair

If your heating and cooling system is in relatively good condition, a thorough repair might be a good option if you're not ready to invest in a new system. Make sure your HVAC professional checks your duct system for leaks (and repairs them), even if you're not repairing or replacing the unit. If your air-handler (blower/fan) needs repair, ask for a multispeed or modulating fan.

3. Replace

A full system replacement is an opportunity for an upgrade! When getting a new system insist on Load Calculations (ACCA "Right sizing"). Consider higher efficiency electric equipment like heat pumps and mini splits. If ducts are being replaced, consider taking advantage of work in the attic to seal attic leaks to the house and add/replace attic insulation. Also, if replacing ducts, make sure the contractor provides sufficient grille area and ducts for the required airflow of the new system. Many older systems have undersized returns.

QUESTIONS TO ASK: Repair or Replace?

- Can a simple repair get you through the season?
- Would a major overhaul help the system last a few more years?
- Do you have the funds to replace? Can you make use of rebates?
- Is replacement the only option because the system is broken and beyond repair?
- If replacement is necessary, does it make financial sense to invest in a more efficient heat pump system?
- Will investing in home energy efficiency retrofits -- such as replacing windows, sealing ducts, sealing the building envelope and/or adding or replacing attic insulation -- mean you can get by with a smaller heating and cooling system or put less stress on your existing system?

Who is Cool Davis? *Cool Davis is a local non-profit organization dedicated to helping Davis residents and businesses adopt more sustainable practices and reduce their greenhouse emissions. Cool Davis has partnered with the city since 2010 to offer resources, host events, and provide outreach and educational experiences for Davis residents. To learn more about other Cool Davis projects related to energy, transportation, and consumption of goods and services, visit us at www.cooldavis.org.*