

An Open Letter on Clean Energy and Climate

Signed by Minnesota Scientists, Engineers, Economists, and Health Professionals

January 2015



**Union of
Concerned Scientists**

The signers of this statement are Minnesota scientists, engineers, economists, and health professionals who have expertise relevant to our need to transition to a clean energy economy and have earned, or are working toward, an advanced degree.

Minnesota's strong clean energy track record has created jobs, provided affordable electricity for families and businesses, and reduced pollution to our lakes, rivers, and streams. Minnesota's use of clean energy also improves public health and helps rein in dangerous carbon emissions that threaten our way of life for generations to come. Increasing the proportion of renewable energy is the most effective way to help the regional economy, protect the environment, and improve our quality of life. We have made a good start but we have the capacity to do more, and now is the time to act. As Minnesota scientists, engineers, economists, and health professionals, **we support requiring at least 40 percent of the state's electricity to come from renewable energy resources, such as wind and solar, by the year 2030.**

Renewable energy is already working for Minnesota. We currently get more than 15 percent of our electricity from wind power generated in Minnesota and surrounding states. In our home state, more than 3,000 megawatts of wind energy powers more than 740,000 homes.¹ But we have only begun to realize Minnesota's renewable energy potential. According to the National Renewable Energy Laboratory, Minnesota could generate more than 20 times its 2013 electricity demand with wind energy. Solar also represents an enormous untapped resource in our home state. Utility-scale solar in urban areas, combined with rooftop solar across the state, could generate more than 70 percent of all the electricity sold in Minnesota in 2013.²

Clean, renewable energy is homegrown energy. It keeps dollars here in state, instead of spending those dollars to

import fossil fuels from other states. In 2012 alone, Minnesota sent \$420 million to Wyoming and Montana that we could have kept in state buying our own clean, renewable energy.³

Due to declining wind and solar costs, technology advances, and Minnesota's wealth of available renewable energy resources, **we can now significantly increase our use of renewable energy while maintaining the reliability of our electricity system and keeping utility bills affordable.** Our existing renewable electricity standard has been achieved at little to no cost to consumers.⁴ As renewable energy prices further decline, we can generate electricity from renewable sources at prices competitive with fossil fuels.

Minnesota's commitment to renewable energy has also contributed to the **reduction of harmful pollutants that lead to health ailments**, such as respiratory illness. Reducing our use of fossil fuels that emit these pollutants and transitioning to a clean energy economy will help Minnesota ensure a healthy legacy for our children and future generations.

Minnesota has vast clean energy potential that can be developed affordably with proven technologies. Increasing our use of renewable energy to at least 40 percent by 2030 will further protect our health, cut carbon dioxide pollution to prevent the worst effects of climate change, and reinvigorate Minnesota's clean energy economy. **By generating more of our electricity from renewable energy sources, we can continue to protect all that makes Minnesota a special place to live.**

1 American Wind Energy Association. 2014. State wind energy statistics: Minnesota. Washington, DC. Online at <https://www.awea.org/Resources/state.aspx?ItemNumber=5215>.

2 National Renewable Energy Laboratory. 2013. Renewable energy technical potential. Washington, DC: U.S. Department of Energy. Online at http://www.nrel.gov/gis/re_potential.html.

3 Union of Concerned Scientists (UCS). 2014. Minnesota's dependence on imported coal. Cambridge, MA. Online at http://www.ucsusa.org/sites/default/files/legacy/assets/documents/clean_energy/Minnesota-Coal-Imports-BCBC-Update-2014.pdf.

4 Wind on the Wires. Wind energy has benefited Minnesota's electric customers. Fact sheet. St. Paul, MN. Online at <http://www.cleanenergyjobs.mn/wp-content/uploads/2012/08/Wind-benefits-Minnesota-customers.pdf>.

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