

Home Energy Efficiency Handbook

Mobile Homes



Conserve energy and save money!

Foreword

Balancing energy costs with other expenses can be challenging for many Clark County residents in both metropolitan and rural areas. The tips in this guide shares ways to potentially lower energy usage and energy bills for mobile homeowners.

This guide can help you:

1. What you should look for in new and current mobile homes, addressing key questions and concerns
2. Identify practical action items that can improve energy efficiency
3. Learn what incentives are active and available to the public

By using some or all the tips in this guide, you will be able to ***conserve energy, make your home smarter, and potentially save money.***

On behalf of All-In Clark County, it's our pleasure to share the resources in this guide. We are committed to reducing our region's contribution to climate change and preparing for its impacts.

How to Use This Guide

This guide is designed for **mobile homeowners** seeking practical ways to improve their home's energy efficiency, performance, and comfort.

The **first section** introduces what energy efficiency is, explains its benefits, and outlines how mobile homeowners can incorporate efficiency into their homes.

The **main section** addresses common struggles with mobile homes and provides recommended solutions.

The **last section** provides information on current incentives and rebates that are available for potential energy efficiency updates.

A Glossary is at the end, sharing commonly used terms associated with home upgrades, appliances, and energy efficiency.



Table of Contents

Understanding Energy Efficiency 5

Mobile Homes and Energy Efficiency 6

 Common Mobile Home Issues 7

 Update Tips for Mobile Homes 9

Glossary 16

Conclusion 17



Understanding Energy Efficiency

What is Energy Efficiency?

Energy efficiency means using less energy to accomplish the same task. Many homes, buildings, and everyday products use more energy than necessary due to inefficiencies and waste.

Improving energy efficiency is one of the simplest and most effective ways to reduce energy use, lower utility bills, and lessen environmental impact.

Benefits of Becoming Energy Efficient

Lowering your energy use can create **savings on your utility bill**.

Energy efficiency can improve indoor air quality, offering **health benefits** through better air circulation and cleaner energy sources, whether you're on or off the grid.

Understanding Energy Efficiency

Most mobile homeowners pay their own energy bills and may struggle with efficiency issues such as leaking insulation or ventilation, or breakdowns in heating and cooling systems. There are many ways to improve your home and potentially reduce monthly utility expenses.

This guide outlines simple, cost-friendly changes, along with habits you can adopt, that can make a meaningful difference to home energy efficiency.

Larger improvements can also be made to improve home energy efficiency, longevity, and help reduce potential damage and improve heat resilience within the summer months.

Depending on what's right for you, energy efficiency changes can start small. Re-caulking drafts, adjusting thermostat settings, switching to efficient lighting, and using appliances wisely can all contribute to a more energy-efficiency home.



Energy Efficiency for Mobile Homes

What's in this section:

- Common Issues
- Tips for Mobile Homeowners



Before you update...

Knowing what features are important and when to update them in your mobile home can help prepare you for changing temperatures and improvement costs. Although making energy efficient changes to your home is important, check for available incentives and move forward when it makes sense for your budget.

Utility Information

1. Review which utilities serve your region and the average cost for each utility. Check for available incentives offered by your utility, if any.

Metering

1. Consult your meter or utility resources to review your usage.
 - Check with your utility to see if there are any incentives or rebates available for updating features in your home.

Heating and Cooling Systems

1. Locate the heating and air conditioning system and review how old it is.
 - Older systems are less efficient, cost more to operate, and tend to break down faster.
 - Research available incentives for a replacement, if applicable.

Water Heater

1. Locate the water heater and check how old it is. Research utility incentives for a replacement, if applicable.
2. What type of fuel does your water heater use? Research options in your area to compare costs. Choose a fuel that works best for your home and budget.



Thermostat Control

1. What type of thermostat do you have? Is it programmable and energy efficient during peak heat months?
2. Check with your utility to see if there is an incentive or rebate for a programmable thermostat.

Air Infiltration/Drafts

1. Check for any leaks and drafts around the property: Doorways, windows, and vents.
2. Plan to seal any leaks or drafts you find

Window

1. Check to see if the windows are double pane. These windows help save on cooling and heating costs.
2. Ensure windows and window screens are properly sealed. Check for leaks and drafts.
3. Look for drapes, window coverings, and black-out shades to minimize heat from the sun during summer months.

Appliances

1. Inspect the gaskets and coils on your refrigerator, washing machine, dishwasher, oven, and dryer to ensure they are clean and properly tightened.
2. Review the age and current operating condition of your appliances.
3. See whether your appliances are Energy Star certified. Incentives may be available for a more energy efficient replacement.

Insulation

1. Check your insulation and consult with a professional if needed. Ask if installing belly wrap and skirting is right for your mobile home and budget.
 - Skirting and belly wrap improve insulation and prevent pipes from freezing in colder months.
2. Check for weathering that needs repair.
 - Signs of weathering include deteriorating insulation, evidence of water leaks, condensation, musty odors, or mold.
 - Consult a professional if needed.



Tips for Mobile Homes

If you are looking for a healthier, more sustainable home, review the tips below. You will find practical steps to improve energy efficiency and potentially lower your utility bills. Even small changes can save you money, and some changes cost nothing at all.

FREE FIXES



Set computers to go into standby mode after 10 minutes of inactivity.



Wash clothes in cold water when possible and hang them out to dry. Check clothing labels for care instructions.



Set your refrigerator to 35-38°F and your freezer to 0-5°F



Program your thermostat or manually dial it back at night or while you are away.



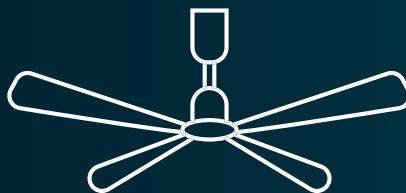
Use shades and blinds to help minimize sunlight heating your home during the summer.



Use sunlight from windows instead of turning on lights during cooler months, when possible.



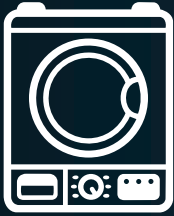
Set water heater temperature to 120 degrees Fahrenheit.



Use ceiling/stand-alone fans

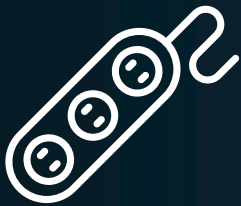
- In the summer, set your fan motors to a counterclockwise rotation to create a breeze.
- In the winter, set your fan motors to a clockwise rotation to help push warm air down.





- Run full loads in the washing machine and dryer.
- Use cold water when possible.
- Check clothing labels for care instructions and consult manual to avoid overfilling.

SMALL UPGRADES



Use energy-efficient power strips for electronics, including gaming consoles, streaming devices, and desktop computers.



Use high-efficiency shower heads and faucets.



Consider replacing your non-programmable thermostat with a SMART thermostat or learning thermostat.



- Replace any fluorescent light bulbs with LED or remote-controlled light bulbs.
- SMART bulbs can be remote-controlled or automated via apps or smart home devices.



Choose high efficiency or Energy Star Certified personal appliances and electronics when it's time to replace older versions.



Weatherstrip doors and windows with foam or install draft stoppers.

LARGE UPGRADES

These upgrades should be conducted at your discretion and may require out of pocket expenses. In some cases, rebates or tax incentives may not be available, but these investments can save money over time.



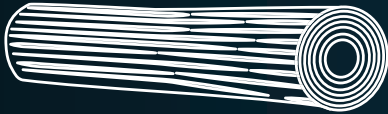
Install/Replace insulation with more sustainable options: Fiberglass batts, Spray foam, Rigid Board.



Replacing windows with double pane or low-emissivity (low-e) windows.



Upgrade to an ENERGY-STAR efficiency HVAC system. Make sure to maintain filter replacement frequency as indicated on the filter label.



Install insulated skirting under the home to reduce heat loss.



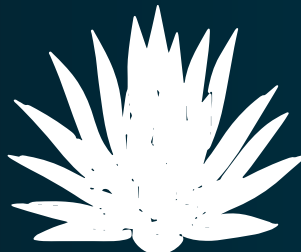
Install a belly wrap to help with extreme weather conditions.



Install insulation to the roof to minimize and prevent leaks.



Replace furnace every 15-30 years to prevent any property damage.



If you own the land, plant native, drought-tolerant, and heat-resistant trees to grow shade around your home. Check the SNWA plant list for native and drought-tolerant plants.



If your utility offers an incentive and a list of verified installers, consider installing a geothermal heat pump.

Rebates, Discounts, and Financial Assistance

What's in this section:

- Incentive guide for current or updated features
- Guide to apply



What Incentives are Available?

Knowing what incentives are available can help you fund or partially fund upgrade projects. Incentives can vary from provider to provider so be sure to check with them to see your eligibility.



AIR CONDITIONING TUNE-UP INCENTIVE

This includes a comprehensive cleaning of the major parts of the system to increase efficiency and reduce wear and tear.



ENERGY-EFFICIENT MORTGAGES

Conventional EEMs may increase a borrower's purchasing power when making energy efficient upgrades to their home at the time of purchase or refinance.



BOULDER CITY SMART THERMOSTAT REBATE

Available to all Boulder City residential electric customers. Only ENERGY STAR thermostats are eligible.



BOULDER CITY SOLAR WATER HEATER REBATE

The Solar Domestic Water Heating Rebate Program is available to all Boulder City residential electric customers with existing electric water heaters.



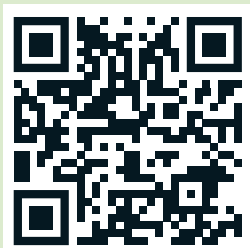
BOULDER CITY AIR CONDITIONER REBATE

Available to all Boulder City residential electric customers with existing central air conditioning and heat pump systems.



BOULDER CITY POOL PUMP REBATE

The Pool Pump Rebate Program is available to all Boulder City residential electric customers with an existing pool and a single stage pool pump.



BOULDER CITY SMART CONTROLLER REBATE

Available to all Boulder City residential electric customers. Rebate applies to smart irrigation controllers.



LOW INCOME HOME ENERGY ASSISTANCE PROGRAM (LIHEAP)

The Low Income Home Energy Assistance Program (LIHEAP) helps keep families safe and healthy through initiatives that assist families with energy costs. LIHEAP provides federally funded assistance to reduce the costs associated with home energy bills, energy crises, weatherization, and minor energy-related home repairs.



NCEF LOAN APPLICATION

Apply for a loan to help upgrade your home to become more energy efficient.



NV ENERGY AC TUNE – UP INCENTIVE

Increase your system's efficiency, reduce your electric bill and cooling costs, extend equipment life, help prevent costly repairs and enjoy a cool and comfortable home.



NV ENERGY FREE SMART THERMOSTAT

The latest energy-efficient technology, including up to four smart thermostats, valued at \$300 per thermostat.



NV ENERGY FREE ENERGY ASSESSMENT

An easy and convenient tool to help you manage your home's energy usage, and see what changes can be made to your home.



NV ENERGY FREE APPLIANCE REPLACEMENT

Make upgrades to your home with energy-efficient appliances and products, at no cost to you, when you meet eligibility requirements.



NV ENERGY POWERSHIFT BUNDLED APPOINTMENT

Receive an appliance evaluation, air filter replacement, energy saving report, HVAC inspection, insulation inspection, energy-efficient light bulbs, and thermostat.



NV ENERGY FREE POOL PUMP CALIBRATION

Have your variable speed pool pump calibrated by one of the approved Pool Pump Calibrators at no cost.



NV ENERGY WATER HEATING OFFER

The Residential Heat Pump Water Heater offer provides a solution for customers to replace old, inefficient water heating systems with higher efficiency equipment.



SOUTHWEST GAS TANKLESS WATER HEATER

An energy-efficient natural gas tankless water heater not only offers hot water on demand but can help save space and reduce energy use by only heating the water that is being used.

Glossary

Anode Rod – a rod suspended inside a water heater tank used to attract corrosive elements and materials.

Belly wrap – provides additional insulation and protection to the home.

Caulking Sealant – any type of silicone-based sealant that is used to help seal leaks within the home.

Double-paned Windows – windows that improve insulation and energy efficiency.

Energy Star – a certification established in 1992 by the US EPA and US DOE. Appliances that meet certain energy efficiency standards can display the energy star logo.

Foam gaskets/tape – flexible sealing and insulating material to be placed between two surfaces to prevent leaks and reduce a home's HVAC load.

Heating and cooling system – a system designed to regulate the temperature, humidity, and air quality within a home.

Home heating system – generates and distributes heat as part of the HVAC system, and typically refers to furnaces, boilers, or heat pumps.

HVAC – abbreviation for Heating, Venting, and Air Conditioning.

Insulation – the ability to resist heat transfer and flow between the house and the outside.

LED – light emitting diode that produces light up to 90% more efficiently than incandescent light bulbs.

Low-emissivity Windows – Windows with microscopically thin coating that is transparent and reflects heat.

Master meter – a single meter that measures the total consumption for an entire property or building.

Refrigerator seals – the airtight barrier between the inside of the fridge and the outside that prevents cool air from escaping.

Skirting - helps to reduce heat loss in the winter and keeps the area cooler in the summer as well as helps protect the home from the elements.

Ventilation system – the process that supplies fresh air to an enclosed space, removes stale or polluted air, and maintains air quality, temperature, and humidity.

Weatherization – process of protecting a building from the elements and improving its energy efficiency by adding insulation, sealing air leaks, and improving ventilation.

Weatherstrip – the process of sealing openings around doors and windows.

Conclusion

This guide and accompanying resources reflect All-In Clark County's commitments to serving the community and addressing the regional impacts of climate change.

By providing our comprehensive energy efficiency offerings, we hope to empower residents to conserve energy, save money, and improve the comfort of their mobile homes.

On behalf of All-In Clark County, it is our pleasure to support our community as we address the local impacts of climate change.

Best,



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