



# ENERGY STAR® Congregations Energy Stewardship Action List

## Stewardship of the Earth: Stewardship of Funds.

Virtually all faith traditions teach stewardship of life-supporting natural resources. Wise energy use also supports good financial stewardship of congregational funds. Your congregation, through energy efficiency in the house of worship, and in members' businesses and homes can help protect the earth for future generations.

The U.S. Environmental Protection Agency's ENERGY STAR Congregations Network offers free information, technical support and public recognition for congregations that take action against energy waste. This "action list" sheet draws from the more detailed information available in the ENERGY STAR "Putting Energy into Stewardship" guide, which is on the Web with other information and tools. Please visit [www.energystar.gov/congregations](http://www.energystar.gov/congregations)

## LIGHTING

- Turn off lights (and other equipment) when not in use. High utility costs often include paying for energy that is completely wasted.
- Install "occupancy sensors" in proper locations to automatically turn off lighting when no one is present, and back on when people return. Even good equipment can be installed wrong. The sensor must be able to "see" an approaching person's motion to be able to turn on the light before, or as the person enters an area.
- Replace incandescent light bulbs with compact fluorescent lamps (CFLs), wherever appropriate. CFLs cost about 75% less to operate, and last about 10 times longer.
- Adjust lighting to your needs; use free "daylighting." This means turn off or dim your lights when daylight is adequate, or use automatic "daylight-dimming" ballasts/controls to do this for you.
- To prevent glare, eyestrain, and headaches, do not "over-light." Too much light can be as bad for visual quality as too little light—and it costs a lot more.
- Install brighter, safer light-emitting diode (LED) exit signs. ENERGY STAR qualified exit signs can dramatically reduce maintenance by eliminating lamp replacement for about 10

years, and they use 5 watts or less compared to 40 watts in a typical exit sign.

- Consider upgrading to T-8 (1" diameter) fluorescent lamp tubes with solid-state electronic ballasts that are more efficient than older T-12 (1.5" diameter) tubes with magnetic ballasts.

## OFFICE AND KITCHEN EQUIPMENT

- Always buy ENERGY STAR qualified equipment for your congregation, business and home. The ENERGY STAR mark indicates the most efficient computers, printers, copiers, refrigerators, televisions, windows, thermostats, ceiling fans, and other appliances and equipment. Find ENERGY STAR qualified products online at [www.energystar.gov](http://www.energystar.gov).
- Clean refrigerator coils twice a year. Replace door gaskets if a dollar bill easily slips out when closed between the door's seals.

## HEATING AND AIR CONDITIONING

- "Tune-up" your heating, ventilation and air-conditioning (HVAC) system before heating and cooling seasons with an annual maintenance contract. Like a new car, even an ENERGY STAR qualified system will decline in performance without regular maintenance. A yearly maintenance contract costs about \$100-\$150 depending on the building and HVAC system, but will usually pay for itself in direct utility savings - and your system can even last years longer. A contract automatically ensures that your HVAC contractor will schedule pre-season tune-ups, in case you forget or are busy.
- Change HVAC filters (or clean if reusable) every month during peak cooling or heating season. New filters are very inexpensive, and dirty filters cost more to use, overwork the equipment, and result in poorer indoor air quality.
- An ENERGY STAR qualified programmable thermostat can optimize the operation of your HVAC system. This solid-state, electronic device automates your HVAC operation "24 / 7" based on your schedule, and can be "overridden" as needed for unscheduled events. Your employees will always enter a comfortable building in the morning, yet you will save money.

# Putting Energy into Stewardship

These “smart thermostats” range from \$25 to \$150, depending on features – but any ENERGY STAR model can cut HVAC costs.

- Control direct sun through windows depending on the season and local climate. During cooling season, block direct heat gain from the sun shining through glass on the east and especially west sides of the building. Depending on your facility, options such as “solar screen,” “solar film,” awnings, and vines can help. Trees can attractively shade the building, and help clean the air. Interior curtains or drapes can help, but it is best to prevent the summer heat from getting past the glass and inside. Unobstructed southern windows can contribute solar heat gain during a winter day.
- Use fans. Comfort is a function of temperature, humidity, and air movement. Moving air can make a somewhat higher temperature and/or humidity feel comfortable. Fans can help delay or reduce the need for air conditioning, and a temperature setting of only 3 to 5 degrees higher can feel as comfortable with fans. Each degree of higher temperature can save about 3% on cooling costs. When the temperature outside is more comfortable than inside, a “box fan” in the window, or large “whole building” fan in the attic can push air out of the building and pull in comfortable outside air. Fans can improve comfort and save energy year round.
- Plug leaks with weather-stripping and caulking. Caulking and weather-stripping let you manage your ventilation, which is the deliberate, controlled exchange of stuffy inside air for fresher outdoor air. To learn more about indoor air quality in your building visit [www.epa.gov/iaq](http://www.epa.gov/iaq).

## WATER - HOT AND COLD

- Fix leaks. Small leaks add up to many gallons and dollars wasted each month. Water conservation, especially hot water, saves energy and money, as well as water.
- Use sink aerators and water-efficient showerheads and toilets to save water.
- Install an insulation blanket on water heaters that are seven years or older, and insulate the first 3 feet of the heated water “out” pipe on both old and new units.
- When buying a new water heater, always buy ENERGY STAR qualified equipment. In areas of

infrequent use consider “tankless” water heaters to reduce “standby” storage costs and waste.

- Set water temperature only as hot as needed (110-120 degrees) to prevent scalds and save energy.
- When landscaping, use plants native to your climate that require minimal watering and provide better pest resistance. If local code allows, consider diverting “gray water” for irrigation.

## CLEAN, GREEN ENERGY

- Ask your utility if “green” power from renewable resources is available. Consider meeting all or part of your needs (reduced by efficiency) with electricity needs generated from a clean source such as solar or wind power.

## CARBON OFFSETS

- After optimal investments in energy efficiency and green energy have reduced the house of worship’s “carbon footprint,” the remaining carbon emissions can be balanced or “offset” to eliminate your global warming contribution.

## ENERGY STAR Congregations

[www.energystar.gov/congregations](http://www.energystar.gov/congregations)



## ENERGY STAR Small Business Network

[www.energystar.gov/smallbiz](http://www.energystar.gov/smallbiz)

## EPA Green Power Partnership

[www.epa.gov/greenpower](http://www.epa.gov/greenpower)

## EPA Climate Change

[www.epa.gov/climatechange/](http://www.epa.gov/climatechange/)