

# The Cost Per Kilowatt-Hour of Coal Versus Natural Gas

According to most analyses, the cost of electric per kilowatt-hour from coal is consistently below that of natural gas:

- <https://www.statista.com/statistics/189180/natural-gas-vis-a-vis-coal-prices/>
- <https://savethecampbell.com/the-coal-used-in-the-campbell-plant-from-powder-river-basin-is-significantly-cheaper-even-than-natural-gas/>

ChatGPT gave me the following recent responses:

what is the average cost per kilowatt hour in the usa of coal versus natural gas?



As of my last update, the average cost per kilowatt-hour (kWh) for electricity generated from coal and natural gas can vary, but here are some general estimates:

- **Coal:** The cost typically ranges from about 2 to 4 cents per kWh, depending on the region and market conditions.
- **Natural Gas:** The cost generally ranges from about 3 to 7 cents per kWh, influenced by factors like natural gas prices and the efficiency of the power plants.

These numbers can fluctuate due to changes in fuel prices, regulations, and advancements in technology. For the most current figures, it's best to refer to sources like the U.S. Energy Information Administration (EIA) or recent energy market reports.

Here is what it says about the cost comparison in Michigan:



As of the latest data, the average cost per kilowatt-hour (kWh) for electricity generated from coal and natural gas in Michigan generally falls within these ranges:

- **Coal:** Typically around 4 to 6 cents per kWh, though this can vary based on factors like transportation costs and local regulations.
- **Natural Gas:** Usually around 5 to 9 cents per kWh, influenced by market prices and demand fluctuations.

These figures can change based on seasonal factors, fuel prices, and the overall energy market. For the most accurate and current data, checking resources like the Michigan Public Service Commission or the U.S. Energy Information Administration would be helpful.

what is the cost per kilowatt-hour in the USA of electric produced from sub-bituminous coal



In the U.S., the cost of electricity generated from sub-bituminous coal typically ranges from about \$0.02 to \$0.07 per kilowatt-hour (kWh). However, these costs can vary significantly based on factors such as local coal prices, plant efficiency, transportation costs, and regulatory impacts.

For the most accurate and up-to-date information, checking resources like the U.S. Energy Information Administration (EIA) would be beneficial. If you have any specific regions or plants in mind, let me know!



But this price difference is even more dramatic in winter, as reflected in this ChatGPT response:



Winter can significantly affect the cost per kilowatt-hour (kWh) for both coal and natural gas due to several factors:

### Natural Gas

1. **Increased Demand:** Winter temperatures lead to higher demand for heating, which can spike natural gas prices. This increased demand often results in higher electricity costs.
2. **Supply Constraints:** Cold weather can impact production and delivery, causing supply shortages that drive prices up.
3. **Storage Levels:** Natural gas is often stored in underground facilities. If storage levels are low heading into winter, prices can surge.

### Coal

1. **Demand Variation:** While coal is less affected by seasonal heating demands than natural gas, winter weather can still influence coal-fired generation levels, depending on regional energy needs.
2. **Transportation Challenges:** Severe winter weather can disrupt transportation networks, affecting coal delivery to power plants and potentially increasing costs.
3. **Competition with Natural Gas:** In winter months, if natural gas prices rise significantly, some utilities might switch back to coal, influencing coal demand and prices.

It is especially important in winter to have coal generation in the mix because of price and storage issues. There is a common sense reason why China and India continue to build coal plants in significant quantity, while the West economically languishes under the weight of bad energy policy.