

RESIDENTIAL ENERGY CONSERVATION METHODS

All processes in your home consume energy. Consuming energy costs money and generally releases emissions that contribute to climate change. By considering how our actions impact residential energy consumption, we can adopt simple behavioral changes to reduce energy use, cost, and emissions.

What is Energy Conservation? Energy conservation involves making behavioral changes that reduce energy consumption while maintaining comfort and quality of life.

RESIDENTIAL ENERGY CONSERVATION

SPACE HEATING

54% of Residential Energy Consumption

Applicable when heating your home above outside ambient temperature.

- Lower the temperature set point. Lowering the set point from 22°C to 21°C is worthwhile and immediately reduces energy consumption.
- Use a programmable thermostat to lower the temperature overnight or when you aren't home. Lowering the temperature to ~18°C overnight greatly reduces energy consumption with minimal impact on occupant comfort.
- Regularly clean or replace furnace filters. A clean filter allows the furnace to circulate warm air more efficiently.
- Ensure windows and exterior doors are properly closed, latched and sealed.
- Open window coverings to maximize sunlight through south-facing windows. The sun heats the interior of the house when allowed to shine through windows.

WATER HEATING

17% of Residential Energy Consumption

- Use cold water for laundry. Cold water uses 100% less energy than hot water.
- Take a shower instead of a bath. Showers generally use less water than baths.
- Lower the water temperature in the shower.

SPACE COOLING

6% of Residential Energy Consumption

Applicable when cooling the house below outside ambient temperature.

- Raise the temperature set point. Raising the set point from 20°C to 22°C is worthwhile and immediately reduces energy consumption.
- During peak heat hours, close window coverings to block sunlight from shining in the windows.
- Regularly clean or replace air filters to ensure proper airflow and system efficiency.

APPLIANCES AND EQUIPMENT

19% of Residential Energy Consumption

- Reduce the number of appliances actively running. Move contents from second refrigerator or freezer to main refrigerator/freezer and unplug second unit.
- Run dishwasher, washing machine and clothes dryer only when they are full. One full load consumes half as much energy as two half loads.
- Unplug unused appliances.

LIGHTING

4% of Residential Energy Consumption

- Turn off lights when leaving a room.
- Review your home for lights that are always on. Lights on the porch and above the kitchen sink are commonly left on 24/7 but should be turned off the majority of the time.
- Use dimmer lights when appropriate.

APPENDIX

Energy:

General term referring to electricity and fuels (diesel, natural gas, wood, etc.) consumed by a building.

Residential Energy:

Energy used in homes for heating, cooling, lighting, appliances, and electronics to support daily living.

Greenhouse Gases (GHGs):

Carbon dioxide, methane and various other gases in lower concentrations that trap heat in the atmosphere, contributing to climate change. GHGs are emitted primarily due to producing and burning fossil fuels.

Fossil Fuels:

Diesel, natural gas, propane, coal, and other fuels that were formed in the Earth over millions of years. Fossil fuels are consumed (burned) during use and are not readily replenished.

Global Warming:

The rising temperature of the Earth due to rising levels of heat-trapping GHGs in the atmosphere.

Climate Change:

Includes global warming and all associated impacts including increased droughts, heatwaves, flooding and forest fires, changes in wildlife migratory patterns and other effects.