Getting Started: Congregational Resources for Creation Care

Episcopal Church in Western Oregon, Creation Care Work Group

Spiritual Motivation

Wendell Berry's poem, "The Peace of Wild Things" has inspired many to take time to reflect on and to appreciate the peace and grace of being a part of God's creation. You can find the text to this poem and a recording of Wendell Berry reading it at this site:

https://onbeing.org/poetry/the-peace-of-wild-things/

The Episcopal Church in Western Oregon and Carbon Neutrality

The Resolution to achieve Carbon Neutrality by 2030

In July 2022, the Episcopal Church's General Convention Resolution (AO87) committed the Episcopal Church in the USA to "Carbon Neutrality" by 2030. In November 2022, the we confirmed that resolution, which:

"Commits the Diocese of Oregon to a goal of net carbon neutrality by 2030 for all facilities, churches, and operations through reducing emissions from travel, reducing energy use, increasing energy efficiency in buildings, supporting green energy production, and purchasing offsets from duly investigated, responsible, and ethical partners; and further,

"Commits the Diocese to exploring creative ways to support parishes in taking actions toward mitigating their negative impacts on the viability and beauty of God's world."

What is "Net Carbon Neutrality?"

Carbon-neutrality refers to eliminating carbon emissions from a building and church operations so that no carbon (carbon dioxide, methane) is added to the atmosphere. Energy generated through the use of fossil fuels for space and water heat, cooking, electricity, and church programs is the main source of carbon emissions in our facilities. Alternative energy production (wind, solar, water) creates fewer if any such emissions. To achieve carbon neutrality by 2030 will require substantial reductions in the use of carbon-based energy. Most churches and individuals will not

be able to achieve that goal by 2030 without the purchase of carbon offset credits. This is what the resolutions refer to as "offsets from duly investigated, responsible, and ethical partners."

Initial Resources for Congregations

Below is an initial collection of resources that can help your parish or mission to get started on developing and implementing a plan to achieve Carbon Neutrality by 2030.

These resources are focused primarily on making church building(s) more efficient, using as little energy as possible and generating, where possible, electrical energy for operations.

Where to Start?

Here are some first steps. Each step links to further resources in this document:

- Identify or form a "Creation Care Committee" (<u>link to committee</u>)
- Begin with an "energy audit" of your facilities (<u>link to energy audit</u>)
- Calculate the "carbon footprint" of your church (<u>link to carbon footprint</u>)
- Create a plan to move toward a more carbon neutral operations (<u>link</u> to planning)

Identify or Form a "Creation Care Committee"

This committee can be a core group, willing and authorized to develop a plan to reach carbon neutrality for your church. The group should be authorized by the serving priest and the Vestry (or Bishop's Advisory Committee) to develop a plan. Ideally at least one member of the group should be a from the Vestry/BAC. Because the plan will involve aesthetic, structural and financial decisions, that member needs to be an integral part of the planning and can serve as liaison to the Vestry/BAC as the plan develops. A few members working with other interested people should do the bulk of the planning work, with periodic review and approval by the Vestry/BAC.

Committee Size:

2-5 people could develop the plan, with input from the Vestry/BAC, experts/contractors, and others in the congregation.

Skills needed or accessible to the Committee:

- Planning experience (in their work, past Parish projects, etc.)
- Knowledge of building construction/remodeling
- Finance experience
- Knowledge of utilities, energy
- Passion/commitment to the goal

Sanctioning the Committee:

The Vestry/BAC and the Rector/Vicar should formally install the committee with a charge (e.g., prepare a plan for achieving carbon neutrality, including short-term and longer-range objectives). The same decision-making authorities will review and approve of the plan.

Begin with an "Energy Audit" of Your Facilities

A very important first step in moving towards carbon neutrality in homes—and, of course, in businesses and houses of worship—is to gain information. Having an energy audit done on the property is the tried-and-true way to accomplish this.

An energy audit is a process and inspection survey to understand the energy use of the building and to identify opportunities to improve energy efficiency while maintaining or improving occupants' comfort. There are professionals who specialize in this work. Some utilities offer energy audits to their customers.

The Oregon Department of Energy has an extensive list of professionals who can provide an energy audit. The list is searchable by area of the State served (<u>link to Oregon Energy Audit Assessors</u>)

For smaller churches where funding might be tight, it is possible to conduct a "do it yourself" energy audit. This guide from energy.gov can help you. A professional audit will be far more precise than you are likely able to do, but there are some easy and inexpensive steps you can take now: closing up drafts

and leaks in windows, doors, around baseboards and electrical outlets, switches, and fixtures. Here is the energy.gov DIY guide. https://www.energy.gov/energysaver/do-it-yourself-home-energy-assessments

Calculate the "carbon footprint" of your church operations

A carbon footprint is the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions. Carbon dioxide is the main product of the combustion of fossil fuels (oil, fossil gas or methane, gasoline, propane, etc.).

You can calculate your church's carbon footprint or your own carbon footprint at home, by using one of these online sources:

Nature Conservancy Carbon Footprint Calculator

Climate Stewards USA - includes a specific calculator for churches

Episcopal Diocese of California (endorsed by Presiding Bishop Michael Curry) - this guide is aimed primarily at individuals and includes an assessment and suggestions for committing to action

Create a Plan to Move Toward More Carbon Neutral Operations

Buildings are the second leading source of greenhouse gas emissions in Oregon (after transportation). Human-caused carbon emissions come from burning fossil fuels (natural gas, heating oil, other petroleum products, including coal). Many churches in our Diocese heat water and space and cook by burning "natural" or fossil gas.

Combustion of natural gas and petroleum products for heating and cooking emits carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Emissions from natural gas consumption represent 80 % of the direct fossil fuel CO_2 emissions from the residential and commercial sector in 2021.

U.S. Environmental Protection Agency at <u>this site</u>

Our CO2 emissions can be abated through efficiency, electrification, and renewables, like wind, water, and solar. Replacing fossil gas furnaces and water heaters with heat pump-based systems, and gas kitchen stoves and ovens with electric appliances will go a long way toward decreasing CO2 emissions. Here is an example of a beginning plan and timeline for reaching carbon neutrality for a church. Each church will have different elements in their plan, depending on their current conditions. The energy audit and carbon footprint calculations, referenced above, will help you set priorities for the specifics of your plan.

Example "RoadMap" to Achieving Carbon Neutrality for Building by 2030

Action	2023	2024	2025	2026	2027	2028	2029	2030
Establish Carbon Neutral Steering Committee	I							
Complete energy audit and calculate carbon footprint								
Identify and implement most cost-effective, lower cost improvements								
Develop cost estimates for "big projects" (solar panel install, heat pumps)								
Raise /identify funds for identified "big projects."								
Replace gas heater/appliances.								
Install solar, and generator, or other (if appropriate)								
Determine carbon neutral gap after remodel and gas replacement.								
Develop strategies to reach carbon neutrality								
Implement net carbon neutrality strategies.								

This chart is one way to visually depict a plan. You can use the editable version of this Road Map chart for you your own planning purposes. All the text and the arrows can be moved to fit your plan. You can download a MSWord copy here.

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