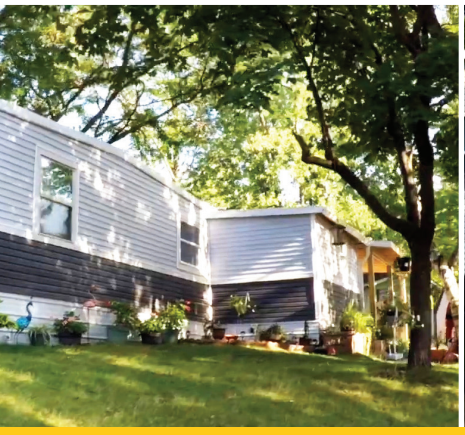
Energy for Manufactured Homes:

What You Need to Know








IN THIS GUIDE

Savings Steps
Save energy and money with simple tips

Understand Bills
Learn about your utility bills and common charges

Contacts & Chat
Get energy related support and assistance

Learn how you can save energy and money at home, who to contact for assistance, and how to understand your utility bill.

CERTs
CLEAN ENERGY RESOURCE TEAMS

My Energy Contacts

Fill in the names and contact information for energy programs & providers

Your Community

Your park owner can be a partner on energy. Discuss any issues you're experiencing with them.

Contact: _____ **Phone:** _____

Electric and Natural Gas Utility

The utilities serving you may provide energy assessments, energy-saving devices, and rebates. They may also provide seasonal cost averaging, and refer you to local agencies for support.

Electric Utility: Find on bill, call city hall, or visit https://mn.gov/puc/consumers/help/utility.

Utility: _____ **Phone:** _____

Website: _____

Gas Utility or Delivered Fuel Vendor: Find gas at https://blueflame.org/whos-my-utility.

Utility: _____ **Phone:** _____

Website: _____

Energy Assistance Program

If you are having trouble paying your energy bills, the state Energy Assistance Program may be able to help with your energy expenses. Find your provider at https://mn.gov/commerce/consumers/consumer-assistance/energy-assistance/eap-provider.jsp

Provider: _____ **Phone:** _____

Website: _____

Weatherization Assistance

If you are having trouble paying your energy bills, Weatherization Assistance may be able to help reduce energy costs with insulation, heating, appliances, and more. Find your provider at https://mn.gov/commerce/consumers/consumer-assistance/weatherization/wap-providers.jsp

Provider: _____ **Phone:** _____

Website: _____

Citizens Utility Board

CUB can help you understand your utility bill or address related questions or complaints.

Phone number: 844-MINN-CUB (844-646-6282) **Website:** http://cubminnesota.org

Clean Energy Resource Teams (CERTs)

CERTs has a wide range of resources on energy efficiency and renewable energy.

Website: https://www.cleanenergyresourceteams.org

Energy Emergencies

What to Do if Your Furnace Isn't Working and You Can't Afford Repairs

Contact the Energy Assistance Program. This is usually your local Community Action Agency, which you can find here: https://mn.gov/commerce/consumers/consumer-assistance/energy-assistance/eap-provider.jsp.

What to Do if Your Utilities are Shut Off (or you are behind on payments)

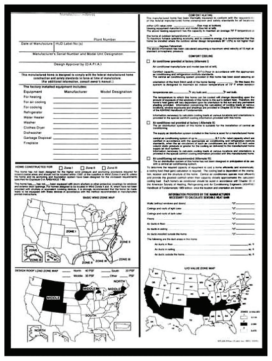
Contact your utility. During the winter, (Oct. 15 - Apr. 15), if you receive Energy Assistance or if your household income is under 50% of MN median income, you and the utility should establish a reduced payment plan. Monthly payments will be less than 10% of monthly household income. During the winter, if you make timely payments based on that payment plan, the utility may not disconnect you, or must reconnect you if you have been disconnected.

You can also contact your local Energy Assistance Program to help with energy bills. If it is not winter, or if your income is higher than half the state's median income, you should still work with your utility to establish a payment plan. You must stick to the payment plan. If your situation changes and you are not able to keep up, you must contact your utility again to make a new payment plan.

More Information: https://ag.state.mn.us/Consumer/Utilities

Know Before You Buy

Find and Read the Data Plate



The Data Plate is a sheet of paper located in a kitchen cabinet, an electrical panel, or a bedroom closet. It should never be removed! If it is missing, you may not be able to find out whether the home was designed for Minnesota's cold climate. A missing data plate may also mean that the home was manufactured prior to 1976, when efficiency standards were implemented for manufactured homes. There are several pieces of information on the data plate that are particularly important:

1. When was the home manufactured?
2. Some homes were designed only for temporary housing. **Make sure the data plate does not include a warning against long-term habitation.**
3. What is the factory-installed equipment? If the current equipment is different, then you know it has been replaced at some point since the home was manufactured. **Check the nameplates on the heating systems (furnace/boiler and hot water) to make sure they are rated for manufactured homes.**
4. What thermal zone was this home designed for? **If you live in Minnesota, it is essential that the home be designed for thermal zone 3** (U value of 0.079 BTU/hr·ft^2·oF).
5. What snow load is was this home designed for? **If you live in Minnesota, it is essential that the home be designed for at least 30 lb/ft^2.**

If the home was manufactured prior to 1976, it was not required to meet efficiency standards. For more information on how to improve the energy efficiency of older homes, check out https://www.energy.gov/energysaver/types-homes/energy-efficient-manufactured-homes.

Inspect the Home

Assume that the manufactured home is being sold "as is." Get it inspected by a professional who is a member of ASHI or InterNACHI. A few things to look for:

1. Moisture barrier and insulation should be intact on the underbelly.
2. Gaps (such as for plumbing entrances) should be sealed against air leaks.
3. Furnace and water heater must be rated for manufactured homes (this should be marked on the nameplates of the furnace and water heater)
4. There should be no damage in the area of the furnace, water heater, or bathroom.
5. Watch for sagging, dark spots, peeling ceiling panels, or warping of the floor, which are often signs of roof leaks or other damage.

Your Utility Bill

What's on Your Utility Bill?

Your electric and natural gas bills have several types of charges. Actual energy costs and items on bills can be different depending on your utility, but here are the basics.

Service Charge

The service charge is a flat monthly fee that you pay every month to have access to energy. Even if you do not use any energy in a given month, you will still be charged for access under the service charge.

Energy Charge

The energy charge on your bill is the cost of the electricity or gas you used. It is billed by kilowatt-hour (kWh) for electricity and therms for natural gas. Your utility reads your meter to determine the amount of electricity or natural gas used. You can affect your energy charge by using less energy!

1. **Understanding kilowatts (kW) and kilowatt-hours (kWh):** kilowatts are a rate of energy use; kilowatt-hours are a quantity of energy used. For example, a microwave might use electricity at a rate of 1 kilowatt (kW). If that microwave is used for 2 hours, it will use 2 kilowatt-hours (kWh) of electricity.
2. **Understanding therms:** therms are a unit of heat. One therm is equal to approximately 29 kWh and can be provided by about 97 cubic feet of natural gas.

Riders

Many utilities also include "riders" on your bill. Riders are charges for specific aspects of your utility service, such as the cost of fuel. Riders may be based on how much energy you use or they may be a flat monthly fee.

Taxes

Finally, taxes on your bill vary based on where you live. Taxes may be flat fees or variable.

How Much Is Your Utility Bill?

On average, manufactured home owners in Minnesota spend around $2,000 per year on energy, or about $170 per month. Manufactured home owners use, on average, 675 therms of natural gas and 8,000 kWh of electricity per year.

In most homes, there are a lot of opportunities for savings! See energy-saving tips on the next two pages, and watch how-to and do-it-yourself videos specifically for manufactured homes at https://www.cleanenergyresourceteams.org/home.

Saving Energy at Home

Simple tips for saving energy and money at home

Heating and Cooling Tips

- In winter, set your thermostat at 68°F during the day, and lower it at night and when you are away. To make this easier, get a programmable thermostat installed. Open window curtains/shades during the day to let the sun help warm your home, and close them at night.
- In summer, set your thermostat at 78°F and use a simple box fan to reduce air conditioning costs. Close curtains and shades during the day and open windows at night to take advantage of "free cooling."
- Remember, don't try to heat or cool the outdoors! Close windows and doors when running the furnace or air conditioner. Also, make sure your air registers are clear of furniture or other obstructions so that air can circulate, and replace furnace filters monthly.

Heat with your furnace, not portable space heaters. In many manufactured homes, portable space heaters are the biggest use of electricity in the winter. Many are also a fire hazard. If your furnace isn't keeping up, there are things you can do to reduce heat loss and improve comfort.

To do: Seal leaky air ducts

Do-It-Yourself Improvements

- Leaky heat ducts under the floor are a common problem. Learn how to inspect and seal them, and other DIY tips, in a video from CERTs: cleanenergyresourceteams.org/home.
- Seal your home from cold winter drafts with plastic film on the windows and draft snakes, sweeps, and weatherstripping for doors. Use spray foam for other gaps, such as around plumbing and electrical entrances. Close storm windows on doors and windows, too.
- Make sure that the crawlspace under the floor (underbelly) is well insulated.
- If you need to replace your furnace or air conditioner (AC), install high efficiency EnergyStar units. For AC, Energy Efficiency Rating (EER) 13 or above can save you as much as 50% on your cooling costs.

ENERGY STAR

Saving Energy at Home

Simple tips for saving energy and money at home

Cooking & Cleaning

- Reduce water heating costs with water-efficient faucet aerators and showerheads. Look for the WaterSense label.
- Turn down your water heater to 120°F. This helps save energy and reduce the risk of accidental burns.
- Insulate hot water pipes and use a water heater blanket.
- Cook with your microwave or crockpot.
- Wash your clothes with cold water. Clean the lint trap in your dryer before every load.
- When replacing appliances, look for EnergyStar.

Lighting & Electronics

- Replace old-style incandescent bulbs with LEDs and turn off lights when you are not in the room or when you can use natural lighting.
- Unplug electronics when not in use or use a smart power strip to do it for you.

What is the Weatherization Assistance Program?
WAP improves the energy efficiency of homes of income-qualified households, including renters. From insulation to heating systems to appliances and more, WAP takes a "whole-house" approach to reducing families' energy costs and improving health and safety for renters and owners.

Ready to Take the Next Step?

1. Watch videos about how to save energy in your manufactured home and explore other resources on the CERTs website: https://www.cleanenergyresourceteams.org/home.
2. See if your utility offers assessments, rebates, or free energy-saving products like LED bulbs.
3. Learn more about weatherization assistance and if you qualify. Find your provider at https://mn.gov/commerce/consumers/consumer-assistance/weatherization/wap-providers.jsp.
4. Need more pointers on DIY repairs for your manufactured home? There are how-to videos for a wide range of projects at https://mobilehomeliving.org/mobile-home-repair-help.

More Resources

All Parks Alliance for Change

All Parks Alliance for Change is the statewide organization for Minnesota's 180,000 manufactured home park residents. APAC provides a vehicle for manufactured home owners to express their needs and concerns in their parks and in the larger community. Through education, grassroots organizing and leadership development, APAC works with residents to improve the quality of life in park neighborhoods, protect the rights of park residents, advance public policy change that supports safe, affordable, and stable park communities, and preserve this vital source of affordable housing. More at http://www.allparksallianceforchange.org.

Manufactured Home Parks Handbook

This useful publication from the Minnesota Attorney General gives and overview of rights and responsibilities for residents of manufactured homes and owners of manufactured home parks. The "Resources" section at the end includes contact information for organizations that can help you if you have a legal issue relating to your manufactured home.
English: http://www.ag.state.mn.us/Brochures/pubManufacturedHomeParks.pdf
Español: https://www.ag.state.mn.us/brochures/pubManufacturedHomeParks_Spanish.pdf

Clean Energy Resource Teams (CERTs)

CERTs is a statewide partnership with a mission to connect people and their communities to the resources they need to identify and implement community-based energy efficiency, renewable energy, and electric vehicle projects. More at https://www.cleanenergyresourceteams.org.

About This Series

CERTs CLEAN ENERGY RESOURCE TEAMS

This guide is part of a series designed to answer common home energy questions.

- Energy for Renters: What You Need to Know
- Energy for Landlords: What You Need to Know
- Energy for Manufactured Homes: What You Need to Know

If you are interested in distributing any of these guides, they can be branded with your logo and contact information. Contact haska004@umn.edu for more information.

FIND GUIDES & TOOLS **CleanEnergyResourceTeams.org/Home**