

Ready, Set (Your),

Thermostat



We want our homes to be comfortable year-round. Once we understand how to optimize our thermostats for energy efficiency, we can find the balance between comfort and affordability. PHOTO BY MARK GILLILAND/PIONEER UTILITY RESOURCES

Q: How do I adjust my thermostat to use less energy and still be comfortable?

A: Heating and cooling accounts for about half the energy used in a typical home, so it is a great place to use less energy. Your thermostat can help reduce wasted energy.

Read on for information on thermostat types, common operational misconceptions and best practices you can start today.

Types of Thermostats

Mechanical thermostats are easy to control by adjusting a dial or sliding switch. The downfall is you must make temperature adjustments manually, which is easy to forget to do. They are inefficient because they typically heat or cool the home beyond the set point.

If your cooling is set to 72 degrees, a mechanical thermostat may cool your home to 70 degrees before it turns off, wasting energy. Then it might not come on again until the home reaches 74 degrees. That four-degree temperature change is noticeable and can lead people to adjust the thermostat setting

down even more, which wastes additional energy.

Some mechanical thermostats contain mercury. To determine if yours does, remove the front plate and look for small glass bulbs. If your thermostat contains mercury, replace it and find a way to properly recycle it.

Digital thermostats are more accurate and efficient. Some are programmable, which is a great option for people who don't have internet or don't want their thermostat data tracked.

Smart thermostats—which require an internet connection—are Wi-Fi-enabled and can be controlled using a smartphone app. Programming is easier, and you can track and manage use and temperature data. However, that data is shared with the manufacturer.

Smart thermostats can learn your preferences and set a schedule that automatically adjusts the temperature. Some have geofencing, which adjusts the temperature based on your smartphone's distance from home.

Misconceptions

A common misconception is the higher you turn your thermostat up or down, the faster your home's temperature

will change. Turning your thermometer up to 90 degrees to heat your home faster is like repeatedly pushing the elevator call button and expecting it to come faster.

It's likely you will forget you adjusted it and waste energy by heating or cooling the home more than necessary. Set your desired temperature for heating and cooling or program your thermostat so you don't make extreme adjustments.

Many people believe it takes more energy to heat or cool a house instead of leaving it the same temperature. The larger the temperature variance between inside and outside, the more energy your system uses.

Setting your thermostat 7 to 10 degrees from its normal setting for eight hours a day can save up to 10% a year on your energy bill, according to the U.S. Department of Energy.

Best Practices

Use these DOE heating and

cooling tips to add efficiency and savings to your home:

- Set your thermostat to 68 degrees in the winter when you are home and awake, and cooler at night or when you are away. Set it to 78 degrees in the summer when you are home and awake, and warmer at night or when away.
 - Upgrade to a programmable or smart thermostat that automatically adjusts the temperature throughout the day and when you leave the house.
 - When on vacation, set your thermostat to 55 degrees in the winter and 85 degrees in the summer.
 - In the summer, fans allow you to set your thermostat about 4 degrees warmer without feeling it. Remember, fans cool people, not rooms, so turn them off when you leave a room.
- Use your thermostat to optimize energy efficiency and find a balance between comfort and affordability. ■



Miranda Boutelle has more than 20 years of experience helping people save energy. She has worked on energy-efficiency projects from the Midwest to the West Coast. Today, Miranda is director of operations and customer engagement at Efficiency Services Group in Oregon, a cooperatively owned energy-efficiency company.

This content was originally created by Efficiency Services Group LLC under contract with NRECA. NRECA retains ownership of this content. NRECA does not endorse Efficiency Services Group, its views herein expressed, nor any products or services it offers.