Shining Examples

Energy Conservation Opportunities in the Metropolitan Chicago Synod

The Work of the Justice Team’s Environmental Concerns Working Group
1992 – 2007
Creation Care in the ELCA

“In the 1993 social statement, Caring for Creation: Vision, Hope and Justice, the ELCA recognized that “the buildup of greenhouse gases, especially carbon dioxide” threatens our planet. It urges us to accept responsibility for our sinful treatment of God’s gift of the earth. A substantial part of the problem is our use of fossil fuels to run our homes, our churches, our cars, and our places of business. Those of us who live in the United States produce one-quarter of the world’s carbon emissions, even though we are only five percent of the planet’s human population. Although we are complicit in the evil that we see, we can repent of our own sinful misuse and abuse of the Earth, direct and indirect, when we confess our sins. We do this especially for the sake of the poor of the earth, working on their behalf even as we contend with entrenched political, economic, and social forces.”

— Mark S. Hanson, open letter on the occasion of Earth Day 2007

http://www.elca.org/bishop/messages/m_070411.html
So what can we do to be good stewards and care for creation?
The Environmental Concerns Working Group is here to help!

A part of the Metropolitan Chicago Synod’s Justice Team

Offering resources for the synod’s congregations to address environmental issues.
Energy Stewardship
Loans for Lights

- No interest loans up to $20,000 for energy efficient lighting retrofitting projects.

- 3 – 5 year payback period based on energy savings.

- Once the loan is paid all energy savings accrue to the congregation. Increasing the amount of resources available for their missional activities.
Ground Rules of the Loan Fund

- Lend money at zero interest.
- Insist on a professional audit before lending to help evaluate results to determine if they are realistic.
- Monthly payments to be based on projected energy savings.
- The overall goal is to get congregations through the process with no current budget pain.
The Augustana Pilot Project

- Audit done in 1992

- $3,000 total project cost

- $1,200/year reduction was the result
  - $3,600/year electricity expenses for replaced lighting
  - $2,400/year electricity expenses for new lighting
  - 40% reduction in the number of kilowatt hours used

- Payback time: 2 1/2 years (30 months)
Augustana Follow-up

- Concern about older congregations unable to finance similar retrofits
- Documentation of results
- Grant from ELCA in 1993 of $5,000 to Metropolitan Chicago Synod to establish revolving loan fund
- Bishop’s agreement that this is both an environmental stewardship and fiscal stewardship issue
- Grants from AAL, individual congregations, and ICECF as well as energy rebates to the synod increase the fund. Currently approximately $55,000 is available in the loan fund.
1994 Projects
Two projects of $2,500 each

- Ashburn, Chicago
  - 7,124 kWh/yr reduction
  - projected savings of $900/yr

- Holy Cross, Wheaton
  - 11,230 kWh/yr reduction
  - projected savings of $2,400/yr
What if you tried to give money away for free and nobody wanted it?

ECWG began to do outreach to help congregations think about their lighting and energy in new ways that are better methods of financial and environmental stewardship.
Resurrection, Franklin Park
394 fixture, $10,483 project in 1999-2000

- Projected monthly savings $250
- 21,814 kWh/yr reduction
- Payback time: 3 1/2 years

- Carbon dioxide reduction: 46,640 lb/yr
- Sulfur dioxide reduction: 217 lb/yr
- Nitrogen oxide reduction: 78 lb/yr
2000—Mixed Blessings

- Outreach program of bishop’s letter and conference meetings produces requests

- *Lutheran* article stirs interest

- Summer 2000—4 churches, 4 audits
  - amount requested: $75,000
  - amount in loan fund: $8,000

- How to pay for it all?
Zion, Elgin
$11,632 project in 2000

- Small (<200 member) church in downtown Elgin with an annual budget of $130,000.
- Lighting audit found potential savings of $2,160/yr (Over 1.5% of their budget! Expenses that would be recovered in 4.64 years, but how to fund all of the initial $11,000+ in costs?)

- ECWG meets with congregational leadership and identifies:
  - $6,000 labor savings from sweat equity of skilled volunteers
  - $1,400 grant from AAL
  - $2,000 rebate from ComEd

- The amount of loan needed from ECWG is only $2,100. An amount ECWG can provide and a one year payback for Zion!
At Zion

it’s out with the old...

in with the new...

and have some fun!
Illinois Clean Energy Community Foundation gets behind ECWG’s Work

- January 2002 ICECF awards $65,000 grant to Metropolitan Chicago Synod for ECWG efforts
  - $45,000 added to synod’s loan fund
  - $20,000 for two-year outreach program employing Mike Stanch as consultant coordinator
Christ Lutheran

191 fixture, $15,500 project in 2002

(Potential savings of $2,367/yr)

At work on energy stewardship

And creating additional inviting space for day care facility
2003—Larger Projects

Three Projects Totaling $41,607

- Good Shepherd Lutheran Church, Naperville—January ($3,922)
  - 5,250 kWh/yr reduction
  - Projected savings of $1,900/yr

- Our Saviour’s, Arlington Heights—February ($12,890)
  - 37,184 kWh/yr reduction
  - Projected savings of $3,600/yr

- Ashburn, Chicago—March ($24,795)
  - 28,148 kWh/yr reduction
  - Projected savings of $4,325/yr
  - Includes $14,070 grant from ICECF for day school’s lighting
2004—Day School Projects
Saint Luke and Pilgrim Get Lighting Grants

- St. Luke Academy gets $16,920 ICECF grant for school lighting upgrade
  - Church receives $3,000 synod loan for church’s side of building

- Pilgrim Lutheran School gets $8,784 ICECF grant for school lighting upgrade
  - Church receives $7,100 synod loan for church’s side of building
2005 & 2006—ECWG goes to Aurora, Elgin, and Barrington
San Francisco, Messiah, Christ the Lord, and Atonement light up and power down!

- Parroquia Luterana San Francisco de Asís, Aurora
  - 15,875 kWh/yr reduction

- Messiah Lutheran, Elgin
  - 12,735 kWh/yr reduction

- Christ the Lord, Elgin
  - 14,003 kWh/yr reduction

- Atonement, Barrington
  - 71,989 kWh/yr reduction
At Work at San Francisco

Members from Rejoice, Geneva help out at San Francisco de Asís
…to turn this

…into this.
What is the difference? (writ small)

- The left one is a conventional sign, drawing 3.3 W.
- The right one is an LED sign, drawing 0.92 W. Using <1/3 of the energy as the one on the left. Since this type of light must be turned on 24/7/365 this fixture can pay for itself in 3 to 6 months.

- But not in the City of Chicago. It may be a green city but there are still some archaic sections in the building code.
## What is the difference? (writ large)
### Three-Quarters of a Million Pound Reduction Of Carbon Dioxide Per Year

<table>
<thead>
<tr>
<th>Church</th>
<th>KWh/yr reduction</th>
<th>Carbon dioxide reduction (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augustana, Chicago</td>
<td>13,395</td>
<td>28,640</td>
</tr>
<tr>
<td>Ashburn, Chicago (1st project)</td>
<td>7,124</td>
<td>15,232</td>
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<tr>
<td>Holy Cross, Wheaton</td>
<td>11,230</td>
<td>24,011</td>
</tr>
<tr>
<td>Resurrection, Franklin Park</td>
<td>21,814</td>
<td>46,640</td>
</tr>
<tr>
<td>Zion, Elgin</td>
<td>10,099</td>
<td>21,593</td>
</tr>
<tr>
<td>Christ, Clarendon Hills</td>
<td>10,870</td>
<td>23,241</td>
</tr>
<tr>
<td>Good Shepherd, Naperville</td>
<td>5,250</td>
<td>11,225</td>
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<tr>
<td>Our Saviour’s, Arlington Heights</td>
<td>37,184</td>
<td>79,503</td>
</tr>
<tr>
<td>Ashburn, Chicago (2nd project)</td>
<td>28,148</td>
<td>60,183</td>
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<tr>
<td>Pilgrim, Chicago</td>
<td>21,962</td>
<td>46,957</td>
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<tr>
<td>St. Luke, Chicago-Belmont</td>
<td>63,438</td>
<td>135,636</td>
</tr>
<tr>
<td>San Francisco, Aurora</td>
<td>15,875</td>
<td>33,942</td>
</tr>
<tr>
<td>Messiah, Elgin</td>
<td>12,735</td>
<td>27,229</td>
</tr>
<tr>
<td>Christ the Lord, Elgin</td>
<td>14,003</td>
<td>29,940</td>
</tr>
<tr>
<td>Atonement, Barrington</td>
<td>71,989</td>
<td>153,919</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>230,514</strong></td>
<td><strong>737,889</strong></td>
</tr>
</tbody>
</table>
What is the difference? (writ large)
Three-Quarters of a Million Pound Reduction
Of Carbon Dioxide Per Year

This is over one ton per day!
What is the difference?
Over 3 Million Pounds Of CO₂ Emissions Have Been Avoided by 14 ELCA Congregations
What could be the difference?

- This is from fourteen congregations.

- What if all 206 ELCA congregations in the Metropolitan Chicago Synod did the same?

- In fact, what would be the practical impact if all churches walked the talk and became the examples—became the salt of the earth?
Now it’s your turn to be better earthkeepers

- Check into improving the energy efficiency of your church’s lighting.

- and...
If you can’t wait to get started being a Green Congregation see the *Environmental Guide for Congregations, Their Buildings and Grounds* that is currently available at [http://www.webofcreation.org](http://www.webofcreation.org).
Energy is just one of the chapters in the Environmental Guide

- Worship
- Congregational Activities
- Energy
- Paper and Wood
- Water
- Cleaning
- Food
- Transportation

- Indoor Air Quality
- Lawn/Garden/Plants
- Recycling and Waste

are each addressed in the Guide
Each of the 11 chapters in the *Environmental Guide* contains sections on:

- Biblical passages
- Theological reflection
- Description of the ecological problem
- Human justice issues
- What to do in the congregation
- What can be done at home
- List of resources
- Activity suggestions