Annual Energy Outlook 2026

with projections to 2050

U.S. Energy Information Administration

#AEO2026

April 8, 2026
www.eia.gov/aeo

What does EIA do?

The U.S. Energy Information Administration (EIA) is the statistical and analytical agency within the U.S. Department of Energy.

EIA is the nation's premier source of energy information.

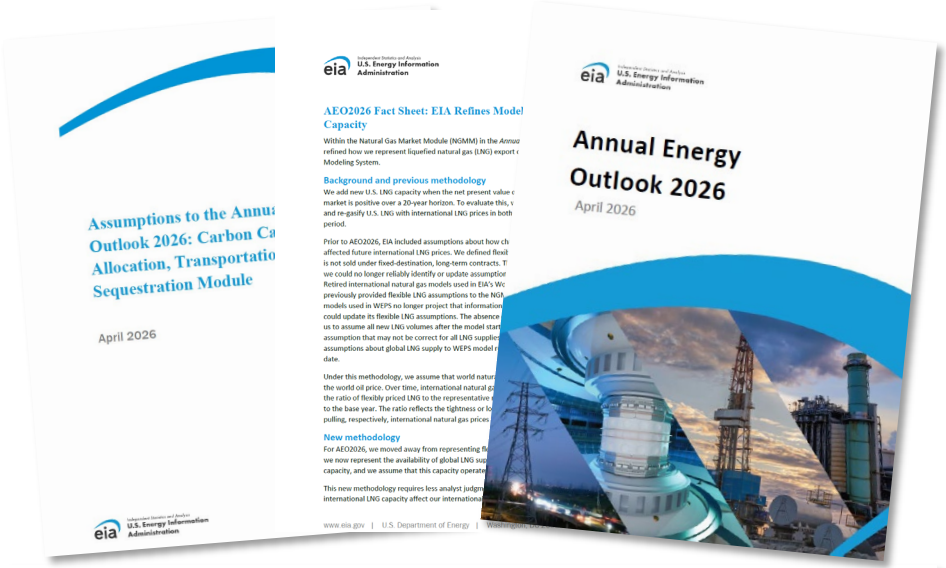
By law, our data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. government.

Our *Annual Energy Outlook 2026* explores long-term energy trends in the United States.

What is the Annual Energy Outlook?

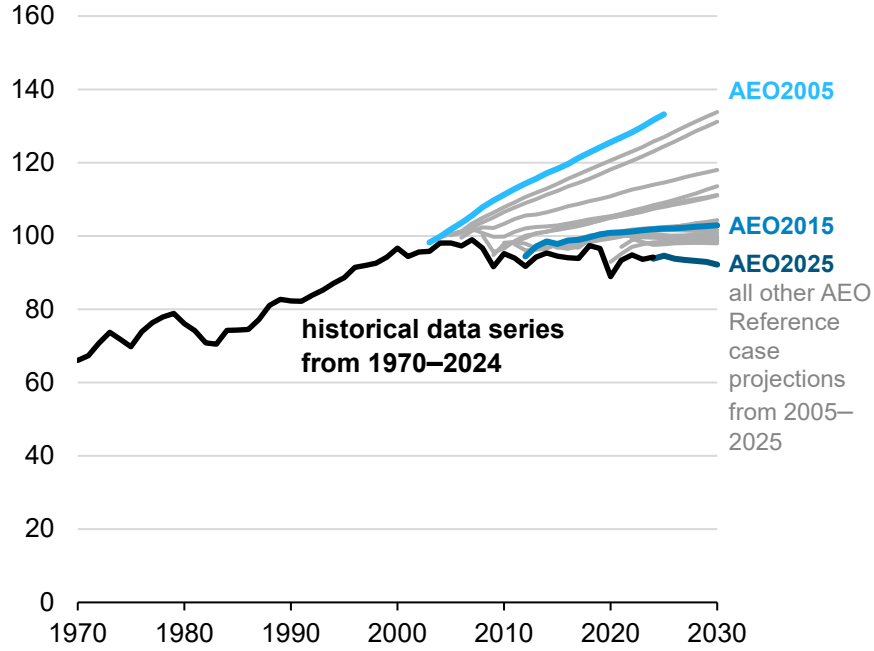
The AEO is a product suite: an analytical narrative, a Counterfactual Baseline and 10 side cases, data tables and visualizations, assumptions, and methodologies. It represents the highest level of Gold Standard energy data science.

The AEO is built on the open-source National Energy Modeling System. EIA publishes the *Retrospective* that compares AEO projections to realized outcomes.

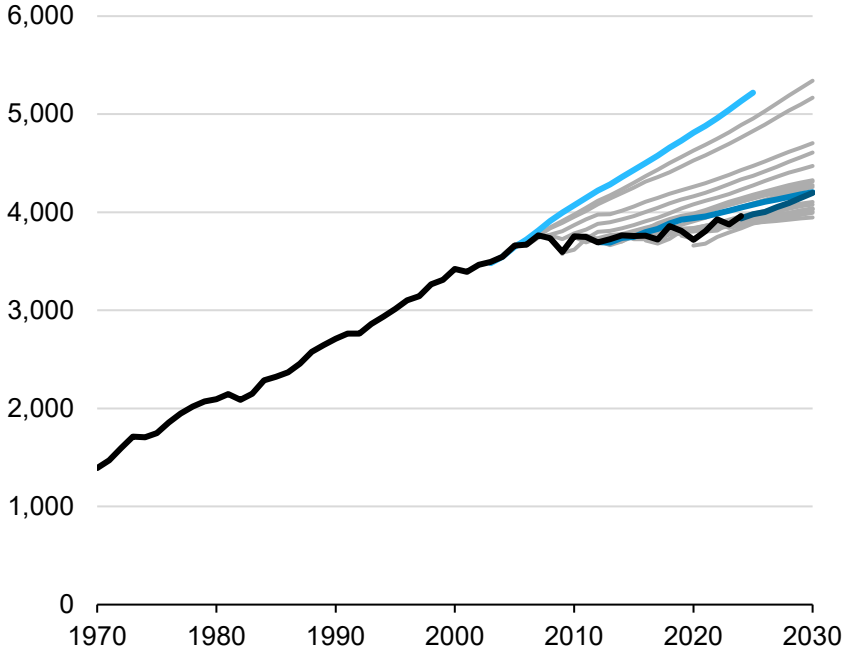


Annual Energy Outlook Retrospective 2025

Total energy consumption from all sectors (Reference)
quadrillion British thermal units



Total electricity sales excluding direct use (Reference)
billion kilowatthours



Data source: U.S. Energy Information Administration, *Annual Energy Outlook Retrospective 2025*, March 2026

The AEO2026 includes cases that vary technical and economic assumptions and highlight the impact of policies

All core cases reflect current laws and regulations as of December 2025.

Counterfactual Baseline* **previously known as Reference*	1.7% annual GDP growth; Brent = $87 per barrel in 2050
Economic Growth	**Low:** 1.2% annual GDP growth
	High: 2.2% annual GDP growth
Oil and Gas Supply	**Low:** 50% lower ultimate recovery and 50% slower technological improvement for specified resources† from the Counterfactual Baseline
	High: 50% higher ultimate recovery and 50% faster technological improvement for specified resources† from the Counterfactual Baseline
Zero-carbon Technology Cost (electric power sector)	**Low:** About 40% reduction in cost from the Counterfactual Baseline by 2050
	High: Costs held unchanged through projection period

†*tight oil, tight gas, shale gas, Alaska, and offshore resources*

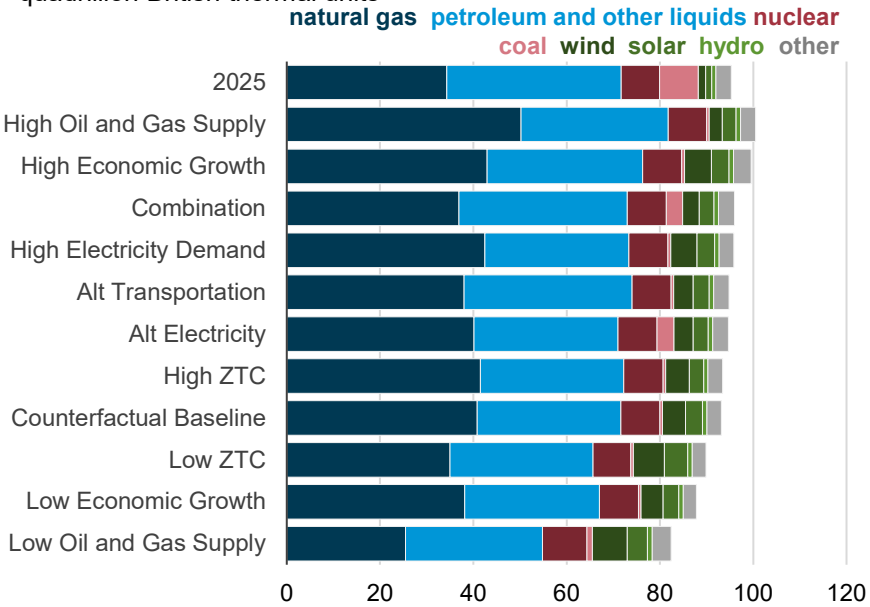
The AEO2026 includes cases that vary technical and economic assumptions and highlight the impact of policies

High Electricity Demand	Examines uncertainty about long-term computational requirements and data center server power draw across the commercial building stock.
Alternative Electricity	Assumes that the June 2025 EPA proposed rule to repeal all greenhouse gas emissions (GHG) standards for the power sector under Section 111 of the CAA becomes final and that the requirements of the rules issued in April 2024 are not in place.
Alternative Transportation	Removes light- and heavy-duty vehicle tailpipe (GHG) standards finalized in 2024.
Alternative Electricity-Alternative Transportation	Assumes both the repeal of EPA 111 rule and the vehicle tailpipe GHG standards.

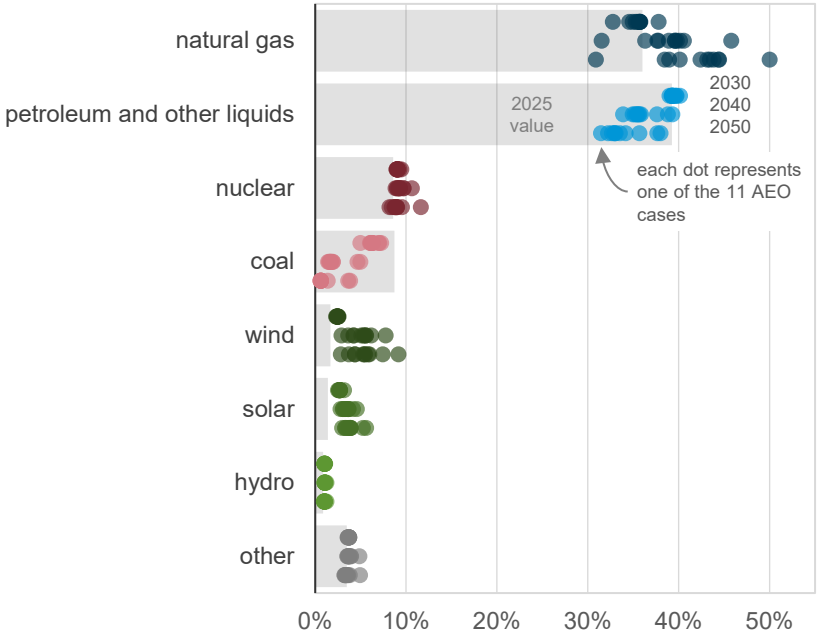
The assumptions used in these alternative cases should not be construed as EIA's assessment on how laws or regulations could be changed or on the likelihood of such a change.

Natural gas and petroleum and other liquids remain the energy sources most consumed in 2050

U.S. consumption by fuel, 2025 and 2050
quadrillion British thermal units



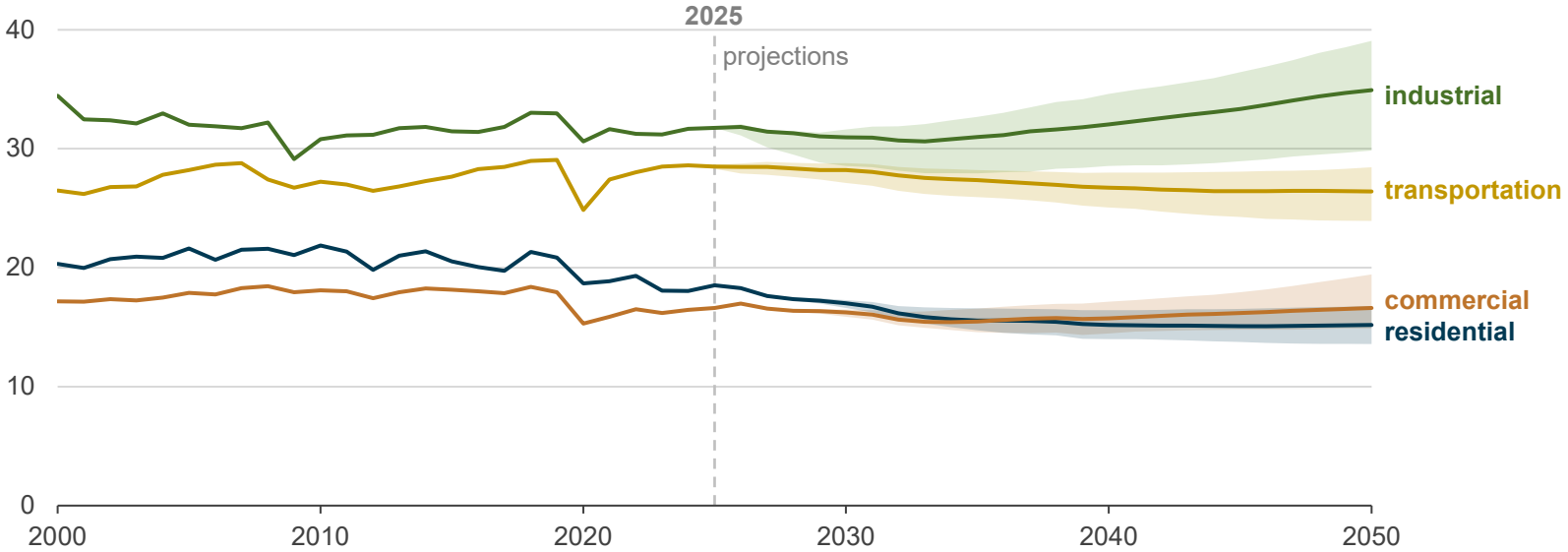
U.S. consumption by fuel in 2030, 2040, and 2050
share of annual total



Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2026,* April 2026
Note: Alt=Alternative; Combination=Alternative Transportation-Alternative Electricity; ZTC=Zero-carbon Technology Cost

U.S. total energy consumption remains largely flat, with greatest growth in the industrial sector

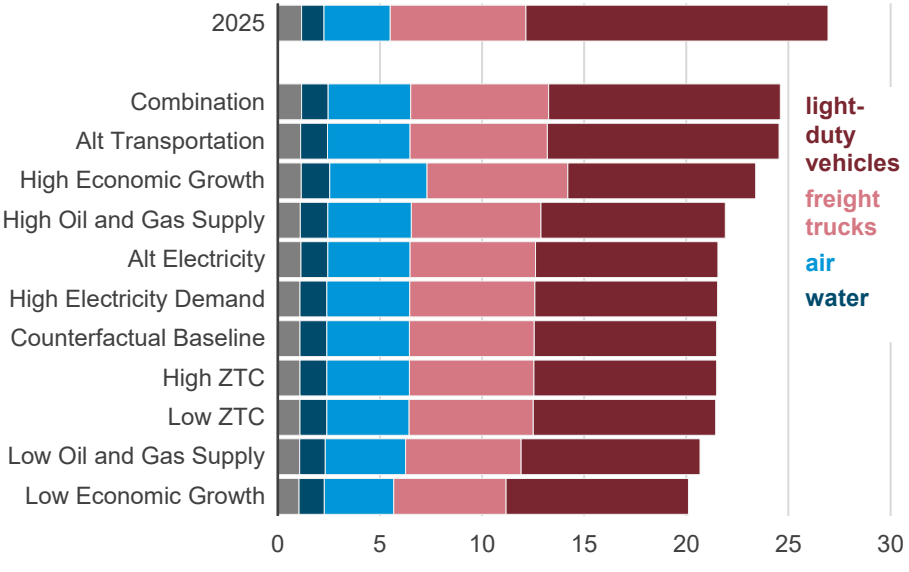
Total energy consumption by end-use sector
quadrillion British thermal units



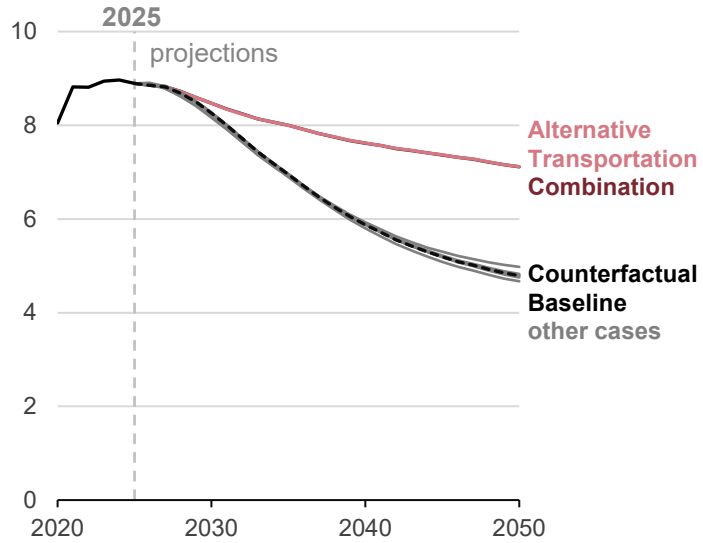
Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2026,* April 2026
Note: Total consumption in end-use sectors includes purchased electricity, electricity-related losses, and hydrogen-related losses. Transportation sector includes pipeline and liquefaction consumption. Each line represents AEO Counterfactual Baseline case projections.

Regulations influence vehicle fleet composition and liquid fuel consumption

U.S. transportation sector consumption by mode, 2025 and 2050
quadrillion British thermal units



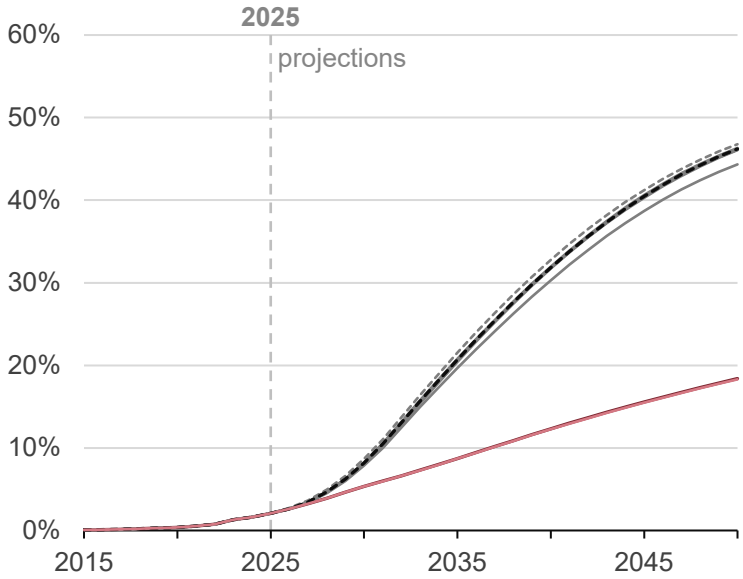
U.S. motor gasoline consumption
million barrels per day



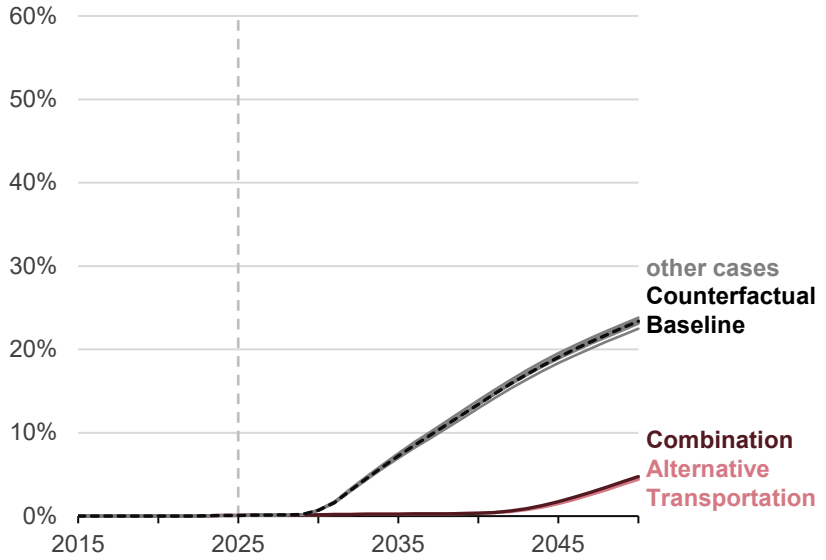
Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2026*, April 2026
Note: In the left chart, o*ther* includes rail, buses, and military. Not included in chart: natural gas consumption for pipeline operation and liquefaction, lubricants, losses due to electricity generation, transmission, and distribution, and losses due to hydrogen production. In the right chart, the Alternative Transportation and Combination cases closely align. Alt=Alternative; Combination=Alternative Transportation-Alternative Electricity; ZTC=Zero-carbon Technology Cost

Electric vehicle shares grow in all cases; policies play a critical role

Battery electric vehicle share of light-duty vehicle stocks
percentage



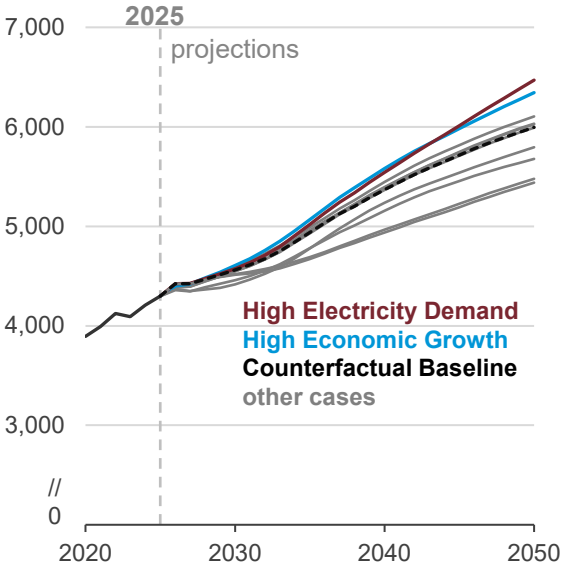
Zero-emission vehicle share of Class 3-8 freight truck stocks
percentage



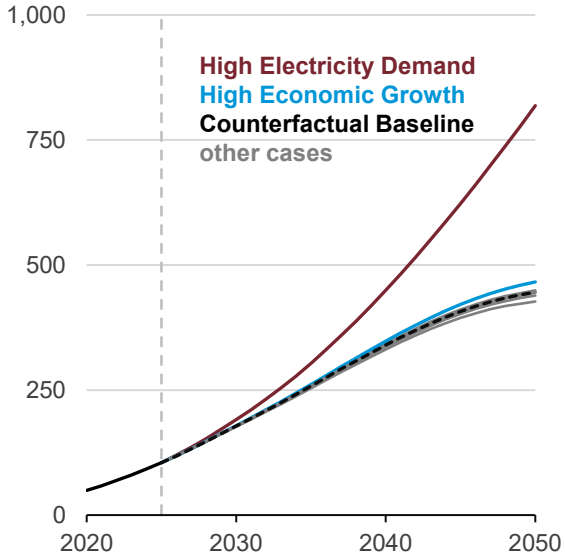
Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2026,* April 2026
Note: Alternative Transportation and Combination cases closely align.

Data center load is emerging as the dominant driver of long-term U.S. electricity growth

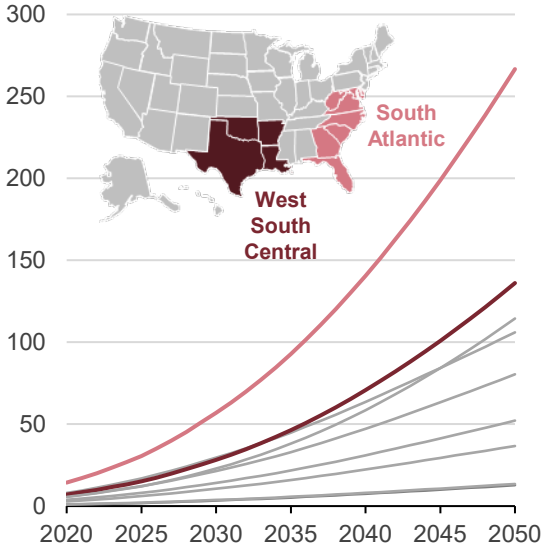
Total electricity consumption, all sectors
billion kilowatthours



Commercial data center server electricity consumption
billion kilowatthours



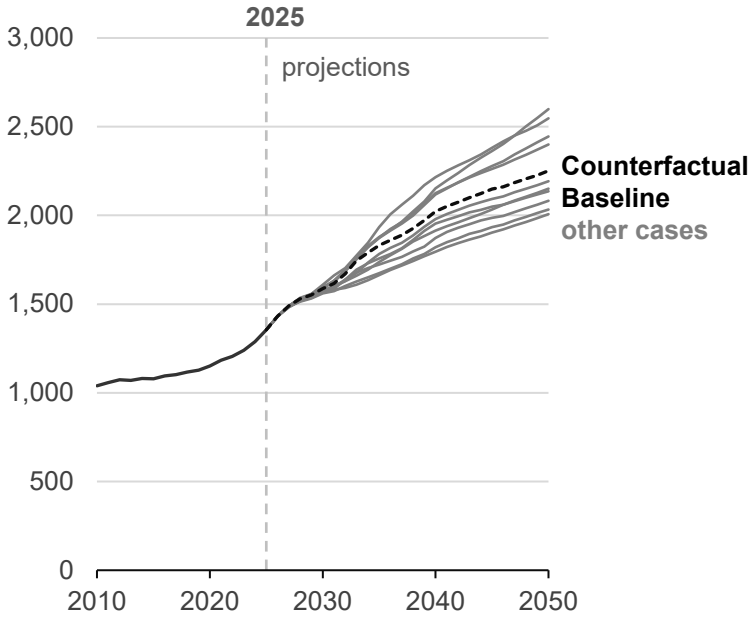
Commercial data center server electricity use, High Electricity Demand case, by census division
billion kilowatthours



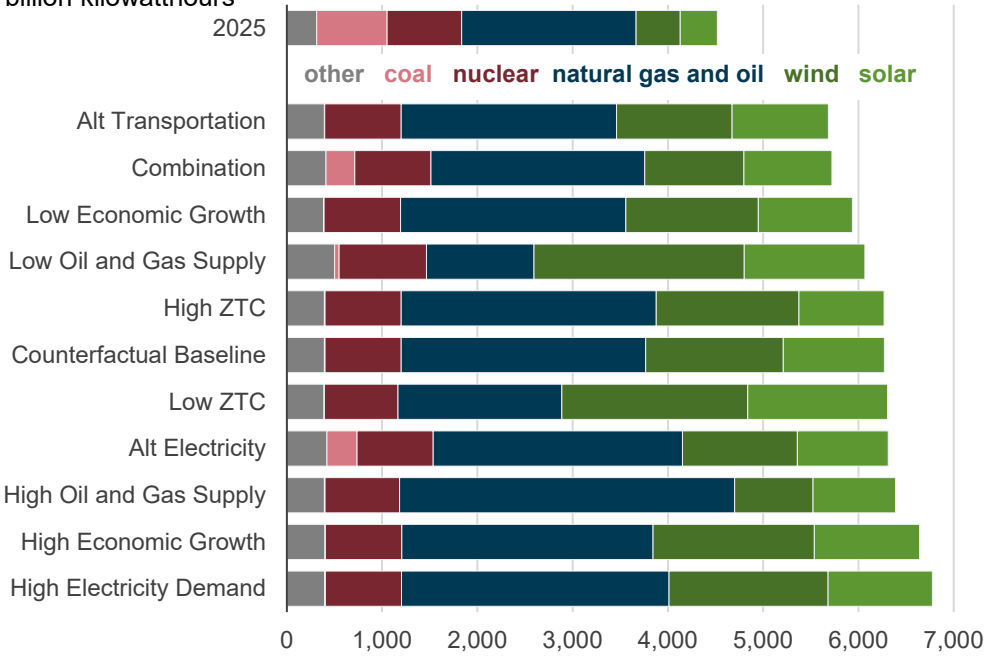
Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2026,* April 2026

In an evolving power grid, natural gas, solar, and wind grow most

Installed electric generating capacity
gigawatts



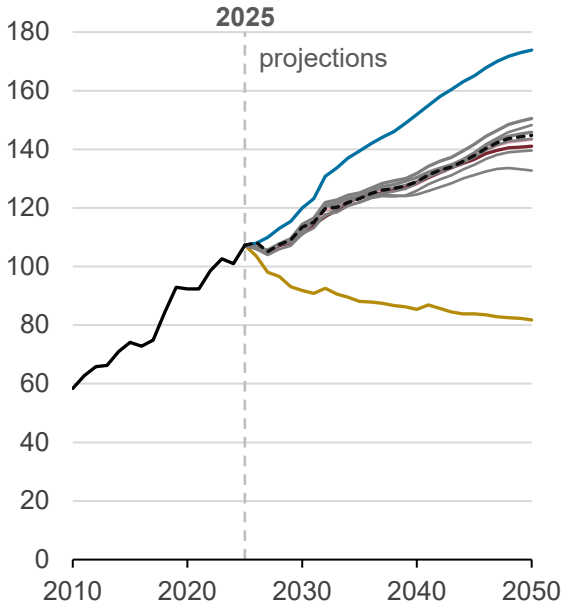
Total generation in all sectors, 2025 and 2050
billion kilowatthours



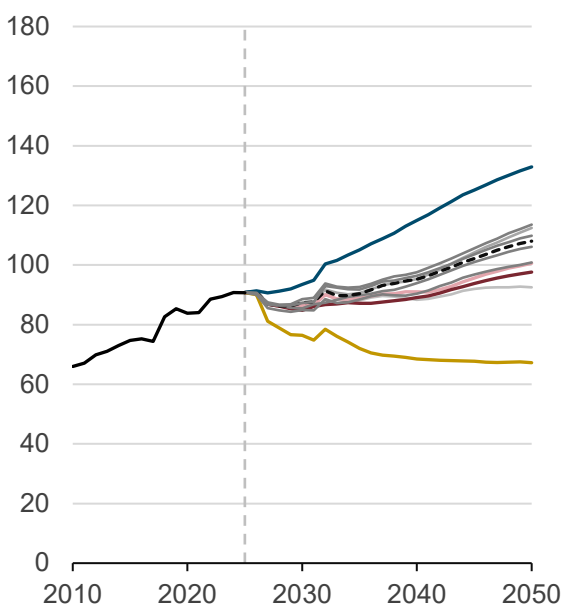
Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2026,* April 2026
Note: Alt=Alternative; Combination=Alternative Transportation-Alternative Electricity; ZTC=Zero-carbon Technology Cost

Natural gas production, consumption, and exports grow across most cases

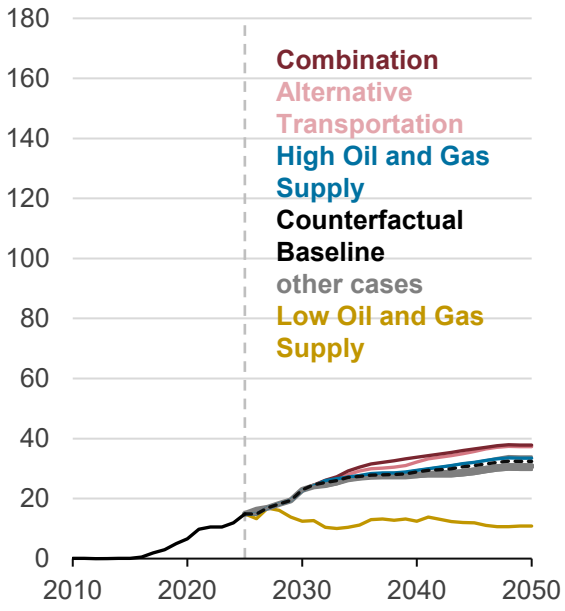
U.S. dry natural gas production
billion cubic feet per day



U.S. natural gas consumption
billion cubic feet per day



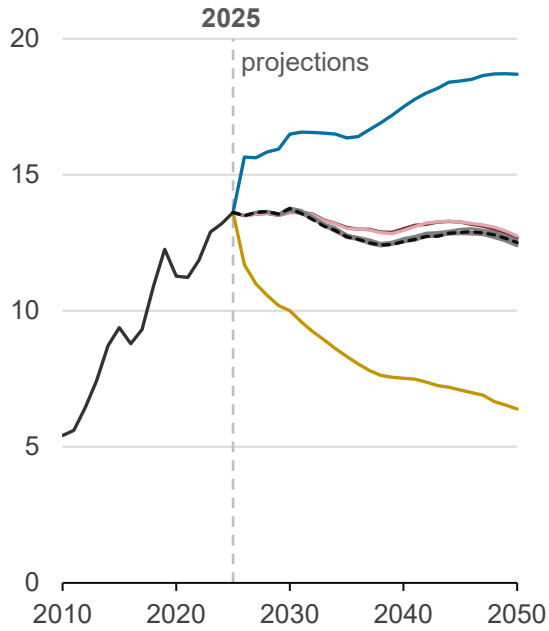
U.S. liquefied natural gas exports
billion cubic feet per day



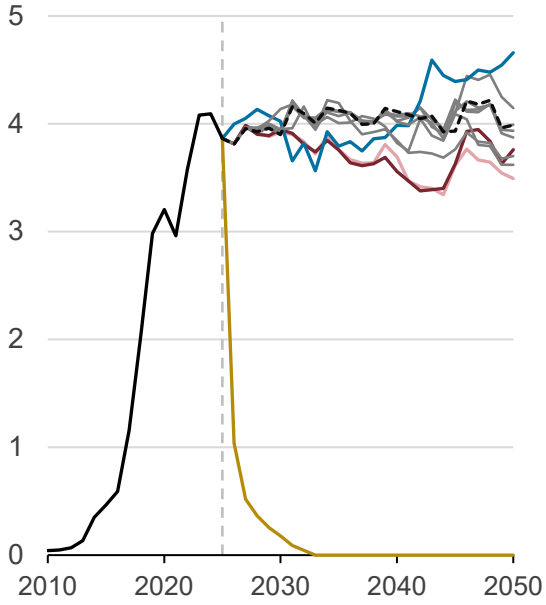
Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2026,* April 2026

In most cases, crude oil production and exports remain historically high

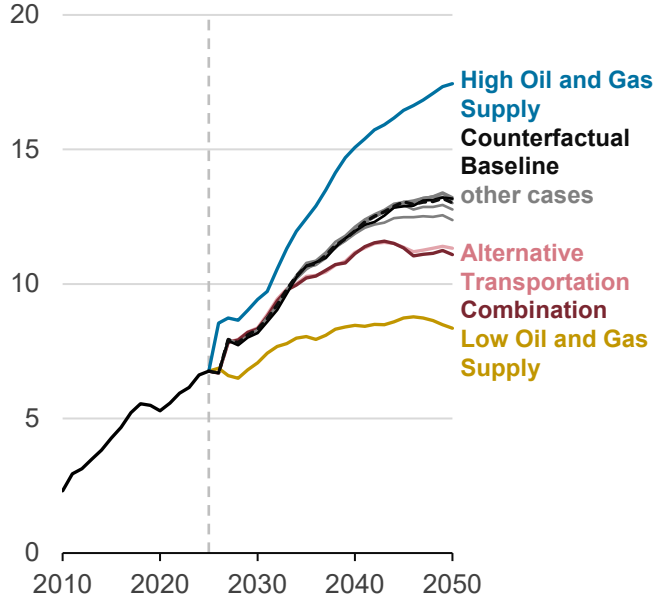
Crude oil production
million barrels per day



Gross crude oil exports
million barrels per day



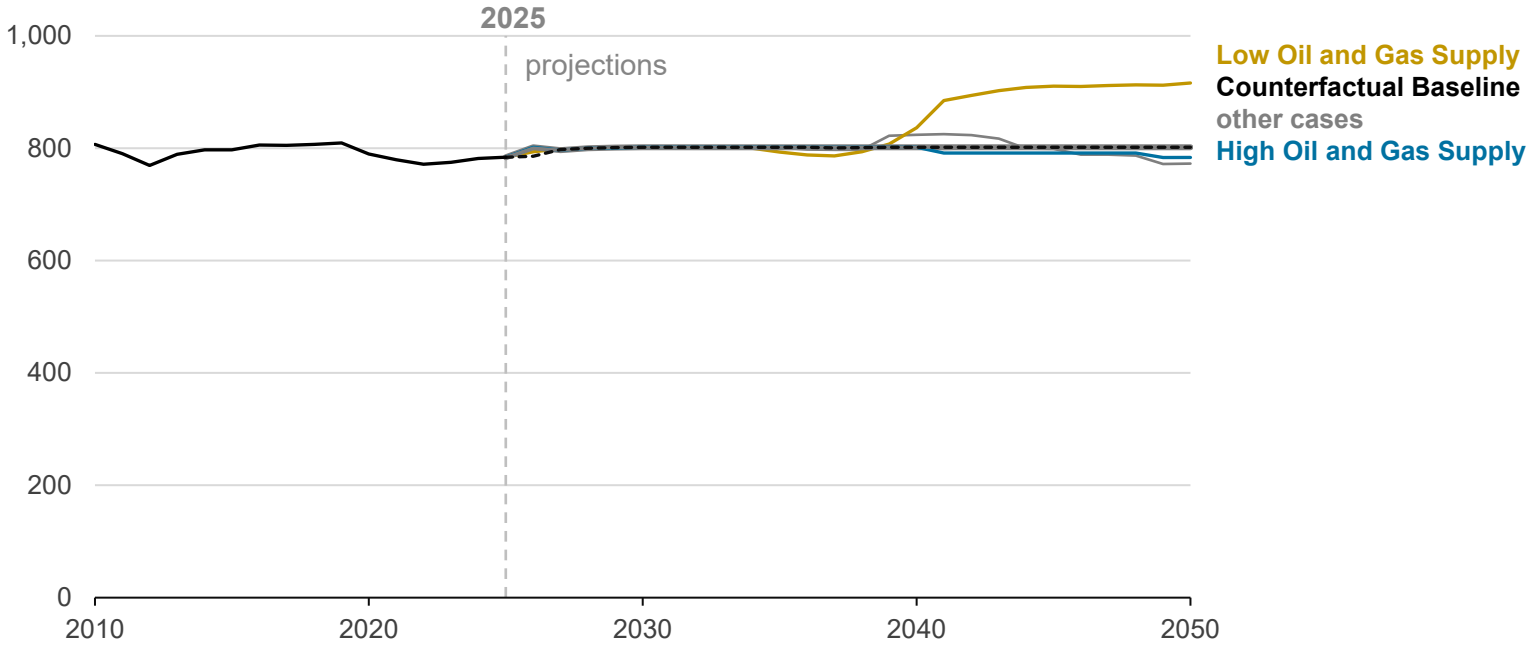
Gross petroleum liquids exports
million barrels per day



Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2026,* April 2026

Focus on technologies: Nuclear-powered electric generating plants

U.S. nuclear electricity generation for all cases
billion kilowatthours



Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2026,* April 2026

Independent Statistics and Analysis

U.S. Energy Information Administration

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Contact us at AnnualEnergyOutlook@eia.gov