



FAITH COMMUNITIES GO GREEN

A COLLABORATION: GREEN UMBRELLA AND EQUASION

TOOLKIT

From our program at the Festival of Faiths,
How energy upgrades can turn your House of Worship
into a community asset.
August 25, 2024

Easy Ways to Save Energy at Your House of Worship

“Simple Ways to Cut Energy Expenses at Your Worship Facility” -
<https://www.rhinobldg.com/15-tips-for-a-more-energy-efficient-church/>
Low-Cost Energy Savers

1. SEAL THE ENVELOPE. Check to make sure all windows and doors seal tightly. A little caulking and weather-stripping go a long way to eliminate air leaks in the building envelope.
2. SEAL LEAKY DUCTS. Check air ducts for leaks. Seal where needed.
3. ADJUST THE THERMOSTAT. In winter, lower the thermostat when the building is unoccupied. In summer, raise the thermostat during vacancy. According to government experts, changing the thermostat by one degree for at least eight hours saves about one percent on the utility bill. Adjusting the thermostat by five degrees or ten degrees should save about five to ten percent. Programmable thermostats make controlling temperature easier.
4. CHANGE FILTERS. Replace air conditioning and heating unit filters monthly for maximum efficiency. Clogged filters reduce airflow, forcing the units to struggle and use more energy.
5. ADD CEILING FANS. Ceiling fans use only about 60 watts of electricity. Air conditioners devour 3,500 watts or more. Use ceiling fans only when the room is occupied. Set the fans to circulate air down in summer and up in winter.
6. CLOSE VENTS. Shut air vents in any seldom-used rooms.

7. LIGHTS OUT. Always turn off the lights when a room is unoccupied. Encourage church staff and parishioners to do the same. Install occupancy sensors in smaller rooms like offices and classrooms. Reduce outside lighting to a safe minimum.

8. EFFICIENT LIGHTING. Compact florescent light bulbs (CFL) produce the same amount of light as regular bulbs but use much less electricity. CFL bulbs also last up to ten times longer than ordinary inefficient bulbs. Use LED (Light Emitting Diode) lights in all exit signs.

9. DIMMER SWITCHES. You need less artificial light in the daytime in a room with windows. Installing dimmer switches allows you to adjust the lighting, accordingly, reducing the energy expended.

10. WATER HEATER. Set water heaters between 120 degrees and 130 degrees for maximum efficiency.

11. UNPLUG. Small amounts of energy are lost when appliances and electronics are turned off, but still plugged in. Unplug computers, peripherals, and other office equipment when not in use to reduce energy waste.

12. CHANGE SCHEDULES. Combine activities to cut the worship facility's occupied hours. Reschedule janitorial services from night to daytime to decrease hours of operation and cut energy use.
Investing in Energy Savers

13. REPLACING EQUIPMENT. When air conditioning, heating, water heaters, dishwashers, fax machines, copiers, and other equipment needs replacing, choose high-performance models. Compare the ENERGY STAR® ratings to find the most energy efficient model.

14. FROM THE TOP. In hot climates, consider exchanging dark colored roofing for a lighter colored roof. Consider highly reflective cool-coated steel roofing. Cool-coated roofing lasts longer— and potentially saves fifteen percent on summer energy costs.

Resources for Ways to Save Energy at Your House of Worship

Resources found on our FCGG website at <https://fcgg.org/facilities/> such as

- <https://fcgg.org/wp-content/uploads/2022/04/Facilities-Resources-1.pdf/>
The Energy Star Treasure Hunt:
- https://www.energystar.gov/industrial_plants/treasure_hunt (save up to 15%)

Energy and Water Efficiency Checklist for Worship Facilities:

- <https://www.energystar.gov/sites/default/files/2024-06/Energy%20Checklist%20Worship%20Facilities%20new%202024.pdf>

Faith and the Common Good DIY Checklist:

- https://tithely-media-prod.s3.us-west-1.wasabisys.com/195444/DIY_Walkthrough-FCG_2018.pdf (This is longer and more detailed)

Interfaith Power & Light - <https://interfaithpowerandlight.org/>,

Cool Congregations program:

- <https://interfaithpowerandlight.org/coolcongregations/about/>
Download “Five Steps to Becoming a Cool Congregation” GO TO “25 Steps Under \$25” on pages 20-21 or “25 Steps Over \$25” on pages 22-23.

Funding Resources & Opportunities for Energy Upgrades

for Tax Exempt Organizations: Nonprofits, Schools, Houses of Worship

Grants

- [C-SITE \(Communities Sparking Investment in Transformative Energy\)](#): The City partnered with Faith Communities Go Green/Green Umbrella, the Cincinnati Zoo & Botanical Garden, Cincinnati Development Fund, and SonLight Power on this grant that would fund energy audits, efficiency, and solar improvements for 14 designated nonprofits and houses of worship, as well as build capacity for energy workforce training and local financing for tax exempt organizations. Proposals are yet to be selected/announced.

Tax Credits & Deduction

The Inflation Reduction Act makes it possible for tax exempt organizations to directly take advantage of tax credits for the first time using the new “[Elective Pay](#)” provision.

- [Clean Energy Investment Tax Credit \(“ITC”\) and bonus credits](#): Solar, battery backup storage, and geothermal heat pumps qualify for 30% tax credit. Additional 10% tax credits can be stacked for 1) using [domestic content](#); 2) location in an [Energy Community](#) (former coal community or brownfield); 3) location within a mapped [Low-Income Community](#) (this is the only competitive credit – requires an additional application).
- [Commercial Clean Vehicles](#): 30% tax credit for eligible electric vehicles, max \$7,500 for passenger vehicles and \$40,000 for buses, box trucks, etc.
- [Alternative Fuel Vehicle Refueling Property Credit](#): 30% tax credit for electric vehicle chargers.
- [179D Commercial Buildings Energy-Efficiency Tax Deduction](#): New and retrofitted buildings achieving a minimum energy efficiency improvement of 25% over the building code standard. Value: Between \$0.50 and \$5.00 per square foot. Designer, architect, or engineer will take the credit and then can pass through discount to the owner.

Low-Cost Loans

- [Ohio Air Quality Development Authority](#): Developing a revolving loan fund to support clean energy generation, like rooftop solar.
- [Greenhouse Gas Reduction Fund](#): The federal government is in the process of disbursing \$20 Billion for clean energy projects serving sectors economy-wide (consumers, residential and commercial developers, businesses, tax-exempt organizations, etc.)

Additional Resources

- [RE-Volv](#): Zero-down solar financing for community-serving nonprofits.
- [CollectiveSun](#): Solar financing for tax-exempt organizations and nonprofits.
- [SonLight Power](#): Cincinnati-based nonprofit solar installer equips tax exempt organizations with solar, both locally and abroad.
- [EnergySage](#): One-stop-shop for energy upgrade guidance and vetted solar marketplace.
- [Lawyers For Good Government](#): Free federal funding legal resources geared toward local governments, but Elective Pay topics are relevant for all tax-exempt organizations.
- Environmental Justice Thriving Communities Technical Assistance Centers ([TCTACs](#)): Free federally-sponsored program to support low-income and marginalized communities (including tax-exempt orgs in Justice 40 (J40) communities) with guidance/training on grant writing, project management, budgeting, etc. Our regional TCTACs are [Blacks In Green \(BIG\)](#) and the [Great Lakes Environmental Justice TCTAC](#).
- Are you located in a Justice 40 (J40) community? Check the [CEJST map](#).

Additional Funding Resources found on our FCGG website at <https://fcgg.org/funding/>

**To learn more and join Faith Communities Go Green,
a Green Umbrella & EquaSion Collaboration,
go to [FCGG.org](https://fcgg.org)**