



# Winter Fuels Outlook 2024–2025

*Joseph F. DeCarolis, Administrator*  
*October 10, 2024 | NY Energy Forum*



**U.S. Energy Information Administration**

*Independent Statistics and Analysis*

[www.eia.gov](http://www.eia.gov)

# What is the *Winter Fuels Outlook*?

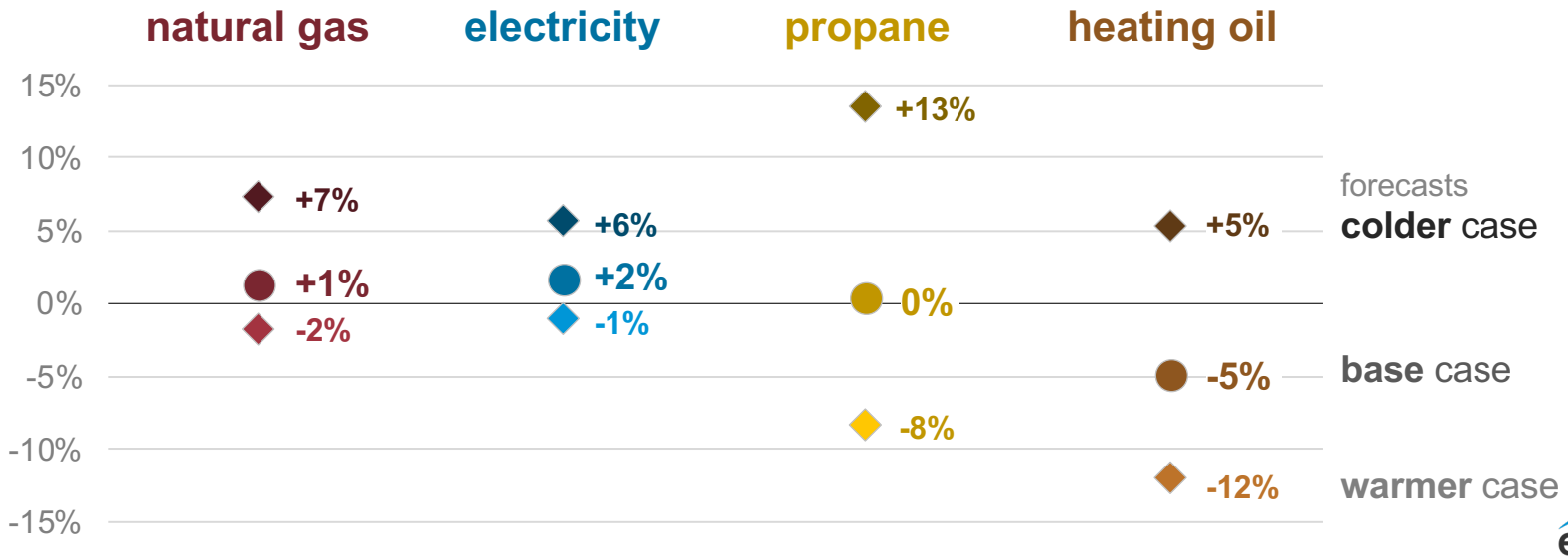
EIA's forecasts for  
upcoming winter  
**residential energy  
expenditures**

Energy market  
**conditions** for heating  
fuels

# We expect the majority of households will spend about the same on energy this winter

## Residential energy expenditures percentage change since last winter

For homes where the main heating fuel is...



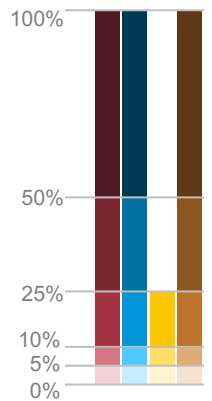
Data source: U.S. Energy Information Administration, Winter Fuels Outlook

# Household Characteristics

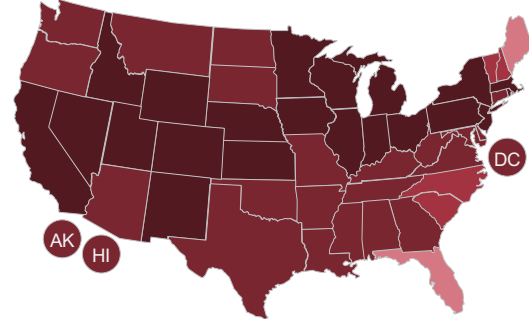
# 96% of U.S. homes are primarily heated with one of four fuels

Main home heating fuel by state (2023)

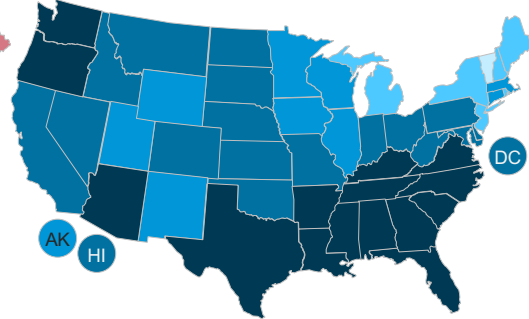
share of homes within each state



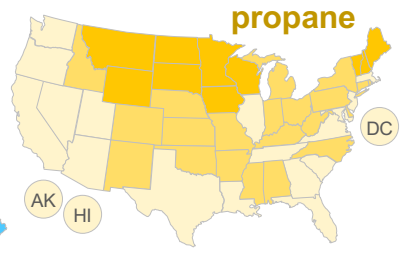
natural gas



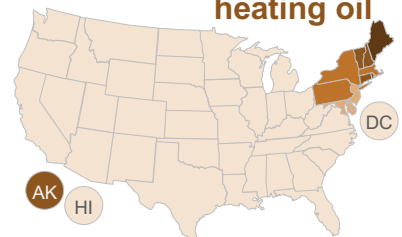
electricity



propane



heating oil



share of U.S. households primarily heated by



natural gas (45%)

electricity (43%)

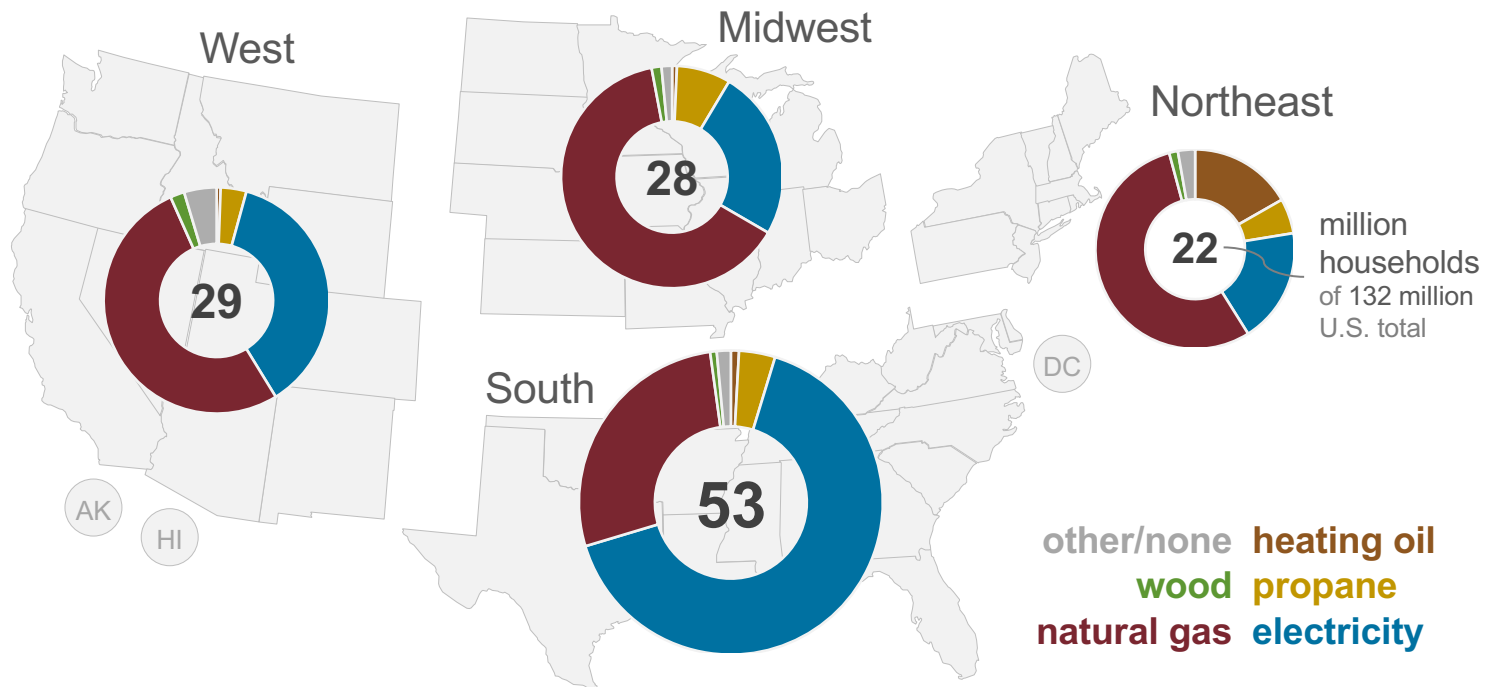
propane heating oil  
(5%) (3%)

other / none  
(4%)

Data source: U.S. Census Bureau, American Community Survey (ACS); U.S. Energy Information Administration, Winter Fuels Outlook

# Most *Winter Fuels Outlook* forecasts are for specific Census regions

Census regions and their heating fuels (2024)



Data source: U.S. Energy Information Administration, *Winter Fuels Outlook*

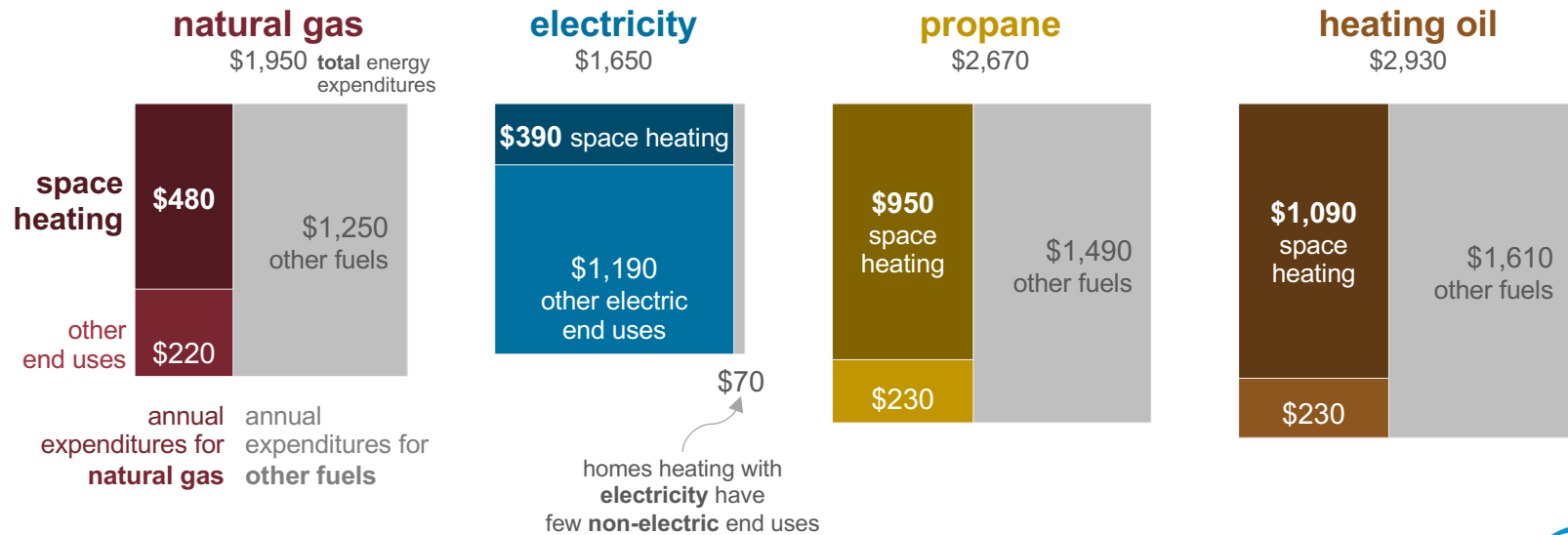


2024–2025 *Winter Fuels Outlook*  
October 10, 2024

# Expenditures from the **main heating fuel** are a portion of **total household spending** on energy

## U.S. annual household energy expenditures (2020)

For homes where the main heating fuel is:



Source: U.S. Energy Information Administration, Residential Energy Consumption Survey, 2020, Table CE4.16

# Weather Sensitivities

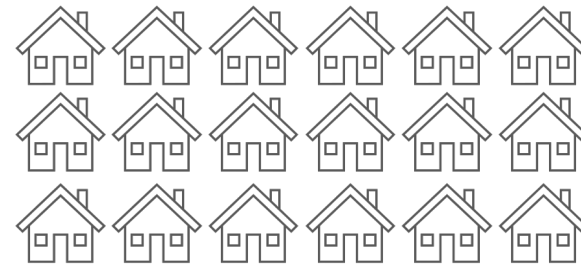


## Weather affects energy expenditures in **two ways**



### **For your household**

Local weather directly affects household energy consumption.



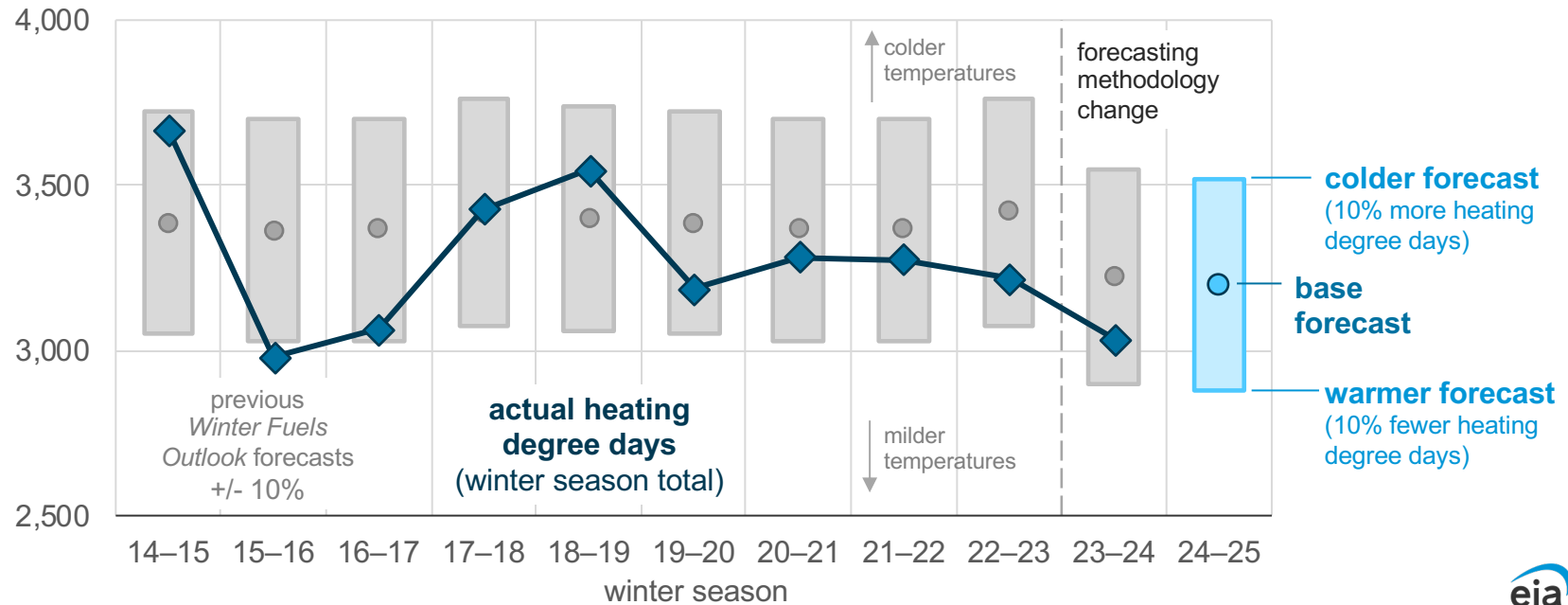
### **In aggregate**

More demand leads to higher wholesale prices, which may be passed along to consumers.

# Temperatures are a key source of uncertainty in our forecasts

## U.S. population-weighted heating degree days

degree days



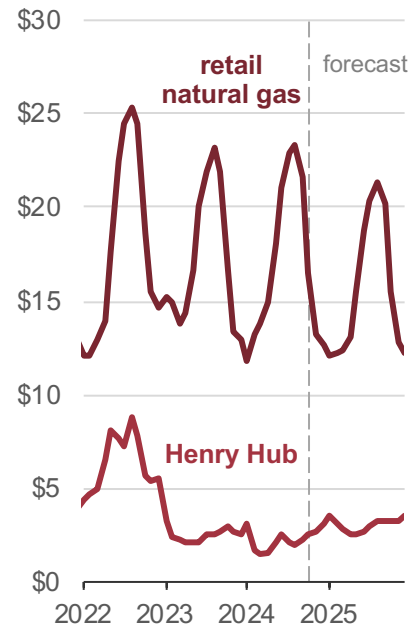
Data source: U.S. Energy Information Administration, Winter Fuels Outlook

# Energy Market Conditions

# Changes in **wholesale** prices ultimately affect **retail** prices, but timing varies by market

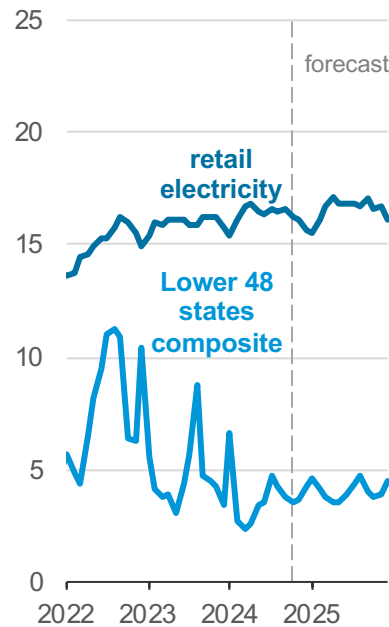
## Natural gas prices

dollars per thousand cubic feet



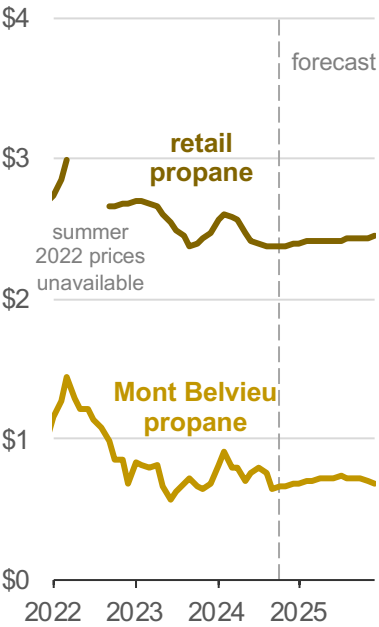
## Electricity prices

cents per kilowatthour



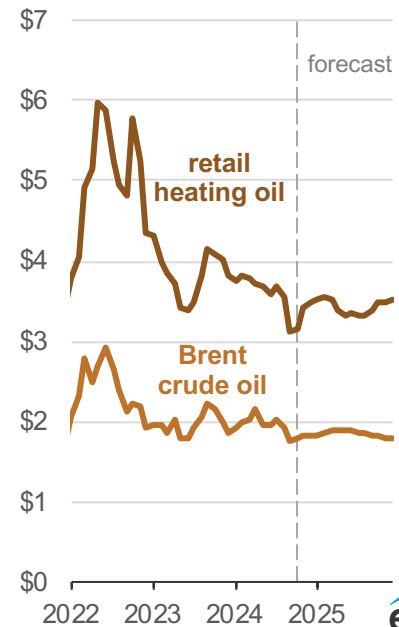
## Propane prices

dollars per gallon



## Heating oil prices

dollars per gallon



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook

# Residential Energy Expenditures

## A note about comparing forecasts **across fuels**

By dividing the U.S. housing stock by **main heating fuel**, we are showing...

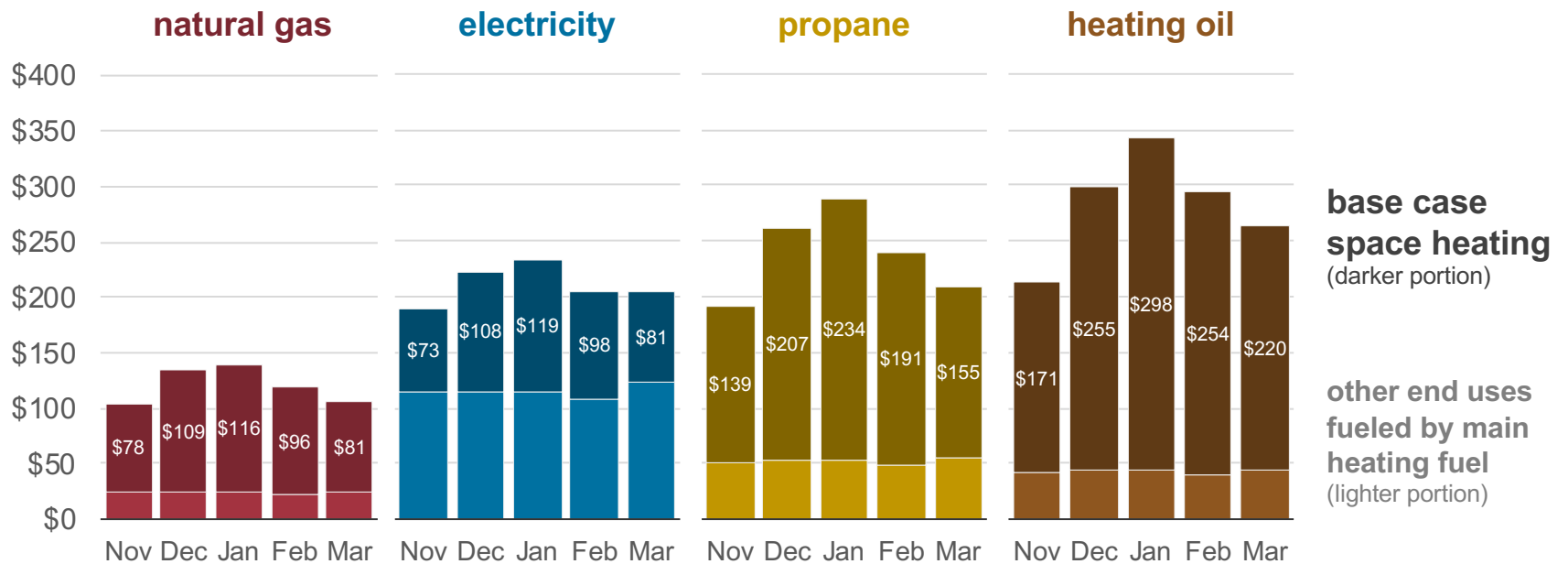
**different households** with  
**different characteristics** in  
**different locations** experiencing  
**different weather.**

# Our forecasts now distinguish **space heating** from other end uses

Energy expenditures for space heating and other end uses (winter 2024–25)



For homes where the main heating fuel is:



Data source: U.S. Energy Information Administration, Winter Fuels Outlook

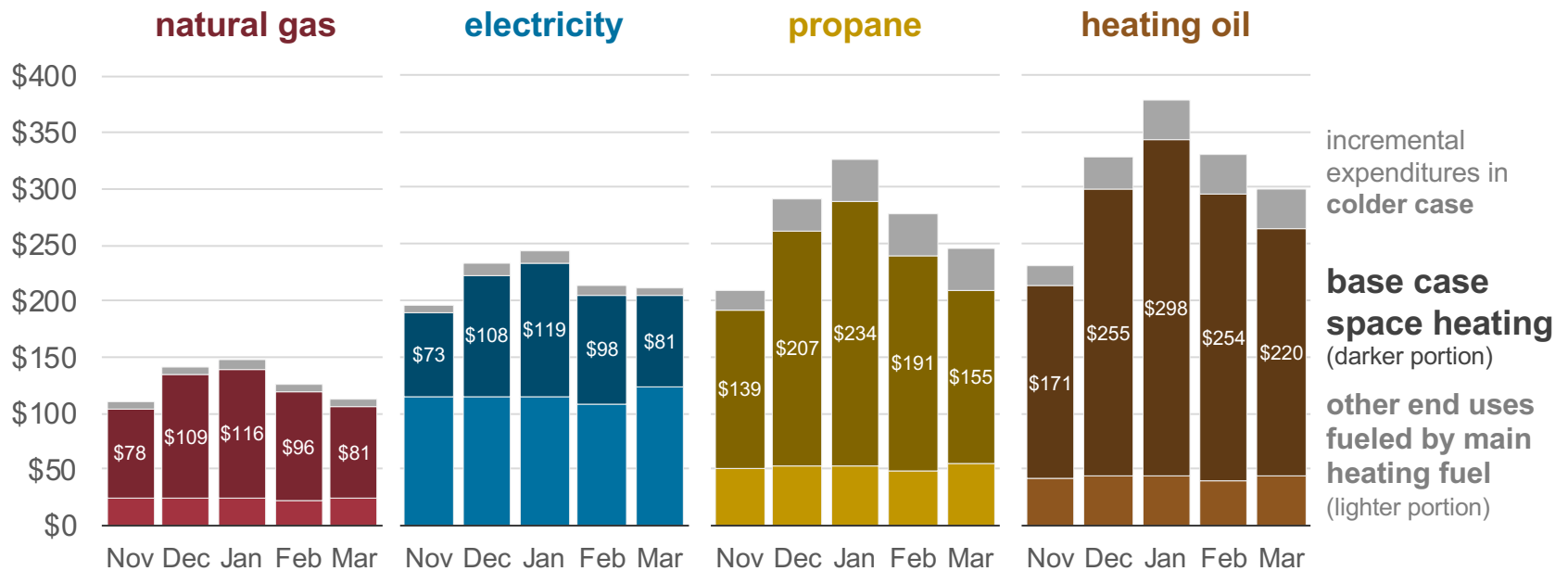


# Our forecasts now distinguish **space heating** from other end uses

Energy expenditures for space heating and other end uses (winter 2024–25)



For homes where the main heating fuel is:



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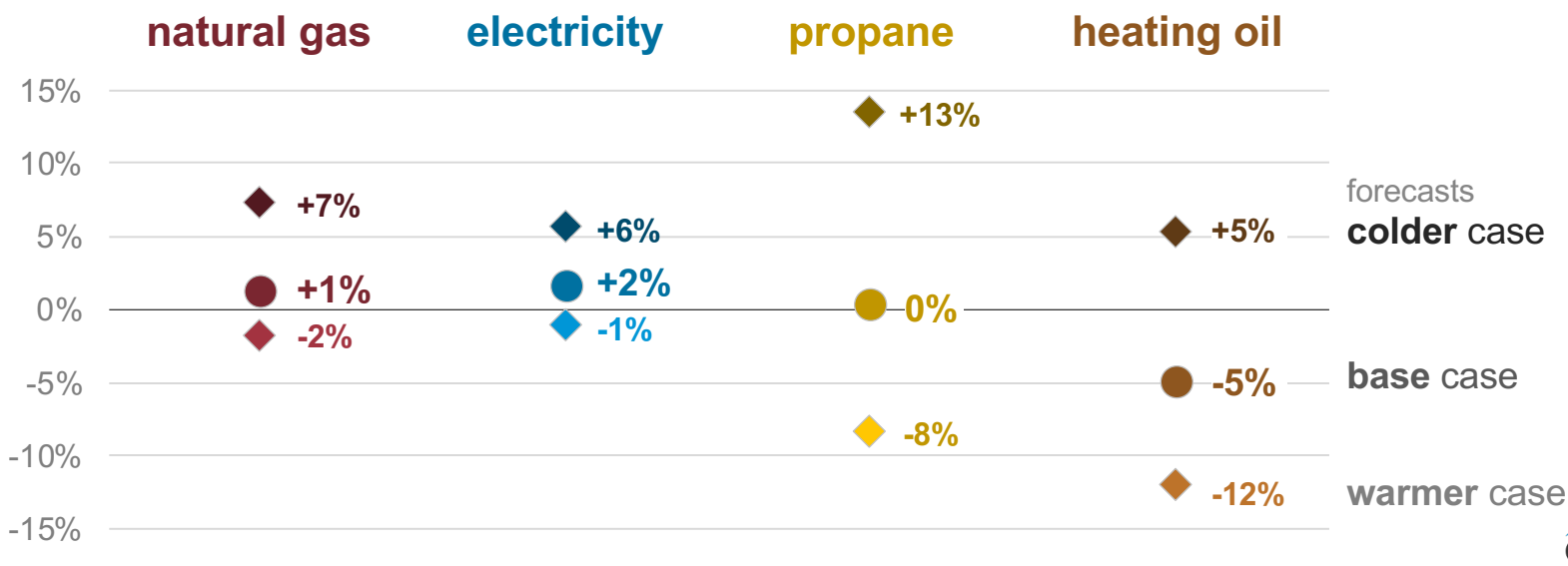




# We expect the majority of households will spend about the same on energy this winter

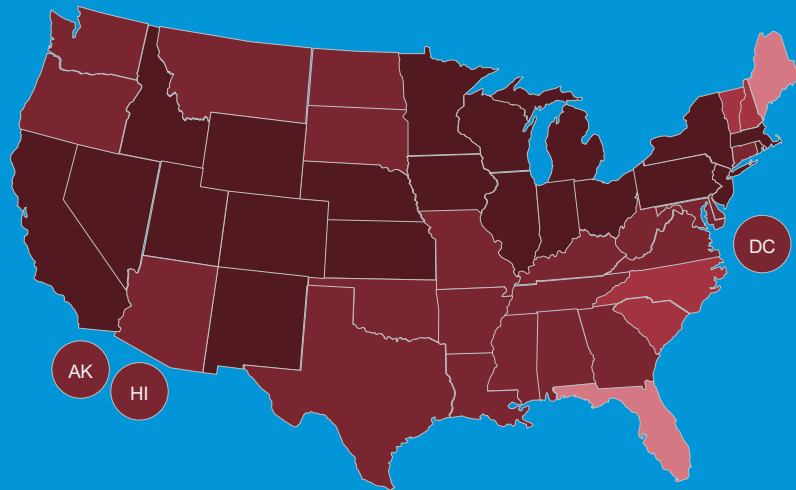
## Residential energy expenditures percentage change since last winter

For homes where the main heating fuel is...



Data source: U.S. Energy Information Administration, Winter Fuels Outlook

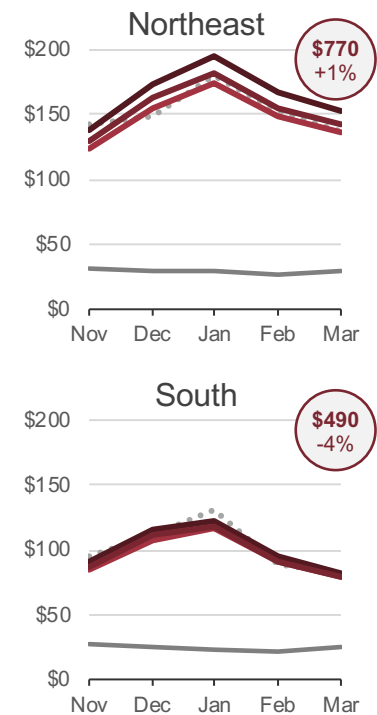
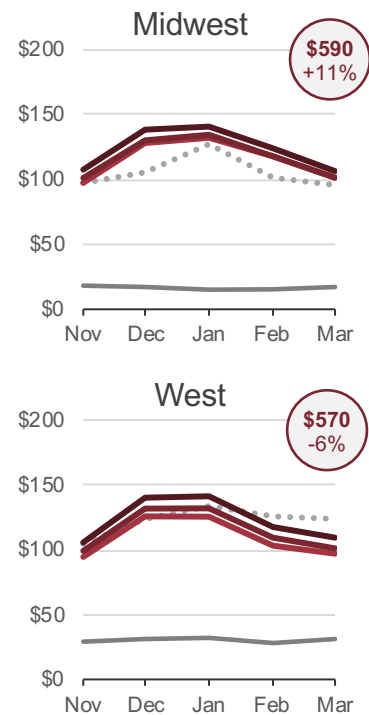
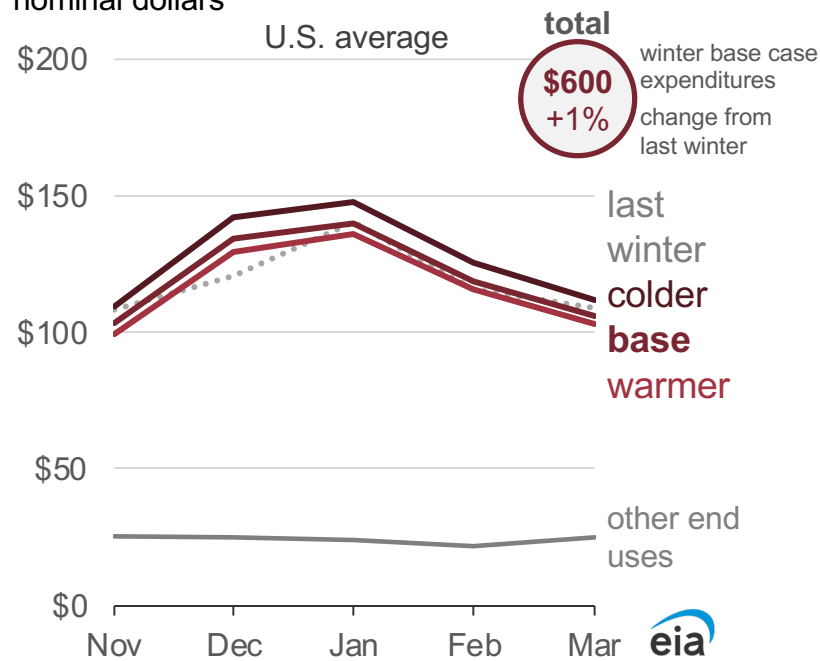
# Natural Gas



# Natural gas expenditures forecast to be similar to last winter

## Monthly natural gas expenditures

nominal dollars

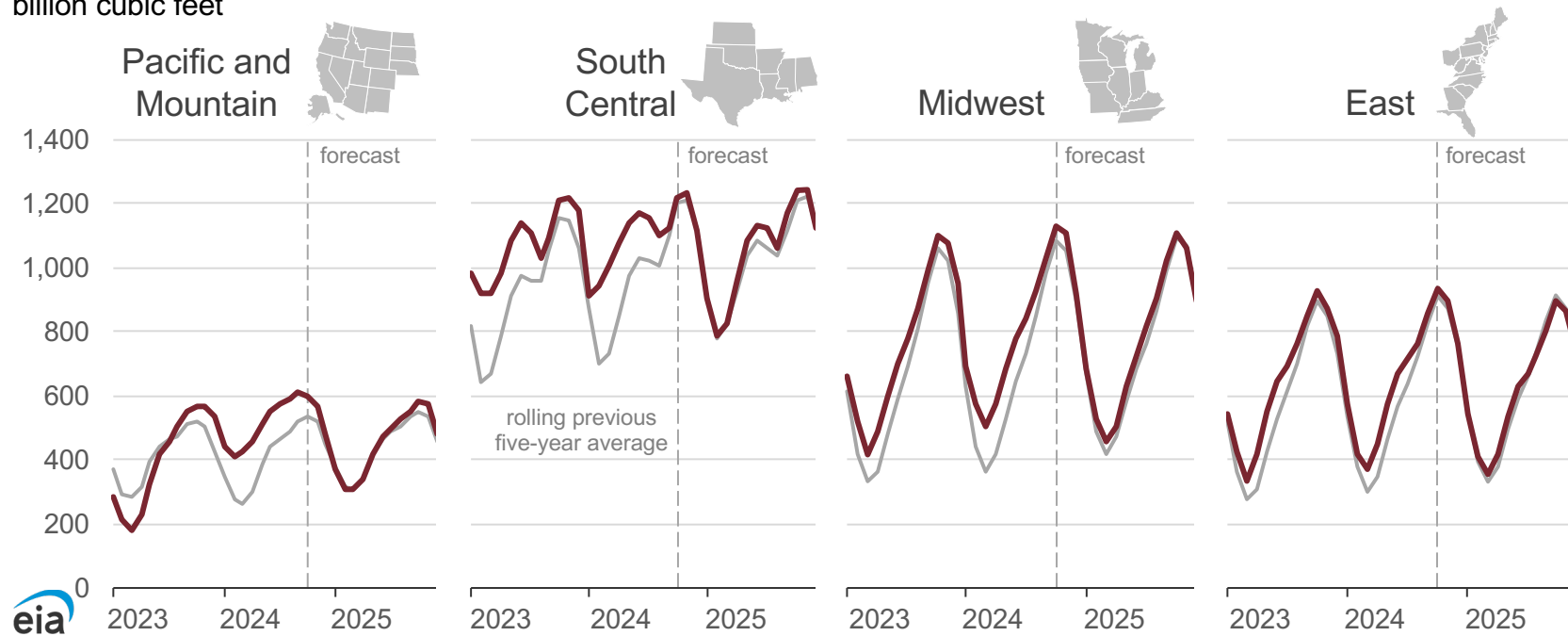


Data source: U.S. Energy Information Administration, Winter Fuels Outlook

# Regional natural gas inventories are near or above average

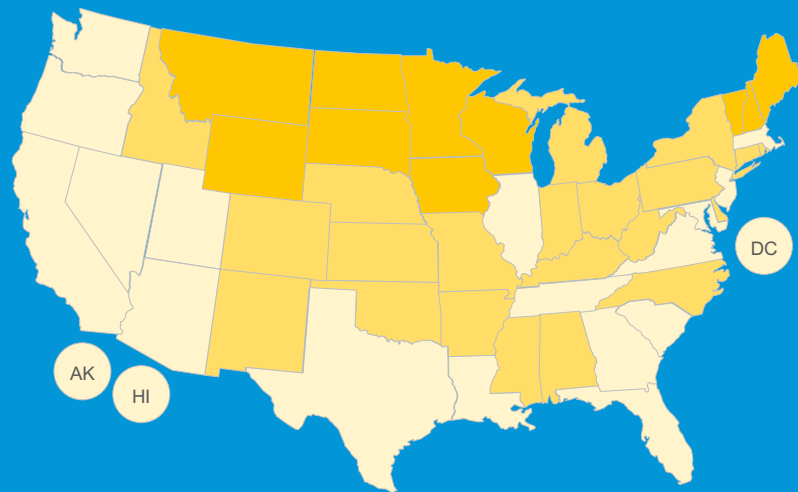
## Regional natural gas inventories

billion cubic feet



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook

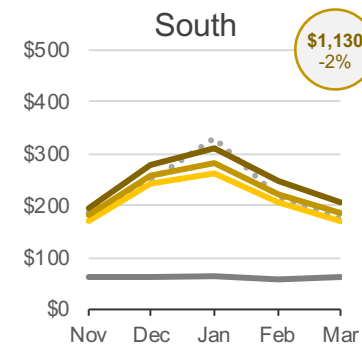
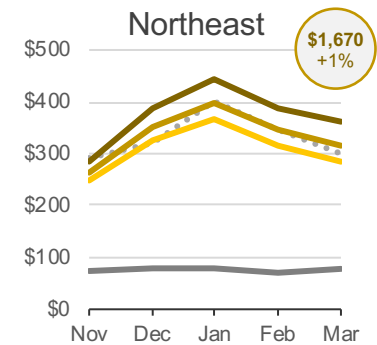
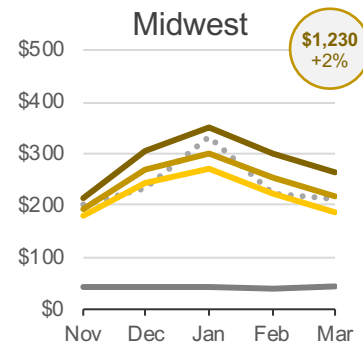
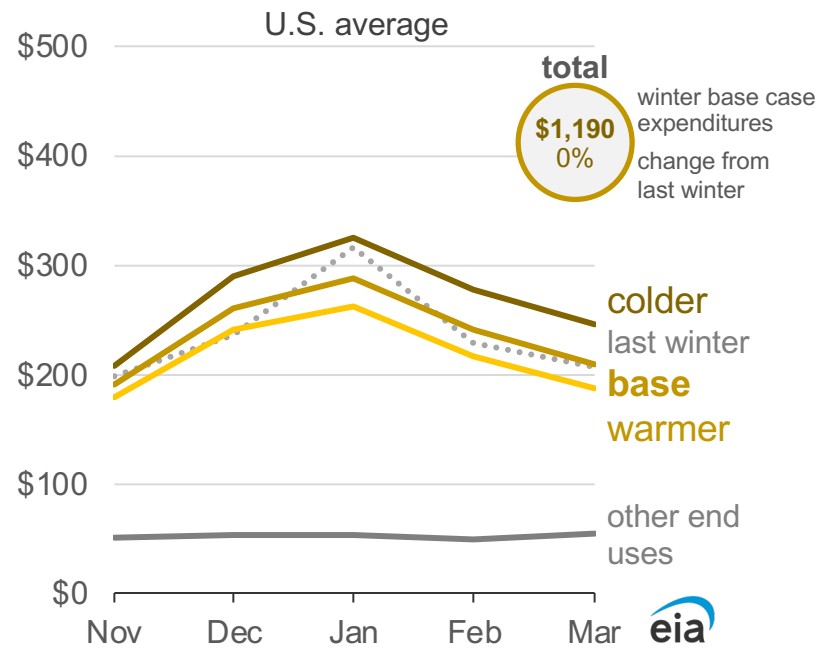
# Propane



# Propane expenditures forecast to be similar to last winter

## Monthly propane expenditures

nominal dollars

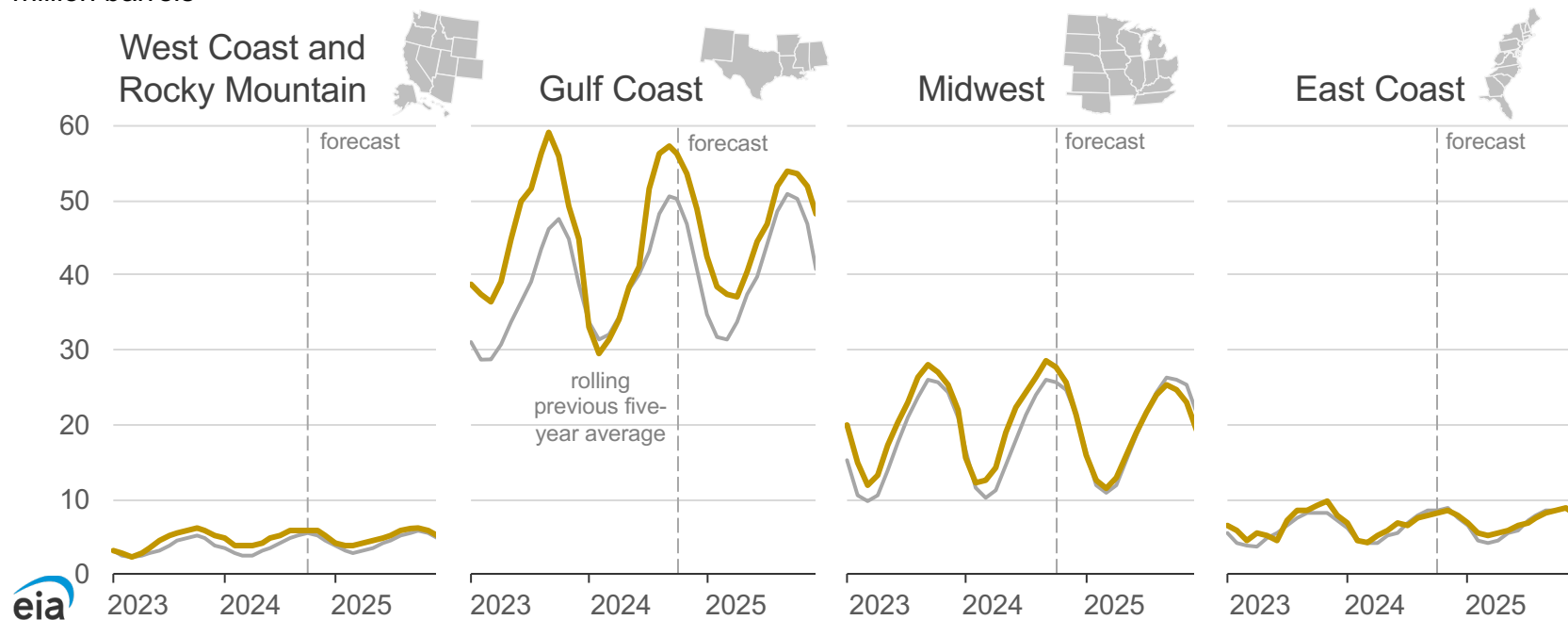


Data source: U.S. Energy Information Administration, Winter Fuels Outlook

# Propane inventories are **above average**, especially in the Gulf Coast region

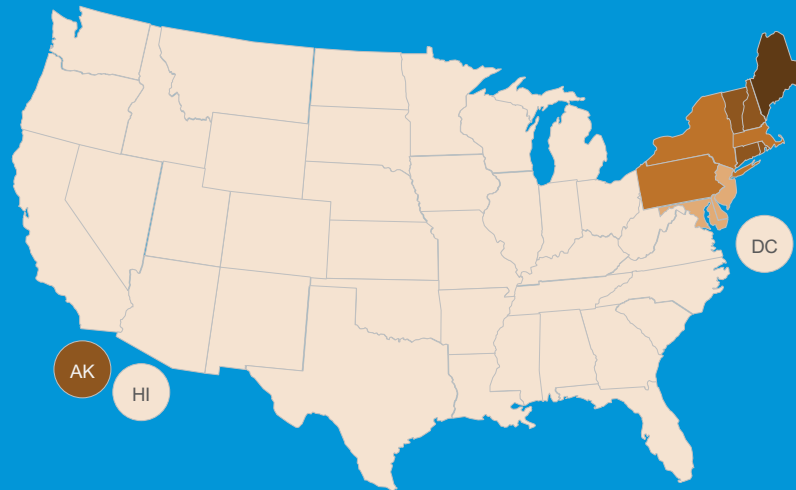
## Regional propane inventories

million barrels



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook

# Heating Oil

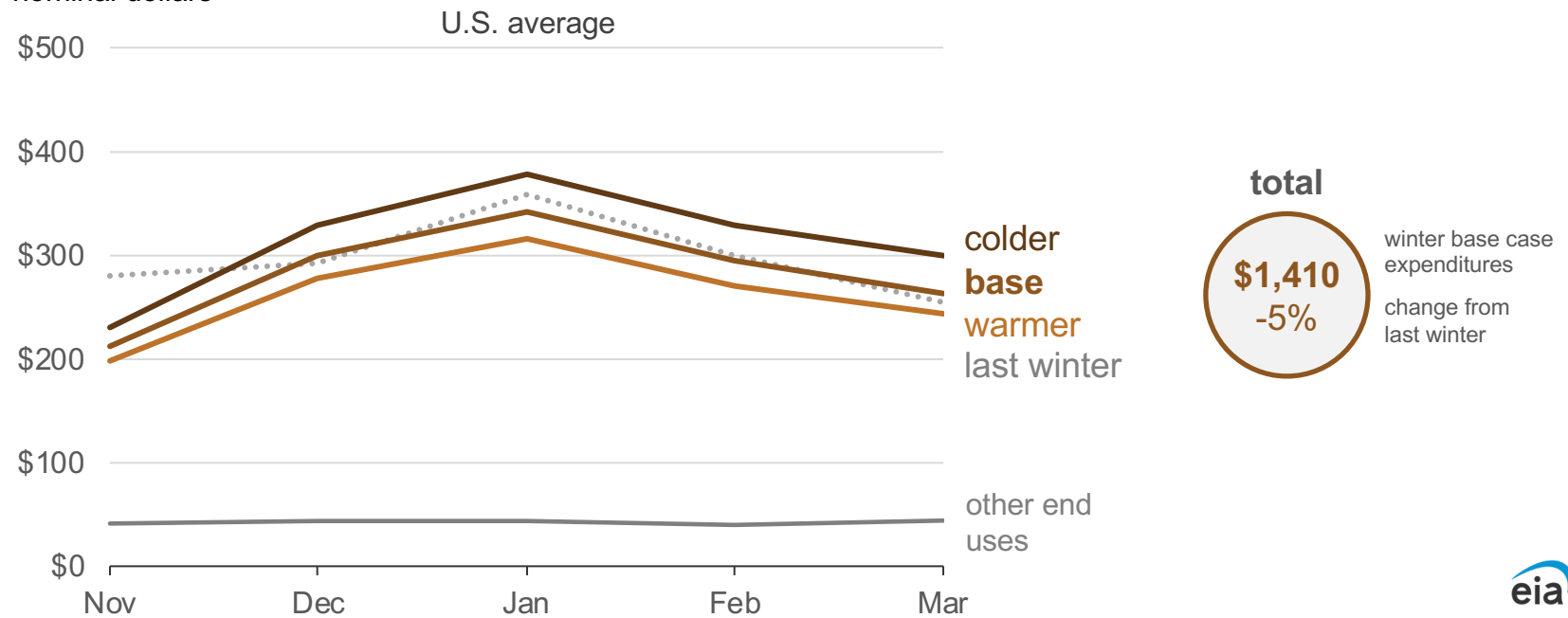




# Heating oil expenditures forecast to be **lower** than last winter

## Monthly heating oil expenditures

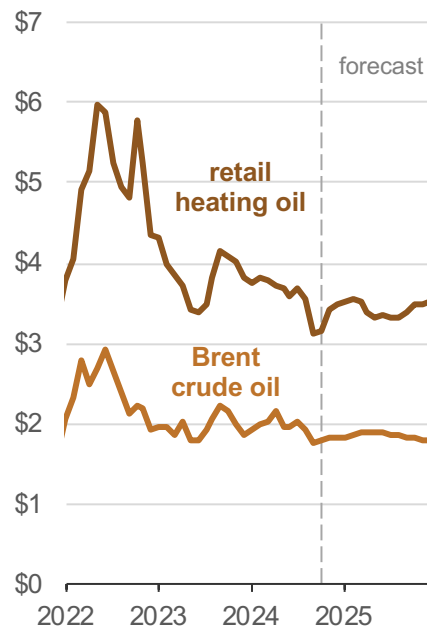
nominal dollars



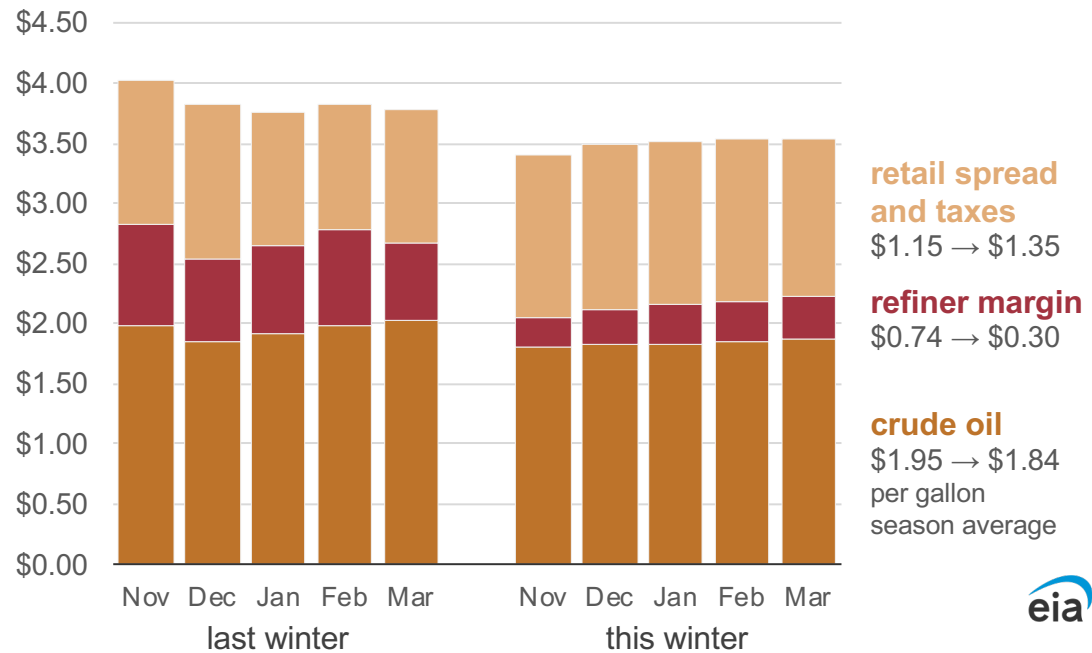
Data source: U.S. Energy Information Administration, Winter Fuels Outlook

# Refining margins for heating oil are lower than last winter

**Crude oil and heating oil prices**  
dollars per gallon



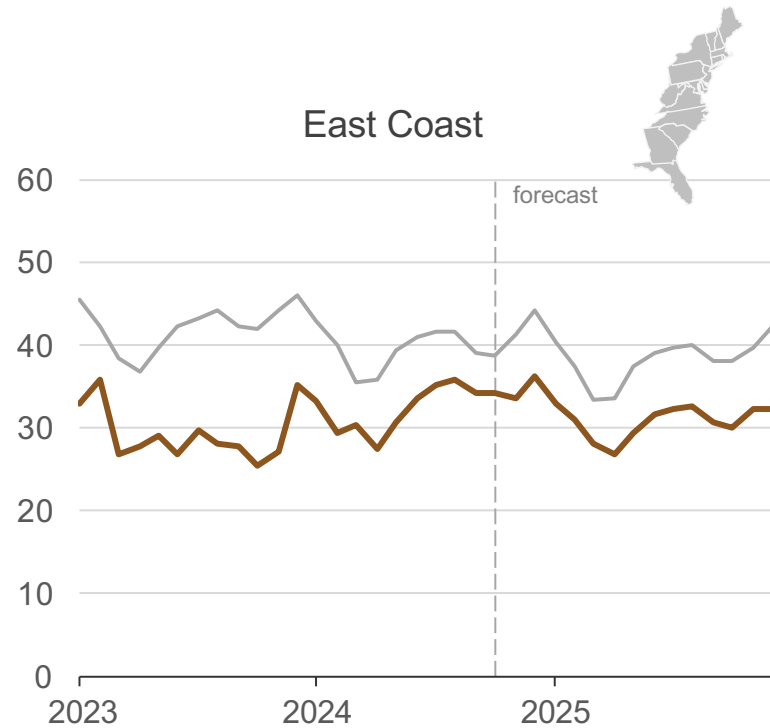
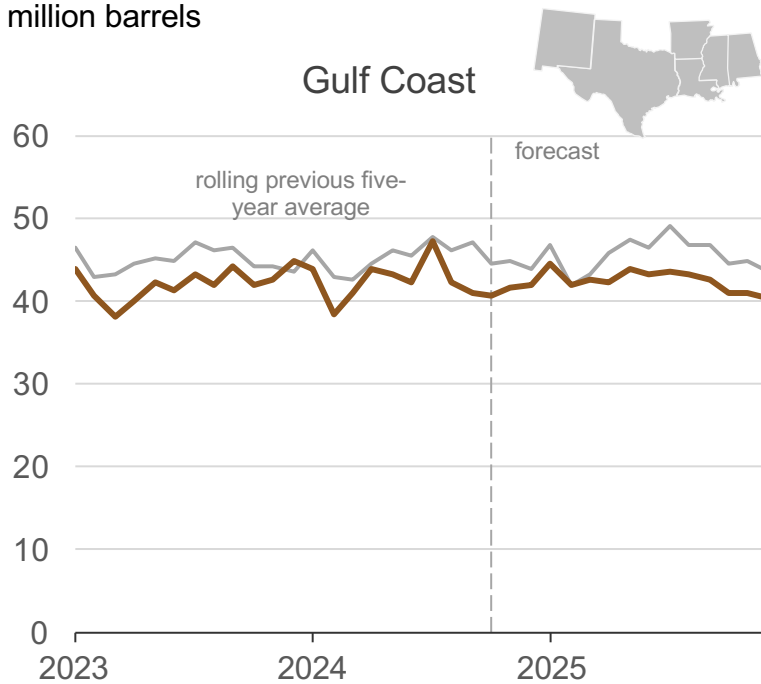
**Estimated components of retail heating oil prices**  
dollars per gallon



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook

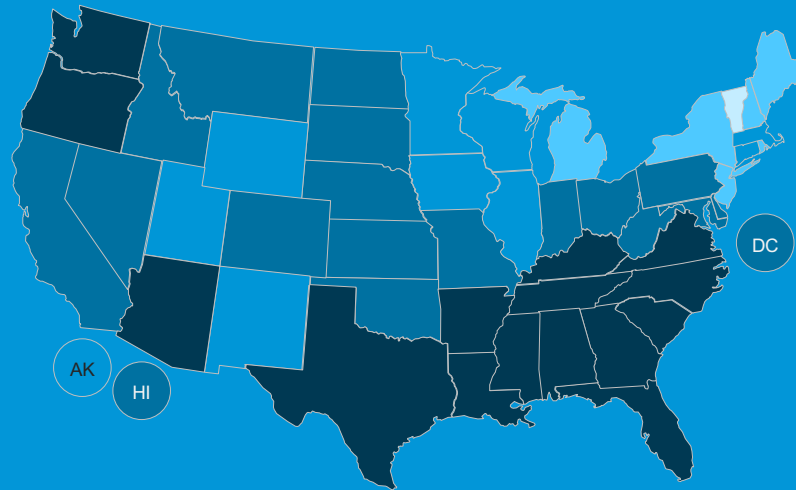
# Heating oil inventories are **below average** in the Gulf Coast and East Coast regions

**Regional distillate fuel oil inventories**  
million barrels



Data source: U.S. Energy Information Administration, Short-Term Energy Outlook

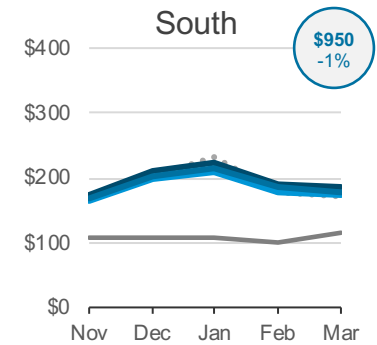
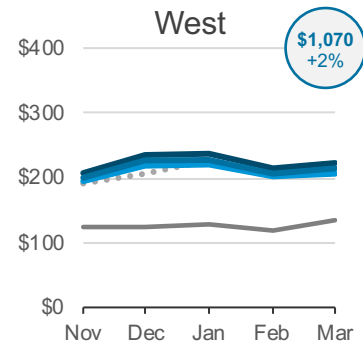
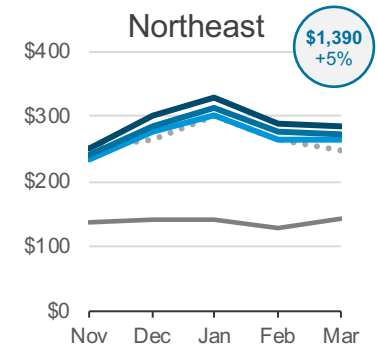
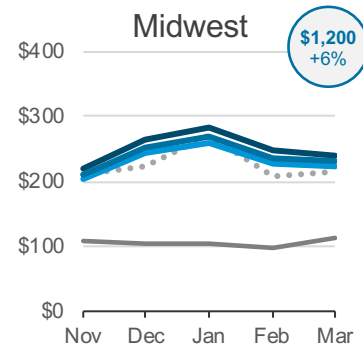
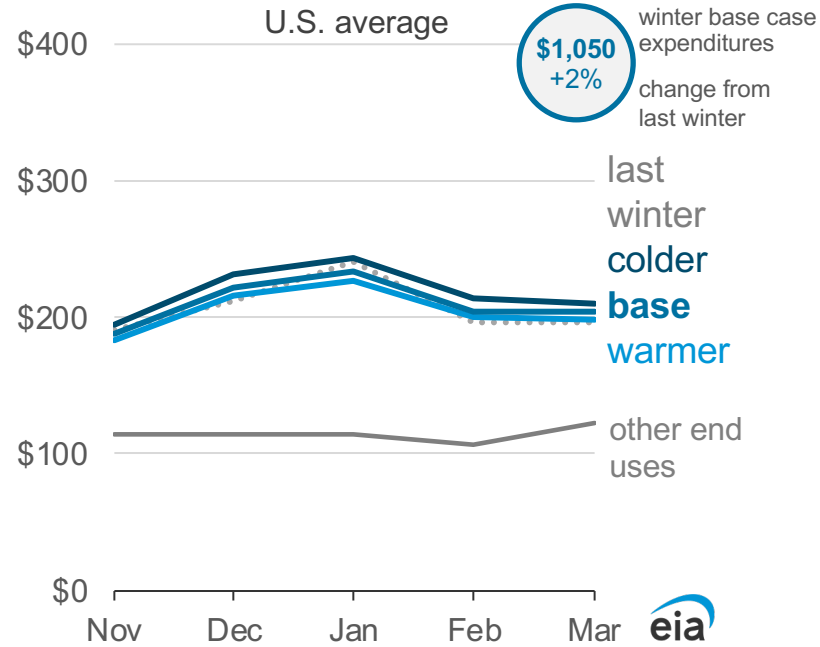
# Electricity



# Electricity expenditures forecast to be **slightly higher** than last winter

## Monthly electricity expenditures

nominal dollars



Data source: U.S. Energy Information Administration, Winter Fuels Outlook



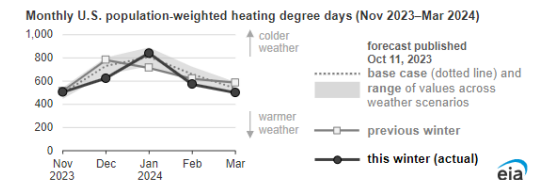
# EIA Resources

# Winter Fuels Outlook updates and other EIA resources

- We update household consumption, price, and expenditure estimates with each *Short-Term Energy Outlook* release through April 2025
- EIA data sources
  - [Heating Oil and Propane Update](#)
    - [Winter Propane Market Update](#)
  - [Weekly Petroleum Status Report](#)
  - [Weekly Natural Gas Storage Report](#)
  - [Hourly Electric Grid Monitor](#)
  - [Residential Energy Consumption Survey](#)

## Progress Tracker

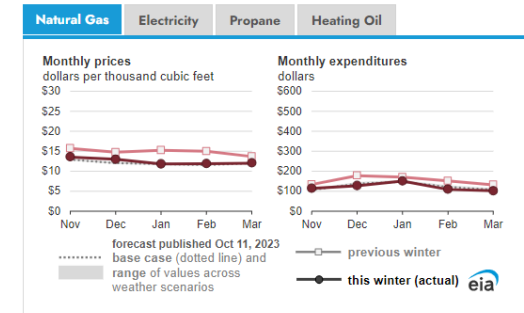
### U.S. weather indicator



Data source: U.S. Energy Information Administration, Winter Fuels Outlook

### U.S. household average fuel price and expenditures

households categorized by primary heating fuel



Data source: U.S. Energy Information Administration, Winter Fuels Outlook