



# 2026 Energy Landscape

Division of Energy Resources

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## Deputy Commissioner Pete Wyckoff

*Leading the transition to a clean, equitable, reliable, and affordable energy system*

### Federal and State Initiatives Assist Comm Lissa Pawlisch

#### Energy Affordability

- Focus on residential
- Energy assistance
- Weatherization
- Federal Home Energy Rebates

#### Energy Development

- Non-residential programs
- Technical Assistance & Education
- Energy Reliability and Security

### Regulatory Affairs Assist Comm Dr. Sydnie Lieb

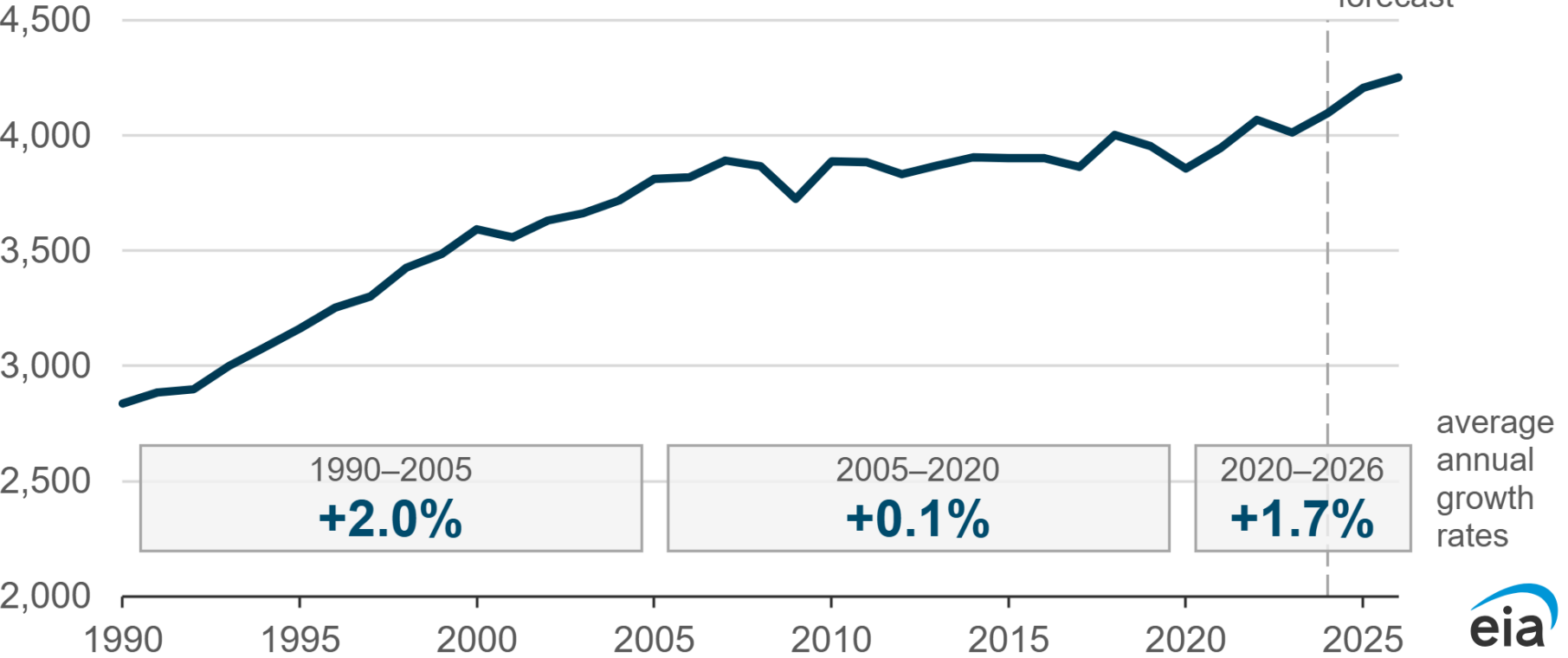
#### Regulatory Affairs

- Public Interest Advocacy at the PUC
- Utility energy conservation programs
- Telecommunications
- Regional and federal regulatory advocacy
- Energy infrastructure permitting

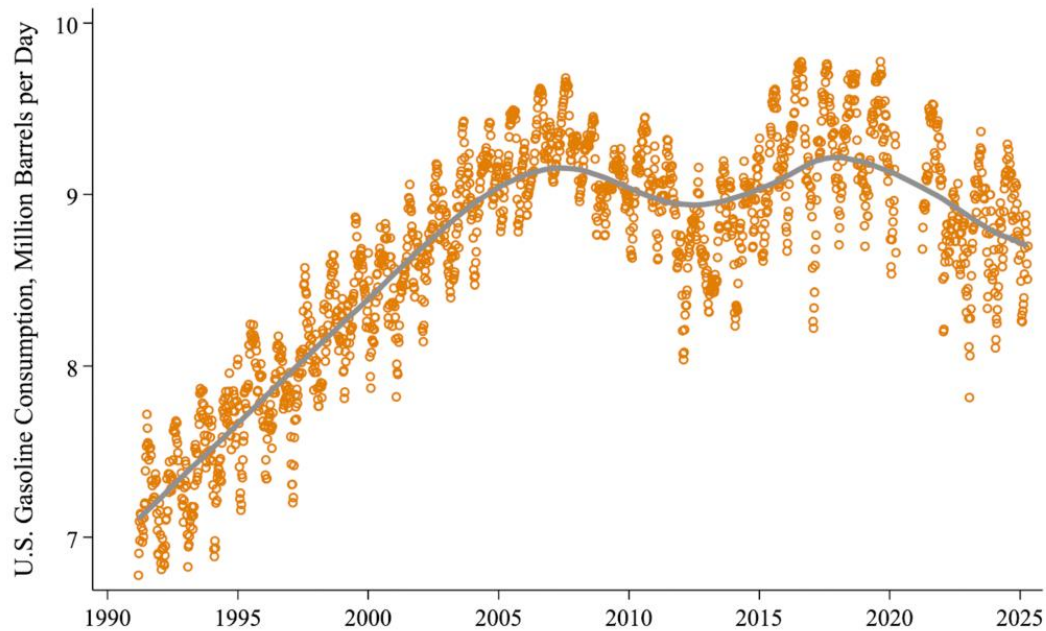
# U.S. electric demand is growing again (natural gas has followed a similar pattern)

## U.S. electricity consumption (1990–2026)

billion kilowatthours



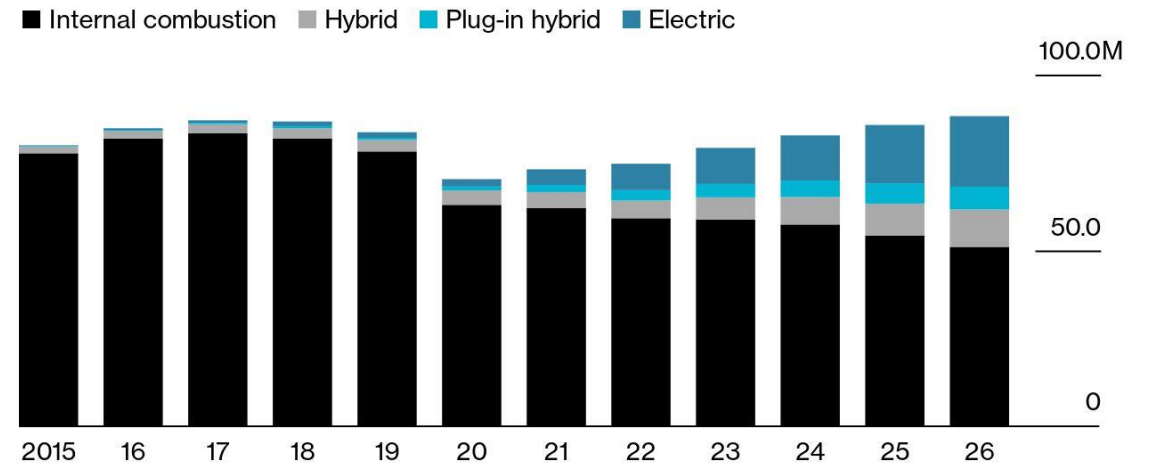
# In contrast, gasoline consumption is declining



Note: This figure was constructed by Lucas Davis (UC Berkeley) using data from the U.S. Department of Energy, Energy Information Administration (EIA), "4-Week Average U.S. Product Supplied of Finished Motor Gasoline". This definition includes all grades of gasoline sold at retail, including conventional, reformulated, and oxygenated gasoline, whether sold as regular, midgrade, or premium. EIA collects this information using a weekly survey of refineries and other petroleum market participants. For details see [http://www.eia.gov/dnav/pet/pet\\_cons\\_wpsup\\_k\\_w.htm](http://www.eia.gov/dnav/pet/pet_cons_wpsup_k_w.htm). The figure excludes observations from Covid between April 2020 and March 2021. I'm happy to send you the version with those observations included, but this version makes it easier to see the broader trend. The gray line summarizes the overall pattern using a non-parametric kernel regression.

## The World Hit 'Peak' Gas-Powered Vehicle Sales in 2017

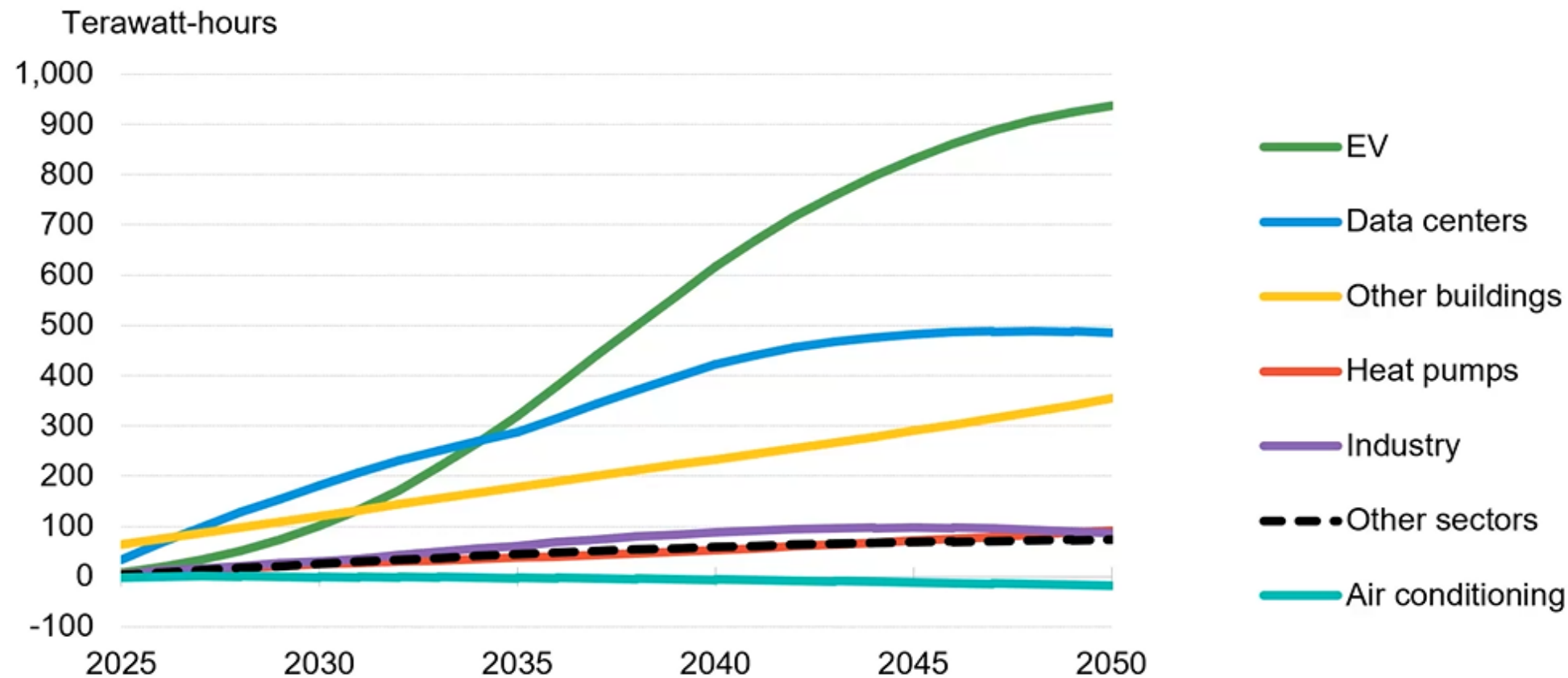
EVs make up a greater share of global vehicle sales, a trend that's expected to continue



Source: BloombergNEF

# Data centers drive near-term US power demand, followed by EVs

Drivers of future US electricity demand, Economic Transition Scenario



Source: BloombergNEF

- **Drivers of energy costs**
- **Impacts of federal pullbacks**

# Recent electricity costs (prior to 2025)



LAWRENCE BERKELEY NATIONAL LABORATORY

Brattle

## Recent Retail Electricity Price Trends: *What Do We Know... or Think We Know?*

Ryan Wisler, Galen Barbose, Peter Cappers, Jeffrey Deason,  
Sydney Forrester, Will Gorman, Eric O'Shaughnessy  
**Lawrence Berkeley National Laboratory**

Ryan Hledik, Long Lam, Audrey Yan  
**The Brattle Group**

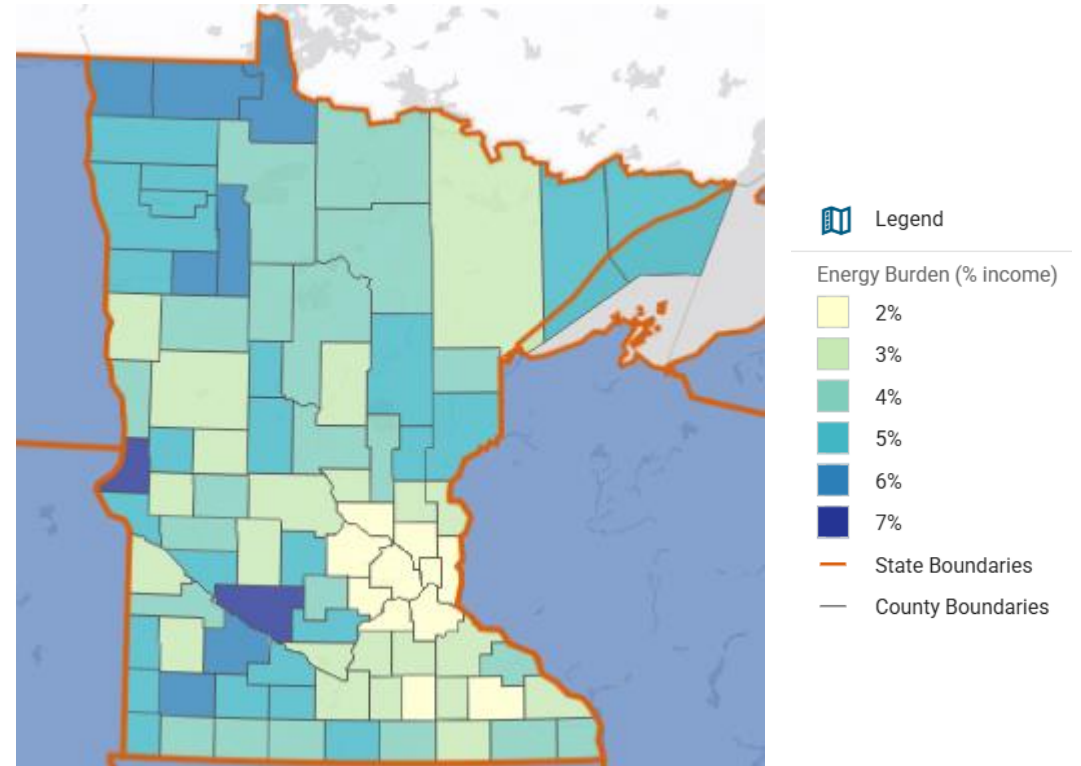
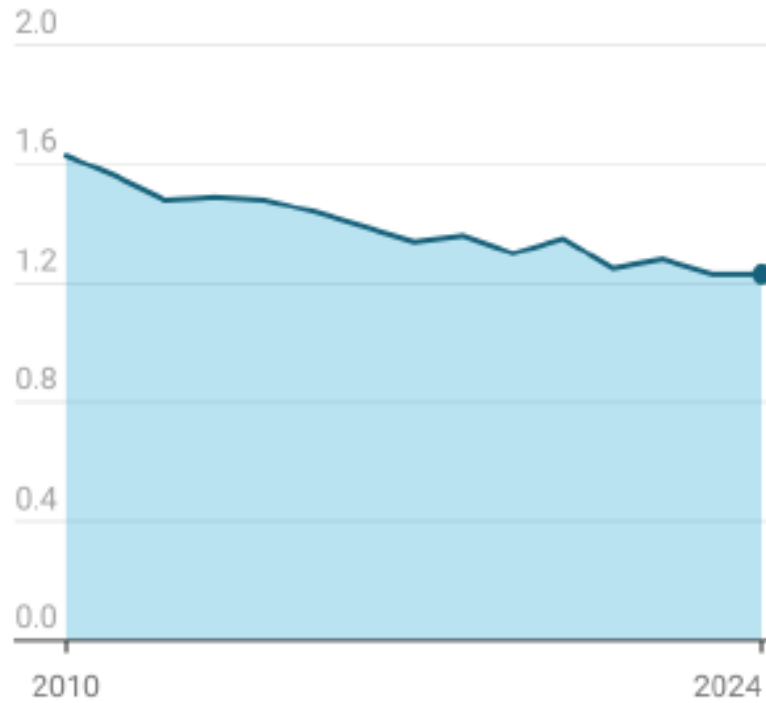
October 2025

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Image source: OpenAI DALL-E

# Electricity costs declining as percent of expenditures (and inflation adjusted prices have declined)

Residential Electricity Costs as a Percentage of Personal Consumption Expenditures

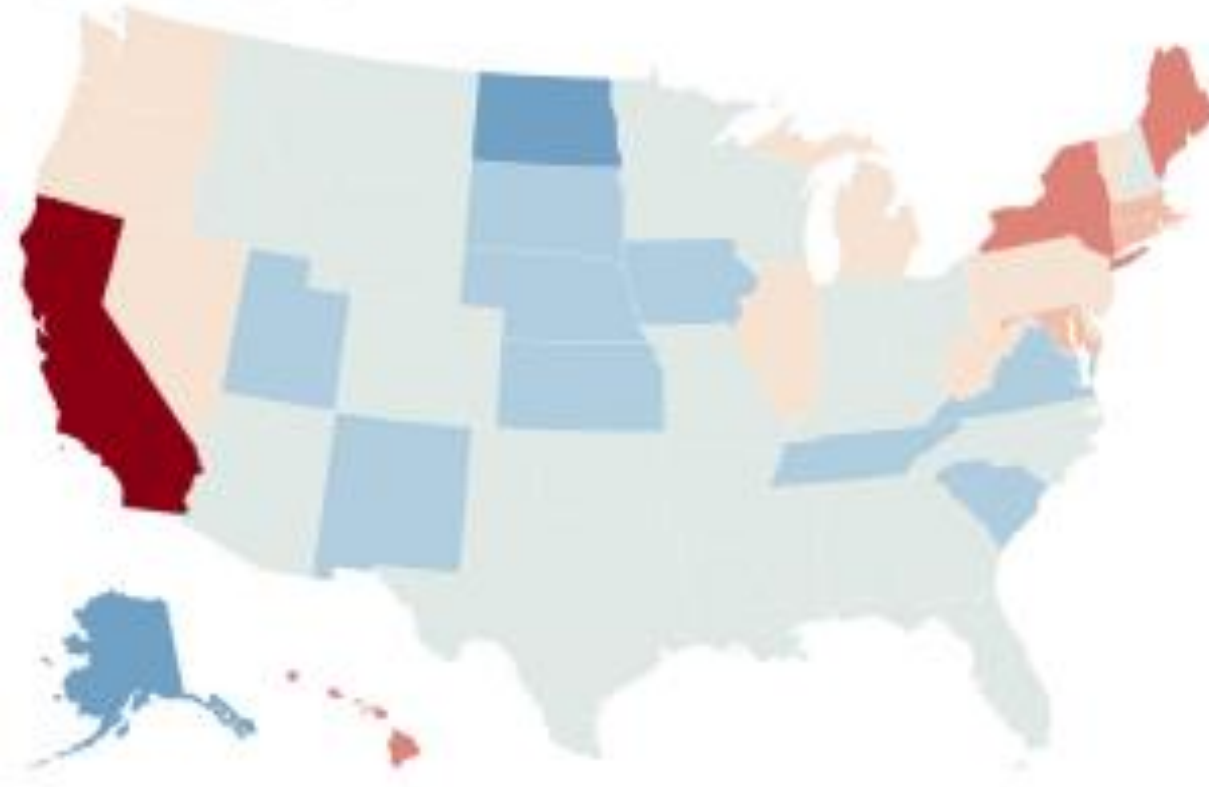


Source: [LEAD Tool](#) | Department of Energy

# Inflation adjusted, Minnesota electricity has costs have been declining (slightly)

## Change in Average Retail Electricity Prices: 2019-2024

Real 2024\$ cents/kWh, inflation adjusted

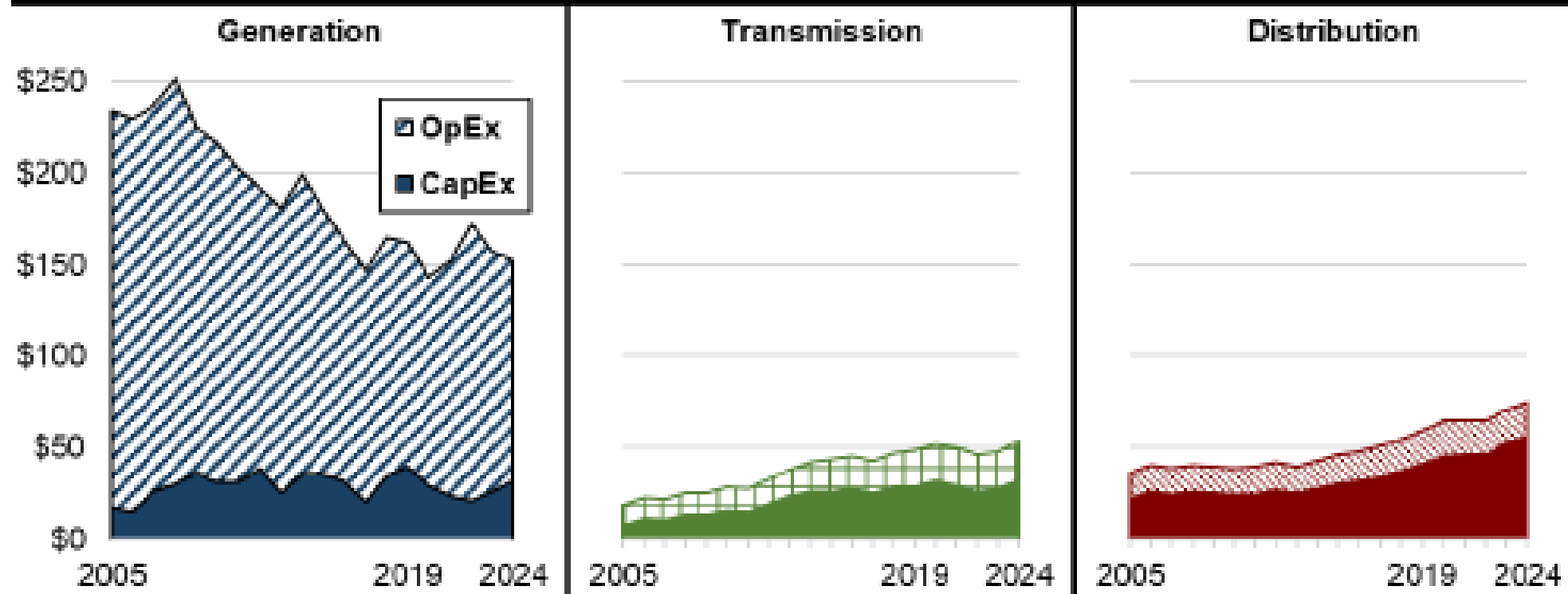


Source: EIA - Created with Datawrapper

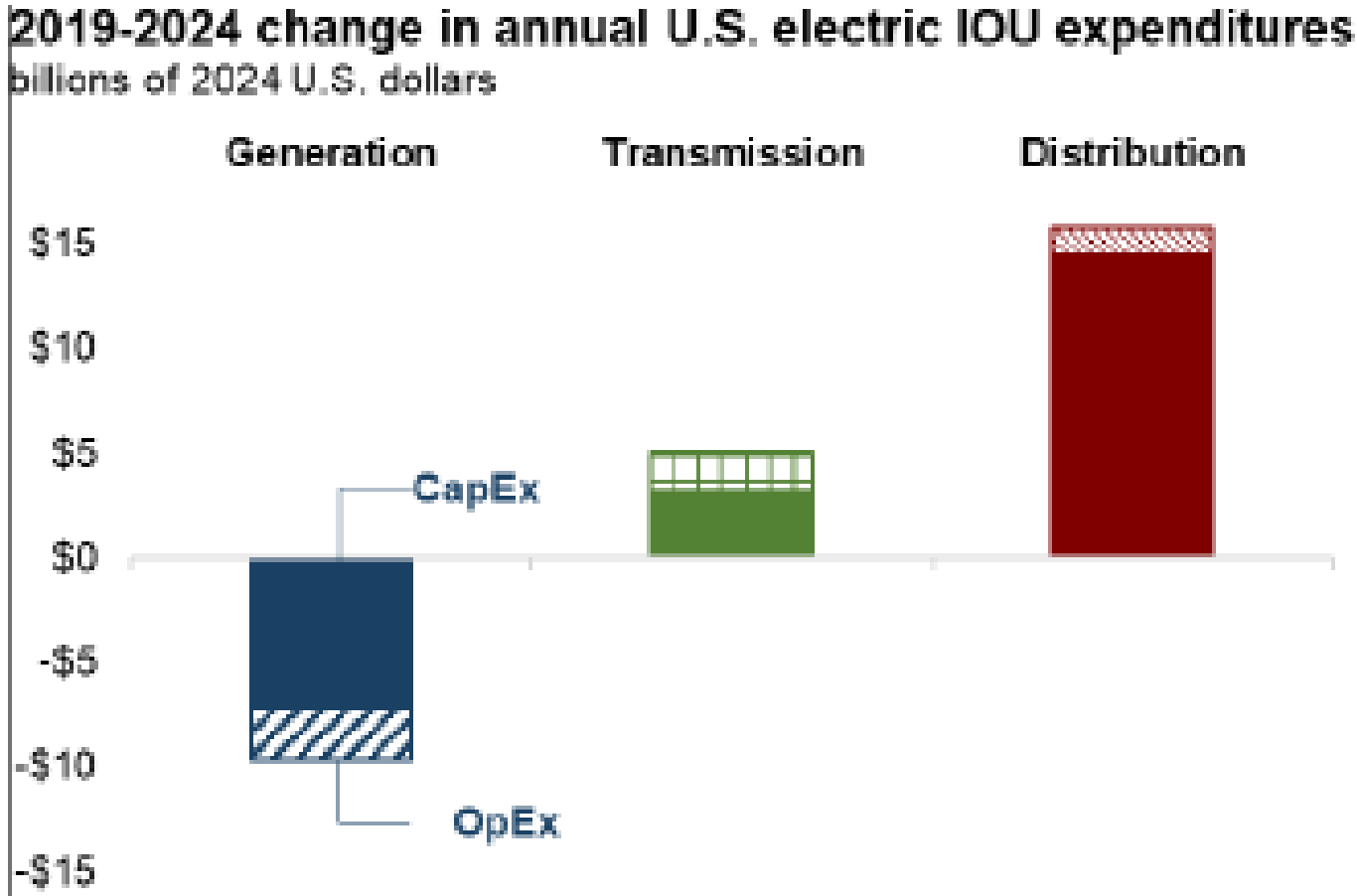
# Fuel costs way down (peaked when coal peaked), transmission and distribution costs rising

## Annual U.S. electric IOU expenditures

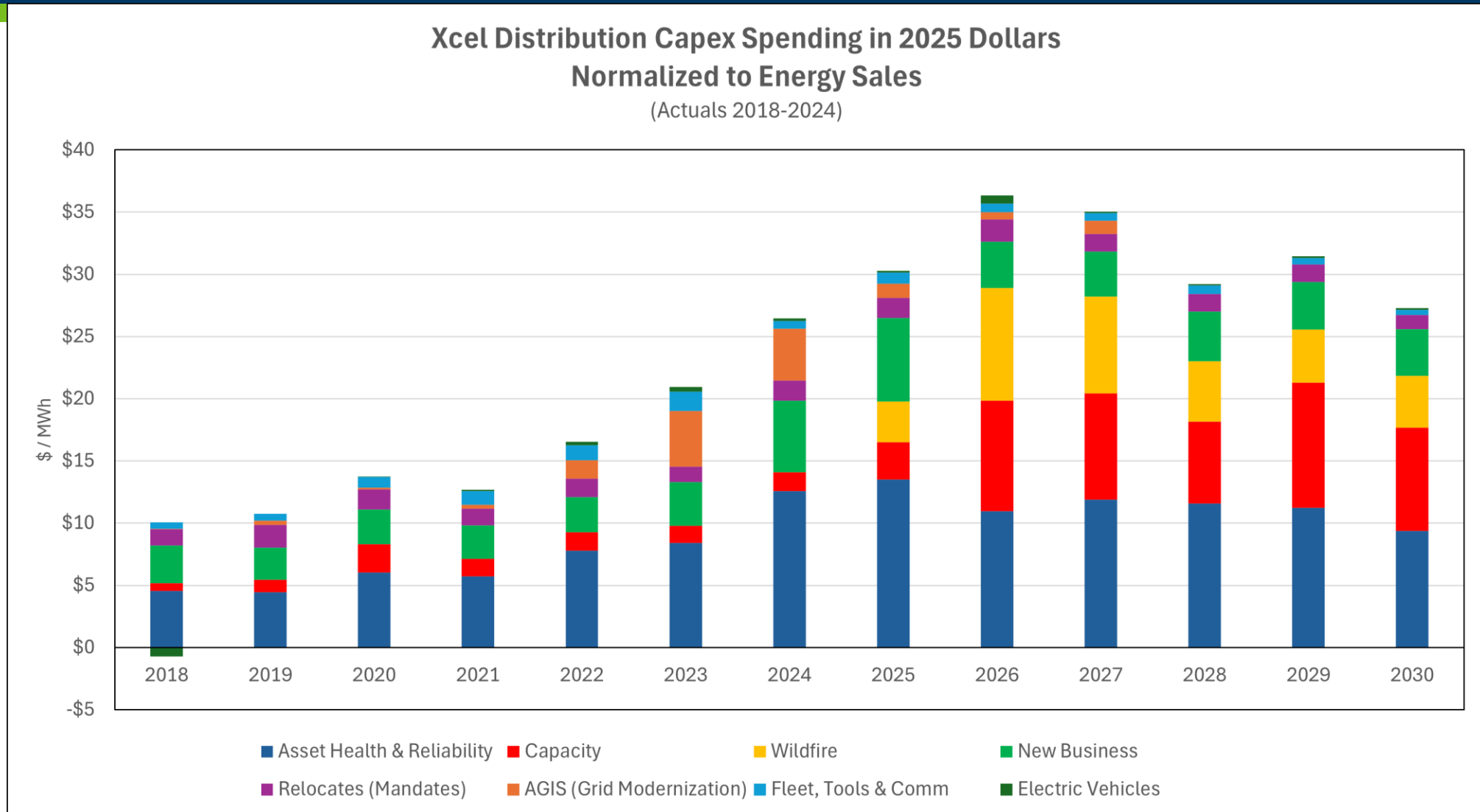
billions of 2024 U.S. dollars



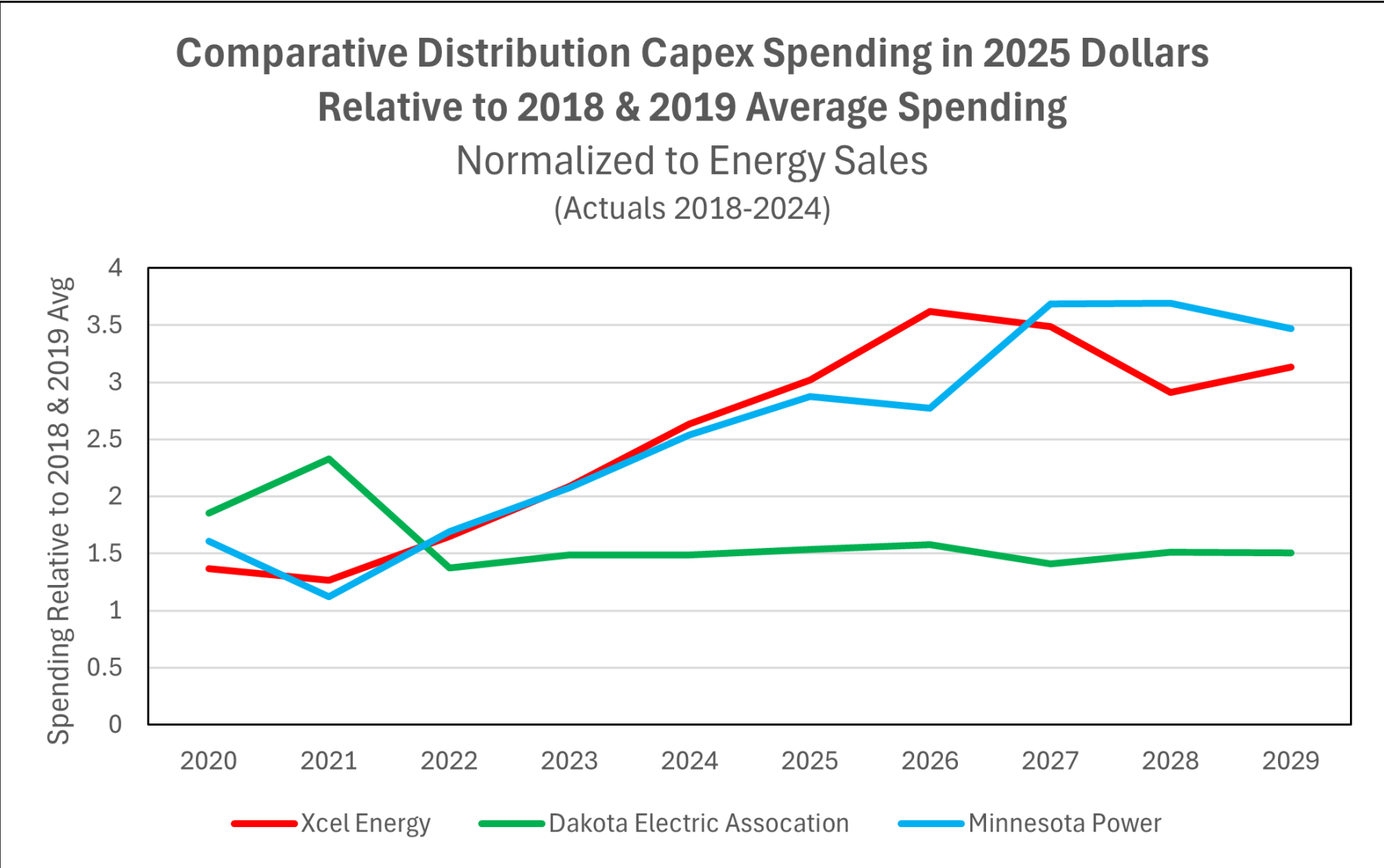
# Distribution costs are growing fast



# Xcel follows this national pattern



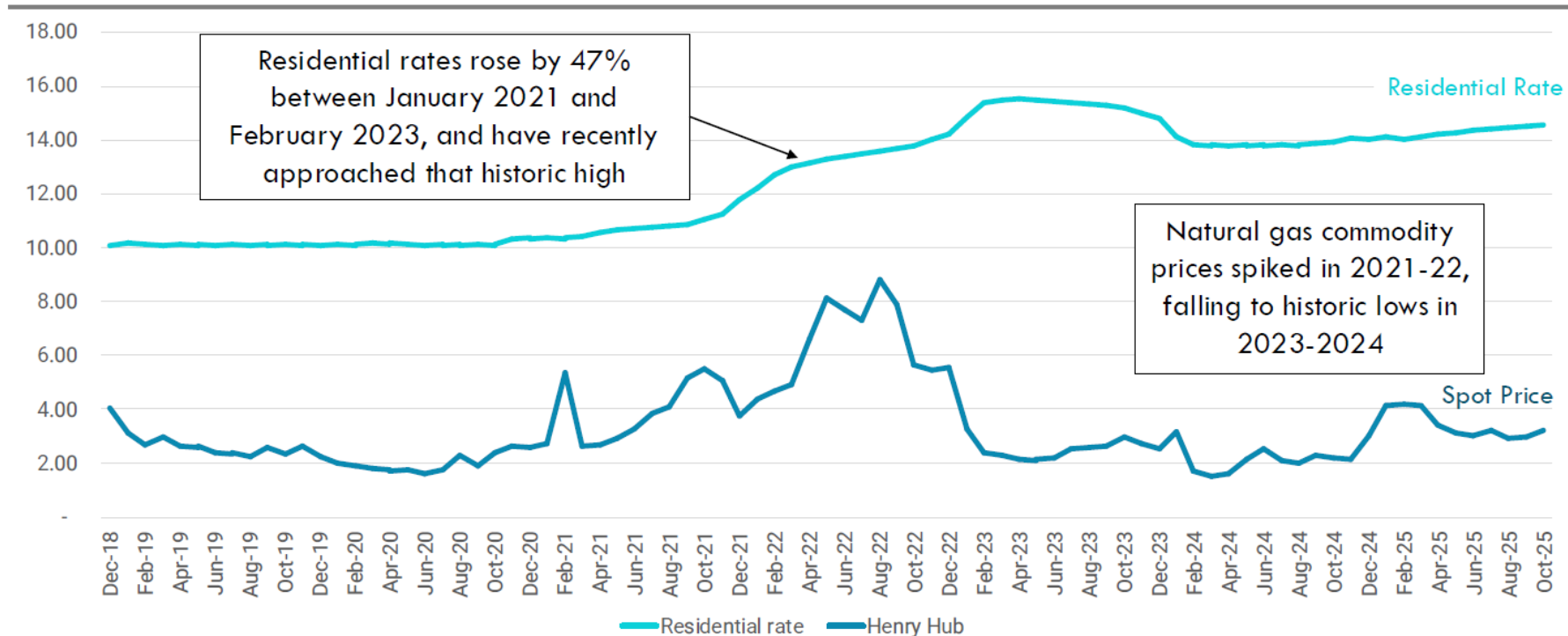
# Minnesota Power also anticipates dramatic increase, less growth from Dakota (a coop)



# Gas Tangent... prices rising for residential– increasingly driven by pipes, not cost of gas

## While natural gas commodity prices recently fell from a 2022 historic high, residential rates remain elevated

Trailing 12-month average price of natural gas delivered to residential customers compared to monthly Henry Hub spot price  
USD per MMBtu of natural gas, December 2018-October 2025, U.S.



RMI - Energy. Transformed.

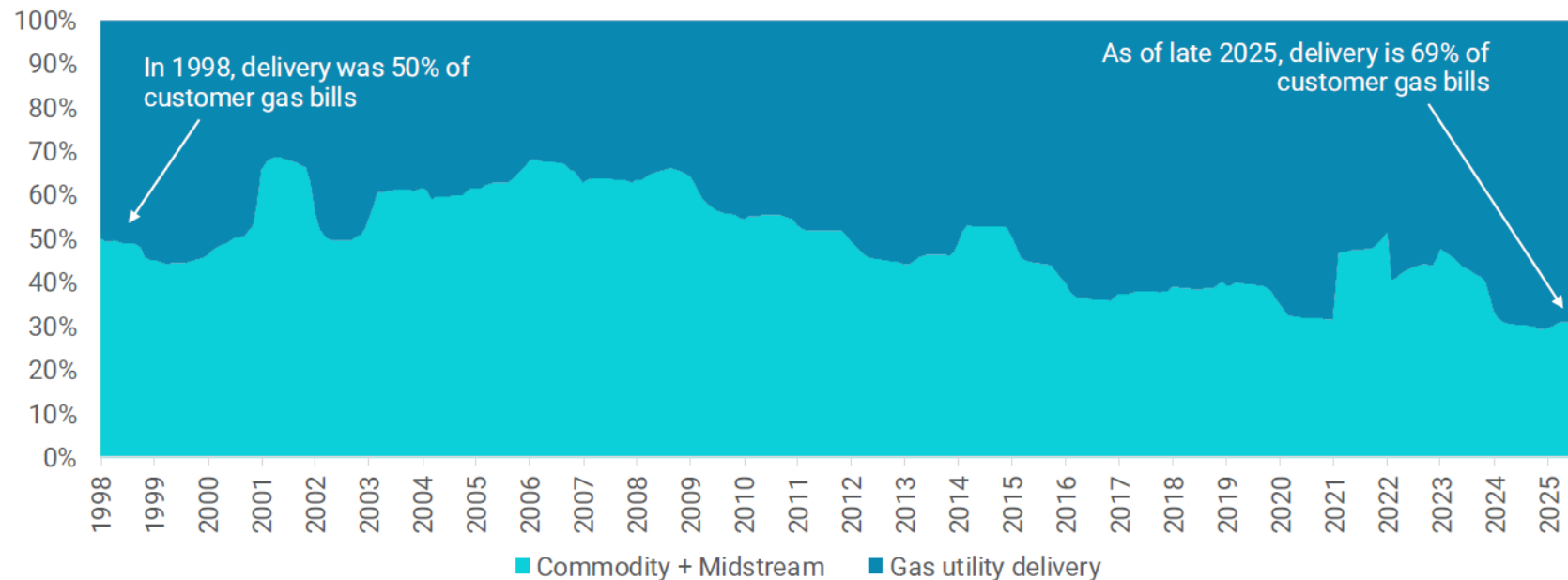
Source: EIA

# Like electricity, the cost of residential gas is increasingly about the delivery, not the energy

## Gas utility delivery costs have grown as share of customer bills

Relative share of residential customer gas utility bills

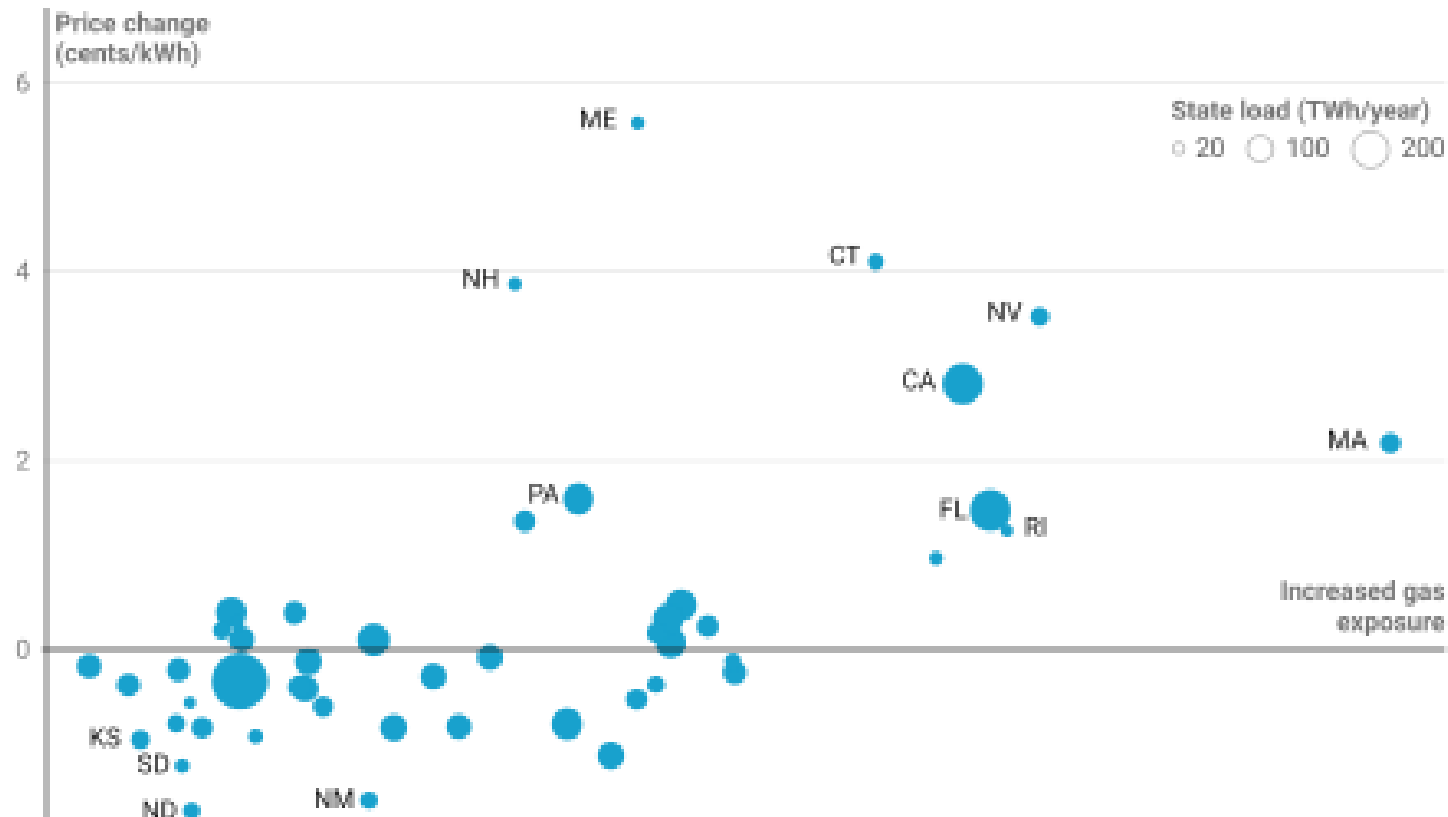
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# But for electricity: Natural gas exposure makes states vulnerable to electric price increases

## Natural Gas Exposure vs. Retail Price Changes from 2021 to 2023

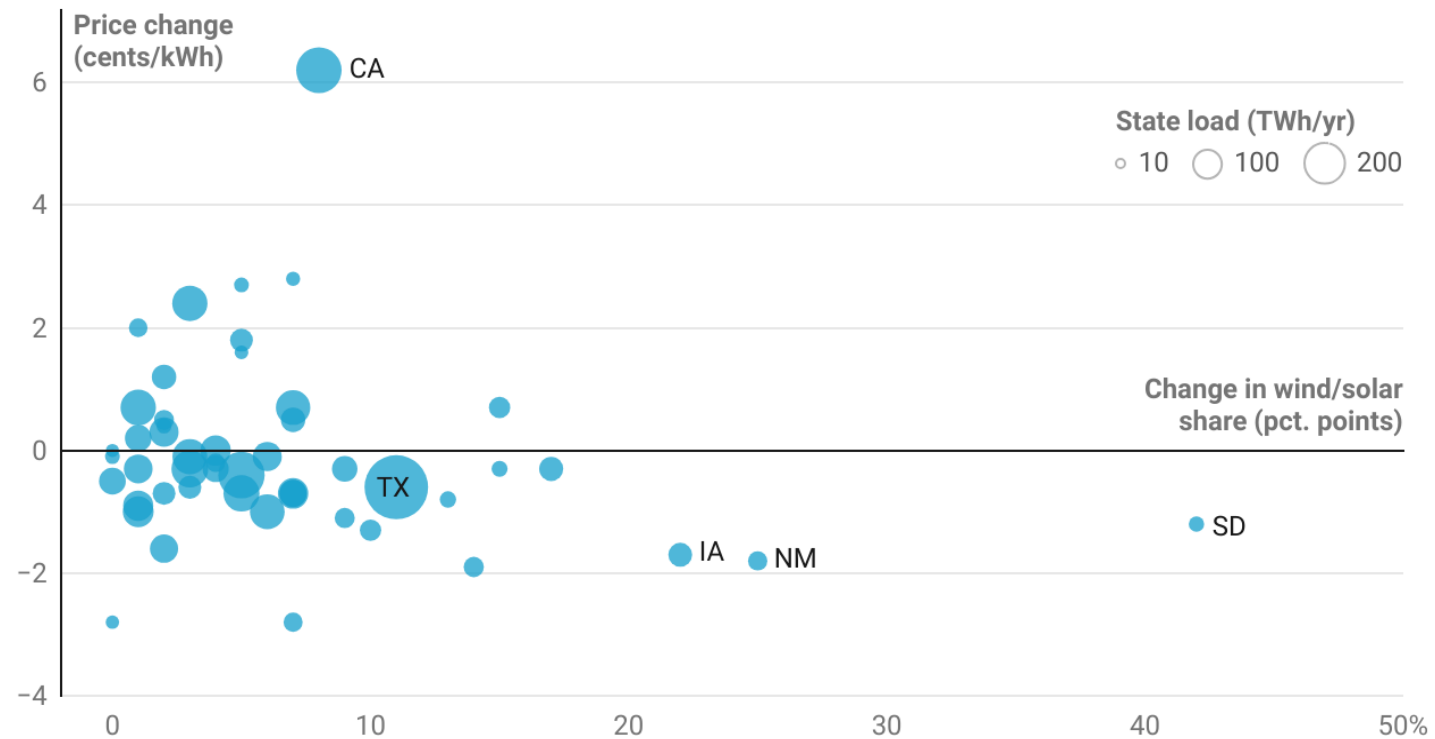
Price change in cents/kWh, inflation adjusted to 2024\$. Gas exposure defined as state-level share of natural gas multiplied by change in state's hub-level gas prices (in \$/MWh) from 2020-21 to 2022-23.



# Utility scale wind and solar tend to drive prices down

## Growth in Utility-Scale Wind and Solar vs. Retail Price Changes from 2019 to 2024

Price change in cents/kWh, inflation adjusted to 2024\$. Utility-scale wind+solar in-state market share is presented as a percentage point change in share from 2019 to 2024.



Source: EIA, LBNL • Created with Datawrapper

# Growing loads can spread fixed costs → lower rates

## Load Growth vs. Retail Price Changes from 2019 to 2024

Price change in cents/kWh, inflation adjusted to 2024\$. Load growth in percentage terms from 2019 to 2024.



# Energy costs— national story in 2025 was that they are going up

## UTILITY BILLS ARE RISING

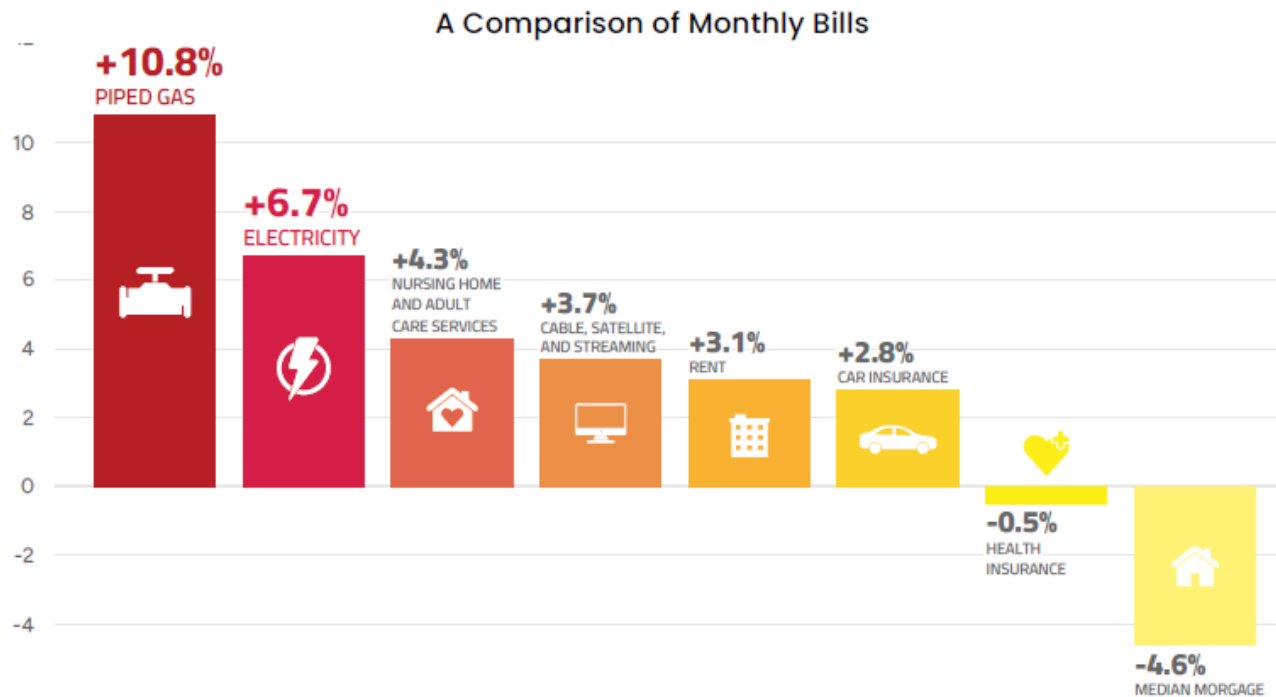
**2025 REVIEW**

JANUARY 2026



1. Replacing Aging Infrastructure
2. Costs Associated with Extreme Weather Events
3. Volatile Fuel Costs
4. Increased Demand for Electricity\*

*\*In some specific circumstances.*



**Figure 3.** Comparison of increases in monthly bills between December 2024 and December 2025  
 (Sources: [MBA](#); [Consumer Price Index](#))

3 [www.bls.gov/cpi/](http://www.bls.gov/cpi/)

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Record rate increase requests in 2025 (nationally)

In Minnesota:

Otter Tail (electricity)– 17.7%

Xcel (gas)– 8.2%

- **Drivers of energy costs**
- **Impacts of federal pullbacks**

# Federal Funding Impact – mostly HR1

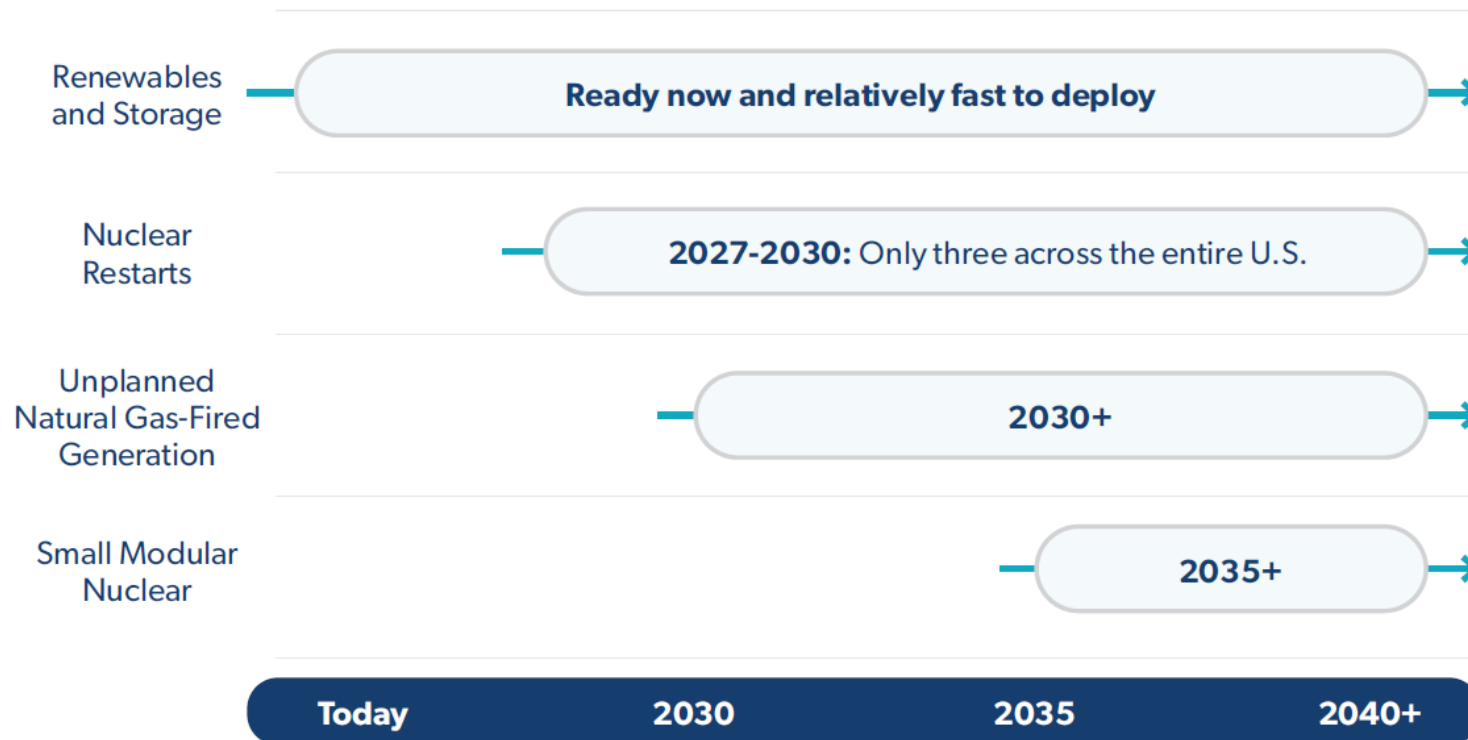
- Clean Energy Tax Credits
  - Terminated credits for commercial scale wind and solar that commence construction after July 2026, or are placed in service after 2027.  
  
(Household clean energy and EV credits terminated in 2025)
  - At risk: \$7 billion federal payments to Xcel, Minnesota Power, and Otter Tail Power for projects they are scheduled to build from 2028-2032
  - Nevertheless: Wind and solar will remain the cheapest existing technologies to rapidly add electricity to the grid to meet rising electricity demand, including data centers

# Only new wind and solar (and batteries) can meet rapid need for new generation...

BRATTLE ECONOMIC ANALYSIS OF CLEAN ENERGY TAX CREDITS - PREPARED FOR CONSERVAMERICA

## Solar, Wind and Storage Projects Are Already in Development and Can Meet Demand Now – Other Resources Are Available in Later Years

Expected Deployment Timelines by Generation Type

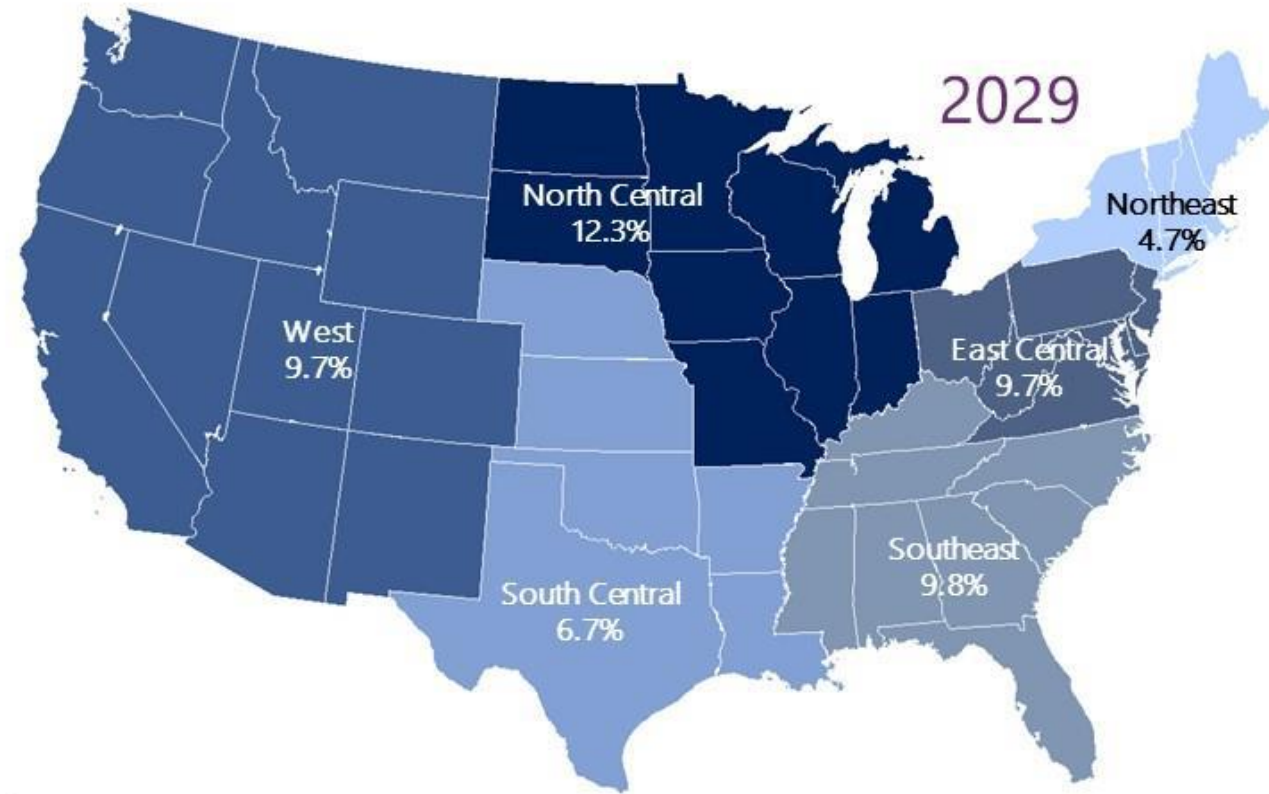


### Even Faster?

- Energy Efficiency
- Demand Response
- Virtual Power Plants
- Grid Enhancing Technologies
- Power Line Reconductoring

# Impact on utility bills & energy sector in Minnesota

- Tax credit roll backs projected to significantly raise household energy costs nationwide
- In Minnesota, energy bills are projected to increase by
  - 10% by 2029
  - 25-42% by 2035



# Federal Funding Impact

- Clean Hydrogen
  - The Clean Hydrogen Production Credit (45V) terminated early
  - Minnesota's green hydrogen economy stymied
- Green Hydrogen is a key to producing high value iron products in MN
  - Traditionally Minnesota iron shipped to where coal is available to make steel.
  - If coal is replaced by hydrogen, Minnesota could make steel

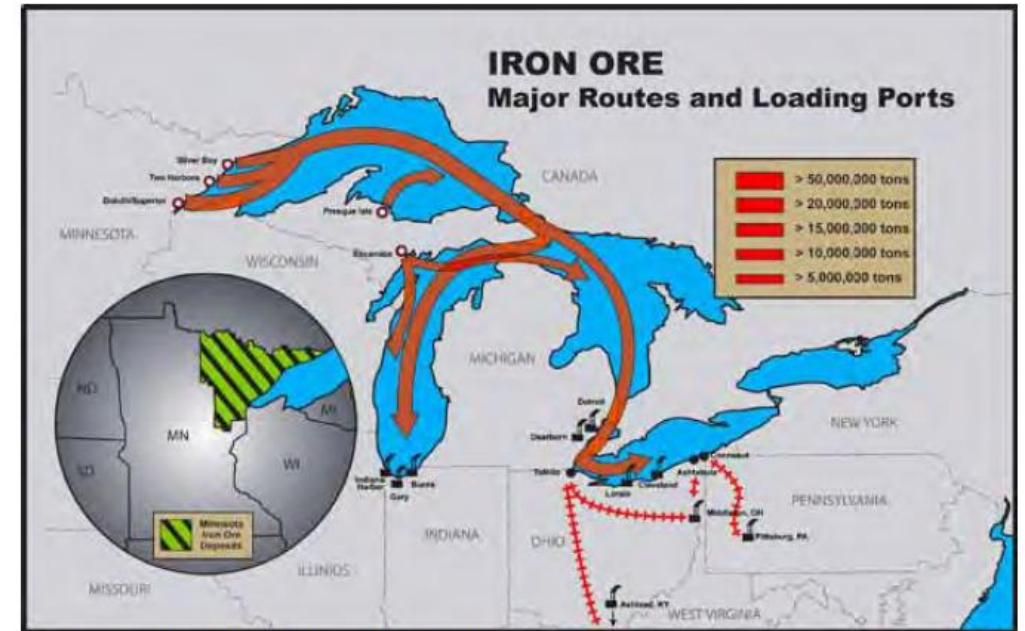
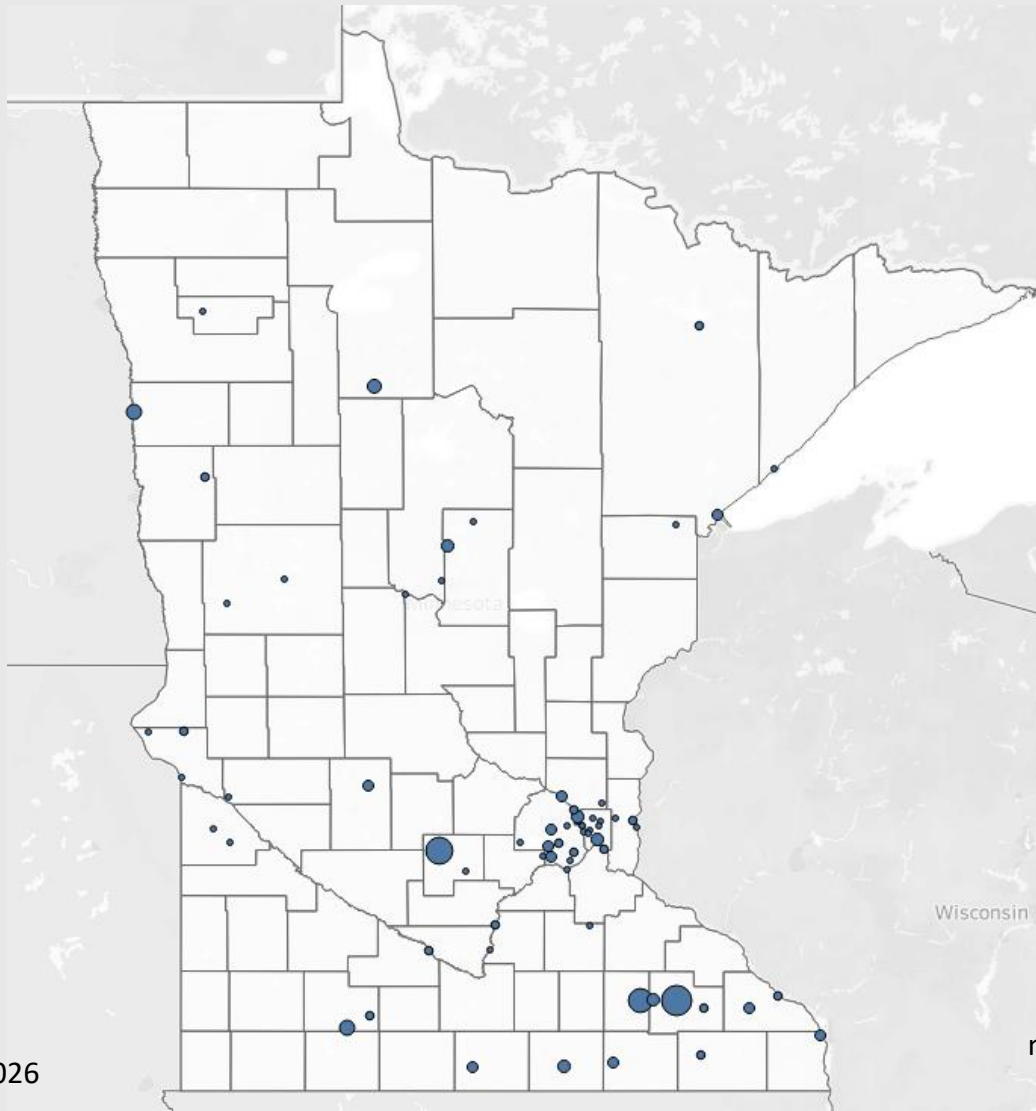


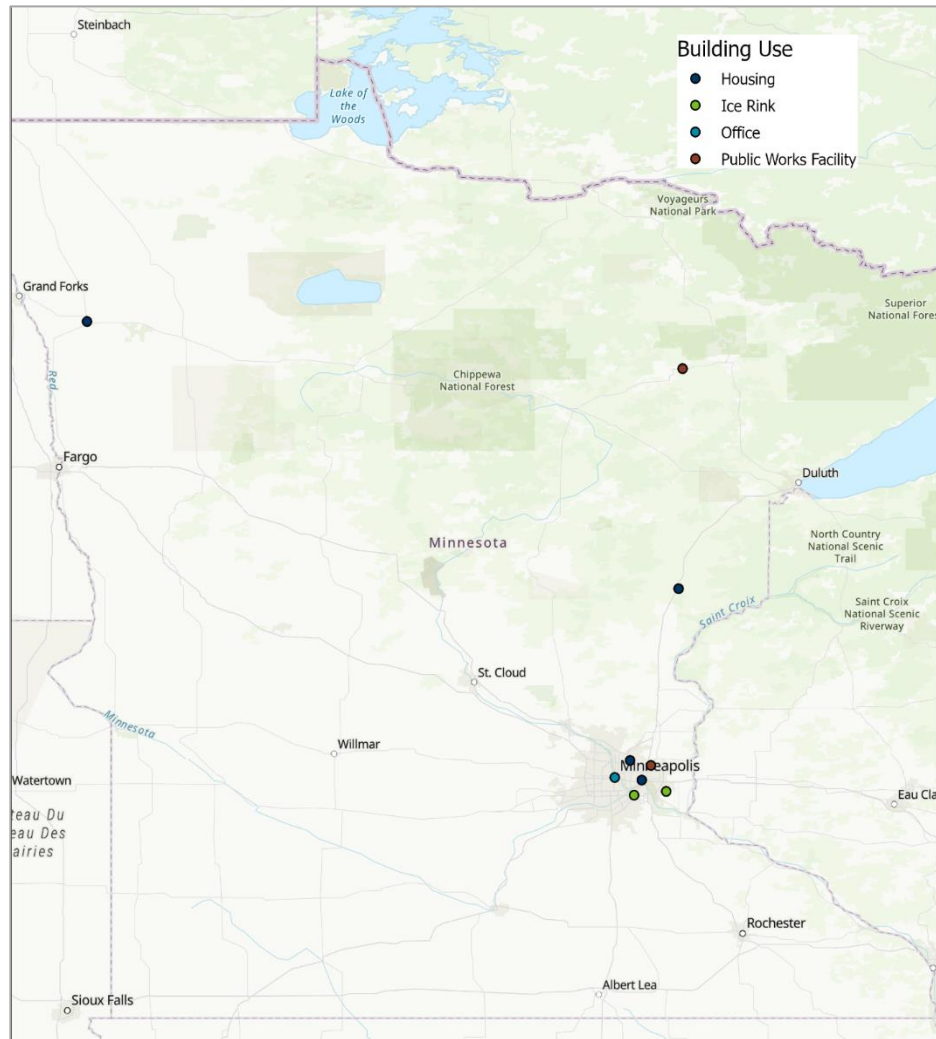
Figure 1. Iron Ore: Major Routes and Loading Ports

# Focusing on solar tax credits before they expire: Solar on Public Buildings

- 199 executed contracts totaling \$15.7M
- Contracts pending on 36 approved projects totaling \$2.8M
- Anticipated solar installation supported across all rounds: 7.62 MW-ac (9.82 MW-dc)



# Focusing on the tax credits that were not changed: Geothermal Planning Grants



- Received 19 applications from 14 different entities
- Requesting exceeded \$2.5M for \$>1M available
- Studies at facilities ranging from sports centers to housing developments to an entire neighborhood

# Energy Grant Cuts

- Billions in federal energy grants to Minnesota from IRA and Bipartisan infrastructure law– initially challenged by new Administration, cancellations to NGOs, companies, universities, tribes
- Thanks to legal action, many Minnesota state enterprise grants still exist– but the money is flowing very slowly in many cases
- Congress rejected proposed cuts to Federal Low Income Energy Assistance Program and Weatherization Assistance

# Coal Plant Emergency Orders

- Consumers Energy (utility), Michigan regulators and the Midcontinent Independent System Operator (MISO) signed off on the retirement of the J. H. Campbell coal plant
- Emergency order from Administration required it to remain open
- Estimated \$300 million annually to keep it running
- Minnesota part of lawsuit from 15 states challenging the authority of the Administration to make these orders
- Followed by other plants

# Federal actions in 2025 are inflationary

- Repeal of clean energy tax credits
- Failure to deliver on contracts for energy-related grants
- Tariffs, particularly on clean energy components
- Policies to stop coal plant closures
- Policies to increase exports of natural gas

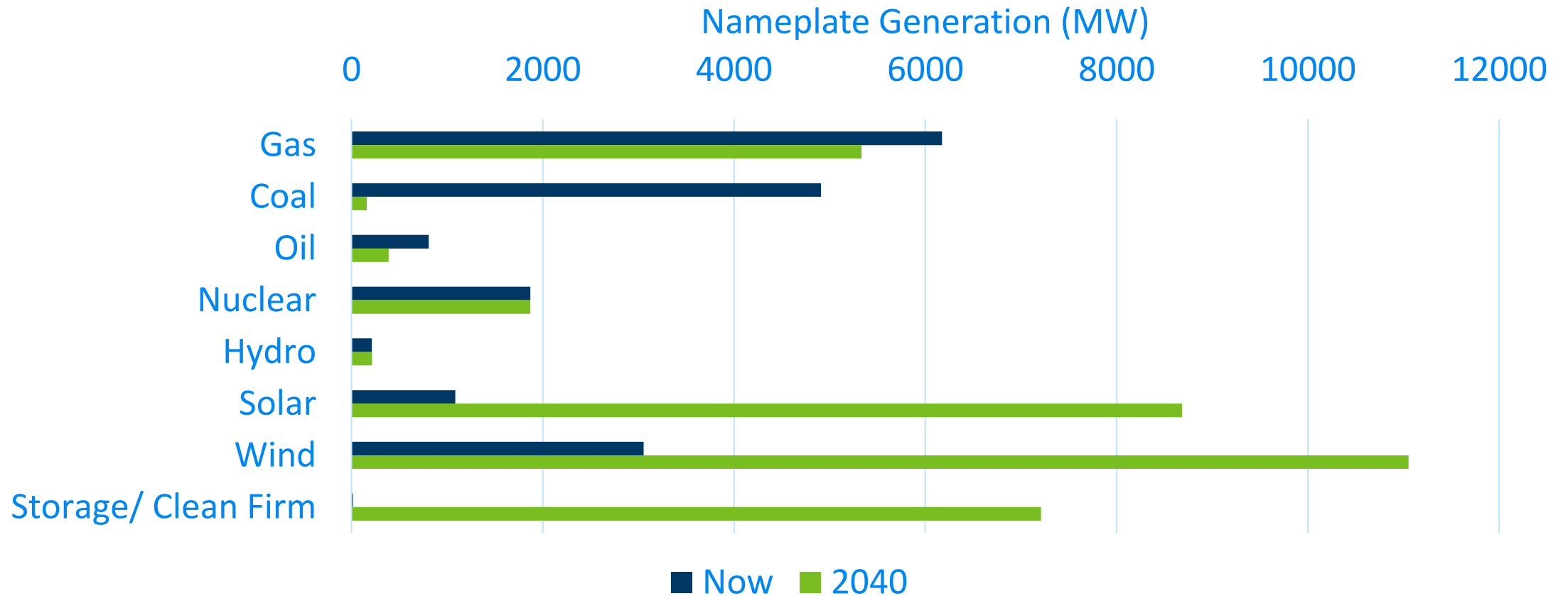
- Minnesotans can expect their Natural Gas Bills to increase
- Per Energy Information Administration:
  - “We expect prices to average \$4.00/MMBtu in 2026, 16% higher than in 2025, primarily due to increased liquefied natural gas (LNG) exports amid flat production growth.”
- January 2026 forecast expects an additional 12-13% price increase for natural gas in 2027 (EIA)
- This does not account for temporary price spikes during weather events

# Impact to Minnesota's 100% by 2040

- Energy demand in Minnesota is expected to increase:
  - Data centers
  - Electrification
- H.R. 1 makes energy more expensive, but solar and wind will remain the easiest to build and most cost-effective forms of new energy generation— going clean = fighting inflation
- Despite federal changes, Minnesota utilities are still on track to meet the state's 100% carbon-free electricity mandate under Minn. Stat. 216B.1691.

# A period of rapid change in energy

Example: Minnesota's Electric Mix



# Solar energy land use

Minnesota Land Use (2,150 MW Solar)



Minnesota Land Use (10,000 MW Solar)



Land Use Category  
Farm  
Other  
Solar

Land Use Category  
Farm  
Other  
Solar

# Thank You!