



# Winter Fuels Outlook 2024–2025

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

# What is the *Winter Fuels Outlook*?

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

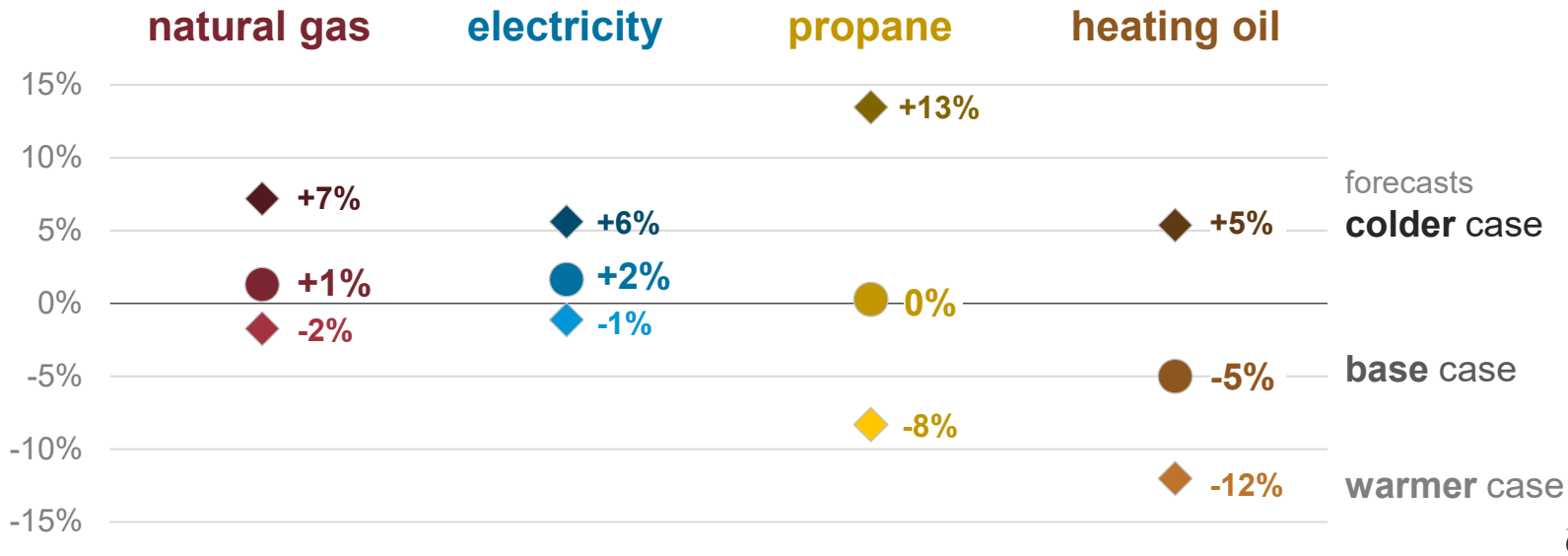
Energy market  
**conditions** for heating  
fuels

# 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...

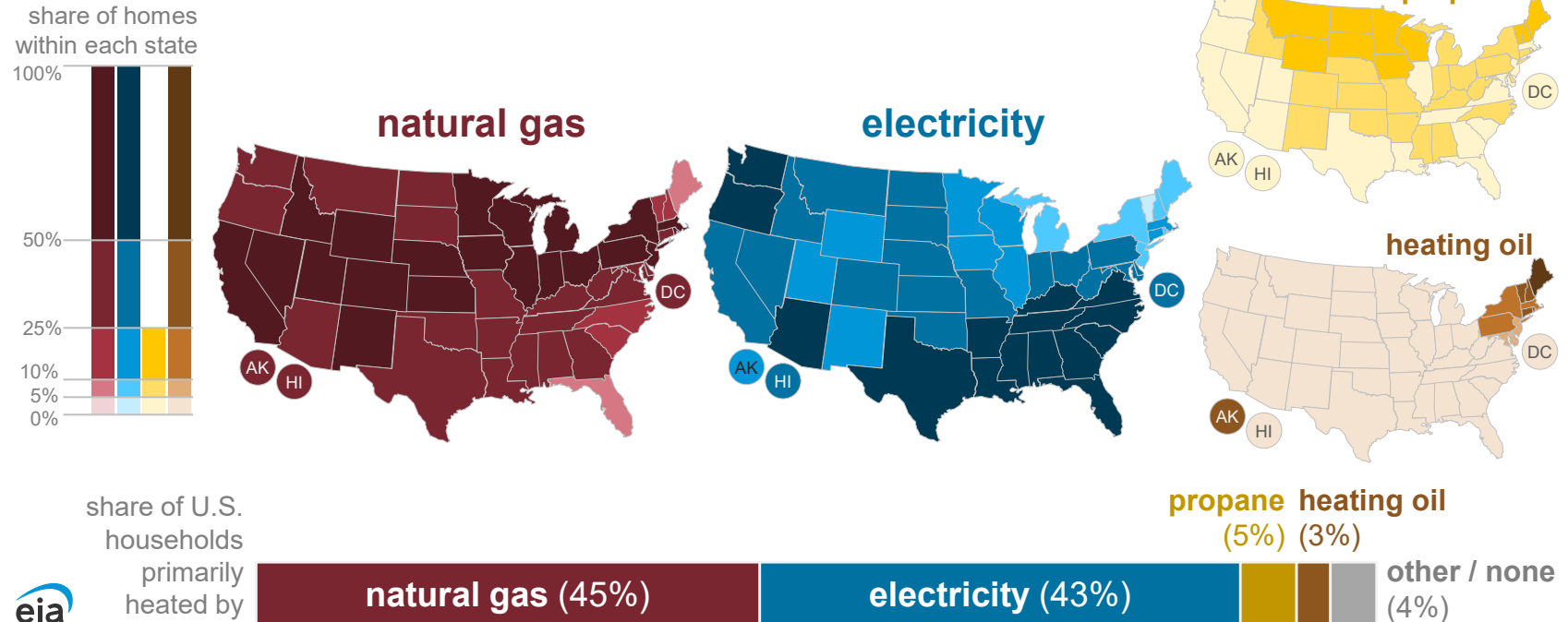


Data source: U.S. Energy Information Administration, Winter Fuels Outlook

# Household Characteristics

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

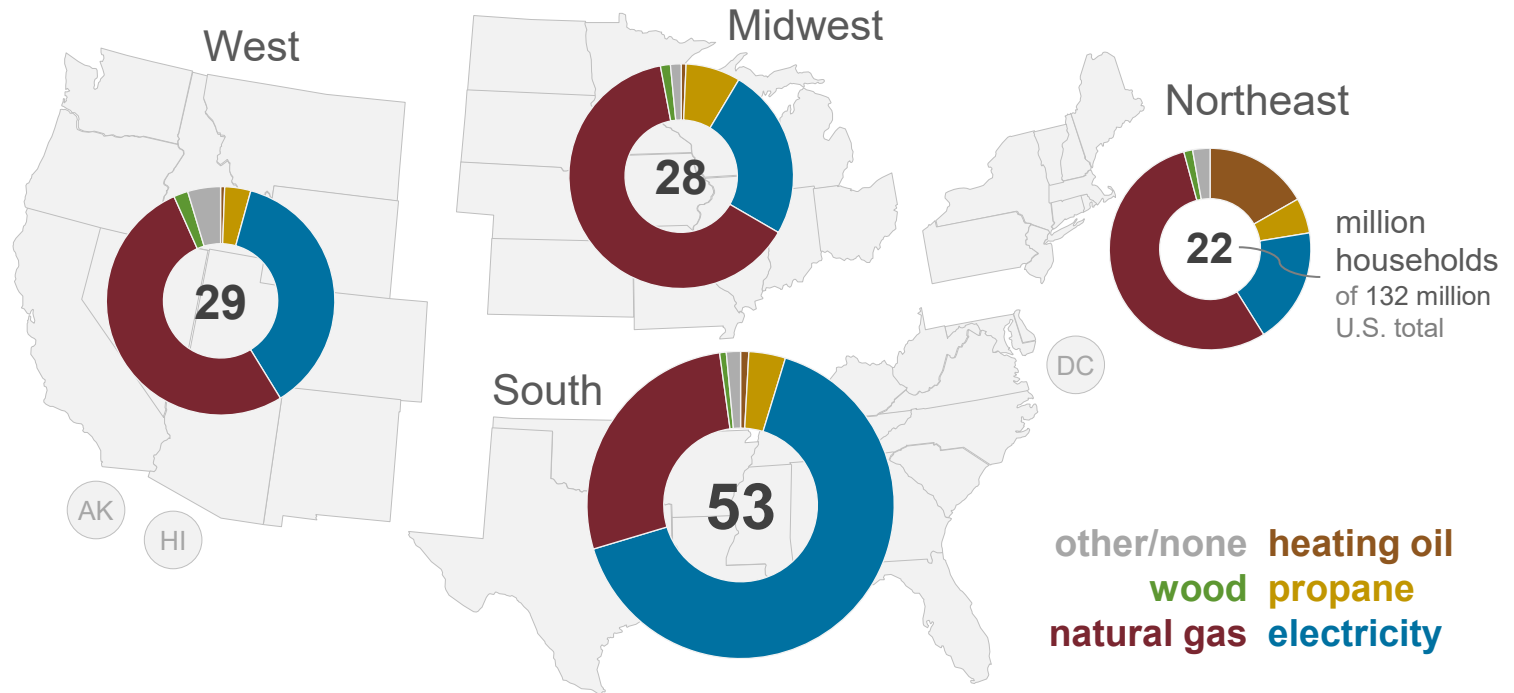
## Main home heating fuel by state (2023)



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)

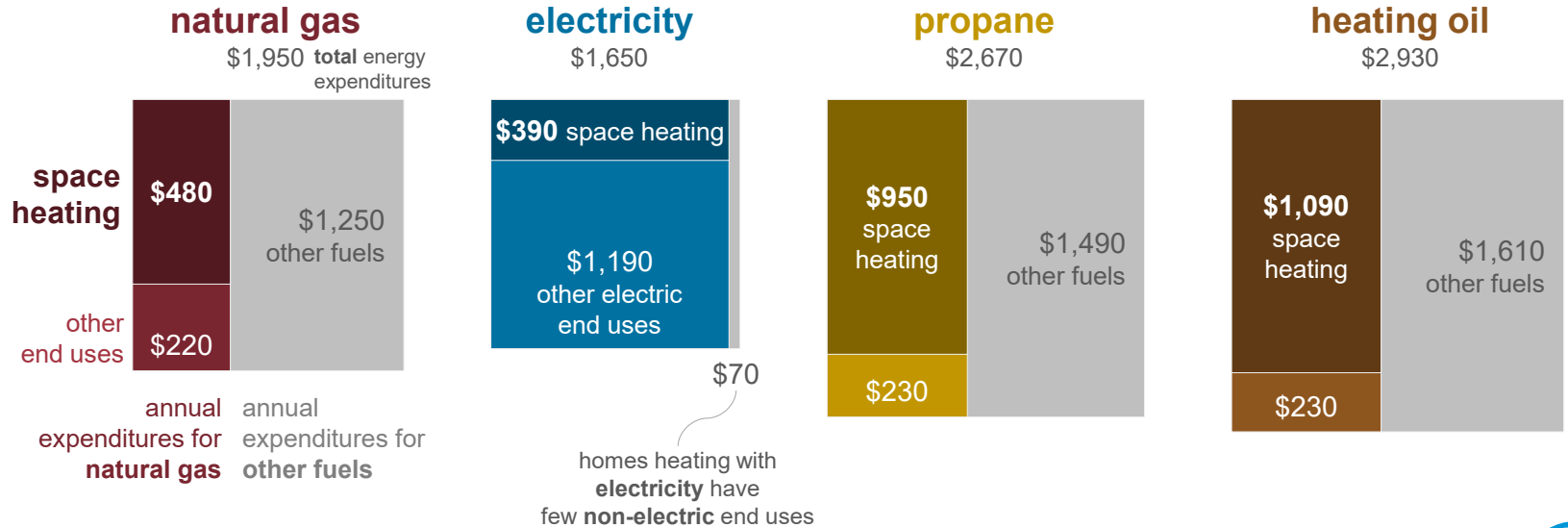


Data source: U.S. Energy Information Administration, *Winter Fuels Outlook*

# 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.



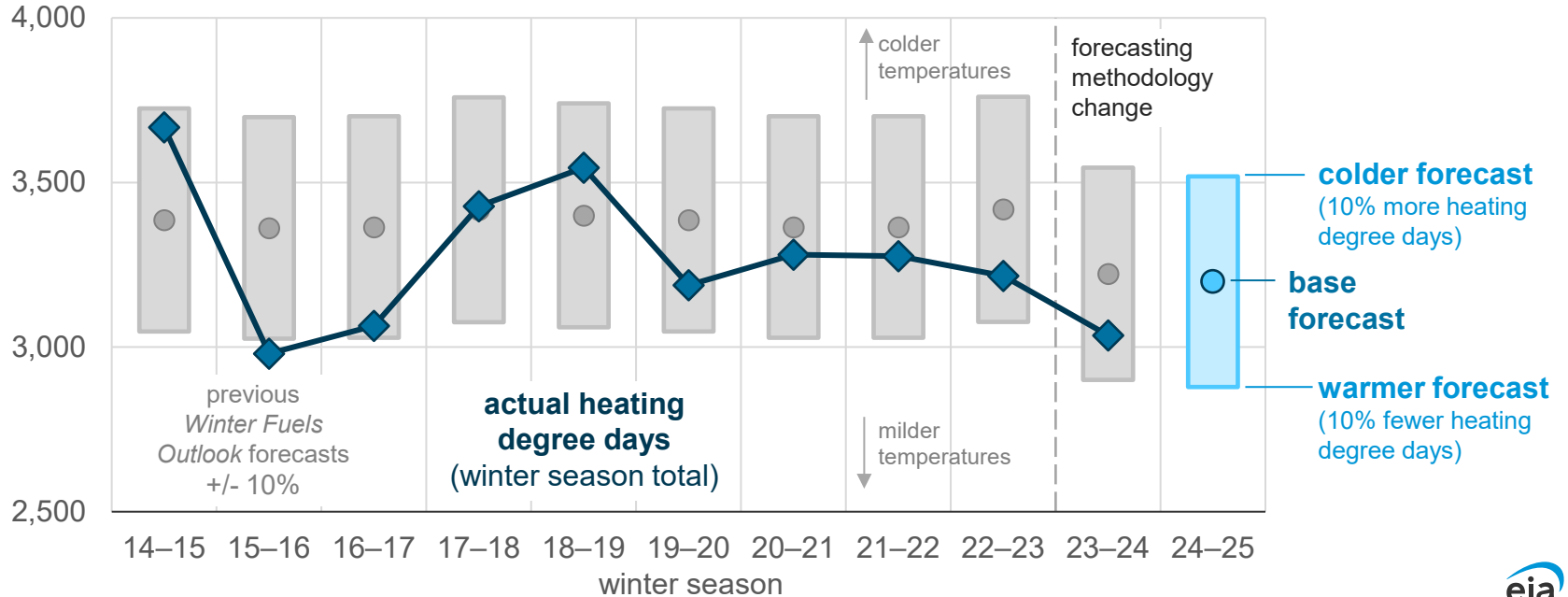
### **In aggregate**

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

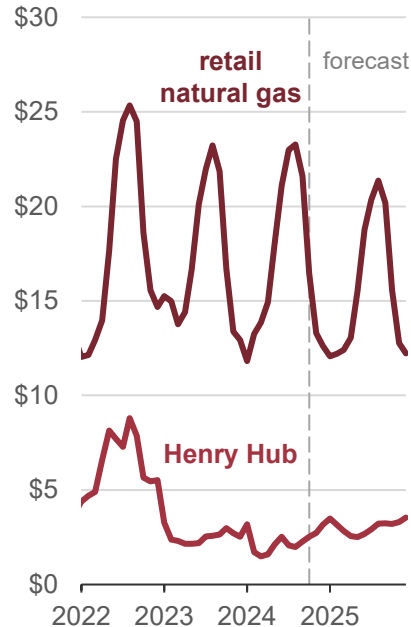


# Energy Market Conditions

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

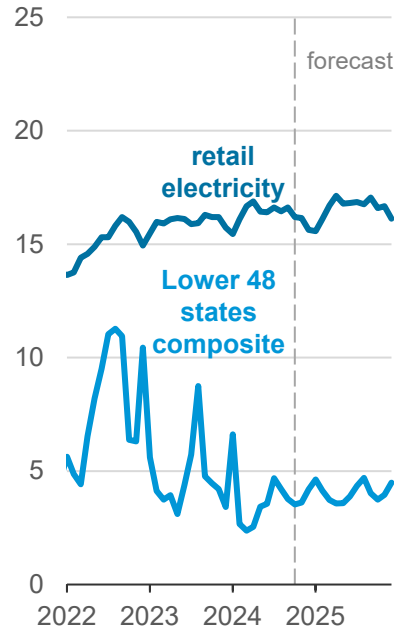
## Natural gas prices

dollars per thousand cubic feet



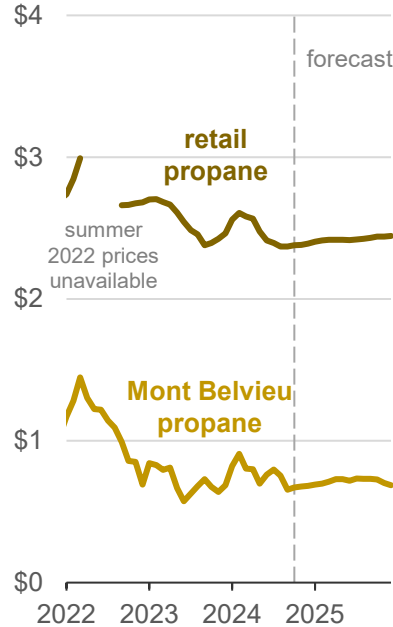
## Electricity prices

cents per kilowatt-hour



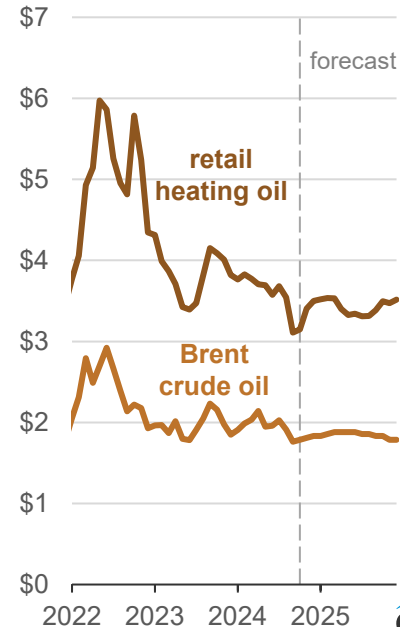
## Propane prices

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...

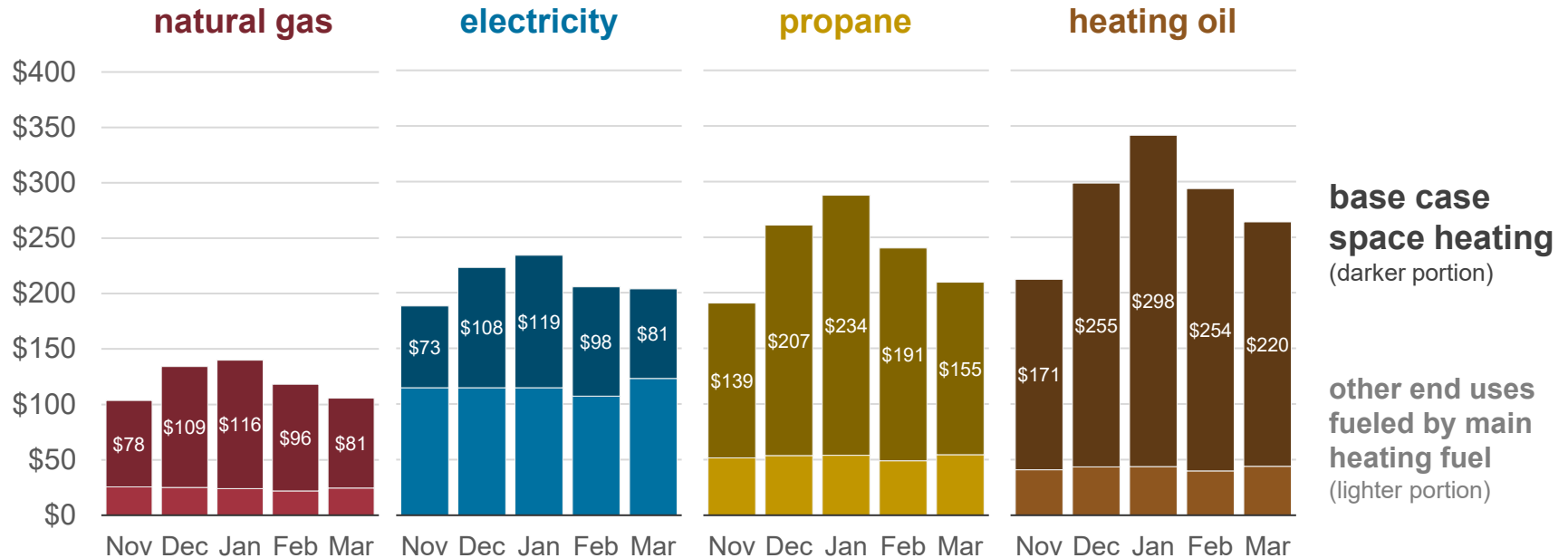
**different households** with  
**different characteristics** in  
**different locations** experiencing  
**different weather.**

# 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:



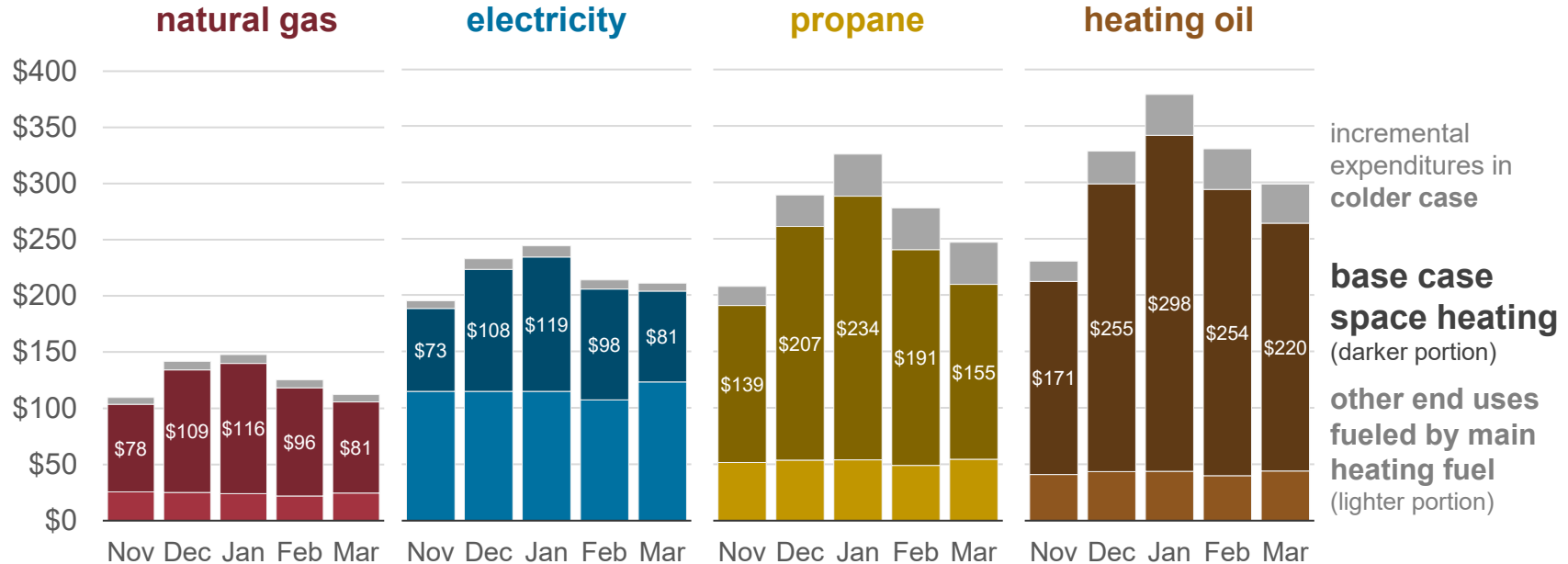
Data source: U.S. Energy Information Administration, Winter Fuels Outlook

# 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:



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

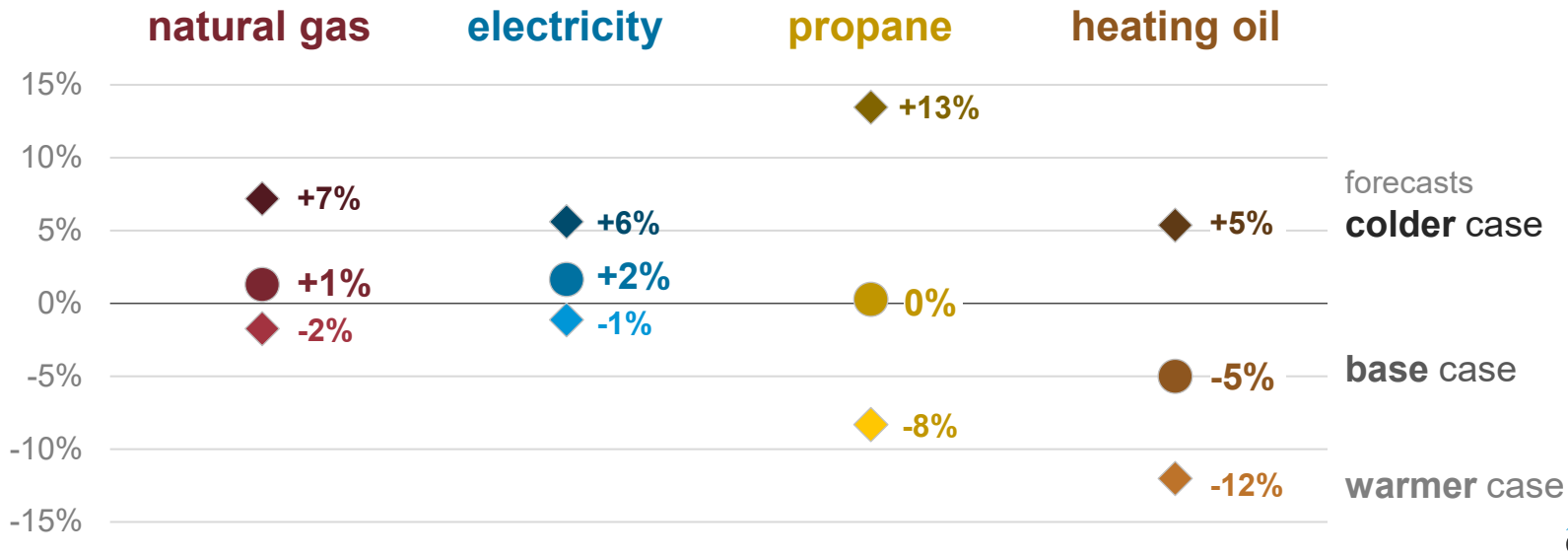


# We expect the majority of households will spend about the same on energy this winter

## Residential energy expenditures

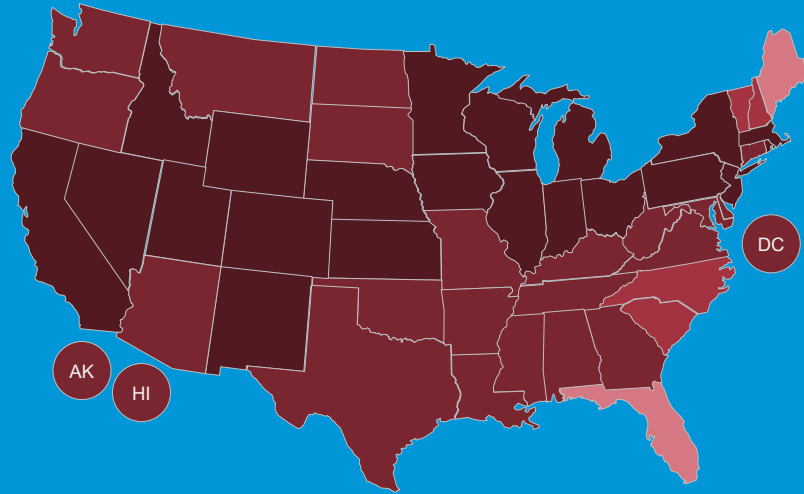
percentage change since last winter

For homes where the main heating fuel is...



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

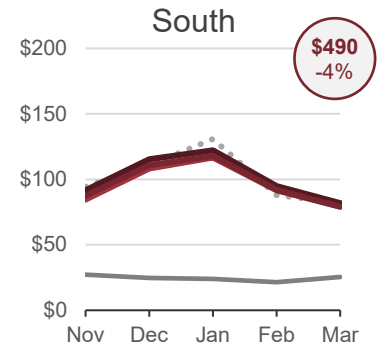
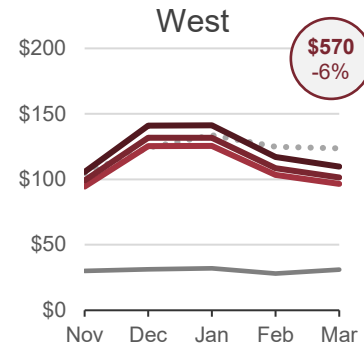
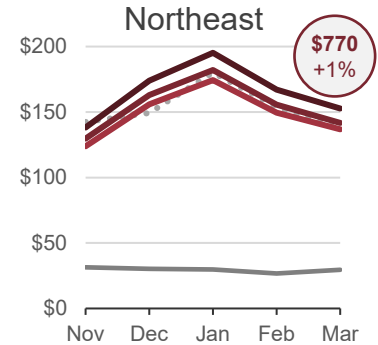
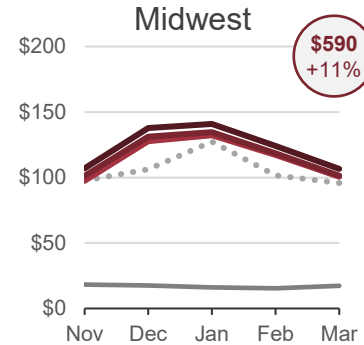
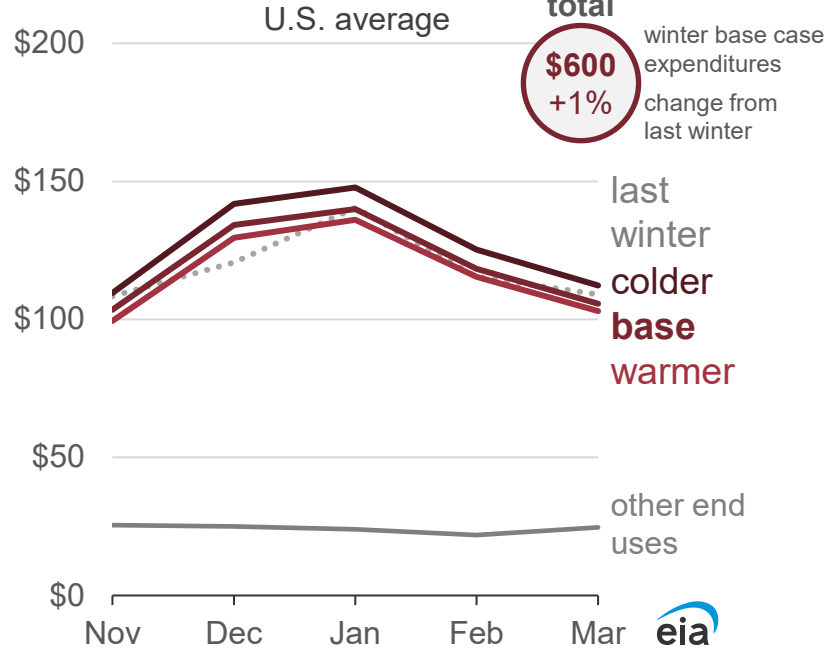
# Natural Gas



# Natural gas expenditures forecast to be similar to last winter

## Monthly natural gas expenditures

nominal dollars

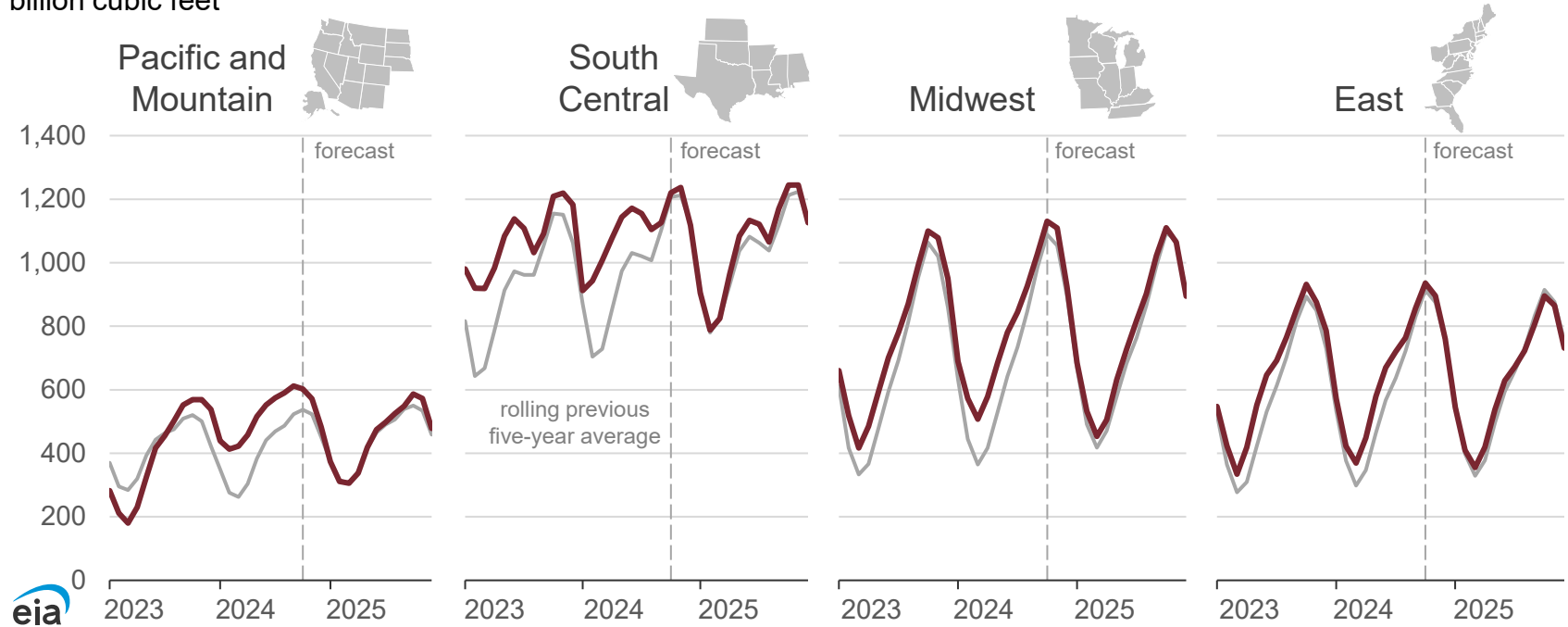


Data source: U.S. Energy Information Administration, Winter Fuels Outlook

# Regional natural gas inventories are near or above average

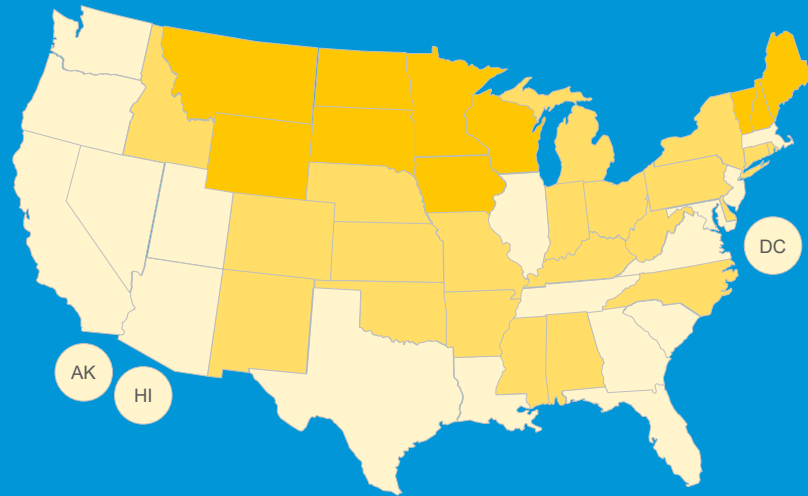
## Regional natural gas inventories

billion cubic feet



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

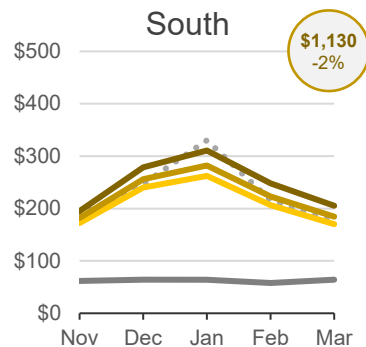
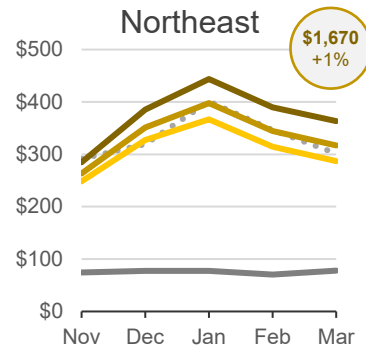
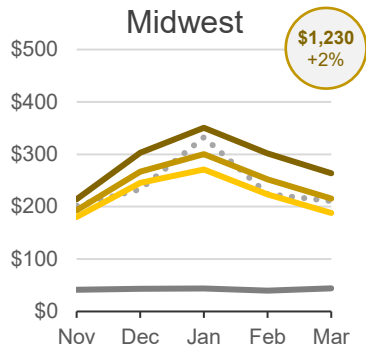
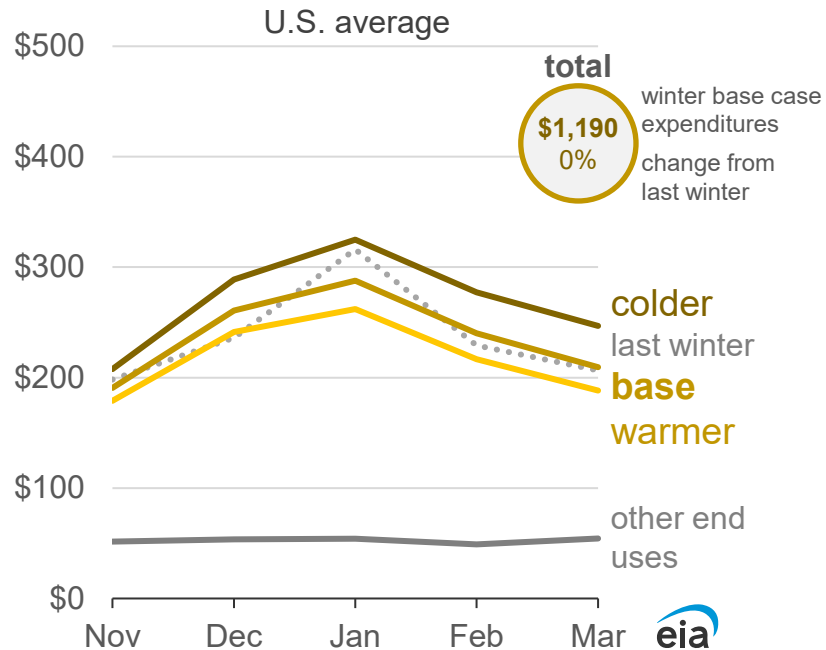
# Propane



# Propane expenditures forecast to be similar to last winter

## Monthly propane expenditures

nominal dollars

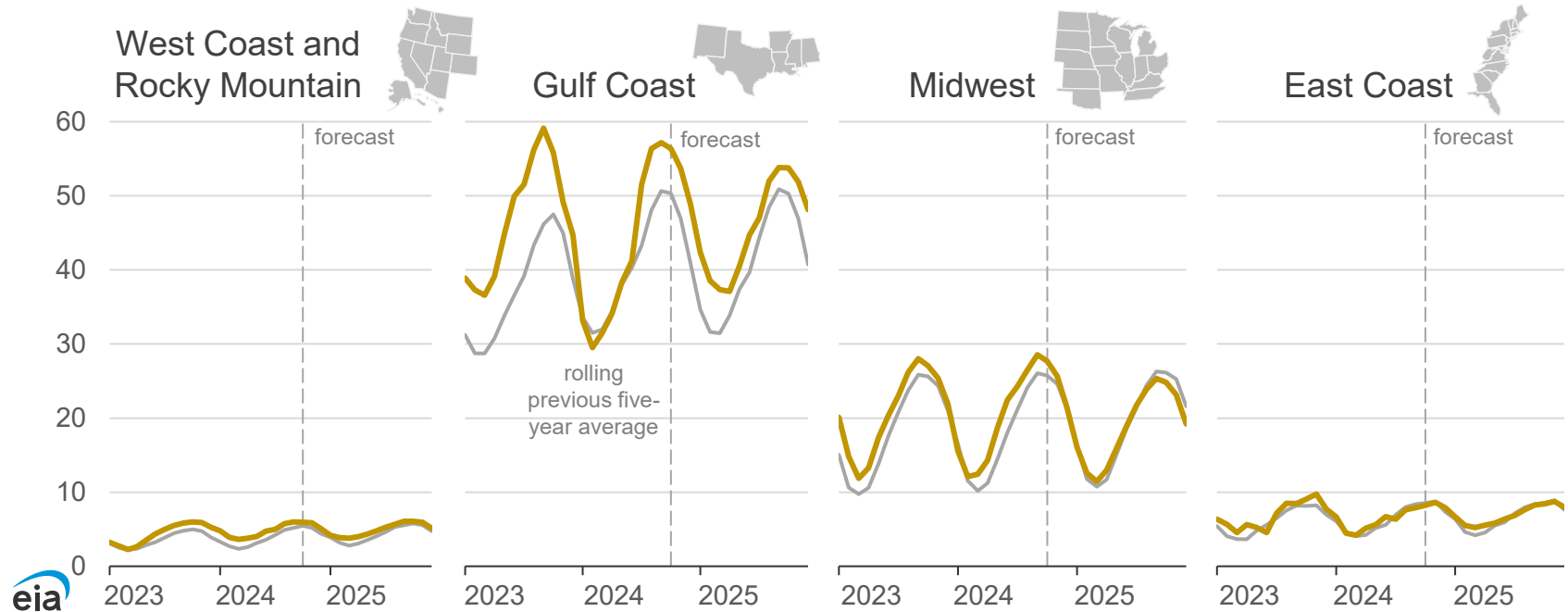


Data source: U.S. Energy Information Administration, Winter Fuels Outlook

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

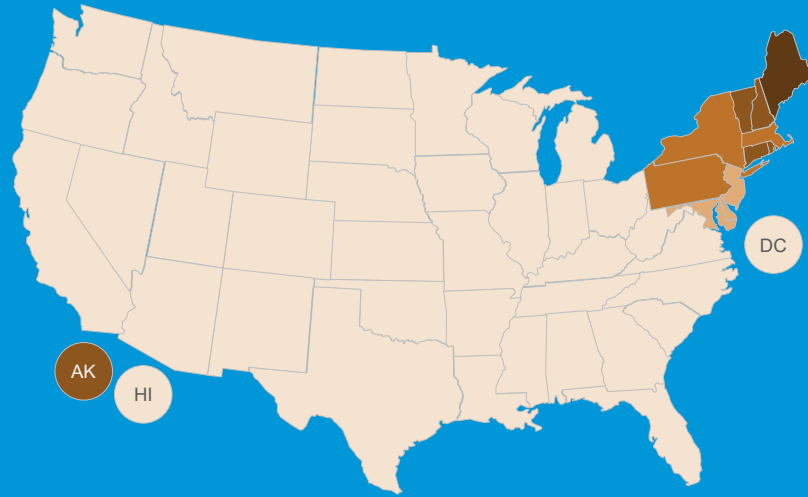
## Regional propane inventories

million barrels



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

# Heating Oil

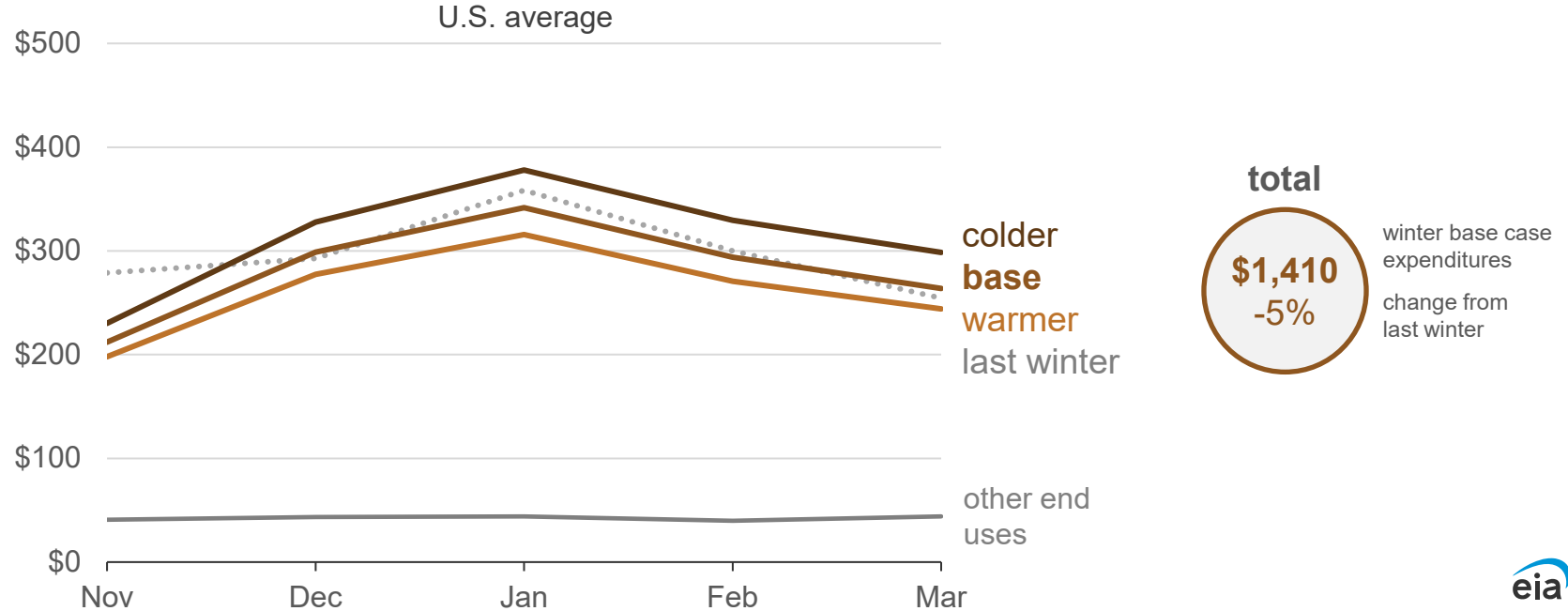




# Heating oil expenditures forecast to be **lower** than last winter

## Monthly heating oil expenditures

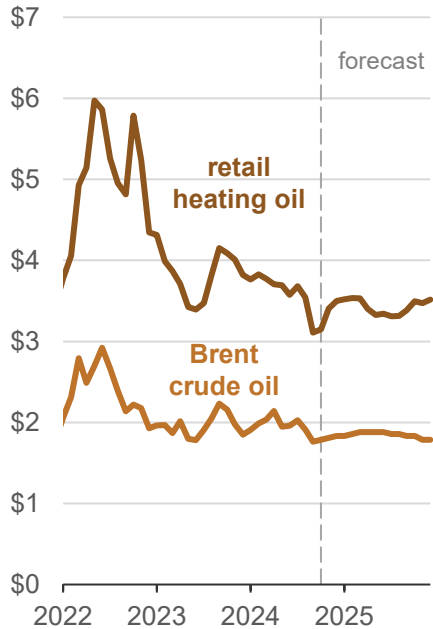
nominal dollars



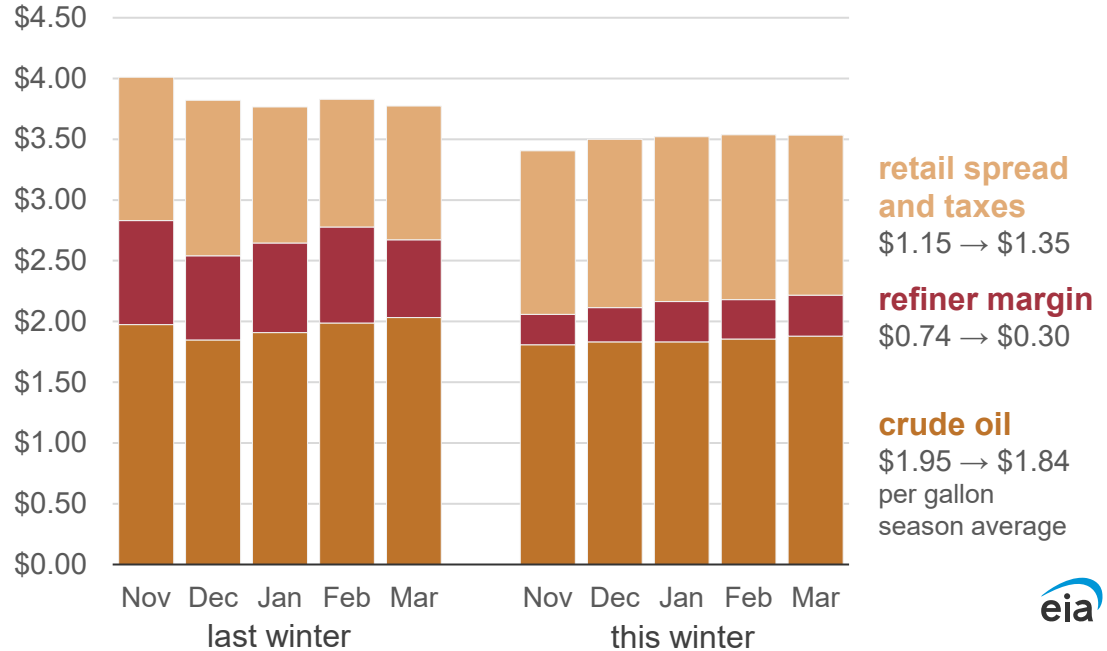
Data source: U.S. Energy Information Administration, Winter Fuels Outlook

# 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



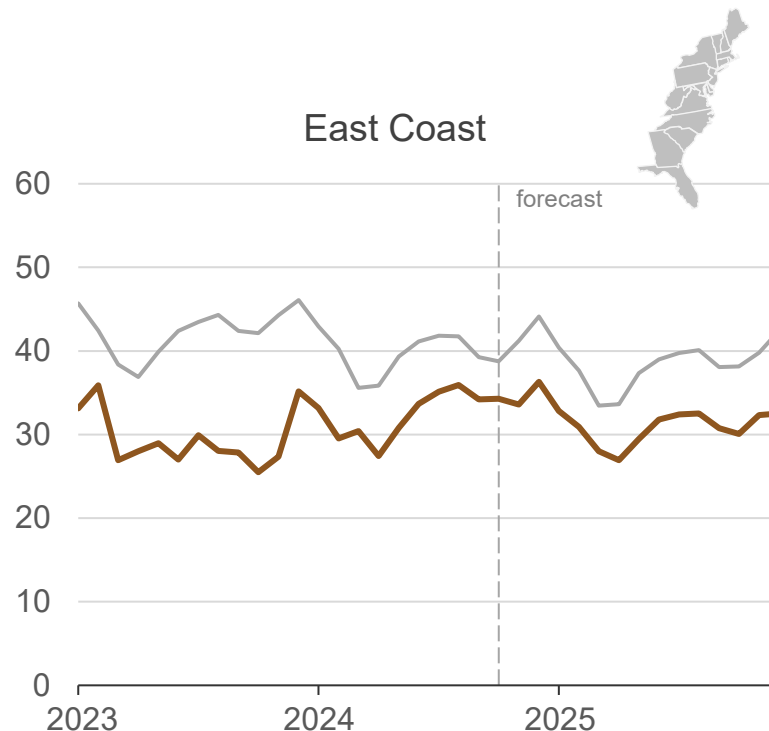
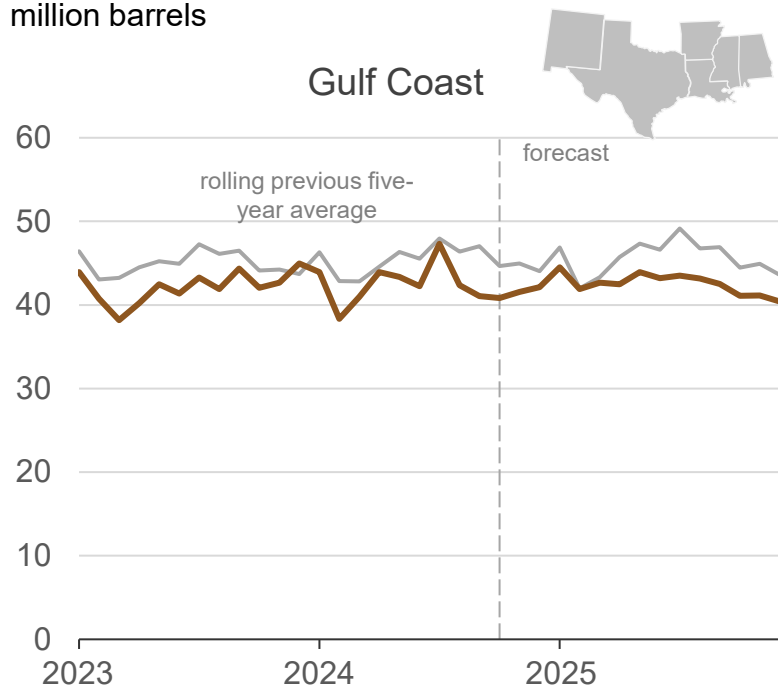
Data source: U.S. Energy Information Administration, Short-Term Energy Outlook



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

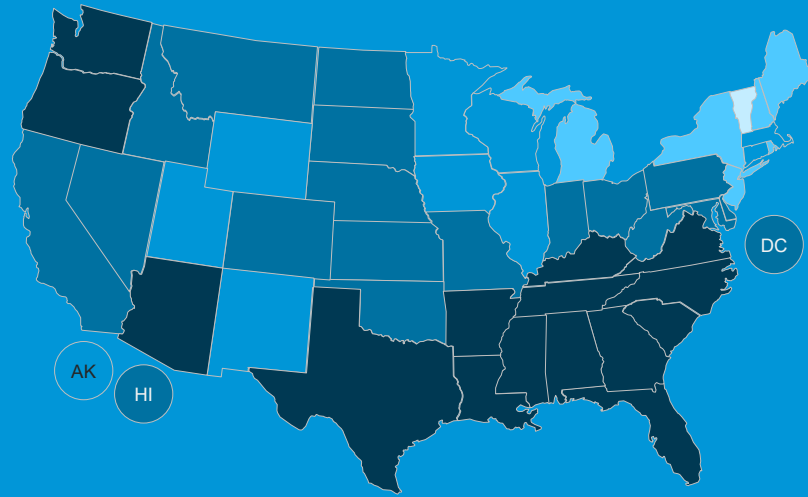
## Regional distillate fuel oil inventories

million barrels



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

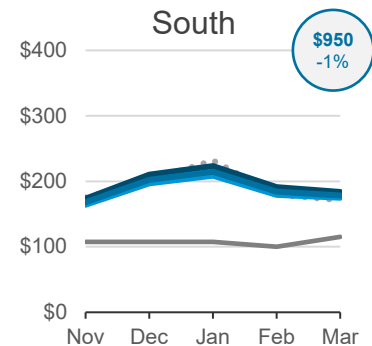
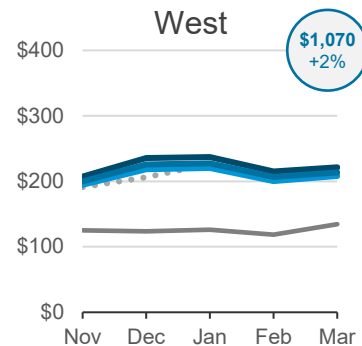
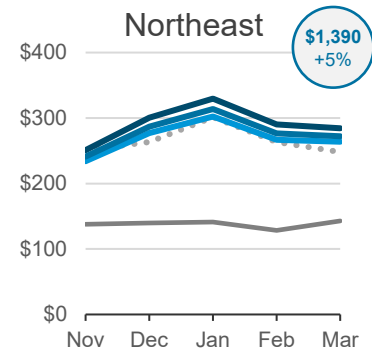
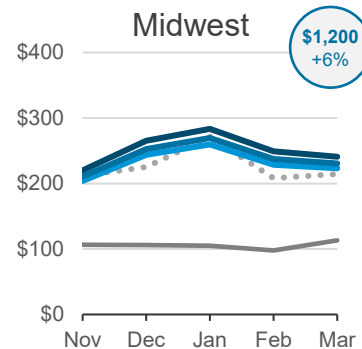
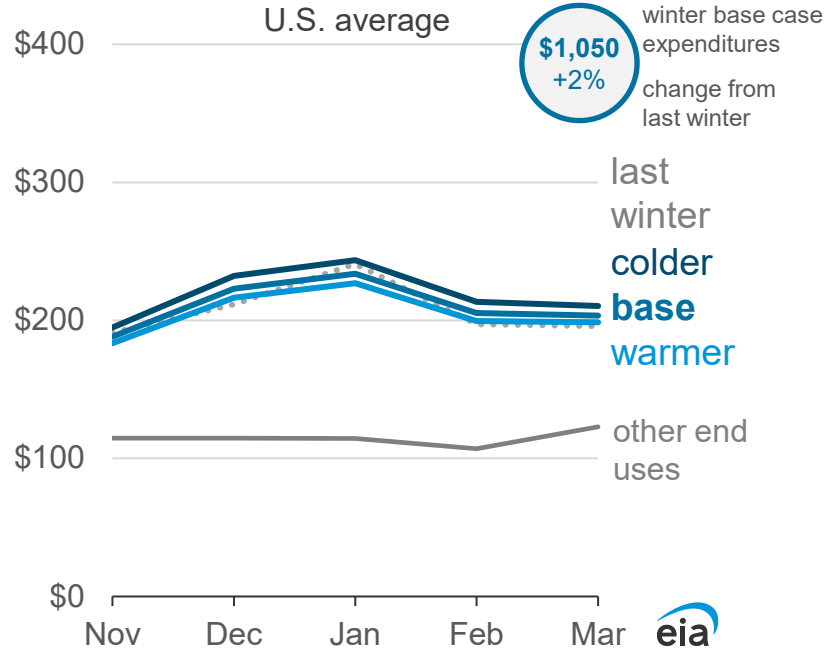
# Electricity



# 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

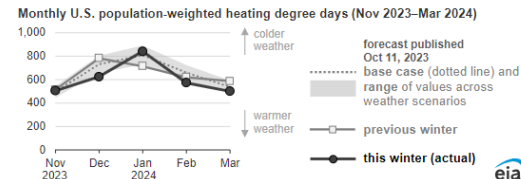
# EIA Resources

# 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](#)

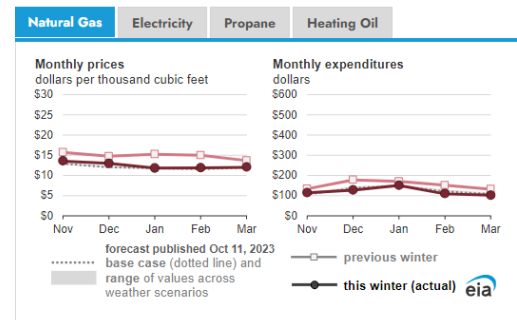
## Progress Tracker

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*