

January 20, 2021
Minnesota House Climate and Energy Finance and Policy Committee
Minnesota House of Representatives
100 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155

Dear Chair Long and the House Climate and Energy Committee,

I would like to thank Representative Long and the Climate and Energy Committee for the opportunity to provide testimony on HF XXX – 100% Clean Energy Standard on behalf of the Union of Concerned Scientists. The Union of Concerned Scientists (UCS) is the nation’s leading science-based nonprofit organization with more than 500,000 supporters, including 6,800 in Minnesota.

I would also like to thank Governor Walz and the House Climate and Energy Committee for their leadership in proposing this bold, aggressive initiative to achieve 100 percent carbon-free electricity across Minnesota by 2040. It has been almost 15 years since Minnesota has taken significant action to drive renewable energy and reduce fossil fuel emissions, and UCS is thrilled that the House is pressing ahead with a 100 percent carbon free future for Minnesota.

Minnesotans are facing a climate crisis in addition to an economic and public health crisis, which has also exposed existing racial injustices and socioeconomic disparities. And despite being one of the first states to take significant climate action with the Next Generation Energy Act, Minnesota has fallen behind on its emission reduction goals, and other states have leapfrogged the Minnesota renewable energy standards. Since Minnesota passed this law, 10 states plus D.C. and Puerto Rico have adopted renewable electricity standards greater than 50 percent and at least 10 states have adopted renewable or carbon-free electricity requirements or goals reaching 100 percent between 2040 and 2050.

The 100 percent carbon free energy initiative proposed by Rep. Long would help Minnesota get back on track with emission reductions and regain its position as a national leader in deploying renewable energy and efficiency, bringing new jobs and investments to the state.

We look forward to working with you to ensure that this bill results in equitable outcomes, new renewable energy investments that would not have occurred without this 100 percent carbon-free energy standard, and a truly carbon-free future for all Minnesotans.

Our primary recommendations as this bill moves forward are to center environmental justice so that the benefits of decarbonization are fully realized and distributed equitably; and to strengthen and accelerate the renewable energy targets to ensure that all utilities not only have backstops to their current corporate pledges, but will also have

reason to re-evaluate existing plans for new fossil fuel energy and instead consider deploying additional renewable energy. Stronger and more aggressive renewable energy standards would help maximize the potential economic and health benefits for Minnesotans as well as incentivize utilities to reconsider their near-term plans to lock Minnesota into new gas infrastructure that would undermine the state’s ability to fully decarbonize the power sector in the next two decades.

Equity and Environmental Justice

The transition to 100% carbon-free electricity must be done equitably, and we appreciate that this bill makes significant progress on ensuring local benefits and environmental justice. As Minnesota reduces its global warming emissions and transitions to cleaner sources of energy, the state should commit to improving air quality and prioritizing clean electricity investments and job development specifically in communities overburdened by pollution and climate impacts and/or economically reliant on existing fossil fuel infrastructure. We appreciate that this bill makes significant progress on ensuring local benefits and environmental justice. Creating a definition of areas of concern for environmental justice and requiring utilities and regulators to consider environmental justice concerns is a strong step toward creating a clean energy future that is truly equitable and leaves no community behind. In particular, the “local benefits” framework (9.6-10.18) lays out critical values for Minnesota to prioritize, and we fully support that this legislation moves Minnesota towards a more just and equitable energy system.

In order to ensure that Minnesota’s 100 percent carbon free energy future addresses existing racial and socioeconomic disparities, rather than maintaining or exacerbating them, [we must center environmental justice](#). [Our current energy system disproportionately harms](#) Black and Indigenous Minnesotans and other Minnesotans of color, who face higher energy burdens, higher levels of pollution and higher rates of respiratory issues due to poor air quality, and higher unemployment and poverty rates. Many of Minnesota’s low-income communities and Black, Indigenous, and other communities of color have suffered disproportionately for generations from the devastating health, economic, and environmental impacts of using fossil fuels to generate electricity and to power vehicles and industrial processes. Communities and workers that historically relied on fossil fuel power plants are also facing economic uncertainty and must not be left behind. All this is compounded further with the ongoing pandemic and economic recession.

Minnesota can shift to an equitable clean energy future with reduced energy burdens, lower emissions, and increased economic opportunities for all, but we must specifically ensure that communities that have been the most harmed by impacts of climate change, fossil fuel infrastructure, and lack of investment and opportunity are prioritized, uplifted, and included as stakeholders in the process of creating and implementing climate solutions, and that communities currently hosting fossil fuel infrastructure are centered in a clean energy transition.

We recommend expanding upon existing local benefits and environmental justice language in the proposal to fully center equitable access to the benefits of a clean energy economy and pursuing renewable energy and carbon free energy targets in a way that prioritizes impacted communities. Generally, we recommend:

- Removing municipal solid waste incineration, which adds to the pollution burdens borne by environmental justice communities, from the list of eligible renewable energy resources.
- Adding provisions for stakeholder processes for when the Public Utilities Commission considers permits and siting of infrastructure (Section 216E.03, subdivision 10; Section 216F.04)
- or potential modification or delays of standard obligations (subdivision 2b)
- Prioritizing investments in clean energy and workforce development in communities where fossil fuel plants are being replaced
- Directing jobs and other economic benefits from clean energy investments to areas of concern for environmental justice
- Specifically prioritizing emission reductions in environmental justice communities overburdened by cumulative impacts of pollution.
- Incentivizing clean energy companies to implement equity actions that help ensure equitable representation in the clean energy workforce
- Ensuring equitable access to renewable energy, efficiency, and storage, especially with distributed solar and community solar

Renewable Energy Standard Recommendations

1. **UCS recommends accelerating the proposed renewable energy targets to encourage utilities to drive renewable energy development in the short term. Following in the footsteps of other leading states, we would recommend setting a standard of at least [50 percent renewable energy](#) by 2030 or moving the 55 percent by 2035 target to 2030. This would ensure the foundation to a carbon-free energy future is laid by renewable energy sources like wind and solar.** The most cost-effective way to decarbonize the power sector, and then the rest of the economy, is by aggressively driving more wind and solar in the state. Without an aggressive 2030 target for renewable energy, Minnesota will miss out on opportunities to continue driving new renewable energy and bringing accompanying health and economic benefits to residents. With federal clean energy incentives extended at the end of last year, it is important that Minnesota does not delay in building more renewable energy like wind and solar. Stronger near-term renewable energy targets make the 100 percent carbon free energy goal all the more achievable, by avoiding fossil fuel stranded assets and building out a strong foundation of renewable energy. Driving renewable energy sooner and more aggressively allows for Minnesotans to access the health and economic benefits and jobs faster, aiding in economic recovery.
2. **UCS recommends having separate, higher/accelerated targets for Xcel Energy.** Xcel has been historically required to meet higher renewable energy targets in exchange for dry cask storage at their nuclear plants. Xcel will need to store more nuclear waste in the future, especially if the licenses for Monticello and Prairie Island are extended. This provides a continued rationale for having higher/accelerated renewable and carbon-free targets for Xcel Energy specifically (see Table below). Going from 30 percent in 2020 (under current law) to 40 percent in 2025 is not far or fast enough for Xcel. **For Xcel Energy, UCS recommends a target of at least 50 percent by 2025, and a 2030 target of at least 60 percent renewable energy.** We cannot afford to let up because some utilities are already transitioning to clean energy – especially when these utilities are still planning new fossil fuel infrastructure in the near term.

Year (goal type)	Xcel Energy	Other Utilities
2025 (renewable)	50+%	40%
2030 (renewable)	60+%	50+%
2035 (renewable)	-	55+%
2040 (carbon-free)	100%	-
2045 (carbon-free)	-	100%

Eligible Energy Technologies

The proposed definitions of eligible resources requires strengthening, both in order to effectively drive new renewable energy development in the state and in order to achieve these clean energy standards equitably.

UCS is opposed to municipal solid waste (MSW) incineration being included as part of a 100 percent carbon free energy policy and would [recommend removing it from the definition of eligible renewable energy sources](#) by deleting lines 1.20-1.22.

Waste incineration is not a climate solution and therefore has no place in renewable or carbon free electricity policy. Mixed municipal solid waste incineration emits pollution that contributes to climate change and exacerbates climate impacts, which is at odds with the intention of a 100 percent carbon free energy policy. In addition to the global warming emissions that these incinerators are responsible for, the particulate pollution from waste incineration makes climate impacts like extreme heat all the more deadly in polluted areas by creating smog and bad air quality days in addition to the heat. While MSW may currently be considered a solution to Minnesota’s waste problems, the state should not conflate solutions to other problems as climate solutions, especially as this energy technology actively counteracts both carbon-free electricity and environmental justice goals.

In addition to undermining the goal of eliminating emissions from the power sector, allowing waste incineration to count as renewable energy in this bill will displace the deployment of actual new renewables (wind and solar), that would otherwise bring jobs, economic benefits, and healthier, cleaner air to communities - particularly communities facing air quality issues - during a respiratory pandemic. Burning garbage and calling it renewable energy undermines the clean, healthy energy future Minnesotans desperately need – especially the Minnesotans living near these incinerators. We cannot afford to disincentivize any new wind and solar that would provide clean, healthy, affordable energy and new employment opportunities and economic development opportunities for communities overburdened by pollution.

Allowing waste incineration to count toward renewable energy targets continues a racist policy legacy of polluting environmental justice communities. This is especially at odds with the legislative proposal’s commitment on line 9.32 that “all Minnesotans share the benefits of clean and renewable energy.”

Lastly, while UCS is supportive of hydrogen production from renewable energy sources as specified in the bill, hydrogen combustion can result in significant nitrogen oxide emissions—which have negative public health impacts—that are similar or worse than a natural gas plant. Language could be added to the environmental justice provisions in the bill to specifically address this concern (e.g. 10.1-10.2). For more information, see these [recent blogs from UCS](#) and the [Clean Energy Group](#).

Conclusion

The economics are clear –wind and solar are the most [cost-effective electricity sources](#) in Minnesota today, combined with energy efficiency, which lowers consumer electricity bills. Coal and natural gas are [increasingly uneconomic](#), and contribute to other societal costs, public health effects, and negative economic impacts on Minnesota’s agriculture, forestry, and recreational industries due to their role in causing climate change. Increasing efficiency and achieving 100% carbon-free electricity by 2050 would provide significant economic and public health benefits for Minnesota.

Increasing renewables is affordable for Minnesota and energy consumers. The cost of renewable energy and energy storage has fallen dramatically, with solar costs plummeting [more than 80 percent over the past decade](#), and continued cost reductions are expected. Investments in energy efficiency and renewable energy can lower consumer energy bills, reducing the energy burden for low-income customers. Clean energy investments would also lower the cost of climate change and improve public health by reducing air and water pollution from burning fossil fuels.

[Current climate science](#) tells us that achieving nearly 50 percent carbon dioxide (CO₂) emission reductions in the next decade and net zero global CO₂ emissions economy-wide by mid-century is critical to averting the worst impacts of climate change. Climate change already threatens Minnesota and its economy through, for example, more frequent flooding, rising temperatures, and shifts in the animal and plant patterns of the North Woods. [Climate impacts projections](#) anticipate significant agricultural and public health impacts in Minnesota. Aggressively pursuing a carbon free power sector is a key part of building a zero-emissions economy across all sectors.

In addition, driving renewable energy in the state provides exciting economic and health benefits, both of which are sorely needed as Minnesotans face the ongoing public health and economic crisis of COVID-19. Ensuring that all Minnesotans are able to access these benefits is critical, and we support that this bill lays out a framework to consider environmental justice concerns and ensure frontline communities are included in and benefiting from the energy transition.

A 100 percent carbon free energy by 2040 standard is the level of ambitious climate action Minnesotans need, and ensuring interim renewable energy and carbon free energy targets are part of this proposal sets Minnesota up to make rapid and sustained progress. These interim targets will accelerate the state’s clean energy momentum, enable Minnesota to compete with other states and attract new clean energy jobs, and ensure that we are able to halve emissions in the next decade. We commend the Governor and Rep. Long for their strong leadership on this bold policy that meets the moment we are facing and helps address the climate crisis, the economic recession, public health threats, and racial injustices and socioeconomic disparities.