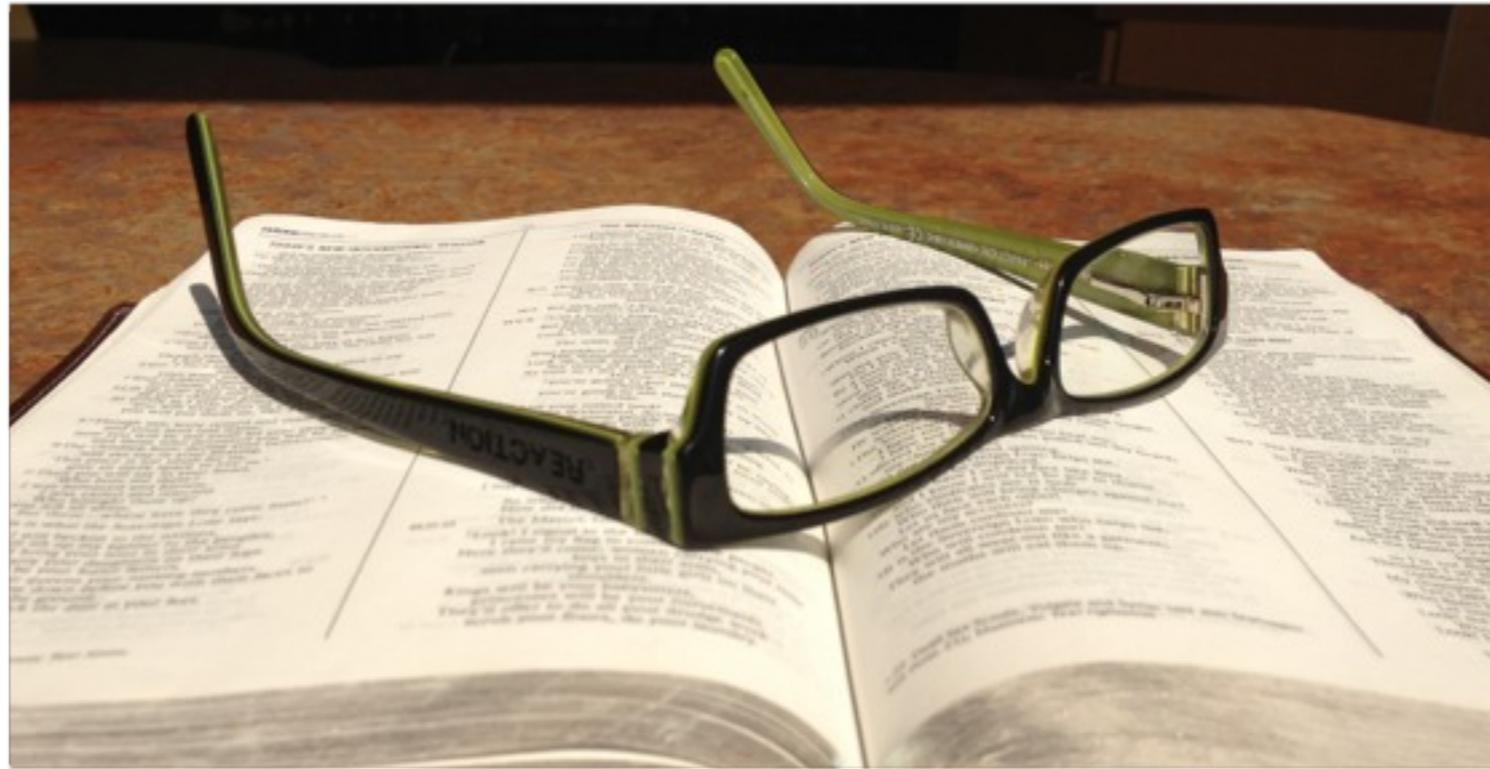


ADDITIONAL RESOURCES

Digging Deeper



This section features selected websites and resources for greening the church. You will find direct links to many faith-based environmental organizations as well as other helpful sites:

Interfaith Power and Light
GreenFaith
Earth Ministry
National Council of Churches-Eco-Justice Programs
Energy Star for Congregations
Evangelical Lutheran Church of America
Lutherans Restoring Creation

Energy Stewards Initiative
ELCA Mission Investment Fund
Lutheran World Federation
Unitarian Universalists Association
United Methodist Church
Sustain Decorah
Winneshiek Energy District
& More

The Next Step: Helpful Resources

Interfaith Power and Light

Interfaith Power and Light is a national organization that works to mobilize the faith community to respond to climate change by addressing energy efficiency issues and encouraging public policy changes.

This website includes news about public policy that affects the environment and how people can take action on the issues. Additionally, there are links of articles about environmental stewardship and faith, and resources for greening worship for clergy and lay leaders.

Iowa Interfaith Power and Light frequently facilitates workshops and can coordinate speakers to make presentations to interested congregations.

Iowa Chapter: <http://www.iowaipl.org/>

National website: <http://interfaithpowerandlight.org/>

Cool Congregations Program: <http://coolcongregations.org/>

[Congregation Carbon Calculator](#)

[Get Your Free “Cool Congregations” Guide!](#)

[Sign up for the monthly newsletter!](#)

Green Faith

Green Faith is an interfaith organization that provides resources and information about environmental stewardship to empower religious communities.

Green Faith website: <http://greenfaith.org/>

[Christian Statements on the Environment](#)

[Resources for Religious Environmental Education](#)

[Stewardship Resource Center](#)

Earth Ministry

Earth Ministry is a non-profit organization focused on inspiring and mobilizing individuals and congregations on caring for creation. Their website includes resources for educational curriculum, creation worship, devotions, information about key environmental issues and actions individuals and congregations can take, as well as links to other resources.

Earth Ministry Website: <http://earthministry.org/>

National Council of Churches of Christ: Eco-Justice Programs

The National Council of Churches of Christ works to organize Christian communities of faith to collaborate on environmental issues. They have campaigns on major environmental problems with detailed information about each issue and what individuals and congregations can do about it. Additionally, their website provides information about public policy advocacy. There are also opportunities for networking with other congregations through this organization.

[Resources available for download](#)

Energy Star for Congregations

The Energy Star program is a partnership between the U.S. Department of Energy and the U.S. Environmental Protection Agency which

presents information and research about energy efficiency.

They offer documents in PDFs with detailed, technical information about how to be better stewards of energy, including online tools and worksheets to help track energy usage. They also offer a list of products certified to be energy efficient.

[Energy Star Website for Congregations](#)

[Building Upgrade Manual](#)

[Putting Energy Into Stewardship: Energy Star Guide for Congregations: Home Improvement Resources](#)

Caring for Creation, Evangelical Lutheran Church of America

This webpage offers a comprehensive list of resource for pastors, lay leaders, and synods within the Evangelical Lutheran Church of America.

[Caring for Creation--Evangelical Lutheran Church of America](#)

Lutherans Restoring Creation

This organization works with ELCA churches to recognize the importance of environmental stewardship and carry out these beliefs in their congregations.

LRC's website includes information about the theological foundations for environmental stewardship, especially within the Lutheran context. There are pages about how environmental stewardship can be incorporated to all facets of church life, including youth education, colleges of the church and worship. They offer a pilot program called the Energy Stewards Initiative for ELCA congregations interested in improving the energy of their buildings (see below).

Lutherans Restoring Creation Website: <http://www.lutheransrestoringcreation.org/>

Energy Stewards Initiative

This initiative is a pilot program currently in progress for a dozen ELCA churches to track their energy usage, make building efficiency changes and receive advice in community as they make these facility improvements.

This program offers an online portfolio to track utility bills, record changes made to the facility, and calculate energy savings. Participating congregations receive information and assistance from program organizers, community forums, and webinars. Currently, First Lutheran Church and Good Shepherd Lutheran Church in Decorah are participating. Contact program leaders if you are interested in this program, as your church may have the possibility to participate in the future.

[LRC Energy Stewards Initiative](#)

ELCA Mission Investment Fund

The Mission Investment Fund provides financial support to new and existing ELCA congregations through loans and investments. Many of their financial resources can be used for ELCA churches to make building efficiency upgrades. Their website offers a great deal of information about greening of the church building, including links to other websites for the categories of energy conservation, renewable energy, building construction water conservation, and more.

[Caring for Creation-Mission Investment Fund Green Resources](#)

[Energy Conservation Links](#)

[Short MIF Green Videos](#)

Lutheran World Federation: Green & Just 2012 Guidebook

This resource focuses on ecological justice and is published by the Lutheran World Federation Youth Desk. It includes Bible Studies, games, tips for project planning, film recommendations, and more.

[LWF Together Green & Just Online PDF](#)

Unitarian Universalist Association of Congregations: Environmental Justice and Sustainability

Resources and links for UU congregations to make their worship spaces more efficient and incorporate the environment into their worship. They also offer a great deal of information on issues such as climate change, fossil fuel use, food production, and natural resource conservation.

Unitarian Universalist Website: <http://www.uua.org/environment/index.shtml>

United Methodist Church: General Board of Church & Society

This organization facilitates the connection between the United Methodist Church and public policy making and has materials about environmental issues.

[UMC's General Board of Church and Society](#)

[UMC's Environmental Statement](#)

["God's Renewed Creation" Resource](#)

Sustain Decorah

This website was formed out of the City's Sustainable Decorah Group that is focused on making Decorah, Iowa as sustainable as possible. The website offers news and resources for businesses as well as residents of the area to engage in sustainability. Stay tuned for a "Churches" page in the near future with resources for your congregation.

[Sustain Decorah Website](#)

Winneshiek Energy District

See pages 67-68 for more information.

<http://energydistrict.org/>

"The Psychology of Climate Change Communication"

This guide is intended for anyone would wants to know how to communicate about the complex and controversial issue of climate change. It was created by the Center for Research on Environmental Decisions in 2009. It applies statistics and scientific research about behavior and psychology to help professionals communicate effectively about climate change.

[Downloadable Copy of Resource](#)

Green Church: Reduce, Reuse, Recycle, Rejoice! 7 Simple Steps to Green Your Church

These books are written by Rev. Rebekah Simon-Peter of the United Methodist Church. Her books connect faith to environmental sustainability and offer practical tips for "greening the church".

[View Simon-Peter's books at Abingdon Press](#)

Section 2

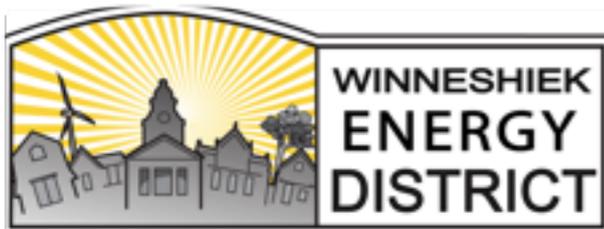
Winneshiek Energy District

Director: Andy Johnson
Home Energy Planner: Joel Zook
Coordinator for Community and
Volunteer Programs: David
Paquette

Board:
Jim Martin-Schramm
Craig Mosher
Carolyn Corbin
Larry Grimstad
Jeni Grouws
Paul Johnson

We are the host site and partner
with Green Iowa AmeriCorps.
Current members include:

Sarah Frana
Joel Kraus
Josh Dansdill
Andrea Becker
Erika Kambs
Eric Sievers



Who we are:

The Winneshiek Energy District is a local non-profit organization focusing on energy efficiency in Winneshiek County.

Energy Districts are a model based on Soil and Water Conservation Districts. The conservation districts grew out of the perfect storm that was the Great Depression and the Dust Bowl. These entities provided the necessary local leadership and structures that catalyzed a conservation movement on private lands across America.

We are now facing a perfect storm of economic and environmental impacts of our energy use. Every year, upwards of 75 million dollars is spent on energy in Winneshiek County. Energy Districts in every county in the country could provide the intelligent and collaborative delivery system necessary for a sustainable energy transformation, local economic stability and ultimately an energy ethic.



*This section was contributed by David Paquette of the Winneshiek Energy District.

Energy District Programs

Home Energy Planning with Rebates

What is Home Energy Planning?

This is our “Big Improvements, Big Rebates” program that provides:

- * Reduced cost on a comprehensive energy audit
- * One on one home energy use and audit review
- * Creation of a Home Energy Plan
- * Significant rebates for implementation of recommended practices
- * Home energy planning is available to all households in Winneshiek County

How does it work?

- * Sign up with Energy District
- * Receive your comprehensive Home Energy Audit
- * Review your Home Energy Plan with our specialist and make an energy improvement plan
- * You Hire contractors to make improvements per the plan specs. Don't worry, we'll help you through it.
- * We certify work completion, process invoices (in some cases you will submit invoices to your utility) and you get your rebate.

How can I sign up for a Home Energy Planning and get more information?

- * Sign up by calling (563) 382-4207 ext. 2#, email joel@energydistrict.org, or visit us online at www.energydistrict.org.

Direct Install with Green Iowa AmeriCorps

What is a Direct Install?

The Direct Install program is a low-cost, high return service that is implemented quickly. The direct installation of lighting measures, water measures, air sealing and more not only saves money -- it also increases home comfort.

Average household Direct Install cost is \$44 and the average annual energy savings per household is \$147. The Direct Install program is available to all households in Winneshiek County.

How does it work?

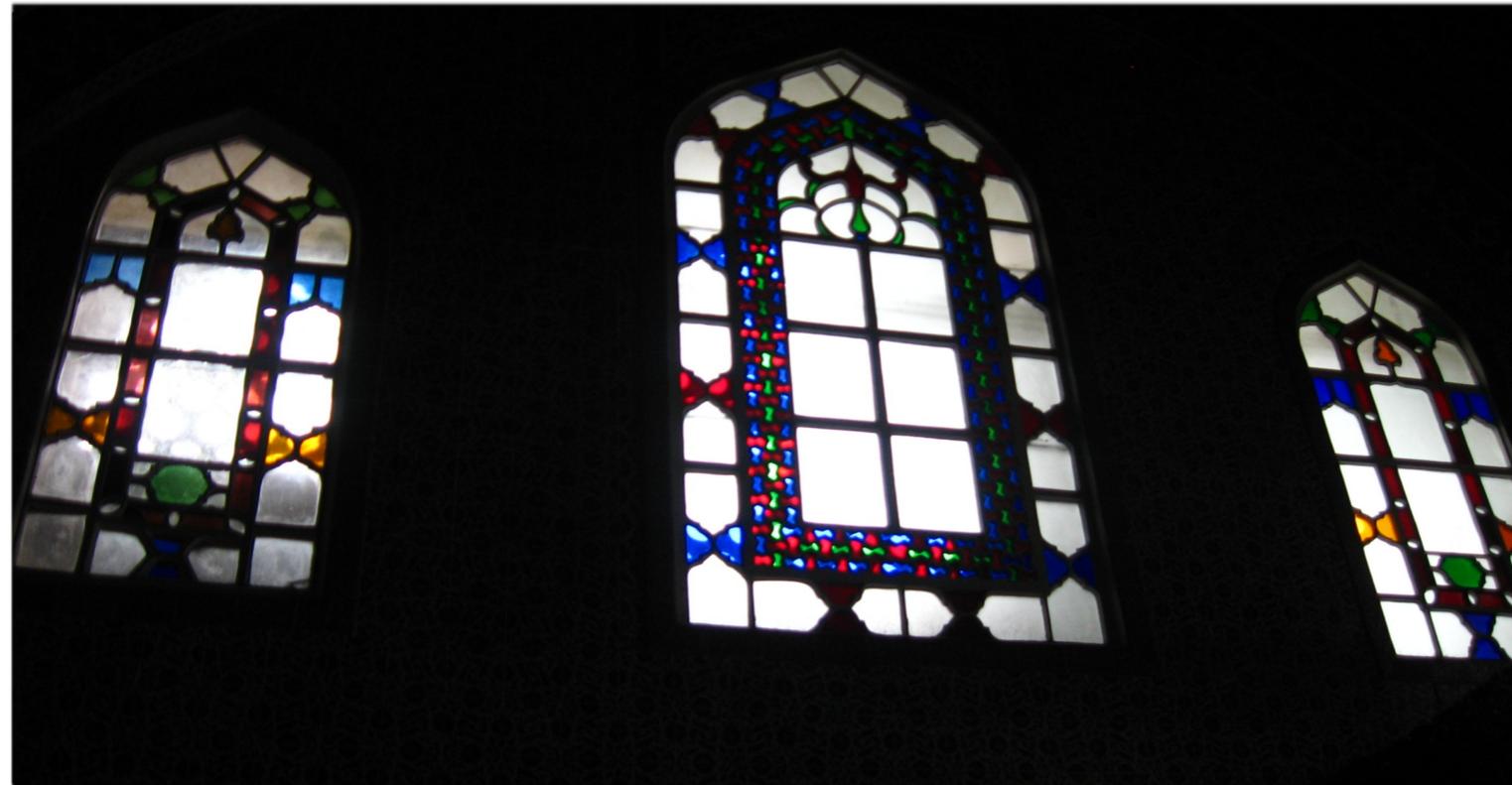
- * Sign up with the Winneshiek Energy District
- * Receive an initial blower door test, appliance safety test, and initial walk through assessment
- * Schedule a time for Direct Install
- * Direct Install includes:
 - Installation of lighting efficiency measures like CFLs
 - Installation of water efficiency measures like efficient shower head and faucet aerators
 - Air sealing to stop drafts
 - Furnace filter check and exchange
 - Programable therm-o-stat check
 - Water heater pipe insulation and temperature check
 - Vehicle and bicycle tire pressure check and much more!
- * Receive your Direct Install report with savings figures and further recommendations

How can I sign up for a Direct Install and get more information?

- * Sign up to schedule a Direct Install by calling (563) 382-4207 ext. 3#, email contact@energydistrict.org, or visit us online at www.energydistrict.org.



APPENDIX



The Greening Churches 2012 Internship supported 9 congregations in Northern Iowa. This section includes research reports on specific information requested by congregations. These reports can give other congregations ideas for projects in the future as well as provide general information for making church facilities more sustainable and energy efficient. This section also includes tools for charting your progress and connecting with others.

Decorah, Iowa

First United Methodist Church
Northeast Iowa Unitarian Universalist Fellowship
Glenwood Lutheran Church
Decorah Lutheran Church
First Lutheran Church
Good Shepherd Lutheran Church
Washington Prairie Lutheran Church

Mason City, Iowa

Trinity Lutheran Church
St. James Lutheran Church

Stained Glass

Report for Decorah Lutheran

Introduction:

One of the most common features in church sanctuaries is the beautiful stained glass windows which portray Biblical stories and create an aesthetically pleasing worship space. Unfortunately, these architectural works of art can wreak havoc on a church's energy bill. The spaces between the tiny pieces of glass and metal that welds them together, called lead coming, ¹³ offer many opportunities for air within the church to escape, or air from the outside to permeate into the sanctuary. Additionally, most stain glass windows consist of only one pane of glass, which does not insulate the room from the outside elements.

The problems of air coming through stained glass windows are not only of concern from an energy efficiency standpoint, but in many cases also mean that historically important pieces of liturgical art are at risk of deterioration. Furthermore, extremely fragmented stained glass windows may pose a safety concern to the congregation if there is a possibility of the windows breaking in extreme weather events. Finally, it is an issue of comfort and hospitality; if worshipers feel a frigid draft during the worship service they will feel less welcome.

Possible Solutions:

One solution to this problem is to put a second window pane on the exterior of the stained glass to protect the stained glass and offer more insulation and energy efficiency. These coverings can consist of either glass or polycarbonate plastic (branded as Lexan by General Electric or Tuffack by Rohm).¹⁴ It is very important that these coverings be properly vented so that they do not allow condensation to build up between the windows and cause more damage than good.

The advantages and disadvantages of glass versus plastic depend on each congregation's need. Glass coverings tend to let more light into the worship space and do not discolor; however, they are more difficult to install and prone to breakage. While plastic coverings are less likely to break and are easier to install, they may turn a dingy yellowish color over time and let less light in. Churches should consult with professional stained glass repair companies to determine which material would be best.

In conjunction with installing a covering, another option would be to replace the frames around the stain glass and repair the lead coming between the pieces of glass. If the caulking between the window and stained glass panel is old and chipped, it will let air from outside into the sanctuary, or leak air out of the building.

Considerations:

Installing protective coverings and/or replacing the frames around the glass panels will certainly improve the energy efficiency of the sanctuary space and reduce energy bills. However, this process will likely be expensive so it is necessary to decide whether the expected outcomes are worth the costs.

First, keep in mind that any building improvement project is a long term investment, intended not only for this generation of the church, but for years to come. The monetary savings of the project may take years to make a significant dent on the investment to install it. However, it the project may be worth the money if there are other factors involved, including historical preservation and congregation comfort and safety.

Energy efficiency improvements may be easier to make on some stained glass windows rather than others. The price will depend upon the size of the windows, the difficulty of the installation, what types of materials

are used, and how far away the contractor is from church.¹⁵ It may be useful to consult stained glass repair companies for bids to determine whether projects would be within the goals of the church's finances.

It may be more worthwhile for the church to consider other ways to conserve energy that will be more cost effective per investment dollar spent. For example, the insulation of the church walls, including in the sanctuary, may be a bigger priority that will yield more energy savings than stained glass projects would.

Another alternative project would to make sure standard windows throughout the church (not necessarily in the sanctuary) are double paned windows. This project would likely be easier to accomplish, since the size and location of standard windows would make this upgrade a manageable feat for the building committee or a local contractor. At the very least, make sure that windows throughout the church have drapes or window coverings and that they are used. In the winter, shades should be closed at night to keep the cold out and opened during the day to let in warm sunshine. During the summer, they should be closed during the day to keep hot sunshine out.

Finally, your congregation may find significant energy savings by changing the schedules of facility use. Since the priority is for the church to be heated or cooled for Sunday worship service, consider scheduling meetings, youth group, Bible Study, choir practice and so forth on Sunday itself or days of the week closer to Sunday. Also, intentional use of heating and cooling only parts of the building that are being used will result in significant energy savings, which opens up more money for ministry rather than building utilities, and is better for the environment.

Funding:

If your congregation decides to go forward with stained glass projects, you should first get several bids from repair companies to obtain an accurate estimation of what needs to be done. Decide what the goals for the repair project are and how this act of environmental stewardship will improve your ministry.

Within the ELCA, funding can come from a capital campaign and/or loans from the Mission Investment Fund. They offer loans for smaller projects with fixed and adjustable rates.

Possible Contacts:

Anne Gerrietts, EIT, LEED AP
Church Building Consultant
ELCA Mission Investment Fund
2481 Como Ave.
St. Paul, MN 55108
Office: 651-649-0454 ext. 225
anne.gerrietts@elca.org

Trinity Lutheran Church,
213 North Pennsylvania Avenue
Mason City, IA 50401
Office: 641-423-0536

(Trinity already replaced coverings on upper windows and is in the process of capital campaign to replace coverings on lower level windows)

Cathedral Crafts
730 54th Avenue Winona, MN 55987
Phone (507) 454-4079
Email: sales@cathedralcrafts.com

J&R Lamb Studios
190 Greenwood Avenue, Midland Park, New Jersey 07432
Phone: 201-891-8585
Email: lambinfo@optonline.net

Glass Heritage, LLC
3113 Hickory Grove Rd, Davenport, IA 52806
Phone: 1.563.324.4300
john@glassheritage.com

Zeus Stained Glass Studio
123 Fifth Street, West Des Moines, IA 50265
515.255.3131
ZEUSGLASS@AOL.COM

**Note this list not comprehensive, please research further companies when pursuing a project.*

Ductless Heating

Introduction:

A ductless heating and cooling unit stands alone and produces heating and cooling for a specific area by transferring warm air from outside into the building for heating and removing warm air from the area for cooling. It is a zoned heating/cooling system, which means that it delivers heating/cooling directly to an area rather than having the air flow from one central heating unit via ducts. As such, these units allow more individual control in each zone. They are often a good solution for buildings with many added wings where installing ducts for heating would be complicated.

According to EnergyStar.gov, ductless heating and cooling can reduce heating and cooling costs by up to 30% compared to duct heating and cooling which may also help the congregation save money on heating/cooling bills¹⁶. In order to be good stewards of environment, churches should consider purchasing Energy Star labeled units which are tested and certified to be the most energy efficient.

If a congregation is interested in pursuing this option further, they should contact their HVAC (heating, ventilation and air conditioning) company for more specific information. Next, they should inform the congregation of the options and decide if the congregation wishes to move the process forward. From there, the property and finance committees should seek out price quotes from HVAC companies and begin the installation process.

Report for Decorah Lutheran Church

Considerations for Moving the Offices:

Since Decorah Lutheran is a patchwork of additions, ductless heating and cooling would be a good solution for climate control if the offices

are moved. Other reasons Decorah Lutheran Church may want to consider moving their offices would be to make the building less confusing to visitors by locating the offices closer to the front doors where people are more likely to enter the church. The church should also examine whether they would be heating fewer areas of the building during the week by moving the offices. The room locations and heating/cooling needs of Bible studies, youth groups, committee meetings, and so on should be taken in consideration, with the goal of only heating sections of the building at a time rather than heating the entire facility.

Other Energy Efficiency Recommendations:

Installing a second set of doors at the entrances would help make the building more energy efficient by reducing the amount of air from the outside that enters the building and needs to be heated or cooled. Decorah Lutheran Church should also consider using the ceiling fans in the sanctuary in the winter to push warm air down from the ceiling. Additionally, the congregation should consider scheduling meetings and events wisely so that only certain areas of the building rather than the entire facility have to be heated or cooled on certain days of the week.

Report for Trinity Lutheran Church

Considerations for Installing Ductless Heating/Cooling:

As we understand it, Trinity Lutheran Church currently does not have any heating or cooling options in the education wing. This certainly must present challenges for ministry and the comfort of those who use this space. A ductless heating/cooling system is one possible solution to this problem.

To keep costs down and to use less energy, Trinity Lutheran may want to consider ductless heating/cooling only on the floor with the most use throughout the week. However, we realize that a heating/cooling

solution on all floors may be necessary for the ministry of the church. In this case, care should be taken to try to schedule events wisely on certain days of the week when not all three floors are heavily used.

Contacts/Resources:

- *Energy Star.gov*: http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=MS
 - This link offers basic information about ductless heating/cooling, a list of units that are certified by their organization to be energy efficient, tips on how to hire a contractor, information about maintenance and more!
- “How Does a Ductless Heat Pump Work?”
<http://www.superpages.com/supertips/ductless-heat-pump.html>
 - For more information about how ductless heating/cooling works, consult this website.
- “Frequently Asked Questions,” *Ductless Heating & Cooling Systems*
<http://goingductless.com/consumer/about-ductless-heating-and-cooling/FAQ>
 - This website offers a great deal of information about the technical aspects of how ductless heating/cooling works, how to determine if it is needed, and answers to other questions.
- “Ductless AC Ratings: A Repairman Reviews the Brands...”, *HVAC-for-Beginners.com*
<http://www.hvac-for-beginners.com/ductless-ac-ratings.html>
 - This link provides energy efficiency ratings as well as other specifications for many different brands of ductless heating/cooling units.

• Section 3 •

Lighting

Suggestions for Improving Lighting in the Glenwood Lutheran Church Sanctuary

July 2012

Purpose of the study: The Glenwood Church Council met with Dale Nimrod in May and with Dale and two Greening Interns, Kristi Holmberg and Callie Mabry, who are working with nine churches in the area this summer. The purpose of the meetings was to identify any environmental sustainability projects that Glenwood might like the interns to undertake for them. One of the projects was to research improvements for lighting the sanctuary.

The goal: The main goal was to find ways to increase the general light level of the sanctuary. Secondary goals included reducing the wattage of the current arrangement. Two other problems to be overcome emerged in the course of the study: (1) The light level in the altar area needs raising independent of the rest of the sanctuary, and (2) there is a real safety issue in bulb replacement in the hanging sanctuary light fixtures.

The study and the findings: On June 7, Kristi, Callie, Dale, and Pastor met with Anne Gerriets, an ELCA Church Building Consultant who is credentialed as an engineer and is certified to do energy audits; she works out of the office for the ELCA Mission Investment Fund in Minneapolis. We did a lengthy “walk-through” the church, beginning with the sanctuary, looking at energy issues in general and sanctuary lighting in particular. On June 27, Dale, Pastor, and Sunny met with Bob Larkin whose business is the Light Source consulting company of Waukon/Dorchester to zero in on the sanctuary lighting.

We talked about a number of things, including better lighting of the altar and the problem of changing bulbs safely in addition to the problem of increasing the lighting level of the sanctuary.

The best way to get more light for less wattage is to switch to LED bulbs. LED bulbs can be purchased as spotlights (25 deg), normal floodlights (40 deg) and wide floodlights (120 deg). Wattage ranges for 11-17 watts. The cost is roughly \$40 per bulb. Color choices range from “warm yellow” to “harsh white” (my words). We were able to screw them into a portable fixture and see how well they worked. The benefits of LEDs are that you get a lot of light for a small amount of electricity, and, unlike the CFLs, LEDs work very nicely with dimmer switches. They definitely last longer, although top quality CFLs should last considerably longer than the big-box specials that we installed at Glenwood a few years ago. A disadvantage is that the LEDs are known to interfere with certain sound amplification systems. And the purchase price is relatively expensive

We made a decision to purchase two LED flood lights to brighten the altar area. Currently, we have three bulbs on each side, and we propose to replace one of the three on each side with an LED flood light. This should accomplish two things (1) it likely will greatly brighten the altar area, and (2) it will let us know for sure if these LEDs are compatible with our sound system. The placement will also help us predict their effect on brightness in the sanctuary fixtures. They will be easy to install in the altar area.

Assuming that the LED floods satisfactorily brighten the altar area and do not interfere with the sound system, it would seem that we should recommend to Council that we replace the “bottom” 500 watt incandescents in the sanctuary fixtures with LED floods. We visited also about the problem of bulb replacement from safety and convenience standpoint. If we were to remove the metal light diffusers from the bottom of the hanging fixtures we could use a hand-held long pole with suction cup to replace the bottom bulbs without having to climb an unstable ladder arrangement. Furthermore, while the bottom bulb/flood is out, we should be able to reach the bulbs in the other three sockets. This might be the best outcome of the consultation. There may be a problem with changing CFLs with the pole, but putting up with the smaller incandescents may be a small price to pay for the safety factor. There may be a problem with the angle of the bulb sockets in the top part of the sanctuary fixtures, but in this event, there may be some relatively inexpensive modifications available.

Bob guessed that new, satisfactory, hanging fixtures would probably cost on the order of \$500 each. We think it would be difficult to justify that expense.

Changing the bottom bulbs to LED floods and removal of the light diffusers from the bottom of the fixtures should help increase the light level in the pews—e.g. to make reading the hymnals easier, but likely will not increase the general room light level from where it is currently. Purchase of a number of wall sconce lighting fixtures would probably be the best way to accomplish that. Such fixtures are relatively inexpensive. One could alternatively increase the wattage of the “upper” bulbs of the sanctuary hanging fixtures.

Submitted to the Glenwood Church Council by Dale Nimrod, Kristi Holmberg, and Callie Mabry

• Section 4 •

End Notes

1. Energy and Earthcare Checklist” *Mission Investment Fund of the Evangelical Lutheran Church of America*. Accessed on June 14, 2012. <http://www.elca.org/Who-We-Are/Our-Three-Expressions/Churchwide-Organization/Mission-Investment-Fund-of-the-ELCA/Caring-for-Creation-MIF-Green-Resources/ELCA-and-Interfaith-Creation-Care-Resources.aspx>)
2. “How to Start Recycling at Church.” *Flourish Online Magazine*. Accessed June 20, 2012. <http://www.flourishonline.org/2010/09/how-to-start-recycling-at-church>
3. Ibid.
4. Iowa Association of Naturalists, “Iowa Prairies,” *Iowa State University Extension and Outreach*, accessed 18 July 2012, <http://www.extension.iastate.edu/Publications/IAN203.pdf>.
5. Energy and Earthcare Checklist” *Mission Investment Fund of the Evangelical Lutheran Church of America*. Accessed on June 14, 2012. <http://www.elca.org/Who-We-Are/Our-Three-Expressions/Churchwide-Organization/Mission-Investment-Fund-of-the-ELCA/Caring-for-Creation-MIF-Green-Resources/ELCA-and-Interfaith-Creation-Care-Resources.aspx>)
6. Ibid.
7. “Phantom Load.” *University of California, Berkley*. Accessed on July 13, 2012. View the handout to find more facts here: <http://www.ocf.berkeley.edu/~recycle/ssec/download/Phantom%20Load.pdf>.
8. Ibid.
9. Ibid.
10. Ibid.
11. Energy and Earthcare Checklist” *Mission Investment Fund of the Evangelical Lutheran Church of America*. Accessed on June 14, 2012. <http://www.elca.org/Who-We-Are/Our-Three-Expressions/Churchwide-Organization/Mission-Investment-Fund-of-the-ELCA/Caring-for-Creation-MIF-Green-Resources/ELCA-and-Interfaith-Creation-Care-Resources.aspx>)
12. “How to Be Hopeful.” Barbara Kingsolver. Accessed on June 20, 2012. <http://today.duke.edu/2008/05/kingsolver.html>
13. “Case Study--Do we really need an external covering?”, *Cathedral Crafts, Inc.*, Accessed July 10, 2012, <http://www.cathedralcrafts.com/preservation/custom-storm-systems/case-study-do-we-really-need-an-external-storm-covering/>
14. Donald Samick, “Energy Conservation and restoration of stained glass windows,” *J&R Lamb Studios*, <<http://www.lambstudios.com/restoration.htm>>
15. “Key factors to consider when installing a protective covering for stained glass windows,” *J&R Lamb Studios*, <<http://www.lambstudios.com/Key%20factors.pdf>>
16. 1. “Ductless Heating and Cooling for Consumers,” *Energy Star*, Accessed July 10, 2012, <http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=MS>

About the Authors



Callie Mabry is from Fort Collins, Colorado. She is an environmental studies and history double major at Luther College ('14). She has always loved nature and became interested in sustainability gradually through learning at school. Her environmental studies classes at Luther inspired her to become a major with a policy concentration. She is especially interested in issues of food and water.



Kristi Holmberg is from North Mankato, Minnesota. She graduated from Luther College in May 2012 with a major in religion and minors in sociology and writing. Kristi's engagement with sustainability began in a religion seminar and continued in a summer research project and participation in the WCC-LWF "Youth for Eco-Justice Program in Durban, South Africa in December 2011. She is especially committed to advocacy on climate change issues.

Notes

Notes