

September 24, 2010

Dear Colleagues in Ministry:

In June, the New England synod Assembly passed Resolution 10-01 on Energy Stewardship. The resolution asks congregations to measure their carbon output and to commit to decreasing it over a certain period of time. With the help of Pr. Nancy Wright, synod liaison for the environment, we have summarized below aids to help your congregation respond to the resolution. Please read carefully and consider these efforts and let us know about your progress.

In addition, I invite you to think about enlisting an environmental liaison for your congregation, who could spearhead your congregation's work. Further, if you know of anyone interested in serving on the synod's green team, please forward his or her name to Lyn Morin at lmorin@nesynod.org. The work of this team will be determined as we move forward together.

Thank you!
Bishop Margaret Payne

Measuring Your Church's Carbon Footprint

Your church's "carbon footprint" is the annual total of greenhouse gas emissions, expressed as pounds of carbon dioxide (CO₂), generated through your use of energy and your disposal of trash. To estimate your church's carbon footprint, total your annual usages for each source listed below and then multiply by the pounds of CO₂ per unit.

<u>Material</u>	<u>Quantity</u>	<u>Pounds of CO₂ per...</u>	<u>Total Pounds of CO₂/Year</u>
Fuel Oil (gallons)		22.4 lb CO ₂ /gallon	
Natural Gas (therms)		12.1 lb CO ₂ /therm	
Electricity (kilowatt hr)		1.2 lb CO ₂ /kwh ⁽¹⁾	
Propane (gallons)		12.7 lb CO ₂ /gallon	
Trash (gallons)		2.0 lb CO ₂ per gallon	
Gasoline ⁽²⁾ (gallons)		19.6 lb CO ₂ /gallon	
		TOTAL (carbon footprint)	

(1) Average for New England electric utilities

(2) Estimate the total miles driven by the Pastor, staff and members to attend worship services, meetings and events and divide by 20 miles per gallon to estimate total gallons of gasoline used per year.

For more detailed "carbon calculators" you may want to investigate some on-line resources such as: www.coolcongregations.com or <http://www.epa.gov/climatechange/emissions/index.html> (also good for home audits).

Options for an Energy Audit of Your Church

1. Contact you energy supplier (electric and/or gas utility). Many utilities provide energy audits at no charge.

2. Contact the Interfaith Power and Light organization in your State; they too may provide energy audits.
3. Do-it-Yourself
 - Setback all heating thermostats to 50F when spaces are not occupied
 - Install energy efficient lights
 - Replace high-use incandescent bulbs with compact fluorescent lamps
 - Replace T-12 fluorescent tubes with T-8 lamps and electronic ballasts
 - Retrofit illuminated EXIT signs with LED bulbs
 - Seal air leaks at doors, windows and attic access openings
 - If existing attic insulation is 6 inches or less, install additional insulation
 - If your heating equipment is over 10 years old solicit bids for a high-efficiency replacement system
 - Reduce the use of refrigeration-purchase an ENERGY STAR refrigerator
4. Access the ENERGY STAR guidebook for congregations at:
http://www.energystar.gov/index.cfm?c=congregations_guidebook.congregations_guidebook
5. Contact an Energy Engineer or Consultant in your area.

Committing to Decreasing Carbon Footprint

It would be wonderful if congregations would commit to a 5% reduction per year. Climate scientists say that we need to reduce greenhouse gas emissions by 80% by 2050 if we are to mitigate severe climate effects, but it will be better if we can reduce more, and sooner.

The reality of a 5% reduction per year in greenhouse gas emissions is that it will be quite easy to do for the first few 4-5 years, but after that the reductions will start to require significant changes and increased costs. It will be difficult, but if people are committed and measuring their progress, it can be done.