

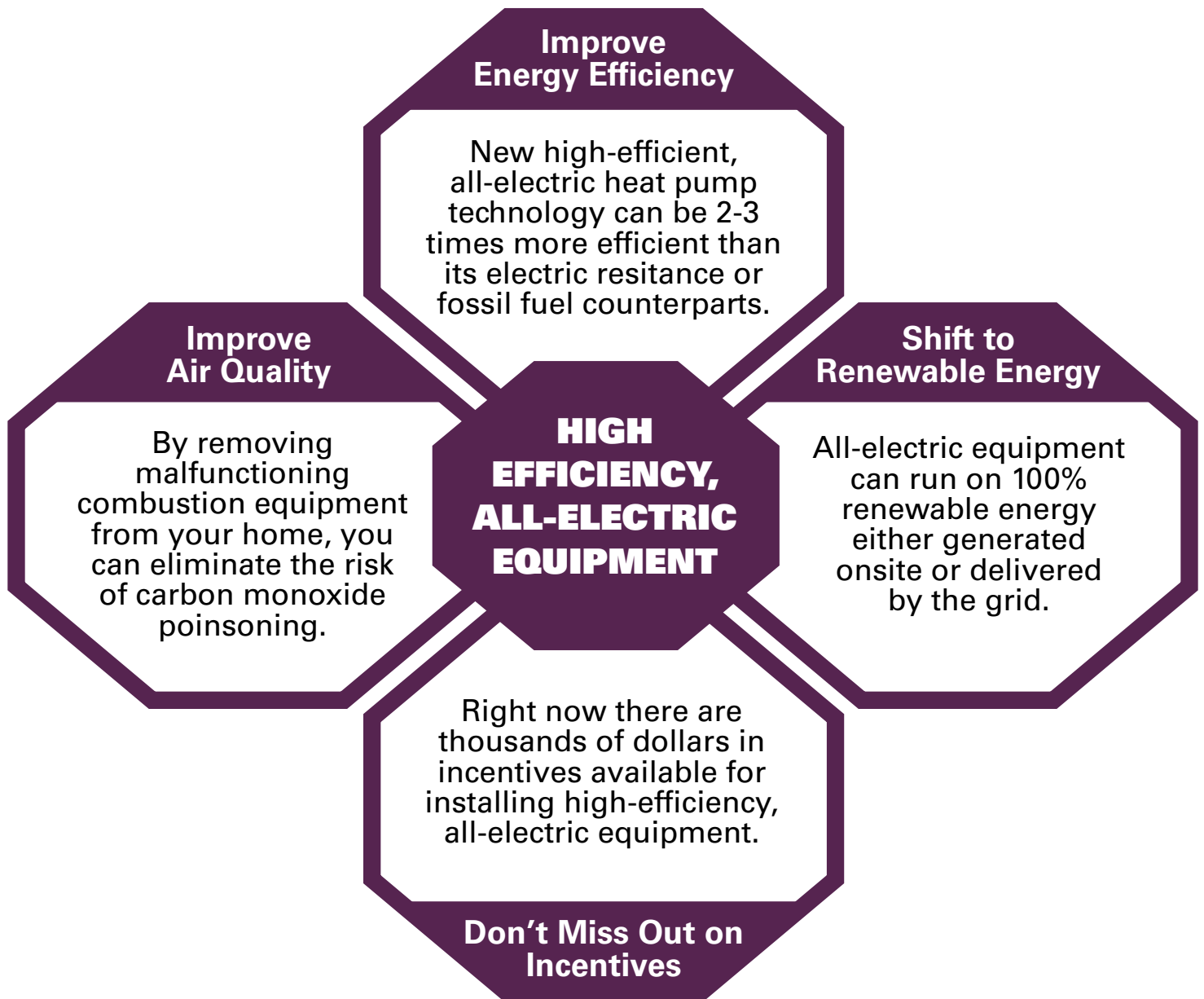


# INDUSTRIOUS HONEYBEE

*Working hard to update my home for my family*

*Bees keep their hive between 93 °F and 95 °F year-round. Heating with body heat in the winter, and cooling through evaporative cooling in the summer.*

If your furnace or water heater is more than 10 years old, or you have an old, inefficient air conditioner, make a plan to replace it so you aren't surprised by a failure. Replace your equipment now with high-efficiency, all-electric options like an air-source heat pump or heat pump water heater and advantage of thousands of dollars in incentives from Xcel Energy, state, and federal programs.



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An Xcel Energy Community Collaboration

# INDUSTRIOUS HONEYBEE



If high-efficiency, all-electric equipment is the right choice for your home, follow the checklist below to get started on equipment replacement.

## Colorado Homeowner

*"Talk to friends, family, coworkers... ask around. Make sure you get quotes from experts who know what they are doing."*

### PLAN

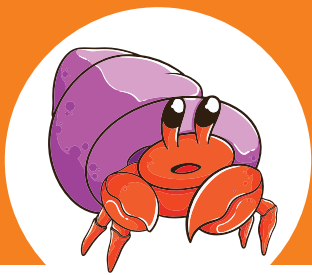
- ☐ Schedule a **Home Energy Squad**® (a registered trademark of Xcel Energy) visit to understand all the opportunities to improve home efficiency. Complete any outstanding insulation or air sealing before installing a heat pump.
- ☐ Work with an electrician to understand what the available electrical capacity is for your home.
  - ✓ Heat pumps use a backup heating system for very cold weather, which can be electric resistance or natural gas. If you have limited capacity, you may need to upgrade your electrical service or use a natural gas furnace for backup. Be sure to consider other electrification projects or electric vehicle (EV) charging when determining if electrical capacity is available. If you need to upgrade your service, call Xcel Energy.
- ☐ Work with your contractor to understand the heating, cooling, and/or water heating needs of your home to properly size your equipment. Use this link for questions to ask your contractor: [bit.ly/XEheatpumps](https://bit.ly/XEheatpumps)

### PURCHASE

- ☐ Gather at least three bids from **Xcel Energy registered contractors**.
  - ✓ Registered contractors will follow industry best practices known as "Quality Installation" and ensure Xcel Energy rebates apply.
  - ✓ You may get a discount for **completing multiple projects** at once, so talk to your contractors about other projects you are considering such as installing a heat pump hot water heater, induction stove, and/or EV charging.
- ☐ Review bids and choose the best option for your needs and install the selected equipment.
- ☐ [Optional] Consider financing options that may include a Colorado Residential Energy Upgrade (RENU) loan or financing options provided by your contractor.

### PERFECT

- ☐ **Optimize system settings** to maximize the time that your system runs in heat pump mode instead of using the backup system. This will maximize system efficiency, lower operating costs, and optimize emissions reductions.
  - ✓ For space heating, consider using a setting that is based on the time to reach your indoor air temperature set point rather than outside air temperature, to switch from heat pump operation to the backup heating system.
- ☐ If you have not switched to a heat pump, enroll in **Saver's Switch or A/C Rewards** to help manage grid electricity demand spikes, which helps reduce dependency on fossil fuels.
- ☐ [Bonus] Leverage Xcel Energy's **Renewable Energy Choices** to ensure your home is running on 100% renewable energy maximizing carbon reduction benefits.



# GROWING HERMIT CRAB

*On the lookout for a safe and comfortable new home*

*Hermit crabs do not have their own shells, instead they use recycled shells from other animals. This means as they grow, they need to go find a larger home to move into.*

When you are looking for a different home, **consider a high-efficiency, all-electric option** to provide a safe and comfortable home that is also affordable and more environmentally friendly.

## This a better, all-electric home.

### CHEAPER TO BUILD AND OWN

New all-electric homes **can be 10% cheaper to build** with similar annual heating costs when compared to standard construction because of the avoided costs for natural gas infrastructure (*Southwest Energy Efficiency Project, 2021*).

### LOWER ENERGY BILLS

New high-efficiency, all-electric homes that meet certain criteria can realize up to **18% lower energy bills and 31% lower energy usage** compared to the average-sized home with natural gas service. *Based on a 2024 study by Residential Science Resources, LLC.*

### IMPROVED HOME COMFORT

New all-electric homes are often quieter and more comfortable than standard construction homes due to increased insulation, high-quality windows, and ultra-quiet heat pump heating and cooling technologies.

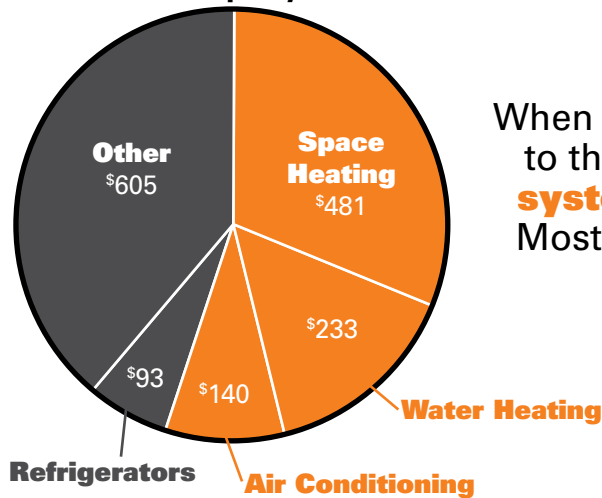


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# GROWING HERMIT CRAB



Average Household\* Energy Costs  
\$1,550 per year



\*Households in the West with cold/very cold climates  
(Energy Information Administration, 2020)

When considering a home purchase, pay attention to the **heating, cooling, and water heating systems** as well as the associated utility costs. Most of the utility costs in your home will come from these systems.



## PLAN

# HOME PURCHASE CHECKLIST

- ☐ Ask the property owner or realtor for a **home energy rating (HERS)** report or 12 months of energy bills to understand likely utility costs. This is especially important when comparing costs for homes with different heating and cooling system types.
- ☐ During walkthrough, review operation and efficiency of heating, cooling, and hot water systems and identify any potential concerns including age, efficiency, and controls. You can find this information on the equipment nameplate. This information should also be included in your home inspection.

## PURCHASE

- ☐ Purchase the home that **best fits your needs**. Be sure to include utility costs for each when considering monthly expenses.

## PERFECT

- ☐ Adjust thermostat and hot water controls to **optimize energy efficiency**.
  - ☐ Heat pumps should be set to switch over to the backup systems if they can't meet the set point rather than switching automatically based on outside air temperature.
  - ☐ Hot water heaters should be set to 120 °F.
- ☐ Schedule a **Home Energy Squad®** visit to learn more about ways to improve your home efficiency and/or decrease dependency on fossil fuels.
  - ☐ If the home has central A/C, enroll in **Saver's Switch or A/C Rewards** to save money and help manage grid electricity demand spikes, which helps reduce dependency on fossil fuels.
  - ☐ Take advantage of other **Xcel Energy Rebates** such as Cellular Shades and Insulation and Air Sealing to maximize home comfort and efficiency.
  - ☐ Leverage Xcel Energy's **Renewable Energy Choices** to ensure your home is running on 100% renewable energy. More information available at: [xcelenergy.com/renewables](https://xcelenergy.com/renewables)
- ☐ If mechanical systems need to be replaced or are reaching end of life, consider **beneficial electrification** options, which may include rebates and tax incentives.



# ADVENTUROUS PARROT

*Willing to go out on a limb to try something new*

*A parrot's natural inquisitiveness makes them excellent problem solvers and tool users.*

Beneficial electrification is an important component to reduce the carbon emissions from energy use in your home. If you have already taken steps to improve the energy efficiency of your home through weatherization and lighting upgrades, **consider beneficial electrification of your heating system**, which is often the largest single source of greenhouse gas (GHG) emissions from energy use in your home.

#1

## HOME ENERGY EFFICIENCY

### Start with the Fundamentals

Home insulation and weatherization are key for home comfort for all types of heating and cooling systems. Be sure to take care of any drafty or uncomfortable areas to maximize the impact of your investment.

#2

## CLEAN ELECTRICITY SUPPLY

### Go 100% Renewable

Xcel Energy's grid already generates 42% of all grid power using renewable sources. Installing rooftop solar or purchasing renewable energy will maximize the emissions reductions from electrification. More information available at:

[xcelenergy.com/renewables](https://www.xcelenergy.com/renewables)

#3

## BENEFICIAL ELECTRIFICATION

### Two-in-One Bonus

Heat pumps can be used to replace an aging AC unit and natural gas heating reducing or eliminating your reliance on fossil fuels, greatly improving home efficiency, and avoiding surprise failure of older systems during very hot or cold weather.



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# ADVENTUROUS PARROT



*This guide focuses on installation of a heat pump for home heating and cooling as home space heating usually accounts for over 60% of a home's fossil fuel use.*

## Average Colorado Home Fossil Fuel Use and Emissions

Space Heating 69%

Water Heating 25%

6%

Other

### PLAN

## ELECTRIFICATION CHECKLIST

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- ☐ Work with an electrician to understand what the available electrical capacity is for your home.
  - ✓ Heat pumps use a backup heating system for very cold weather, which can be electric resistance or natural gas. If you have limited capacity, you may need to upgrade your electrical service or use a natural gas furnace for backup. Be sure to consider other electrification projects or electric vehicle (EV) charging when determining if electrical capacity is available. If you need to upgrade your service, call Xcel Energy.
- ☐ Work with your contractor to understand the heating, cooling, and/or water heating needs of your home to properly size your equipment. Use this link for questions to ask your contractor: [bit.ly/XEheatpumps](https://bit.ly/XEheatpumps)

### PURCHASE

- ☐ Gather at least three bids from **Xcel Energy registered contractors**.
  - ✓ Registered contractors will follow industry best practices known as “Quality Installation” and ensure Xcel Energy rebates apply.
  - ✓ You may get a discount for **completing multiple projects** at once, so talk to your contractors about other projects you are considering such as installing a heat pump hot water heater, induction stove, and/or EV charging.
- ☐ Review bids and choose the best option for your needs and install the selected equipment.
- ☐ [Optional] Consider financing options that may include a Colorado Residential Energy Upgrade (RENU) loan or financing options provided by your contractor.

### PERFECT

- ☐ **Optimize system settings** to maximize the time that your system runs in heat pump mode instead of using the backup system. This will maximize system efficiency, lower operating costs, and optimize emissions reductions.
  - ✓ For space heating, consider using a setting that is based on the time to reach your indoor air temperature set point rather than outside air temperature, to switch from heat pump operation to the backup heating system.
- ☐ If you have not switched to a heat pump, enroll in **Saver's Switch or A/C Rewards** to help manage grid electricity demand spikes, which helps reduce dependency on fossil fuels.
- ☐ [Bonus] Leverage Xcel Energy's **Renewable Energy Choices** to ensure your home is running on 100% renewable energy maximizing carbon reduction benefits.



# RESILIENT WOMBAT

*Making sure my home is a safe and comfortable refuge*

*Wombat burrows can provide safe places to hide during a wildfire and have been known to provide refuge for lizards, birds, and small mammals.*

## COLORADO'S TEMPERATURE STRIPES FROM 1985 TO 2022



***It's no secret that the summers in Colorado are getting hotter.***

Many older homes were not built with A/C because it simply wasn't necessary. If you have an older home and are looking to add cooling, consider installing an air source heat pump.

The heat pump not only provides high-efficiency cooling just like an A/C system, but also provides heating that is 2-3 times more efficient than a typical heating system. Other benefits include:

### Isolating your Home from Poor Air Quality

You will be able to close your windows during days with poor air quality to block out wildfire smoke or other pollution that can negatively affect your health, and still stay cool!

### Quiet Operation

Heat pumps use modern, high-efficiency fans making them much quieter than your existing furnace, fans, and/or window mounted AC units.

### Reducing your Reliance on Fossil Fuels

Heat pumps can provide high efficiency heating with clean electricity reducing or eliminating your reliance on using gas or oil heating in your home and reducing your home's carbon footprint.



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# RESILIENT WOMBAT



*By using a heat pump to add cooling instead of a traditional A/C unit, you can improve your heating efficiency at the same time.*

## Colorado Homeowner

*"When we replaced our swamp cooler with a heat pump, I expected our house to be cooler in the summer. I was surprised by how much quieter it is, which is amazing. The best part is my energy bill only went up by about \$10 per month and I cut my water use in half."*

## PLAN

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- ☐ Review bids and choose the best option for your needs and install the selected equipment.
- ☐ [Optional] Consider financing options that may include a Colorado Residential Energy Upgrade (RENU) loan or financing options provided by your contractor.

## PERFECT

- ☐ **Optimize system settings** to maximize the time that your system runs in heat pump mode instead of using the backup system. This will maximize system efficiency, lower operating costs, and optimize emissions reductions.
  - ✓ For overall home space heating, consider using a setting that is based on the time to reach your indoor air temperature set point rather than outside air temperature, to switch from heat pump operation to the backup heating system.
- ☐ If you have not switched to a heat pump, enroll in **Saver's Switch or A/C Rewards** to help manage grid electricity demand spikes, which helps reduce dependency on fossil fuels.
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