



Improving Energy Efficiency in Your Home

Smart Home Systems

Smart home upgrades can not only make your house more automated, but they can also save you money on energy bills. Some popular upgrades include:

- Home hubs
- Smart lighting systems
- Energy meters
- Smart thermostats
- Smart security systems

Many smart home devices learn your habits and preferences and can suggest changes in your energy use based on your needs and how much money you want to save.

LED Bulbs

LED Bulbs can work for 50,000 hours, if not run outside of the specified temperature range. They use about 8-11 watts of power to replace a 60-watt incandescent with at least 806 lumen and 9.5 watts for a 75-watt equivalent. This capacity provides an efficiency gain of up to 80% over incandescent bulbs.

Other benefits include:

- When operating, cooler than incandescent bulbs.
- Unlike compact fluorescent lamps, instant on.
- Wide variety of color options.
- Bluetooth connectivity can be used to control programmable lighting.
- The most affordable overall lighting system
- There is less need for harmful materials and no mercury.
- In comparison to using incandescent lighting, one lamp saves hundreds of pounds of CO₂.

Lighting Control Sensors

Dimmers: These devices are typically used with indoor lighting to dim the lights, which lowers energy use. You may manage them using your smart devices as well.

Motion/occupancy sensors: When motion is detected, lights are automatically turned on and are turned off after a brief period. They serve a crucial use in outdoor security lighting. Additionally, you may utilize occupancy sensors inside the home to turn on and off the lights when someone enters or leaves a certain room. Another choice for preventing outdoor lights from running during the day is to use photosensors. Additionally, it saves energy.

Timer sensors: These allow you to arrange lights to switch on or off automatically at predetermined periods.

Appliance and Electronics

Purchase energy-efficient products and operate them efficiently. Use a advanced power strip to reduce "vampire loads"--electricity that is wasted when electronics are not in use.

Tankless Water Heaters

Tankless water heaters save energy costs while also being beneficial for the environment. They can cut energy use by between 27 and 50 percent. Water is not stored with tankless heaters; instead, cold water enters the device and is heated as needed. In two ways, this can save energy:

1. There is no reason to heat water that isn't being used.
2. There is no "standby heat loss," where a tank loses heat to the surroundings.