Solving The Climate Crisis
What Lutherans Can Do

Bob Lindmeier

Senior Chief Meteorologist
WKOW TV

Member: The American Meteorological Society
AMS Station Scientist Committee
Citizens’ Climate Lobby
Saint John’s Lutheran
ELCA Synod Care For Creation Team
No Scientific Dispute

- It’s real
- It’s us
- It’s dangerous
- Scientists agree
- We have solutions that are technically feasible, economically affordable, and politically viable
“The scientists have been telling us for decades that we need to act as fast as possible to avert the worst consequences of climate change. Despite that, substantive action has been delayed so long that we’re now bearing witness to the harm caused by warming that has already occurred in communities around the world. It is still well within our power to turn the tide, slowing and eventually halting global warming by bringing our net carbon emissions to zero. But we have to act now to prevent ever greater societal harm and disruption in the coming years and decades.”

Daniel L. Swain, a climate scientist at the University of California at Los Angeles
What Can We Do?

- **Mitigation** - reducing climate change - involves reducing the flow of heat-trapping greenhouse gases into the atmosphere.

- **Adaptation** - adapting to climate change - involves adjusting to actual or expected future climate.

- **Lead the world in adaption and mitigation efforts by fulfilling international agreements**
"Nothing undermines development like a disaster. But there are solutions: every $1 invested in risk reduction and prevention can save up to $15 in post-disaster recovery. Every $1 invested in making infrastructure disaster-resilient saves $4 in reconstruction."

-Mami Mizutori, Special Representative of the Secretary-General for Disaster Risk Reduction and Head of UNDRR
The northern most ELCA Ministry in the United States
Permafrost thaw, flooding, land erosion are causing catastrophic land collapse.
This village of 600 voted in 2016 to relocate.

The estimated cost of resettlement?
A staggering $180 million!
The LWF believes we must continue to act in solidarity with those who are most vulnerable to climate change, with those yet to come, and with all of God’s creation.
ELCA World Hunger recognizes that climate change impacts people in poverty first. Also, it sees climate change as one of the root causes of hunger.

The Bible’s words teach us that to help those who are hungry, to work for justice for all people, is to experience the transformative and connecting power of God. As Lutheran Christians, freed by the grace of God and the death and resurrection of Jesus Christ to serve our neighbors, this directive leads us to give of ourselves and to work and advocate for justice.
• A call to pursue justice for creation through active participation, solidarity, sufficiency and sustainability, and states the commitments of the ELCA for pursuing wholeness for creation — commitments expressed through individual and community action, worship, learning, moral deliberation and advocacy.

• We see the despoiling of the environment as nothing less than the degradation of God’s gracious gift of creation.
ELCA Future Directions - Goal 4

- A visible church deeply committed to working ecumenically and with other people of faith for justice, peace and reconciliation in communities and around the world.

- A priority for action - Advocacy and action on economic justice, racial justice and climate justice.
What Can Your Congregation Do?

• We are called to care for God’s creation in ways both big and small.

• Environmental Stewardship can come from reducing energy use, cultivating the earth or engaging with environmental issues at the public level.
What Can Your Congregation Do?

• Create a Care For God’s Creation ministry.

• Consider solar! It is the single most impactful action your congregation can take to reduce your church’s carbon footprint.
How Much Can Your Church Save?

Approximate Savings
Saint John’s Lutheran
26% electrical savings annually
$200,000 savings over 30 years
$56K system cost
$20K in grants used
Third-party financing used
Actual savings around $100K
You lose money doing nothing!
FUTURE WARMING
Projections (°C) Based on Emissions Decisions

Source: IPCC AR5 Summary for Policy Makers
Temperature baseline adjusted to 1881-1910 to reflect COP 21 targets
<table>
<thead>
<tr>
<th>1.5°C</th>
<th>VS</th>
<th>2°C</th>
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</thead>
<tbody>
<tr>
<td><strong>8.5-30 inches of sea level rise by 2100</strong></td>
<td><strong>Sea Level Rise</strong></td>
<td>Additional 4 inches of sea level rise and 10.4 million more people exposed</td>
</tr>
<tr>
<td><strong>Loss of 70-90% of coral reefs</strong></td>
<td><strong>Ecosystems</strong></td>
<td>Loss of 99% of coral reefs</td>
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<tr>
<td><strong>350 million people in urban areas exposed to severe drought</strong></td>
<td><strong>Extreme Weather</strong></td>
<td>410 million people in urban areas exposed to severe drought</td>
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<tr>
<td><strong>At least one sea-ice-free Arctic summer after 100 yrs</strong></td>
<td><strong>Arctic Ice</strong></td>
<td>At least one sea-ice-free Arctic summer after 10 yrs</td>
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</tbody>
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Our Window For Action is Today

- We have **nine years** to cut our global emissions in **half**
The Paris Climate Accord, We’re Back In!
ELCA’s Response

“The Paris agreement sets the world on a pathway to stewardship, justice and sustainability. All countries have, for the first time, agreed to take concrete steps to reduce greenhouse gas emissions and to review and increase their commitments over time…”
MEETING THE PARIS AGREEMENT
RAPID, DRASTIC CUTS NEEDED TO LIMIT WARMING

Annual global gigatons of equivalent CO2
Source: Climate Action Tracker, UN Environment Programme
GREENHOUSE GAS SOURCES
UNITED STATES EMISSIONS BY SECTOR

- 29% TRANSPORTATION
- 28% ELECTRICITY
- 22% INDUSTRY
- 12% COMMERCIAL & RESIDENTIAL
- 9% AGRICULTURE

Source: U.S. EPA 2017 (released 2019)
UNITED STATES BILLION-DOLLAR DISASTERS
WEATHER & CLIMATE EVENTS

1980-2010 billion-dollar weather and climate disasters (CPI-adjusted).
Source: NOAA/NCEI. Produced 2/12/2020
2020 BILLION-DOLLAR DISASTERS
WEATHER AND CLIMATE EVENTS

Source: NOAA/NCEI, "Billion-Dollar Weather and Climate Disasters"
Current trends in CO2 emissions will not keep us under 2°C.

If we want emissions to drop fast enough...

...we must put a price on carbon.
Energy Innovation and Carbon Dividend Act

How it Works

Charge a fee on fossil fuels at the source (mine, well, or port)

Return 100% of net revenue to households as a dividend

Carbon Border Adjustment

Limited Regulatory Adjustment
Benefits

- Effective
- Good for people
- Good for the economy
- Bipartisan
- Revenue Neutral
The Intergovernmental Panel on Climate Change (IPCC) issued guidelines for how quickly the world must reduce emissions to stay within 2° and 1.5°C required to rein in climate change.

If nothing changes, our emissions in the U.S. are forecast to remain flat.

The Energy Innovation Act would reduce emissions by 40% in 12 years and 90% by year 2050.
Benefits

Effective

Energy Innovation and Carbon Dividend Act

THE BIPARTISAN CLIMATE SOLUTION

40% less carbon emissions over the next 12 years
A HEALTHIER ENVIRONMENT

TODAY
114,000 lives lost each year due to air pollution

THE FUTURE
295,000 lives saved through 2030 because of better air quality
Benefits

**FAMILIES GET PAID**

**TODAY**
$0 paid to households in carbon dividends

**THE FUTURE**
$3,456 annual dividend for a family of 4

Good for People
Benefits

Energy Innovation and Carbon Dividend Act

Good for the Economy

JOBS ARE CREATED

Today
$240 billion in annual costs from environmental and health harms of fossil fuels

The Future
2.1 million jobs created over 10 years in local communities
Democrats and Republicans are both on board, co-sponsoring this bill together.
The government will not keep any of the fees collected, so the size of government will not grow.

100% net revenue is allocated to Americans to spend as they choose.
South-Central Synod of Wisconsin 2017 Assembly Resolution #4

Carbon Fee and Dividend: A Climate Solution

RESOLVED that this assembly encourage members and congregations to continue learning about and advocating for Carbon Fee and Dividend; and be It finally

RESOLVED that this assembly invite our bishop to communicate to the members of Congress who represent the geographical territory of this synod our support for Carbon Fee and Dividend legislation.
Memorial on Carbon Fee & Dividend

Whereas, with a landmark 2017 resolution endorsing Carbon Fee & Dividend as a solution to address greenhouse gas emissions causing climate change, this synod became the first major religious denominational body to join the growing secular movement; and

Whereas the advocacy work from our synod continues with current congressional legislation for Carbon Fee & Dividend, HR 763, “The Energy Innovation and Carbon Dividend Act”; and

Whereas the urgency for action becomes ever more apparent for all of God’s creation—plants and animals, human lives, and entire ecosystems—especially on behalf of the most vulnerable; therefore, be it

RESOLVED that the South-Central Synod of Wisconsin memorialize the 2019 ELCA Churchwide Assembly to join our efforts to continue learning about, supporting, and advocating for a national strategy of Carbon Fee & Dividend that the South-Central Synod of Wisconsin memorialize the ELCA Churchwide Assembly to encourage ELCA members to learn about and advocate for a national strategy of Carbon Fee & Dividend, while ensuring the policies are congruent with our other ELCA values and positions, including sustainability, and care and justice for those in poverty and vulnerable populations.

submitted by
synod Caring for God’s Creation Team, including
- Ms. Jane Harrison, First English, Platteville
- Mr. Bob Lindmeier, St. John’s, Oregon
- Ms. Debbie Nelson, (congregation?)
- Ms. Eleanor Sibert, Five Points, Richland Center
- Rev. Nick Uphall, Advent, Madison
- Rev. Mae Jean Zelle, Lake Edge, Madison

Background
The scientific community overwhelmingly agrees that increases in greenhouse gases (GHGs) released into the atmosphere impact the climate globally, resulting in increased frequency and intensity of hazardous events, that destabilize the environment. This destabilization of the environment, in turn, results in loss of human and animal lives, loss of infrastructure and property, increased health care costs, and loss of productive capacity. Climate change is a matter of justice and the most vulnerable are disproportionately impacted. The effects on the environment destabilize the world’s food supply, which leads to food insecurity, mass migrations, and species extinction. The 2018 Intergovernmental Panel on Climate Change report indicates that significant irreversible damage will occur if we do not act quickly to reduce GHG emissions. The 2018 U.S. National Climate Assessment indicates that without sufficient mitigation efforts to reduce greenhouse gas emissions, climate change will cost the U.S. economy up to $3.6 trillion by 2030 and adversely impact the ability of people to continue living in the areas they currently call home.

Carbon Fee and Dividend: A Climate Solution
Thank You!

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