

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Op-Eds from ENSC230 Energy and the  
Environment: Economics and Policies

Undergraduate Research in Agricultural  
Economics

---

2020

## Public Power's Addiction to Coal

Drew Havens

Follow this and additional works at: <https://digitalcommons.unl.edu/ageconugensc>



Part of the [Environmental Indicators and Impact Assessment Commons](#), [Natural Resources and Conservation Commons](#), [Oil, Gas, and Energy Commons](#), and the [Other Environmental Sciences Commons](#)

---

This Article is brought to you for free and open access by the Undergraduate Research in Agricultural Economics at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Op-Eds from ENSC230 Energy and the Environment: Economics and Policies by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

## **Public Power's Addiction to Coal**

Drew Havens

11/11/20

Op-Ed Draft II

A benefit of living in Nebraska is the accessibility and reliability of our electricity. It powers our homes and businesses and allows us to be productive, hard-working people. But public power and its addiction to coal is not the path forward. Our state's insistence on burning coal for electricity leaves us physically dependent, economically vulnerable, and financially burdened.

In 2018, Nebraska received 99% of its coal imports from Wyoming, and our public utilities sent \$115 million across the border to pay for it<sup>1</sup>. The utilities enjoy unusually cheap rates due to our close proximity to Wyoming's coal mines. But the Wyoming coal industry is reaching the end of its life<sup>2</sup>, and what will happen to us as it dies? Our existing coal infrastructure will continue to demand coal, and we will be forced to ship coal in from the Appalachians. 2018 data from the Energy Information Administration shows that Nebraska can import coal from Wyoming at a rate of \$11.05 per ton. The same data shows that it costs \$28.31 per ton to ship coal from Kentucky to Florida<sup>3</sup>, which is a shorter distance than Kentucky to Nebraska- likely where we would have to import coal from if the Powder River Basin in Wyoming is no longer viable. These increased travel costs will be passed on to us through our electricity bills, to the detriment of all Nebraskans.

Additionally, that \$115 million we send out of Nebraska annually could be put to better use inside our state. Instead of handing it off to Wyoming, our public utilities should be reinvesting in Nebraska. An annual investment of that size would spur our local renewable energy industry and create good-paying jobs for Nebraskans. Technical and engineering jobs on solar and wind farms require two- or four-year degrees and could help to retain some of our state's most promising

young minds. The link between a growing economy and increased energy emissions has been decoupled, and science shows us that clean energy investment drives economic growth.<sup>4</sup>

Farmers benefit from renewable energy more than anyone. More land is required to produce energy from solar panels or wind turbines than from a coal-fired power plant, so it must be leased. Corn farmers who irrigate can expect to earn about \$200 in revenue per acre of corn grown<sup>5</sup>, but they are taking on the risk that a crop failure or other event might put their profits in jeopardy. If they were to lease land to a solar farm developer, they could expect to earn between \$300-\$2,000 per acre per year<sup>6</sup> depending on the acreage of land leased and location of electrical infrastructure. As an added benefit, there is no risk associated with their annual income for that piece of land.

Our neighbor to the east is a perfect example of a successful transition from majority coal to majority wind power. In 2001, Iowa was almost completely dependent on coal, with the fossil fuel making up 85% of its electricity generation. At the same time, about two thirds of Nebraska's electricity was generated by coal<sup>7</sup>. In the two decades since, Iowa's energy policies have allowed private entities to invest so much into wind energy that it now accounts for 42% of the state's electricity use. Coal has declined to produce only 35% of Iowa's electricity, down by 50% since 2001. In stark contrast, Nebraska's coal usage is only slightly reduced from 2001 levels at 55%.

Some will argue the manufacturing of solar panels creates more carbon emissions than are offset by the panels' production. In reality, the carbon emissions resulting from the creation of solar panels are equivalent to only 4% of the carbon emissions created by the construction and use of a coal-fired power plant to produce the same amount of energy<sup>8</sup>.

Another criticism of renewable energy is that the resource is not always available. This is absolutely true, but with modern forecasting equipment and variable natural gas power plants,

electricity generation managers can accurately predict what will be needed and respond accordingly. You don't hear about regular electrical blackouts in Iowa due to the wind not blowing. Also, it is worth noting that wind energy is both free and unlimited.

Setting aside the negative environmental externalities associated with pollution and the severe risks of climate change to our state's agricultural industry, Nebraska would simply benefit economically from renewable energy. Continuing to rely on coal power will hinder our ability to provide every Nebraskan with affordable and reliable power. Coal served its purpose as a reliable and cheap fuel in the past, but our economy now suffers from its prolonged use. It is well past time we made the transition to renewable energy for the benefit of all Nebraskans, and I urge the public utilities and lawmakers of our state to seriously consider the economic impacts of sticking with fossil fuels. It is the only way to grow economically and safeguard our future.

## **Sources**

1. <https://neo.ne.gov/programs/stats/inf/143.htm>
2. <https://www.hcn.org/issues/51.21-22/coal-wyomings-coal-fired-economy-is-coming-to-an-end>
3. <https://www.eia.gov/coal/transportationrates/>
4. <https://science.sciencemag.org/content/355/6321/126.full>
5. <https://cropwatch.unl.edu/2018/2019-nebraska-crop-income-projections>
6. <https://strategicsolargroup.com/what-is-the-average-solar-farm-lease-rate/>
7. [https://www.nytimes.com/interactive/2020/10/28/climate/how-electricity-generation-changed-in-your-state-election.html?te=1&nl=california-today&emc=edit\\_ca\\_20201029](https://www.nytimes.com/interactive/2020/10/28/climate/how-electricity-generation-changed-in-your-state-election.html?te=1&nl=california-today&emc=edit_ca_20201029)
8. <https://www.nrel.gov/docs/fy13osti/56487.pdf>