



Minnesotans Want Clean, Affordable, Reliable and Secure Energy Now

Citizens' Climate Lobby Minnesota Letter to the Editor Project 2024

Project Letters

Congressional District MN01

By Ed Hahn. Published in the Winona Post 12/27/2023 and Winona Daily News 12/23/2023

Electricity. From that first cup of coffee in the morning to our laptops at work to texting our friends and family on the latest iPhone, our modern lives are dependent on electricity. We don't even give it a second thought unless suddenly we don't have it.

Over the last 150 years, the United States has grown into the world's largest economy, fueled in large part by our heavy investment in infrastructure that connects one coast to the other and everywhere in between. According to the Energy Information Agency (eia.gov), the United States produced 4,243,136 gigawatt hours of electricity (a record) in 2022. The problem is that this electricity must be transmitted from where it is generated to the people who use it. And the nationwide system of transmission lines is not keeping up with current demand.

The United States is increasingly experiencing a gap between production/consumption and the ability to transmit electricity to where it is needed when it is needed. Consider the high-profile failures of our current energy infrastructure in the recent past: the 2022 polar vortex that impacted most of the country, the California heat waves of 2020 and 2022, the 2019 heat wave, and 2021 deep freeze in Texas, as well as the polar vortex of 2014 that struck the Midwest and Northeast. These events resulted in high electrical demand for cooling and heating that the system could not meet, collectively costing the United States hundreds of billions of dollars. But many of these grid failures could have been prevented if the U.S. had a more robust energy grid with the capacity to efficiently transmit electricity from one region of the country to another. And as this past summer has demonstrated, these extreme weather events are not going away anytime soon, but rather becoming the norm.

Thankfully, the "Building Integrated Grids With Inter-Regional Energy Supply Act" or the "BIG WIRES" Act (S.2827/H.R.5551) exists to meet this challenge.

This act is a tech-neutral approach that does not favor one form of energy production over the other. Rather, it works to ensure that we have the means to deliver energy when and where it is needed. The United States has a growing need for electricity, yet at the same time, new energy production and capacity remains offline. An article published on CNBC.com on April 6, 2023, reported that while the United States currently has a national grid capacity of about 1,250 gigawatts, we also have 2,020 gigawatts of new energy production sitting unused, waiting to be connected.

BIG WIRES also creates and maintains construction jobs, allows energy producers of all types to sell at fair market rates (avoid selling at a loss during times of low regional demand due to inability to redirect and share excess power), increases energy resilience and security from cyber threats, and lowers energy costs for families and businesses.

So what's the bottom line? We need bigger and better transmission capacity across the United States. This act would require each region to invest in its transmission infrastructure in order to be able to transfer 30% of peak demand between regions by 2035. This would be done through constructing new transmission lines, installing and updating power flow controls and grid-enhancing technologies, and encouraging energy efficiency and new power generation to free up capacity and meet demand.

I encourage you to contact our Congressional delegation — Rep. Brad Finstad, Sen. Amy Klobuchar, and Sen. Tina Smith — and encourage them to support the BIG WIRES Act to secure our energy future.

Ed Hahn, Winona

By Cheryl Campbell. Published in the Rochester Post Bulletin 4/6/2024.

On March 21st, U.S. House Resolution 86, which states that a carbon tax is detrimental to the U.S. economy, passed in the House and will advance to the Senate Finance Committee. Resolution 86 claims a carbon tax is bad for business, hinders American global competitiveness and ingenuity, and hurts families. This isn't so. A U.S. industrial policy that taxes fossil fuels takes advantage of the free market's ability to steer investments toward alternative technologies and reward clean energy producers that deliver services reliably and efficiently, which in turn accrues profits and market share to them.

A smartly implemented carbon tax can create resilient domestic clean energy supply chains. That means jobs, which should appeal to both sides of the political spectrum. This tax need not "disappear" into public coffers. Tax proceeds could go towards electrical grid modernization, household rebates, training, or be redistributed to citizens as a tax credit (much as Alaska pays its citizens a "dividend" based on oil taken out of the ground.) There are many tax policies that drive business decisions: tariffs, equipment depreciation, credits for technology adoption, and

Opportunity Zones are but a handful. Let's not take away carbon taxes as a tool for U.S. industrial policy! Concerned residents should contact their legislators to say "no" to Resolution 86 and "Yes" to state legislation for the Energy Infrastructure Permitting Act (HF4700/SF4784), and the co-location of high voltage transmission and communications infrastructure in existing highway rights-of-way (HF3900/SF3949).

Cheryl Campbell, Citizens Climate Lobby Rochester Chapter

By Richard Dahl. Published in the Winona Post 5/8/2024.

The cost of doing nothing on climate change

After years of warnings that climate change is getting worse but its worst consequences could be avoided if steps were taken to keep global warming from increasing no more than two degrees, a new study published in Nature and reported by CNN states the world is now heading toward a gain of nearly 3 degrees in the next century.

The short-term financial damage being brought by climate change already outweighs the cost of trying to solve the crisis. This means that financial pain from these changes is now unavoidable "even if governments ramp up their efforts to tackle the crisis now," according to CNN. For many Americans "this financial loss will require difficult decisions about how to pay for food, housing and other daily expenses which climate change will increase by approximately 9 percent over their lifetime," the study's authors wrote.

However, immediate action to reduce climate change could stem some losses in the longer term. Urge Brad Finstad, our Minnesota District 1 representative in Congress to support proposals such as the Carbon-Fee-and Dividend bill to take steps in this direction.

Richard Dahl, Winona

Congressional District MN02

By Howard White. Published in the Northfield News 1/18/2024.

Taking Action on Climate

I am a weather geek and have been tracking Twin Cities temperatures since January 2015. Weather and climate are not the same, but eventually, consistent weather patterns over years demonstrate that our climate is changing. Our average daily temperature, as measured over the last nine years, is now 1.5 degrees above normal. That is not good.

We can have an impact on our climate and individual actions help. Over 16 years, and it took that long a time to make it affordable for us, my wife and I have replaced our windows, added solar panels, re-did the insulation in our house's walls and attic, bought an EV, and most recently, installed an air source heat pump to replace our AC and lessen the use of our gas-powered furnace. We reduced our carbon footprint. Now, there are tax credits and rebates making all these changes more affordable.

Greater impact can happen by the action of larger players: the corporations, legislatures and Congress, and the agencies of governments around the world. In our country we need clean energy permitting reform, especially as it relates to the transmission of wind and solar generated electricity from where it is produced to where it is needed. In our state we need to speed up the process of permitting transmission lines.

Let's all do our part and push our elected leaders to do theirs.

Howard White, Northfield, MN

By Susan Wehrenberg. Published in the Sun This Week (Dakota County Tribune) 4/19/2024.

Earth Day 2024: Where there is action, there is hope

The great outdoors. Mother Nature. God's creation. Green space. Our natural world. Whatever you choose to call it, who doesn't love being outside among trees or under a big, beautiful sky! And why not? Science tells us time spent outdoors can improve mood, sleep, stress level, immunity, self-esteem and concentration.

Unfortunately, keeping the planet that helps keep us healthy healthy often seems like an afterthought. This is particularly troubling when it comes to our changing climate as we in the U.S. have contributed more to the problem over time than anywhere else in the world.

Our society may have been slow to face up to the facts when it comes to climate change, but on Earth Day 2024, there is hope and possibility on many levels. And that hope is created through action ... the action of governments, communities, and individuals.

It's encouraging that the federal government now has a National Climate Task Force and offers tax credits and rebates on climate-friendly purchases ([irs.gov/credits-deductions](https://www.irs.gov/credits-deductions)). Minnesota is a leader among states, with our Climate Action Framework, clean energy goals, and funding for some home energy upgrades (mn.gov/commerce/energy). Dakota County does an excellent job promoting sustainability with residents, businesses, schools and municipalities. They lead many efforts to help us "reduce, reuse, and recycle" and work with willing landowners and partners to protect and restore important land.

Locally, some cities are stepping it up to do their part to take care of our planet. The Sustainable Eagan initiative resulted after surveys showed residents value the natural environment as much as they do public safety and the economy. Eagan has hired a sustainability coordinator to help move their vision forward "for a more sustainable future." Burnsville has been serious about climate change planning for years, starting with their Sustainability Guide Plan in 2009, which was then updated in 2020. Burnsville's longtime mayor, Elisabeth Kautz, was even chosen to speak about their efforts at the United Nations Climate Change Conference in Dubai in January. This city also has a sustainability coordinator, which seems like a smart financial move considering that the number of grants available in this area make it difficult to keep up without dedicated staff.

As is often the case, caring citizens are taking action, too. Minnesota has so many environment/natural resources organizations that it's impossible to list them all here. Many churches in our area have active Green Teams. The Lakeville Friends of the Environment group has been spreading the word and working on projects for 14 years and helps throw the best Earth Day celebration around.

Apple Valley residents signaled how highly they value our outdoor world by giving natural resources top priority in a recent parks survey. The Apple Valley Eco Advocates, a group that I am a part of, volunteers on projects and speaks up on local natural resources and environment issues. We helped make sure the new ball fields planned don't contribute to the city's PFAS "forever chemical" problem by using artificial turf.

Every individual contributes to the condition of our world, and there are actions any of us can take to help keep it healthy and beautiful:

- Check out what's going on in your city regarding climate planning and sustainability.
- Look into joining one (or more!) of the many national, state or local groups out there.
- Take the Dakota County Recycling Ambassador class or sign up for their Tour de Trash (co.dakota.mn.us/Environment/EducationResources).
- Let your elected officials know you care about natural resources and sustainability

If you're looking for that one easy step you can take to make a difference, both for the Earth and your pocketbook, consider cutting your food waste. Dakota County has information to help and also offers drop-off sites for food scraps and other organics composting. Food is the largest component of trash in Minnesota and even food put down the garbage disposal gets filtered out and typically ends up in a landfill. Burgeoning landfills are not part of anyone's beautiful world.

We need collective and individual action to protect, maintain and restore our air, water, land and climate. And action creates hope in a better future for our Earth.

Susan Wehrenberg, Apple Valley.

Congressional District MN03

By Mark Cannon. Published in Minnpost 10/27/2023

Bloodsuckers on my mind, and not just in advance of Halloween

It's the season for frightening ghouls so let me tell you about a couple little bloodsuckers that scare me.

As the climate warms, the home range for the mosquitoes *Aedes aegypti* and *Aedes albopictus* is moving north, and with them we can expect to see more of the untreatable viral diseases they transmit. Dengue fever, yellow fever, chikungunya and zika cause untold human suffering throughout the tropical world, and the societal costs in lost revenue and health care are staggering.

Indeed, these and other "tropical" diseases are largely responsible for the dire financial situation in many developing countries.

How did we get to a point in snowy Minnesota where we have to think about tropical diseases? Climate change, that's how.

Even slightly warmer winters and an earlier spring foster increases in mosquito numbers, expand their geographic range and accelerate the development of infectious organisms within the host mosquitoes.

Furthermore, modern transportation means people and foodstuffs can travel hundreds of miles in a day. So it is only a matter of time before virus meets host insect, who in turn feeds on unsuspecting Minnesotan human lounging lakeside.

Fevers, malaise, headaches and joint pain ensue; local physicians, at first mystified, soon realize they need to bone up on their tropical medicine. We need to prevent this scenario becoming a reality.

Aside from warmer average temperatures, climate change means an increase in severe weather events. Flooded sewage systems and overcrowding due to home and infrastructure damage lead to emergence of food- and water-borne illnesses.

Salmonella, shigella, campylobacter, yersinia, leptospirosis and typhus are not words you ever want to see on your test results. These pathogens cause prolonged illness and even death in vulnerable populations like the very young, old, or immunocompromised. Virtually any major flooding event you care to review will have been associated with upticks in these food- and water-borne illnesses.

Infection is by no means the only health risk associated with climate change. To protect our health, our peace and our economy we need to work furiously hard now with the rest of the world on new technologies, strategies and attitudes to minimize our dependence on carbon-based fuels.

The good news is that more politicians, policymakers and leaders of industry are signing on to make a difference. You can, too: by speaking to your representatives, by joining your local chapter of climate activists and by supporting legislation designed to let renewable energy fulfill its potential as a job-creating economic driver and climate change solution.

Mark Cannon, Eden Prairie. Mark Cannon is a local practicing infectious diseases physician and former laboratory virologist.

By Jeff Strate. Published in Eden Prairie Local News 4/9/2024

Local advocates rally for Earth's future

The local chapter of an international climate change initiative with some 530 chapters returns to Immanuel Lutheran Church in Eden Prairie on Saturday, April 13, for its monthly meeting. April is Earth Month.

The MN West Suburbs chapter of Citizens' Climate Lobby (CCL) urges legislators in St. Paul and Washington, D.C., to act more quickly to address the earth's warming.

Immanuel Lutheran parishioner Pat Middeke has been working for and leading the local CCL for about a decade. These days, she serves as an activist and church host for the nonprofit, nonpartisan posse of citizen lobbyists. Its mission is one with Minnesota's 12 other chapters.

Eden Prairie Local News (EPLN) attended the local CCL's meeting in December 2023 and discovered its members to be amiable, open-minded, and motivated to persuade elected officials to act boldly and swiftly.

Here's what EPLN learned and heard during a group chat.

Group co-leader Nicola Philpott shared a confession, a not uncommon one: "I have a 12- and a 13-year-old, and I worry about their mental health. I have to worry about how I am putting climate to them. And I focus on solutions all the time. I do not want to talk about the gloom of it, because it paralyzes people."

Winnie Lindstam responded to Philpott's comment: "Yeah, you're right. If they can be part of the solution, what an exciting thought."

Group co-leader Scot Adams has lived in Eden Prairie since 1997. “I see legislative action and lobbying as a primary mover of change,” he said. “We need a lot more engagement with our legislators.”

Edina’s Paul Thompson refers to those within his white-haired age set who remain uncomfortable sharing their thoughts publicly. “For Minnesotans who are shy (speaking out), this is what we need to do,” he said. “And as we get older, what do we have to lose?” Echoing the trumpeting for reform at countless global warming conferences, Thompson said, “We need to show up, stand up and speak up.”

Lindstam, a retired reinsurance broker familiar with homeowner insurance companies during times of violent weather, said, “I tell people if you want to move to Florida, move to Orlando because that’s where the coast will be.” Lindstam is the group’s liaison to U.S. Rep. Dean Phillip’s office.

Dr. Dave Homans is a retired cardiologist who lives in St. Louis Park. “One of the things I really like about CCL is the way we do our work, which is when we meet with lobbyists,” Homans said. “We get to know them as people. We develop personal relationships which are as important, if not more important, than anything we could say.”

Eden Prairie’s Caude Buettner shared his thoughts on exponential population growth. “We have 8.1 billion people,” he said. “When I was born, we had 2.5 billion. It’s possible that in 75 years, there will (again) only be 2.5 billion people on the planet.” He feels that future population growth can not be sustained. He says politicians don’t have to do anything unless people in the streets force the issue.

Peace Corps veteran Becky Jasper served in Zaire from 1989 to 1991. These days, she works with a nonprofit that awards grants to promising women entrepreneurs in the Democratic Republic of the Congo (formerly Zaire). Jasper told EPLN, “We need to take care of our home and not just move to Mars. Right?” She is also in concert with most other CCL members who find it important to put a price on carbon emissions.

Terry Degner has retired from driving Eden Prairie School District buses and misses the primary school kids. Degner has been a video producer, self-published author, and Vietnam veteran. He commanded the gathered that Saturday morning with urgent, preacherly gravitas. He talked about the sign that hangs in his office that says, “For those who believe in the Kingdom of God, what does it matter if everything earthly crashes.”

Population growth and materialism, he figures, are destroying the planet. He’s worried for his children and grandchildren.

Like Degner and Buettner, Eden Prairie’s David Thomsen considers himself a partial “doomer,” a term for people who believe it’s too late to halt the effects of global warming, including rising temperatures, ice melt, and increasingly severe weather events. Despite their concerns, he and

others continue to attend these meetings. Thomsen reminded the group that, in fact, progress is being made. The technology and the means to produce and use cleaner energy already exist.

In December, Greg Jason reported on the statewide goals of CCL at the Minnesota Legislature, which would be open for deliberation from Feb. 12 through May 30. The retired environmental engineer serves as the statewide team leader of CCL MN. He seemed practical, tactical and optimistic.

During a phone chat with EPLN and a follow-up email letter on Wednesday, April 3, Jason reported that Senate File 4784, the Minnesota Energy Infrastructure Permitting Act, had garnered bipartisan support. The bill has yet to receive bipartisan support in the House, but he anticipates, or maybe hopes, that it will happen during this session.

If passed, this highly technical reform legislation would increase the energy supply, protect the environment, and “allow community voices to be heard,” Jason said. He added that it would reduce carbon emissions at the speed and scale required for clean energy.

Similar bills are being considered in other states and Washington, D.C.

Jeff Strate, Eden Prairie Local News

Congressional District MN04

By Mary Haltvick. Published in the St. Paul Pioneer Press 11/19/2023.

Minnesotans want energy we can afford, energy that is always there 24/7 no matter what. And because we care about air quality and the effects of climate change, we want energy that is clean, carbon-free and safe for all.

In the early months of 2007, the Minnesota Legislature charted a newcourse for our state by passing an ambitious renewable energy standard(RES) for retail electricity sold in the state. A few months later it passed the Next Generation Energy Act (NGEA) requiring the state to reduce greenhouse gas emissions by supporting clean energy and efficiency. Both bills passed with overwhelming support from both sides of the political aisle. It truly was a pivotal moment for Minnesota's energy future and commitment to reducing carbon emissions. When Republican governor Tim Pawlenty signed the bills into law, he called them a "pathway to a better energy future." He characterized them as policy that "benefits the environment, rural economies, national security and consumers."

Fast forward and sixteen years later Minnesota is reaping the benefits. Utilities have successfully met the RES ahead of time, and we have a good chance of meeting the NGEA's interim goal of reducing emissions 30% by 2025. Our state's energy transformation continues at the same time we are creating clean energy jobs and keeping rates affordable.

This year's Legislature was equally aspiring. It passed legislation requiring that 100% of Minnesota's electricity be from carbon-free sources by 2040. Naysayers in both legislative chambers said it couldn't be done, that it was too ambitious. Rep. Zack Stephenson of Coon Rapids responded that it is not a good idea to bet against Minnesotans and their ingenuity. I think most Minnesotans would agree with him. We've been on this path since 2007, and we aren't turning back. We can do this.

The Minnesota Legislature will reconvene in February of 2024. Tell your representative and senator that you want nothing less than a better future for the next generation, one that includes affordable, reliable, clean and safe energy.

Mary Haltvick
Shoreview, MN

By Mary Haltvick. Published in St. Paul Pioneer Press 3/31/2024.

Speed up energy permitting

Last year the Minnesota Legislature passed a bill requiring that 100% of Minnesota's electricity be from carbon-free sources by 2040, a very ambitious goal. Like all tough challenges, we have our work cut out for us. Not only do we need to build solar and wind projects to generate clean energy but also transmission lines to connect that energy to the electric grid. We need to build more clean energy capacity, and we need to do it at a much quicker pace.

One area that is slowing us down is our outdated energy permitting process, much better suited for the past than the future. And the process is getting slower. The Minnesota Energy Infrastructure Permitting Act, introduced this year in the Legislature, aims to shave 9-10 months off the process. In Minnesota this can make a big difference for construction projects on tight schedules always mindful of winter.

When Republican Gov. Tim Pawlenty signed the 2007 Next Generation Energy Act into law, he called it "a pathway to a better energy future." He described it as a policy that "benefits the environment, rural economies, national security and consumers." In 2024, when Democratic Gov. Tim Walz signed the 100% carbon-free bill into law, he characterized it as "an essential investment in our future that will continue to pay off for generations to come." The Minnesota Energy Infrastructure Permitting Act helps us get more quickly to the clean energy future we want and have been building in Minnesota.

Mary Haltvick, Shoreview

Congressional District MN05

By Dave Homans. Published in the St. Louis Park--Hopkins Sun Sailor 1/4/2024.

Resolve to help the environment in 2024

This year, make a New Year's resolution to help save our climate. St. Louis Park is here to help.

We can improve on the annual ritual of pledging to eat less and exercise more. In-stead, why not resolve to help our planet become a better, more livable place for all? Whether it's a home energy audit, electrifying appliances, purchasing an electric vehicle, converting to renewable forms of electricity, or installing a cold climate heat pump, there is so much we can do in our own lives today that will benefit our children and children across the globe.

If you are looking for a place to start, visit the rewiring America website (www.rewiringamerica.org) to see what the provisions of the Inflation Reduction Act can mean for you. And those of us living in St. Louis Park are doubly fortunate because our city government is willing and able to guide us and save us money as we tackle climate change one household at a time.

This new year, visit our city's sustainability page at www.stlouisparkmn.gov/sustainability and decide what you will do to preserve our home. And if you still want to resolve to get more exercise, no problem - riding your bike and walking (rather than driving) are two great ways to cut down on fossil fuel consumption!

Dave Homans, St. Louis Park

By Paul Thompson. Published in the Minneapolis Star Tribune 1/2/2024.

An all-around inspiration

JANUARY 2, 2024

Jessie Diggins made history with this gold medal in March, just one of several accomplishments for her in 2023.

Thanks to Rachel Blount for her fantastic recognition of Jessie Diggins ("In highs and lows, finding room for joy," Dec. 26), our Minnesota homestate hero and the Star Tribune's Sportsperson of 2023. Also thanks to the Strib for its constant coverage of our "shrinking ski season" (Readers Write, Dec. 18) and water shortage ("Making snow, from the groundwater up," (Dec. 12).

Besides all of Jessie's huge contributions as Olympic champion, inspirational teammate, spokesperson for eating disorders and role model for thousands of young (and old) Nordic skiers, Jessie is a concerned citizen.

Ms. Diggins is a board member for POW (Protect Our Winters); she is an endorser of Citizens' Climate Lobby's legislation the "Energy Innovation Act" (a carbon fee and dividend policy to help reach the Paris emission goals by 2050). She has testified before Congress on the impact climate change is having on her sport and the huge carbon footprint necessary to find snow to train on.

As a 44-year Birkie (North America's largest cross country ski race) skier and City of Lakes Loppet supporter, I am reminded this winter of the urgency we all need to embrace to support our state in reaching the lofty goals set by our Legislature (100% carbon-free electricity by 2040) and to do it in a nonpartisan way. Winter, water and loons don't give a damn if you are a Democrat or a Republican. We are all Minnesotans and we love our seasons.

As we hoist our new state flag on May 11, let's all find a way to find our inner Diggins, inspire our friends and families to take the simple steps to transition toward clean energy, and show the care for our environment that supports our passions as Minnesotans. Citizenship takes work. Contact your national and local leaders requesting action.

Paul Thompson, Edina

By Roger Day. Published in the Star Tribune 3/11/2024

We need big wires, stat

The article published on March 2 "Northern Foundry will close Hibbing facility, lay off 91 workers" noted that high utility rates was one reason for the closure. It also said: "The state's entire electric grid is undergoing transformation as renewable energy sources are straining capacity, requiring new high-voltage transmission lines." Another article published on March 5 ("Xcel wary of open market power") noted the same strain on the electric grid, adding: "That can be especially troublesome during extreme weather events, which have become more frequent and severe."

Renewable energy is the cheapest form of power today (per a recent United Nations report), but we cannot realize the full benefit if this energy cannot be transmitted efficiently, or if the transmission is jeopardized by weather events. A bill before Congress addresses the problem by improving the reliability of the energy grid. The aptly-named Big Wires Act would encourage the states to build the infrastructure needed to move clean energy, along with new transmission lines. Learn more by looking up Citizens Climate Lobby and the Big Wires Act. Take action by

contacting your U.S. representative and your senators, and ask them to support the bill. Let's get that clean energy moving!

ROGER B. DAY, Duluth, Minn.

By David Homans. Published in the Minneapolis Star Tribune 3/24/2024.

Look to our own shores for energy

The era of offshore wind has come to the U.S.! ("United States' first large offshore wind farm opens," March 15.)

To save our climate and protect future generations we must develop safe, reliable and affordable sources for electricity — without burning fossil fuels. This requires complementary energy sources; solar panels are great, but it isn't always sunny. We are bordered on two sides by states that generate large amounts of electricity from wind power, and coastal states are now joining the club. Having sailed Lake Superior, I believe we have a large supply of untapped wind power right there.

There is no perfect source of energy, and concerns have been raised about bird collisions, intermittency, blade recycling, etc. These concerns are important but are not deal-breakers. We can pursue and improve this very good solution, without requiring it to be perfect prior to implementation. This winter shattered all heat records and serves as a serious warning that waiting for perfection is dangerous. Climate change itself poses a far greater risk to birds than windmill collisions.

And thankfully this will not break our pocketbook. According to a 2019 Department of Energy report, the cost of producing electricity from wind is well below natural gas, and that calculation does not include repairing all the damage done by the climate warming caused by burning fossil fuels.

Let's not fall behind other states by ignoring the bountiful resource that lies just off our northeast "shore." We can harness the wind and progress toward the goal of self-sufficiency in electrical energy for Minnesota.

Dave Homans, St. Louis Park

By Laura Haule. Published in the Star Tribune 3/29/2024

On permits, look forward, not back

An opinion in the Star Tribune authored by Jason George and Jim Schultz ("Let's team up on permitting reform," March 25) advocated for speeding the permitting process for more manufacturing projects. They acknowledge that there is state legislation to speed permitting of renewable energy projects and that permitting reform should be happening in many other industries, such as natural gas, agriculture, food production, timber, paper and mining, among others.

Although Minnesota lost a pig iron processing plant to North Dakota, industries such as coke production and iron and steel have higher greenhouse gas emissions related to energy consumption from burning fossil fuels. In the absence of a national penalty on fossil-fuel use, Minnesota is legislating lower fossil-fuel emission targets over the next decade. Why would the state be anxious to permit high-emission industries here, knowing that greenhouse gas emissions would rise? Local residents might well object to these dirty plants being located near their communities and insist on local participation early in the permitting process to protect themselves. We have all read about agricultural waste and fertilizer runoff into soils, streams and local water supplies and wells. Cutting more timber releases the carbon sequestered in the old-growth trees. Paper production, logging and mining create high demands for energy and are also industries fraught with pollution problems. We are experiencing a multiyear struggle in opposition to mines and mine runoff in the northern part of the state, an area of many interconnected lakes and rivers where pollution from mining would not stay safely in a contained area but would potentially pollute widely in those vulnerable lakes and community water sources.

The industries the authors mention are those in which water, air or soil pollution might be more likely or community safety might be more at risk. How are other states with high environmental standards able to approve industry permits at a faster rate than Minnesota? It is surprising to me that the authors are not addressing these issues in their article. For fossil-fuel-intensive projects, permitting would require greater assurances that our mutual environmental future is not at risk. I am in favor of speeding up the permitting process especially for renewable energy and grid-improvement projects. We are experiencing ever greater demand for clean renewable energy. With more clean energy, we can have more agriculture and manufacturing that do not rely on petrochemicals and fossil fuels. It is wasteful to build more fossil-fuel infrastructure when we are transitioning away from fossil fuels, as we must do for a stable climate and a safer future.

Laura Haule, Minneapolis

Congressional District MN06

By Earl O. Knutson. Published in the West Central Tribune 3/13/2024.

Stunning green energy news from St. Cloud

In a session arranged and hosted by the Upper Mississippi River Region arm of the League of Women Voters, St. Cloud Public Services Director Tracy Hodel presented St. Cloud's energy story. In 2015, the city set a goal of sourcing 25% of the electricity needed to operate the city government from renewable sources by 2020.

In fact, by 2020, they had blown way past that goal — all of the city government's electricity was from renewable sources.

Hodel's presentation, available via YouTube <https://tin-url.com/24pka6z5>, featured excellent graphics. The presentation starts at 6 minutes in and continues for about 32 minutes, followed by a question and answer session. Aerial views show solar panels covering roofs of many city buildings, such as the Whitney Senior Center.

A large part of the presentation is about the wastewater treatment plant, with the premise that there is a lot of recoverable waste energy in wastewater. The treatment process produces methane gas, which is collected and used (along with electricity from an adjacent solar farm) to power plant operations.

The process also produces fertilizer and, in the future, will produce hydrogen gas, a new-age fuel.

Any notion that St. Cloud is a staid, risk-averse city has been turned on its head. Future goals: all city electricity to be renewable by 2028; the entire city to be carbon-free by 2038.

The Public Services department has been alert and resourceful in regard to grant opportunities, and grants have helped pay startup costs in some projects. Hodel stated that going green has saved money.

The video mentioned above is also available at Facebook. [com/wacag](https://www.facebook.com/wacag), which also has many other climate/energy articles.

Earl O. Knutson

By Mark Wasson. Published in St. Cloud Live and the Rochester Post-Bulletin 5/3/2024.

Minnesota legislators want to compensate tourism industry for warm winter

A mild winter means the industry is out millions of dollars. The state may come to the rescue with an aid package. Climate change could mean more financial emergencies, or the tourism industry may have to adjust.

John Fredrikson and his wife, Mindy, have owned Gunflint Lodge and Outfitters in Grand Marais, Minn., since 2016. They say this past winter was the worst one they have seen.

The business rents out 26 cabins year-round and offers customers access to winter activities from snowmobiling and ice fishing to 70 kilometers of ski trails.

Last winter, with a dearth of snow, the lodge did not charge for cross-country ski passes due to the poor quality of the trails, and a pair of Clydesdales the resort uses for sleigh rides mostly had the winter off, Fredrikson said.

"It was pretty brutal as far as activities and business-wise," he said. "We were impacted pretty heavily."

While Gunflint Lodge saw its revenues fall 30%, Fredrikson said smaller businesses faced an even bigger impact from the winter that wasn't.

"There's a few that do really well in the winter with snowmobilers coming but there's zero snowmobiling going on," he said, adding that Gunflint Lodge itself did not rent out a single snowmobile in the recent winter season.

In response to the challenges the tourism industry faced, a bipartisan group of legislators wants extra funds for businesses affected by Minnesota's mild winter. Some tourism spots have seen up to a 40% decrease in customer traffic this year.

While a dollar amount has not been decided on, industry leaders say the revenue loss is in the millions, something that earlier small business loans promoted by Gov. Tim Walz were not enough to address.

The bills, SF 5428 and a companion, HF 5370, would give forgivable loans to businesses that experienced a 20% loss in revenue due to this winter's lack of snow and ice. They were introduced in both the House and Senate in mid-April.

There had been hope that the small business loans would cover businesses hurt by the mild winter, but they turned out to not be enough, bill co-author, Sen. Grant Hauschild, DFL-Hermantown said.

In addition, provisions similar to the bill failed to be added as amendments to other bills.

"I think we have to tell the story and show the impact and really make the case," Hauschild said, adding that the measure could happen through a conference committee for some of the bonding bills this session. "Certainly it's not easy given the lateness of the bill, it's not certain by any means."

In 2022, tourism had a \$22.8 billion state economic impact, and the industry generated \$2.2 billion in state and local taxes. Minnesota's tourism industry supports about 172,000 jobs.

Hauschild said the state needs to consider climate change when hashing out emergency and disaster aid and how the government will support businesses just trying to get by.

"It's just like any other disaster, whether it's a fire or a flood, the impact of climate change and the impact of our weather on businesses is a natural disaster," he said. "It wasn't by their own making. It's something impacting all of us, just like other natural disasters and just because it was slower and took us a little bit more time to sort of realize the full economic impact does not mean that it was any less dire."

Climate change and tourism

"The winter tourism economy in Minnesota is incredibly important because of all the other businesses associated with winter tourism, the hotels, the restaurants, the ice fishing operations to snowmobiling operations," said Bo Bigelow, executive director of the Minnesota Ski Areas Association. "They're critically important to the economies of rural Minnesota."

While Minnesota tourist locations reported a dramatic decline in customers this winter due to the lack of snow and ice, those same businesses saw increased traffic due to record snowfall the year prior. These extremes are the byproduct of climate change, something scientists say is here to stay. It may force businesses to work differently if they want to survive.

Gunflint Lodge and Outfitters

Ice skating at Gunflint Lodge and Outfitters in Grand Marais, Minnesota. The photo was taken in 2018. Contributed / Gunflint Lodge and Outfitters

For example, the mild winter hit one of the northland's favorite activities, skiing, fairly hard.

Usually, ski areas wrap up snow-making around the Martin Luther King Jr. Day weekend in January with a few refreshes towards the end of the season. This year, ski hills had to make snow throughout the entire season.

The process is labor-intensive and has a high impact on energy costs. Those costs and the lack of casual skiers led ski areas to see millions of dollars in lost revenue compared to the previous winter, according to Bigelow.

"We went from one of our best years, top five years ever in terms of snow and visits last season, to this season, which was one of our lowest numbers," Bigelow said.

Last year, Minnesota recorded 48 days with measurable snowfall, according to the Minnesota Department of Natural Resources. This year, the DNR reported 22 days.

In addition, winter in Minnesota has become generally shorter and milder. Since 1970, there have been 16 fewer days from the initial freeze to the last frost, something climate scientists call the "loss of winter."

Snow amounts vary greatly from one year to the next, but the state is seeing a consistent trend towards warmer winters with extreme weather, according to Jessica Hellmann, a professor at the University of Minnesota who studies the impact of climate change.

It may seem counterintuitive, Hellmann said, but just because we may have a cold, snowy winter, it does not mean that the state and the world in general are not headed towards a changing warmer climate.

"We no longer talk about if climate change is going to happen," Hellmann said. "We talk about the fact that it is happening, the consequences of global warming are observable now."

The effects of climate change that we are seeing now are likely to get worse, according to Hellmann, who is also the director of the U of M's Institute on the Environment.

"If we don't pick up the pace and reduce (greenhouse gas emissions) substantially, what we're experiencing now is going to get more pronounced over the coming decades," Hellmann said.

The world has warmed about 1 degree Celsius from historic baselines, which means that even if humanity stops global warming at the 2 degree Celsius increase outlined in the Paris Climate Agreement, the Minnesota tourism industry will still see the same type of weather fluctuations, though slightly worse.

"This is the world we've created for ourselves, and we're trying to make it not worse but that will require still quite a lot of ambition," Hellmann said.

With a changing climate, Greater Minnesota needs to think about diversifying its economy with more renewable energy like solar and wind power, Hellmann said.

As far as tourism goes, the industry will need to adapt, said Xinyi Qian, the director of U of M's Tourism Center.

The changing climate means activities such as ice fishing or skiing might change locations, or the seasons for activities will need to be adjusted. Those changes mean that businesses need to communicate when and where future customers can come to enjoy winter activities.

Qian also suggested a regional approach to tourism with different entities banding together to provide a tour package vibe that offers several things for a tourist to do.

"Instead of hanging your hat on fishing a particular type of fish, it is also helpful to highlight and really hammer on the point that we have a variety of things to offer," Qian said. "For example, different festivals and events that may not be weather- or climate-dependent."

Mark Wasson, Rochester

Congressional District MN07

By Earl Knutson and the Willmar Area Climate Action Group. Published in the Lakes Area Review, New London, MN, 1/13/2024.

The Willmar Area Climate Action Group seeks to take immediate local action to address the urgent issue of climate change and empower our community to support broad-scale solutions.

The intensity of modern forest fires

In 2023, the Minnesota Department of Health issued 24 warnings due to smoke from a months-long forest fire in Canada. This was a high number, raising the question, "Is there something new about forest fires?" The book *Fire Weather* by John Vaillant presents evidence that yes, there is something new. Modern fires are often so intense that they create their own weather events.

The central part of this book is a detailed account of the May 2016 forest fire around and in Fort McMurray, Alberta, Canada. This account is based on interviews of inhabitants who experienced the fire, many of whom are named and directly quoted in the book. It was reported that, once the fire invaded Fort McMurray, the intensity was such that houses were leveled in a matter of 5 minutes. The fire caused the evacuation of 85,000 people, only firefighters stayed. Miraculously, all survived.

The author tells of modern forest fires in other places.

- The 2002-2003 fire near Canberra, Australia spawned the first known occurrence of a fire-driven funnel cloud - a tornado. "Fire weather" is an apt description.
- In August 2017, four large fires in British Columbia combined to loft smoke into the stratosphere where the jet stream carried it around the globe for four months.
- In July of 2018, the Carr Fire forced the hurried evacuation of 40,000 people from Redding, California. Among the debris found later was a steel tractor seat "crumpled like a paper plate" indicating the high temperature reached in the fire.
- In 2020, large forest fires in Australia, California, and Oregon lofted smoke and dust into the stratosphere, comparable to moderate volcanic eruptions.

The author ties the intensity of 21st century forest fires to mankind's heavy use of fossil fuels, causing global warming. Heat waves and droughts hit the boreal forest, enabling fires to burn hotter and spread faster and farther than in earlier times.

In this wide-ranging book, the author goes into the history of the petroleum industry, of climate science, and of climate policy. There were climate change warnings by scientists in the 1950s and '60s, including by Edward Teller (of Hydrogen bomb fame). For a time the American Petroleum Institute (API) had a carbon dioxide and climate committee and the industry supported research on climate change.

In the 1980s, the pendulum in the USA swung. As described by Vaillant, there was a retrenchment. Skepticism of science, scientists, and government grew. The watchword was, "The government is the problem." The API committee was dropped. Industry support for research morphed into questioning of climate science. The climate bright spots were James Hansen's 1988 testimony before congress and the 1989 formation of the UN Intergovernmental Panel on Climate Change. Although data and knowledge continued to accumulate, meaningful action was delayed for decades.

The Willmar Area Climate Action Group seeks to take immediate local action to address the urgent issue of climate change and empower our community to support broad-scale solutions. The group meets on the third Monday of each month, in person and via Zoom. To join, e-mail: wacug2@ginail.com. More info at: Facebook.com/WACAG.

By Claudia Egelhoff. Published in the Swift County Monitor-News 2/28/2024 and The Forum of Fargo-Moorhead 2/27/2024/.

Legislative Clean Energy Action Needed

I read with interest Lee Hamilton's recent column in the Monitor-News about "Big Decisions and American History." I am reminded of another big decision made in the 1930's - to bring affordable electricity to farms.

By 1930, nearly 90% of urban and non-farm rural homes had electricity but only about 10% of farms did. Private utility companies balked at the cost of connecting farms to the grid. 1936, the federal Rural Electrification Act (REA) authorized loans to newly formed cooperative utilities to build out the grid, wire farm homes and outfit them with lights and appliances.

REA engineers developed new technologies that dramatically reduced the cost of bringing power to far-flung homesteads. Federal investment boosted productivity on the farm and saved hours of housework with electric lighting energy. It took several generations but we finally realized that burning fossil fuels harms our health, degrades our climate, and threatens our national security. This made rural life more attractive, reducing the incentives to move away. We are currently embarked on another "Big Decision" with federal and state investments in reliable, affordable, safe, and clean energy. It took several generations but we finally realized that burning fossil fuels harms our health, degrades our climate, and threatens our national security.

Renewables are increasingly competitive with traditional forms of energy. Battery storage technology is rapidly advancing. Clean energy moves us closer to energy independence from oil-producing countries.

Clean energy reduces emissions, stabilizes our climate, and protects the environment. If you like this vision, contact your members of the legislature: Sen. Torrey Westrom (651-296-3826) and Rep. Paul Anderson (651-296-4317). Tell them you want energy that is reliable, affordable, safe, and clean.

Claudia Egelhoff, West St. Paul

By Beth Monke. Published in the Fergus Falls Daily Journal 1/6/2024

Out With the Old, In With the New

You'll have certainly just recently sung Auld Lang Syne and rung in a new year, hoping for a good 2024! In the world of climate science, we all must hope for a better 2024, given that 2023 was the hottest year on record, and the past 9 years have all broken records for being the hottest. In 2023 climate pollution from human fossil fuel combustion reached 420 parts per million, a level that has not been seen since about 14 million years ago, according to the journal Science. Climate changes are impacting every region of the world, and in places like the US, emissions are declining, but too slowly. Despite this bad news, 2023 wasn't all bad.

According to Dana Nuccitelli, CCL Research Coordinator and writer for Yale Climate Connections, In 2023 America's climate pollution fell by about 2-3% from the previous year, and we are now 18-19% below 2005 levels. In 2023, the European Union decreased their climate pollution by 6-7% partly due to their need to reduce their reliance on fossil fuels from Russia. 2023 was also the year that wind turbines, heat pumps, and electric vehicle sales hit new records as well. Unfortunately, the reductions made were offset by increased emissions from China and India.

The good news, though, is that, although China has been a big climate polluter, China is also setting records regarding the deployment of solar energy. Currently, more than half of the world's solar deployments are in China. Now, whatever you might think about China, the fact of the matter is that we get a lot of stuff from them. (Have you ever tried to buy something in Target or Walmart that was NOT made in China??) China is really doing much of the world's dirty work regarding manufacturing. In fact, about 28% of the world's manufacturing is done in China. So, if China continues on its current path of deploying wind and solar and can experience decreased emissions in 2024, and the rest of the world follows suit, we may see a global tipping point worldwide, where global CO2 emissions will start to decline. If the world's leaders are diligent in their commitment made in December at COP 28 to transition away from fossil fuels, there is a chance that 2023 could be seen as the year that global climate pollution peaked.

In the US, states are now starting to roll out upfront rebates for homeowners to get energy audits and to make homes more energy efficient. Tax credits for new and used electric vehicles

are now transferrable to car dealerships as of January 2024, meaning that they will effectively become upfront discounts subtracted from vehicle sticker prices. Also, the farm bill will be negotiated this year and will hopefully include natural climate solutions; and congress must continue to work towards permitting reform which will increase the number of clean energy projects that have been waiting in line to get approval. Out with the old, in with the new! In 2024, let's continue to work diligently to reduce our carbon footprints, and celebrate the gains that are being made!

Beth Monke, Fergus Falls

By Erika Gilsdorf. Published in the Detroit Lakes Tribune 2/18/2024, the Perham Focus 2/14/2024 and the Pelican Rapids Press 2/15/2024.

This winter has been warm. Ominously warm.

February is looking and feeling a bit different this year, huh? I know some of us like keeping our winter jackets at home. I, however, love all the seasons here.

It's one of the reasons I moved here from Arizona after college. You can't beat our spring excitement of warmer weather on the horizon, the smell of a BBQ, and our yards coming to life.

Or, our hitting-it-hard summers at the lakes, our fall colors, and our winter fun. I founded the Polar Fest back in 1996 to celebrate all the crazy things we Minnesotans love to do in winter.

The truth is, the cold in Minnesota connects us. Most of those I've talked with, regardless of personal preference about cold, have expressed a feeling of oddness or disorientation about the warmth and lack of snow. We are all wondering what this weather could mean for our lakes, wetlands, forests and wildlife this summer.

Are we looking at an even worse drought? Conditions are setting up with terrible wildfire potential. Will we have trouble breathing in July? There is a billion dollar weather disaster every 18 days on average in the United States.

If your greatest concern is low water levels for boating this summer, that is worth talking about. Talking about climate action is one of the first best things we can do to create change.

Talking helps us move into the most important stage: doing something. I know a lot of us don't like politics. I for sure don't. It's confusing, messy, and taxing to keep up on everything.

But, I've also learned from experience that when you turn your head to avoid politics, and let others act, speak and choose for you, they will.

Most Americans want Congress to act on climate change. We know that the more fossil fuels we burn, the more heat trapping carbon pollution we put into our atmosphere, leading to warming trends which have dramatic destabilizing consequences.

It's critical that candidates running for office are well-informed and ready to act on climate.

Asking them questions about this allows you to see how well they understand the situation and what their priorities are in responding to it.

If this winter has you feeling queasy in your gut, I urge you to do something to ease it.

Talk about clean energy, especially with elected officials and candidates.

Look into energy efficiency alternatives and rebates for your home or business through the Inflation Reduction Act.

Get involved or donate money to groups working on clean energy, climate action, and reforestation.

Vote. Reduce and conserve energy. Listen hard when people disagree with you and try to understand where they are coming from.

Become a trusted listener.

It all matters.

We can no longer look away when 'away' is staring at us right outside our window.

Erika Gilsdorf, Detroit Lakes

By Dave Ellison. Published in the Pelican Rapids Press 1/25/2024 and the Fergus Falls Daily Journal 5/3/2024

Can we afford clean energy?

You've probably heard that the cost of clean energy from wind and solar is coming down fast. You've maybe even heard that it's already cheaper than coal. Turns out that's not quite true. A recent study looked at the operating costs of all 210 coal fired plants in the US. They compared the cost of each to the cost of building and operating nonpolluting wind and/or solar plants with the same capacity at the same place. At the Dry Fork plant, near Gillette Montana it would be cheaper to continue to burn coal.

At the other 209 sites it would save money to just shut them down and build new solar or wind. So replacing coal burning generators with new wind and solar wouldn't always save money, only 99.5% of the time. All together the switch would generate \$589 billion dollars of investment in our country. That's a lot of good jobs.

Some would point to the obvious; the sun doesn't always shine and the wind doesn't always blow. There would be enough money saved to build 150 gigawatts of battery storage, that's over 60% of the capacity of the existing coal plants. 80% of the coal plants were at least 30% more expensive than a comparable wind/solar replacement. Battery storage allows the electric grid to continue to deliver power at night and on cloudy windless days.

This study looked only at what shows up on your monthly electric bill. Turns out that's just the tip of the iceberg. A recent Harvard study found that there are much greater impacts on our health care system. Air pollution from burning coal costs \$187 billion (asthma, chronic lung disease) and \$29 billion from mercury emissions. In Appalachia alone coal mining costs \$74 billion in health care. Quitting coal would save on health care costs as well as electric bills.

Sustainable, affordable, reliable energy is doable with the tools we have right now. But the real bottom line should never be just dollars. It should be the health and well-being of our families and neighbors. Coal wastes money and costs lives. So why are we still burning coal? You could ask your power company, your senators and you representatives but in a democracy we the voters are ultimately responsible.

<https://energyinnovation.org/wp-content/uploads/2023/01/Coal-Cost-Crossover-3.0.pdf>

Dave Ellison, Pelican Rapids

By Dave Ellison. Published in the Pelican Rapids Press 2/8/2024.

Earth Matters

What does it really cost?

Most of us understand that dumping carbon dioxide into the atmosphere is a really bad idea. Climate scientists have been warning us for decades that we're drastically changing the only planet we have.

Fouling our nest, so to speak. But we live in a society where the bottom line is the dollar. So, how much is a livable planet worth? In an effort to answer that question, economists, climatologists, and computer modelers have collaborated to estimate the social cost of carbon (SCC). The SCC is the economic damage to the planet and the 8 billion people living on it caused by the release of one more ton of carbon. That's a pretty simple definition that turns out to be incredibly complicated to answer. You might start by estimating the loss of real estate value in

coastal areas due to rising sea levels, the loss of crops due to drought, and property damage from increasingly violent storms. Don't forget mass migrations and the resulting social unrest and wars that will result. Pretty complicated but that's what we have economists and big computers for.

So, what's the answer? It depends on what you take into account, but the middle of the road average of many studies is \$190 per ton of carbon. This number leads to some interesting calculations. For instance, our 2011 VW gets about 30 mpg. So, it emits roughly 1 pound of CO₂ every mile. If we drive 2000 miles, we emit one ton of CO₂, pay \$200 for gas and cause \$190 of economic damage to the earth. Of course, I'm not going to have to pay for that damage because it's spread over the whole planet and many generations to come. But it's very real.

The carbon cost of burning fossil fuels for electricity is also surprising. We pay around 10 cents for one kilowatt hour of electricity generated by burning coal. The cost to the planet and our descendants is 21 cents! Natural gas is a cleaner fuel, the SCC is only about 10 cents per kwh.

There is a bright side to all of this. If the social cost of a ton CO₂ is \$190, the benefit to all of us for not emitting that ton is \$190. Every kwhr of clean, solar or wind generated electricity saves money for us and our descendants. A well-insulated home or an energy efficient appliance generates benefits for many generations to come. An investment in the production of clean energy is an investment that will continue to generate savings far into the future.

Carbon cost of coal <https://www.eia.gov/todayinenergy/detail.php?id=48296>

Of nat gas <https://www.eia.gov/tools/faqs/faq.php?id=74&t=11>

Dave Ellison, Pelican Rapids

By Dave Ellison. Published in the Pelican Rapids Press 2/14/2024 and the Fergus Falls Daily Journal 4/19/2024.

Responsibility...

.... sounds like the beginning of a really uncomfortable sermon. But maybe not.

Most of us understand that the carbon our species has been dumping into the atmosphere by burning coal, gas and oil for two centuries has caused the changes we're seeing all around us. So, who is responsible? Of course, we all are but not equally. And it's not intentional. I don't think anyone gets up in the morning thinking "What can I do today to help wreck the planet?" You don't get to decide, "Today I'm going to use clean solar instead of dirty coal." We all do things that cause harm. It's almost impossible not to. Our society has been built on and runs, to a large extent, on energy from burning fossil fuels. It's built into the system. Even so we are not all equally responsible.

Last year a report by Oxfam, an international non-profit, quantified carbon emissions on the basis of country and wealth. Since the industrial revolution the “Global North” has been responsible for 92% of the carbon emitted. The wealthiest countries (with 16% of the population) emit 40% of the carbon while Africa, with 17% of people, emits 4%. So, there are big differences between countries, but there’s a much more interesting way to look at responsibility. The richest 1%, who live all over the world, emit as much carbon as the poorest 5 billion people put together, 66% of the world’s population. A study of 20 billionaires showed that each was responsible for 8,000 tons of CO₂ per year. A single super yacht (with helipads, submarines, a 50-foot swimming pool and fulltime crew of 40) can emit 34,000 tons annually. The average for the poorest half of the world is 2.8 tons per person each year. Inequality and climate change are not two separate problems. They’re two sides of the same thing.

The fact that a few thousand extremely wealthy individuals do great damage to our life support system doesn’t absolve us of responsibility for our own choices. But it does point to the possibility of making changes in the system through collective action, like fair taxation. I don’t think our disapproval will hurt the sales of super yachts but it can change the direction of corporations and governments. It won’t be easy. But this is a democracy and even corporations answer to shareholders and public opinion. We need to speak up.

(This study is a hard read but well worth it. <https://www.oxfam.org/en/research/climate-equality-planet-99>)

Dave Ellison, Pelican Rapids

By Erika Gilsdorf. Published in the Fargo Forum 2/25/2024 and the Fergus Falls Daily Journal 3/6/2025.

Does the warm winter have you concerned?

February has been looking and feeling a bit different this year, huh? I know some of us like keeping our winter jackets at home. I, however, love all the seasons.

Regardless of personal preference about cold, you have to wonder what this weather could mean for our outdoors and wildlife this summer.

Are we looking at an even worse drought and more wildfires? Will we have trouble breathing in July? There is a billion-dollar weather disaster every 18 days on average in the United States.

Talking about climate action can create important change. Doing something can create even more. I know a lot of us don’t like politics. But, I’ve learned that when you turn your head to avoid politics, and let others act, speak and choose for you, they will.

Most Americans want Congress to act on climate change. We know that the more fossil fuels we burn, the more heat-trapping carbon pollution we put into our atmosphere, leading to warming trends which have dramatic destabilizing consequences.

If this weather has you concerned, I urge you to do something. Talk about clean energy, especially with elected officials and candidates. Look into energy efficiency alternatives and rebates for your home or business through the Inflation Reduction Act.

Get involved or donate money to groups working on clean energy, climate action, and reforestation. Vote. Reduce and conserve energy. It all matters.

We can no longer look away when 'away' is staring at us right outside our window.

Erika Gilsdorf, Detroit Lakes

By Claudia Egelhoff. Published in the Swift County Monitor-News 2/28/2024.

I read with interest Lee Hamilton's recent column in the Monitor-News about "Big Decisions and American History". I am reminded of another big decision made in the 1930's – to bring affordable electricity to farms.

By 1930, nearly 90% of urban and nonfarm rural homes had electricity but only about 10% of farms did. Private utility companies balked at the cost of connecting farms to the grid. 1936, the federal Rural Electrification Act (REA) authorized loans to newly formed cooperative utilities to build out the grid, wire farm homes and outfit them with lights and appliances.

REA engineers developed new technologies that dramatically reduced the cost of bringing power to far-flung homesteads. Federal investment boosted productivity on the farm and saved hours of housework with electric lighting and appliances. This made rural life more attractive, reducing the incentives to move away.

We are currently embarked on another "Big Decision" with federal and state investments in reliable, affordable, safe, and clean energy. It took several generations but we finally realized that burning fossil fuels harms our health, degrades our climate, and threatens our national security.

Renewables are increasingly competitive with traditional forms of energy. Battery storage technology is rapidly advancing. Clean energy moves us closer to energy independence from oil-producing countries.

Clean energy reduces emissions, stabilizes our climate, and protects the environment.

If you like this vision, contact your members of the legislature: Sen. Torrey Westrom (651-296-3826) and Rep. Paul Anderson (651-296-4317). Tell them you want energy that is reliable, affordable, safe, and clean.

Claudia Egelhoff
West St Paul, MN

By Dave Ellison. Published in the Pelican Rapids Press, 5/16/2024

Resilience: Clean Energy like solar, wind are less subject to international politics.

In Feb 2021, a blizzard swept through Texas, and the electrical grid failed. People were left without heat, water, and food for days. At least 246 died. The price of electricity for some went to go up to \$9.00/kwhr. On that day, Feb 16, Texans spent 10.3 billion dollars on electricity, more than they spent in all of 2020. Governor Abbot initially blamed the failure on frozen wind turbines and solar panels. Careful investigations later showed that almost all of the problems were due to the natural gas system that had not (and still hasn't) been winterized and the lack of interconnection between the Texas grid and the rest of the country. Their electrical system was not resilient.

We're not Texas, but we can still learn from their experience. Many experts believe that distributed energy generation (DEG), multiple small energy sources, is necessary for a truly resilient system. Instead of power from a few huge generators traveling hundreds of miles over a few large transmission lines, a DEG system would rely on hundreds of solar arrays, wind generators, battery backup, and a network of interconnecting transmission lines. The advantages are pretty obvious. Because energy is generated close to where it's used, line losses from long-distance transmission (6.8% in California) are avoided. A single tornado or terrorist attack could take down a power station or transmission line but not a system spread out over many counties. DEG is less vulnerable to extreme weather or sabotage. With DEG, local interconnection allows operators to shift power from sunny to cloudy areas. DEG is flexible. The cost of clean energy from solar arrays and wind turbines is not affected by international politics. The price of sunshine and wind will never go up. DEGs are more affordable.

Of course, there are challenges. The shape of our current system was set almost 100 years ago when large centralized plants produced all power. That assumption is built into the system. Although the technology is available, co-ops connected to Great River Energy (like Lake Region) are contractually prevented from transferring power from one substation to another, and no substation is allowed to source more than 5% clean local power. Even so, more local policies

that encourage member/owner investment in clean, renewable energy sources and storage would begin to move us toward an affordable, clean, truly resilient system.

For more on DEGs,

https://www.energy.gov/sites/prod/files/oeprod/DocumentsandMedia/1817_Report_final.pdf

Editor's note: Longtime Pelican Rapids resident and retired physician Dave Ellison has a keen interest in the environment and alternative energy.

Ellison's "Earth Matters" column appears regularly in the Pelican Rapids Press. His views do not necessarily reflect those of the Press management and staff.

By Dave Ellison. Published in the Pelican Rapids Press and the Fergus Falls Daily Journal 5/8/2024.

A Climate Success You May Have Missed

Canada, our neighbor to the north imposed a price of \$65 a ton on carbon emissions in mid-2018. Although each province could set up its own system 10 of 13 have opted for the same federal program. The provincial government collects a fee from all forms of fossil energy, coal, oil, natural gas at the source, and gives 90% back to individual households. Most economists agree that increasing the cost of carbon is the most efficient way to reduce emissions. The concept is pretty straightforward. If you increase the price of fossil carbon the price of goods and services that use it go up proportionately. People respond by using less and carbon emissions go down. Sceptics predicted that rampant inflation would follow, the economy would stagnate and that households with the least income would be hurt. They were wrong.

Carbon emissions went from 15.5 tons per capita in 2018 to around 14 tons in 2020-2022, a 10% drop. Not enough to save the planet but it's a start. The carbon fee is scheduled to go up in April to \$80/ton. So who ended up paying? According to Canada's Parliamentary Budget Office, 80% of Canadians came out ahead. They got more back in monthly rebates than they paid in increased prices. Low-income households did the best - for 94% of them monthly rebates exceeded increased costs. Since wealthy families use more carbon emitting products and household rebates are not based on income, they end up paying more. However, even 55% of the high-income group (more than \$250k/year) came out ahead.

But did the economy survive? It not only survived, it thrived. From 2018 to 2022, per capita GDP went from \$46.5k to \$55k. A study of 31 European countries with carbon pricing showed no evidence of economic harm. The US and Australia are the only developed countries without some form of carbon pricing-rebate system.

Some folks are trying to change that. Citizens Climate Lobby (CCL) is an international effort with over 500 chapters around the world. In the US it is building a bipartisan coalition of legislators to back a very modest carbon fee/dividend bill. This is a truly bipartisan effort. For every Republican who agrees to back the legislation, CCL must find a democrat to join the initiative. Fergus Falls has a very enthusiastic chapter which meets at 6:30 p.m. on the first Monday of the month at the Fergus Falls Public Library. New comers are always welcome to join the conversation. Recently, the Fergus chapter has met with Jordan Rasmussen, and also with representatives from Lake Region Electric Cooperative, Otter Tail Power, and Great River Energy to discuss related matters.

For more info check out <https://citizensclimatelobby.org/>

Dave Ellison, Pelican Rapids

By Beth Monke. Published in the Fergus Falls Daily Journal 6/1/2024.

Get Rewired!

Summer is a good time to think about projects, and with more tax incentives and rebates coming in 2025, it may be a good time to start thinking about doing some climate friendly upgrades! However, it is always difficult to know where to start. Projects cost money, and sometimes there isn't enough of that to go around. However, with some planning, there are options available with some good financial incentives as well!

A great website that is available is rewiringamerica.org. This website will walk you through making your own personalized energy plan, which often starts with an energy audit, weatherizing and then including more technologies for which there are tax incentives and rebates. This website also has a contractor locator and gives an estimate of projected savings. Some of the Minnesota incentives are projected to roll out beginning in 2025 (some are available now), so this is a good time to start planning and investigating.

Another great option is your local utility company. We are Otter Tail Power Company customers, and their website is a wealth of information. If you go to "ways to save," it will lead you to very updated information on energy saving programs and rebates. Did you know that OTPCO does appliance recycling? So if, for instance, your refrigerator is on its last leg, but it still works, they will come and pick up your old "working" refrigerator and actually pay you \$50 for it!! Then if you buy a new energy star refrigerator, they will pay you another \$50! There are many programs for energy efficiency offered that can save you 30% or more on your energy bill! They also have information on rebates for electric heat pumps, electric vehicles and all of this information is on their website along with forms for applying for your rebate.

A third great resource is Clean Energy Resource Teams, located on the U of M, St. Paul campus. Their website is cleanenergyresourceteams.org which has very up to date information on rebates and incentives in our state. For instance, did you know that the application process for MN rebates for electric bikes begins on June 6? MN residents can apply to get a rebate for an e-bike and qualifying accessories of up to 75% or a maximum of \$1500! There will be an online application portal that will open on June 5th, and the CERTS website will have a link to the portal as that time nears. Those certificates for rebates will be on a first come, first serve basis (there is a limited pot of money for this rebate), so make sure you get right on it! On July 1st, the state will issue those rebate certificates to approved individuals, and off you will go on your new e-bike! My husband and I both have them, and they are the bomb. Of course, it is even better if you can use your e-bike to bike to work or the store instead of driving that 3,000 pound vehicle when you really don't need to. An ebike will take you to work at 20 mph, which is a great way to enjoy the view and get a little exercise before you get to work. Have a fun summer planning for new adventures and energy savings!

Beth Monke, Fergus Falls

Congressional District MN08

By Pat Fettes. Published in the Isanti-Chisago County Star and the Forest Lake Times
12/7/2023.

We purchased an electric vehicle recently and we love it. It's perfect for most of our transportation needs, and fun to drive!

Did you know many EVs have become more affordable with up to \$7500 in tax credits from the Inflation Reduction Act? Driving an EV causes less carbon pollution than a gas-powered vehicle as 55% of Minnesota's electricity is currently generated from renewable and nuclear sources. People worry about "range anxiety" but honestly global warming scares me more. EVs aren't perfect, but we appreciate being part of the transition to clean energy.

Some legislators want to slow the transition to clean energy, claiming it will cause power outages and cost consumers more. However, the cost for renewable energy has fallen, and the UN reports "Renewables are the cheapest form of power today." Energy management and storage methods are rapidly advancing, making a reliable energy grid based on renewable sources possible. The BIG WIRES Act introduced in Congress will increase the grid's resilience to threats like extreme weather and will accelerate our transition to cleaner energy. Considering the catastrophic costs of sticking with fossil fuels—more weather disasters, increased deaths due to heat/pollution, agricultural crises—clean energy looks better and better!

So, if you want to be a part of the transition to clean energy, consider driving an EV. And tell your legislators you want clean, affordable, reliable, and safe energy without delay; the BIG WIRES Act is a great start. Visit CitizensClimateLobby.org for more information.

Pat Fettes, Wyoming, MN

By Michael Overend. Published in the Lake County Press on 12/1/23 and the Cook County News Herald on 12/1/23

Clean, Affordable, Reliable and Safe (CARS) is a good way to describe what renewable energy offers our families and communities.

A recent NY Times article detailed the amazing change that is happening in our US (and global) energy systems. Our public utilities are responding to economic market forces and rapidly transitioning to affordable and reliable renewables (wind and solar) and away from increasingly more expensive and polluting fossil fuel energy.

“Since 2009, the cost of solar power has plunged by 83 percent, while the cost of producing wind power has fallen by more than half... Today, solar and wind power are the least expensive new sources of electricity in many markets, generating 12 percent of global electricity and rising. This year, for the first time, global investors are expected to pour more money into solar power — some \$380 billion — than into drilling for oil.”

<https://www.nytimes.com/interactive/2023/08/12/climate/clean-energy-us-fossil-fuels.html?smid=url-share>

Renewables provide an increasing percentage of our energy because of their growing cost-savings compared to fossil fuels (coal, oil and natural gas) and they make our grid more reliable than the fossil fuels vulnerable to severe-weather equipment failures:

<https://news.bloomberglaw.com/us-law-week/power-grid-failures-reveal-the-myth-of-fossil-fuel-reliability>

Using electricity to power our lives; LEDs for lighting, heat pumps for heating and cooling, water-heating and clothes-drying, induction stoves for cooking and electric vehicles for transportation dramatically increases our energy efficiency and lowers our costs for energy. The benefits of renewables in cost-savings and eliminating greenhouse gas and other air pollution make this transition a win-win-win for our family budgets, businesses, our environment and health:

https://www.cnn.com/2023/11/23/health/coal-fired-plants-kill-more-people-particle-pollution?cid=ios_app

The multiple advantages of moving from fossil fuels to 100% electricity generated from renewables to power our lives is called “Beneficial Electrification “ helping every US family and community. See [RewiringAmerica.org](https://www.rewiringamerica.org) to learn how the Inflation Reduction Act helps you benefit from Clean, Affordable, Reliable and Safe (CARS) renewable energy.

Michael Overend, Two Harbors

By Dave Homans. Published in the Cook County News Herald 2/17/2024.

With the cancellation of dog sled races and the difficulties facing our winter resorts this season, it's time for us to take effective action to combat climate warming now - before it's too late. The 2023 Yale Climate survey showed that 75% of residents of Cook County already understand that our climate is warming and 62% of us accept the strong evidence that this is due to human activity. So let's do something.

You might think that living in the northland, we won't be much affected by climate warming. Not so. We're actually warming faster than many other parts of the earth. Globally, temperatures have increased 1.8 degrees F since 1895, but Minnesota temperatures have risen 3.2 degrees since 1970. International Falls has actually seen a 3.4 degree increase, making it the 99th

fastest warming US city. Yet our winter economy is built on a foundation of snow and our forests are subject to fire, making us very vulnerable.

We don't have to sit helplessly watching our way of life melt away. The Energy Innovation and Carbon Dividend Act (H.R.5744) charges corporate polluters a fee for the carbon emissions they put into our air. The money collected goes to regular Americans in the form of a monthly 'carbon cashback' payment to keep things affordable. (A typical family of 4 living in Grand Marais, with an average annual income for Cook County would gain 13 dollars a month). Rather than enacting thousands of new regulations, this approach prices carbon rationally, and then lets market forces do the rest. It is favored by economists as the most efficient and effective climate solution. Furthermore, it's an equitable approach that also unleashes the innovation we need to solve this problem.

Please contact your members of congress, urging them to join the fight to save our snow.
David Homans, St. Louis Park

By Ronald Erickson. Published in the Bemidji Pioneer 2/14/2024.

Citizens Addressing our Changing Climate: Driving an electric vehicle in sub-zero temperatures

Car manufacturers of non-electric vehicles and the oil industry are champions of spreading doubt, even fear associated with the ownership of an electric car.

On the morning of January 20, when the temperature hit a low of -24 degrees in Cass Lake, my wife and I drove our Tesla to the Twin Cities to see our grandson before he left for his second semester of college.

We are aware of the misinformation about electric vehicles not being suited to northern Minnesota's sub-zero temperatures, but sub-zero temperatures didn't worry us.

We have 38,000 miles on our Tesla and have driven it over the past two very cold winters on numerous trips to the Twin Cities, Fargo and Duluth with zero "range anxiety" — the term given to the fear of running out of electricity.

Car manufacturers of non-electric vehicles and the oil industry are champions of spreading doubt, even fear associated with the ownership of an electric car. No one wants their electric car to run out of electricity, especially on a sub-zero day.

For people having little or no experience with EVs, possibly "range anxiety" is a concern. Before we purchased our Tesla, we researched locations of superchargers between Cass Lake and Minneapolis and found we would have no reason to be concerned.

Today, there are Tesla superchargers in Baxter, Little Falls, Clear Water, Monticello and throughout the Twin Cities, plus in Fargo, Duluth, Bemidji and Grand Forks. Regardless of the location, Tesla superchargers are available 24 hours a day, seven days a week.

Most of our trips to the Twin Cities are nonstop from our home to our son's home. But on January 20, with a car interior temperature of 72 degrees, and a cold -24 degrees outdoor temp, the battery understandably drained more quickly. We stopped in Little Falls for a 20-minute charge.

Our son's garage is equipped with a 240-volt electric outlet, so we plugged in when we arrived and our car fully recharged overnight. We were able to see our grandson off to college and our round-trip "fuel" cost was \$16.

For the two and a half years we have owned the EV, we have not spent \$5,500 for gasoline to power the equivalent number of miles driven. Instead, we have spent \$1,100 on electricity. I tend to keep my cars for 10 years and plan to do the same with my Tesla.

Over those 10 years, I will not have to spend \$22,000 for gasoline. That makes me smile. Also, because Tesla requires no scheduled service, we will save additional time and money over the life of the car. Electric motors have no oil or antifreeze to change. The car's regenerative brakes use electric motors to capture the car's moving energy and use the energy to recharge the battery.

As a result, the car's brake pads experience much less wear and will last hundreds of thousands of miles. It is almost hard to believe, but my only job is to wash my car, add windshield fluid, and replace the tires when needed.

Charging overnight at home means no trips to the gas station, and so far, we have not had to take our car in for any recalls. To date, out of four million Teslas on the road, less than 40,000 have required actual in-shop fixes.

All our "recalls" have been fixed by over-the-air software updates, including the recent February 2 recall notice. These software updates occur overnight.

Tesla's all-wheel drive has better traction and performance in snow and on ice than any 4x4 vehicle we have owned, including my Ford F150, which is a great truck. But the instant warmth, reliability, convenience and lower operating costs of the Tesla are compelling. The Tesla is my preferred Minnesota winter vehicle.

All electric vehicles are not equal. Tesla has a seven-year lead in design and engineering refinements to make driving in 24 below-zero weather completely reliable and comfortable. I enjoy driving my Tesla — it's a fun car to drive, and I feel I am doing a small part to help our environment.

If you want to learn more about EV trends in Minnesota and nationwide, check out fresh-energy.org.

Beltrami Electric, Otter Tail Power and Citizens Climate Lobby are presenting information to help the community learn about the benefits of electrifying your life from 4 to 6 p.m. on Thursday, March 21, in the Beltrami Electric Community Room. "Empower Your Home: Learn, Earn, and Share in Energy Efficiency!"

Ronald Erickson, Cass Lake

Ronald Erickson is a member of the Citizens' Climate Lobby organization. For more information, visit CitizensClimateLobby.org.

By Roger Day. Published in the Duluth News Tribune 3/15/2024.

Let's get clean energy moving

Most of us know fossil fuel-based energy systems have led to immense damage to the environment and to our climate, whereas clean-energy systems have not. Fewer know clean-energy systems are more affordable. The UN reports renewables are the cheapest form of power today: Since 2009, the cost of wind-based power has decreased by more than 50%, and the cost of solar power is 83% less. The New York Times reported in August that, "This year, for the first time, global investors are expected to invest more money into solar power — some \$380 billion — than into drilling for oil."

But we cannot take full advantage of cleaner, cheaper energy if it cannot be transmitted efficiently. A Twin Cities newspaper reported March 1 that "renewable energy sources are straining capacity, requiring new high-voltage transmission lines."

A bill before Congress, aptly named the "BIG WIRES Act," would address this by encouraging states to build new transmission lines and the infrastructure needed to move clean energy. Search online for "Citizens Climate Lobby/Big Wires Act" for further information. Contact your U.S. representative and senators and ask them to support it. Let's get that clean energy moving!
Roger Day, Duluth

By Michael Overend. Published in The Timberjay and the Lake County Press 3/15/2024

MN Clean Energy Permitting Reform

Strong market forces affecting our energy sector are creating our clean energy future through “beneficial electrification” of our lives and economy, offering us a better quality of life and protecting our environment for less cost. We need enormous amounts of clean, cost-effective wind, solar and hydroelectric, plus major energy storage, to make these “renewables” our reliable “baseload” power and fully harvest these benefits. Unfortunately, the excessive and costly time delays in “permitting” expansion of our existing electric grid are a major roadblock for building and connecting proposed new “renewables” projects. Permitting delays adversely affect siting, building and connecting new renewables and storage, and siting, expanding and upgrading high-voltage transmission, substations and local grid distribution lines.

By 2050 we must build and connect three times the existing capacity of our electric grid to meet this demand; a huge challenge considering it took over 100 years to develop our current grid. Our utilities and electric transmission organizations are working to meet this demand, “Since early 2021, planned wind and solar capacity across 116 utilities has more than doubled, increasing from 144 to 295 GW by 2035.”

<https://rmi.org/the-ira-is-the-largest-climate-investment-in-us-history-are-utilities-planning-accordingly/#:~:text=Planned%20capacity%20%5BGW%5D%20is%20shifting,by%2013%20GW%20by%202035>

The Inflation Reduction Act (IRA) offers powerful Federal funding incentives, combined with new Minnesota state funding, to help utilities and every electricity consumer accomplish this important clean energy transformation. These incentives all focus on massive expansion of renewables generation and transmission for electricity consumers. Our nation is blessed with large areas (mostly central US) ideal for renewables generation. Most residential, commercial, and industrial electricity consumers are located near our coasts. Consequently, we must design and build huge amounts of new “renewables” primarily in the rural Midwest and connect it to consumers in distant population centers with major transmission infrastructure expansion. This incredible demand and powerful incentives for clean energy also strongly encourages rooftop solar and battery storage for homes and businesses (distributed generation) with upgrades needed of local grid infrastructure. These upgrades create opportunities to develop safer, stronger local grids more “resilient” to our increasing severe weather and natural disaster events.

The IRA's potential to create clean energy electrification benefits for our economy is enormous. A February 2024 Climate Power report summarizing the 18-months since IRA passage states, “A bulk of the new clean energy projects are located in congressional districts represented by Republican members of the House of Representatives – totaling 144,532 new jobs and over \$262.19 billion in investment across 274 clean energy projects in 133 Republican-held districts.” <https://climatepower.us/wp-content/uploads/2024/03/State-of-the-Clean-Energy-Boom-Report-March-2024.pdf>

E2's Executive Director Bob Keefe stated, “...We're witnessing one of the biggest and most far-reaching economic revolutions in generations, thanks to the IRA. What this study shows is

that this boom extends beyond clean energy and clean vehicles and to everything from construction to restaurants to retailers to real estate.

“Even if you don’t care about climate change, even if you don’t like clean energy or electric vehicles, you ought to like the jobs, investments, sales and tax dollars coming to your state and your community because of this clean economy transformation.”

Unfortunately, Princeton’s REPEAT Project shows 80% of the IRA’s potential benefits will not happen unless we modernize our outdated, inefficient “permitting” process. “Permitting reform” is critical for rapidly building important renewables and transmission projects on local, state and national levels. We need clean energy permitting reform on all levels to streamline and dramatically reduce the average 10-year period from proposal to completion of new renewables and transmission, while preserving important environmental protections, affected-community engagement and input. Call your state legislators at (651) 296-6013 and ask them to support the Minnesota Energy Infrastructure Permitting Act (SF4784/HF4700) and other important clean energy permitting reform legislation.

Michael Overend, Two Harbors

By Polly Merhar. Published in the Bemidji Pioneer 3/13/2024.

Citizens Addressing Our Changing Climate **Empower your Home - energy efficiency improvements you can afford**

On Thursday, March 21, several local organizations will meet with community members for an old-fashioned show-and-tell event about home efficiency and electrification opportunities. These new opportunities for tax credits and rebates can be hard to navigate. In fact, some have yet to be finalized! That is why we are coming together to offer the community a way to learn and earn more! The event is called “Empower Your Home: learn, earn, and share in energy efficiency.”

This event is sponsored by Beltrami Electric, Ottertail Power, Citizens’ Climate Lobby, Clean Energy Resource Team (CERTs), and the Bemidji Sustainability Commission. The event is on March 21, from 4-6 pm, with a presentation from 5-5:30, and will be held at the Beltrami Electric community room at 4592 Technology Drive NE.

You can talk with expert electric power company staff and learn about the rebates they offer, learn more about efficient heat pump technology, and talk one-on-one with community members about their experience with heat pumps, geothermal, solar, and home efficiency improvement projects. This is a good place to start if you have a home story like mine.

When we moved to Bemidji, we found a fixer-upper. It was crazy bad. Not an appliance worked. There was water in the basement, the septic was non-existent, the well was shooting water like a geyser, windows didn't close, and more! It was HOT in summer and COLD in winter.

Once we fixed the water issues, our energy efficiency and home comfort efforts started with windows. There were lots of picture windows and not enough windows that opened. Having operable windows made the summers bearable, and double panes made winters more comfortable. If we had done this in 2024, we would be eligible for \$1200 in tax credits! Actually, even better, we could do this over time and do projects annually to receive up to \$1200 a year for 10 years and get the tax credit each year.

Next, we added insulation to the attic - after digging out the wood chips that had been the insulation. We reused the chips for horse bedding for 2 years! I had never heard that wood chips could be insulation - but it made sense for the age of the home and the rural location. Insulation in the attic alone reduced our winter heating costs by one-third. The insulation project paid for itself in only one year! Such energy efficiency projects are now covered by a tax credit, making it more likely the project will pay for itself fast.

An energy audit is a great place to start. Some energy companies offer them free, so check with your providers first. The cost may vary depending on the level of the audit, from simple to complex. The current tax credit also includes \$150 toward an energy audit. Whether you have done many home energy efficiency projects over the years or are just getting started, an audit is a great tool to help you create a 10-year efficiency plan!

If you are considering adding solar to your home, it is always advised first to improve your home's energy efficiency. That way you will need much less solar to operate your home. Energy efficiency improvements feel good! We put new seals on all of our exterior doors this year. \$40 and a couple of hours of work, and our house was much less drafty. I bet they paid for themselves in one season - even with a winterless winter like we just had. But more importantly, they made our home more comfortable to live in. I found this [article on the "This Old House" website](#) that brings you the home efficiency and electrification program in a truly accessible format. Use the Rewiring America tool embedded in this article to see how much money you can receive based on your personal information.

We are so excited to bring this event to you so your home can be more enjoyable to live in at a price you can afford. We hope to see you on March 21st!

Polly Merhar, Citizens' Climate Lobby

By Patrick Welle. Published in the Bemidji Pioneer 4/10/2024

Citizens Addressing our Changing Climate: Save money and the environment by joining the energy future

Are you interested in reducing your electricity bill and polluting less? The Inflation Reduction Act offers new rebates and tax credits for switching to cutting-edge electricity options and energy efficiency that can help our pocketbooks and the environment.

We have a tremendous opportunity to learn about recent advances in climate and energy policies. Bemidji's homegrown expert, Brett Cease will be speaking at 5:30 p.m. on Thursday, April 18, in the Beltrami Electric Community Room.

He is recognized nationally in his role as the vice president of programs with the Citizens' Climate Lobby. All are invited to learn about joining the energy future and ways you and the environment can benefit.

Heat pumps are a major option in this transition to a better energy future. The transfer of hot and cold by air-source heat pumps consumes half to a third of the energy of furnaces that burn fossil fuels to create heat. And using groundwater for heat transfer is even more efficient because it typically ranges around 50 degrees.

Experts observe that some people are making the switch for cost savings, others are primarily motivated to help the environment and many people want both.

The IRA is designed to move us to an energy economy that is both cheaper and better for the planet. As a volunteer with CCL, I understand that economic incentives can motivate more sustainable choices. The IRA provides subsidies to households — and rewards utilities — to encourage the adoption of these improved technologies.

While the IRA will take us part of the way to a cleaner energy future, CCL advocates further policies to achieve the full transition. CCL supports policies that will build the lower-carbon economy in the most cost-effective and fiscally responsible manner. Subsidies for conservation and cleaner energy alternatives increase government debt.

While handing off debt would ultimately be less burdensome to our children and grandchildren than handing off a less livable planet, it would be wrong to allow either outcome to bankrupt their futures. The economic evidence is overwhelming that the environmental and social costs of the emerging climate crisis, if left unaddressed, will be far worse than the costs of solving the problem.

It will be too cumbersome and expensive to achieve the transition entirely through government subsidies. CCL favors market-based incentives that induce polluters to pay some of the costs of reducing their pollution. This "polluters-pay" idea has been widely popular with the public for decades.

It has become painfully clear that society is suffering from worsening extreme weather patterns — storms, floods, droughts, wildfires, etc. If we don't hold polluters accountable, the rest of us are victims of the damages they cause.

CCL advocates for the Energy Innovation Act, which is before the U.S. Congress. It would charge fees for carbon pollution from industries and return the revenues as equal, per capita dividends to Americans. This policy has broad support among economists with more than 3,600 economists signing "the Economists' Statement on Carbon Dividends."

Key principles are:

1. "A carbon tax offers the most cost-effective lever to reduce carbon emissions at the scale and speed that is necessary . . . to steer economic actors towards a low-carbon future."
2. "A consistently rising carbon price will encourage technological innovation and large-scale infrastructure development. It will also accelerate the diffusion of carbon-efficient goods and services."
3. "Substituting a price signal for cumbersome regulations will promote economic growth and provide the regulatory certainty companies need for long-term investment in clean-energy alternatives."
4. "To protect U.S. competitiveness, a border carbon adjustment system should be established. This system would enhance the competitiveness of American firms that are more energy-efficient than their global competitors. It would also create an incentive for other nations to adopt similar carbon pricing."
5. "The majority of American families, including the most vulnerable, will benefit financially by receiving more in 'carbon dividends' than they pay in increased energy prices."

Many of our closest trading partners have already adopted carbon pricing. To promote fair trade (see item four above), these countries are also implementing carbon border adjustment mechanisms (CBAM) that charge import tariffs on goods manufactured in other countries with higher carbon pollution.

There is growing interest among U.S. policymakers to adopt CBAM so that markets reflect the fact that so much of U.S. manufacturing is already cleaner than that of imports. Because CBAM captures environmental costs, it is the type of tariff on imports that complies with the rules of international trade.

It would level the playing field so U.S. industries can compete with Chinese goods that are artificially cheap. Imagine a future in which Minnesota forest and steel-related industries lead the world in low-carbon production processes under fair carbon fees and border adjustments. Canada implemented carbon fees a couple of years ago to fund the Canada Carbon Rebate. Analysis shows the vast majority of Canadians are receiving more in carbon rebates than they pay in increased energy prices (see item five above). All households can save money by reducing their carbon footprints.

We can start building a cheaper and more sustainable energy future today. Please join us on April 18 to learn how.

Patrick Welle is a member of the Citizens' Climate Lobby organization. For more information, visit CitizensClimateLobby.org.

By Judith Thimke. Published in the Duluth News Tribune 4/19/2024

Make Climate Change Front and Center in this Election

The other day was cold and rainy. In front of East High School, I saw a young woman waiting bravely in a downpour in front of a bus stop sign. She had on a light jacket with a hood. I passed her in my warm car, thinking, “wow”. I circled back and stopped to ask if she wanted an umbrella. She shook her head no. As I continued into town, I felt I should have been more direct: I could have reached out of my passenger window, offering her my umbrella (“Hey, would you take this? I have an extra.”) Maybe she didn’t want my help, perhaps she didn’t want an umbrella, or possibly she wasn’t sure how to accept my offer. I’ll never know. But it made me think. Minnesotans are used to living with snow, sleet, driving rain and forceful winds. With the climate crisis, extreme weather events will become more frequent and more intense, affecting some people more than others, like those who do not have access to a car or who depend on the bus for their basic transportation. While increasing the number of bus stop shelters might encourage more people to choose urban transit, it most certainly would provide much-needed respite for those who have no alternative.

It’s imperative that we push our elected officials to address climate justice and promote the transition to clean energy. We now have tools to make an equitable difference through the Inflation Reduction Act, a true game changer. Approaching the upcoming election, climate concerns should be front and center: Ask incumbents what they’ve done (and other candidates what they’ll do) through their elected positions to ‘shelter our communities from the storm’ by promoting these and other legislative efforts, holding them accountable with your vote.

Judith Thimke, Duluth

By Polly Merhar. Published in the Bemidji Pioneer 5/8/2024

Citizens Addressing our Changing Climate: Let’s talk about fighting the pollution overheating our planet.

Let’s make Mother’s Day 2024 the catalyst for hundreds of conversations that help people fight the pollution overheating our planet.

“No one does anything unless it feels important. And if no one is talking about it, how important can it be?” — Science Moms

Dr. Katharine Hayhoe is an atmospheric scientist who studies climate change, is an advisor to the Citizens' Climate Lobby, and is a mother.

The warm winter we just had has given me the courage to talk about carbon pollution to everyone. I feel like even those who are not concerned about climate change might be getting worried. They must be getting that icky feeling you get in your gut — the feeling every woman has learned to listen to and not ignore.

Let's make Mother's Day 2024 the catalyst for hundreds of conversations that help people fight the pollution overheating our planet. Why moms? Women have [historically been at the forefront of social change, from fighting for the right to vote to ending child labor. We even made Mother's Day a national holiday.](#) Let's channel that same energy and determination into tackling the pollution problem.

Why now? [Because 70% of Americans are](#) deeply concerned about climate change, and only 25% think there is scientific consensus when, in fact, it is 99%. The world is heating up 50 times faster than ever in recorded history. With 85 million moms in America, we have the power to make a difference. Let's harness our Mom Power and start moving the dial!

[Dr. Hayhoe has helped Citizens Climate Lobby develop an easy way to think about climate conversations.](#) Start with the *heart* by connecting personally with an opening question. Next, move to the *head* by presenting your concerns and impacts through facts and data. And finally, *hands*, by talking about solutions that people can do.

Here is a personal example. “I couldn't Nordic ski, fat tire bike, and I hardly used my snow shoes this winter. I am so worried that this might be the new normal. Do outdoor activities bring you joy?... Winter temperatures in Minnesota have already increased by 5 degrees Fahrenheit. When we top this with an El Nino weather pattern, our winter recreation gets canceled, and our winter businesses are at risk. We have made lots of energy efficiency improvements in our home to do our part to reduce carbon pollution. I also regularly contact my elected representatives to ensure they know the climate is essential to me. It feels good to do something active to save the outdoors, which I love. Doing something positive might help you feel better, too.

Here is another example: “Have you heard about all new great, new tax credits and rebates available to convert your home to clean energy? ... Minnesota will have its rebate program ready for early 2025, but tax credits were ready for your 2023 taxes. You can research websites like Rewiring America, Citizens' Climate Lobby, and your electricity provider.

I am making it a point to tell as many people as possible about these money and energy-saving, pollution-reducing opportunities. I'd happily share my home improvement stories and help you navigate the tax credits and rebates.”

And saving the best example for last. “I’m concerned about the cost of cleaning up after climate-related disasters like wildfires, floods and crazy-big storms. Did you notice the smoke in the air last summer?...

[In 2023, 28 disasters cost 600 billion dollars.](#) The trend is for more events costing more money year over year. This feels bigger than me, so I take action by checking out each candidate's platform and record on carbon pollution policy before I vote. I have one voice and one vote, and I will make sure it counts for the climate because I want to have winter again.

So, fellow moms, let’s get out there and talk about carbon pollution. Let’s use our outside voices. Let’s do all we can so the kids we have brought into the world continue to have a beautiful, four-season Minnesota to grow, learn and love.

By Polly Merhar, Bemidji