

---

# *Annual Energy Outlook 2010 and Priority Data Improvements*

---

State Energy Working Group  
December 22, 2009, Washington, DC

Richard Newell, Administrator



U.S. Energy Information Administration  
Independent Statistics and Analysis

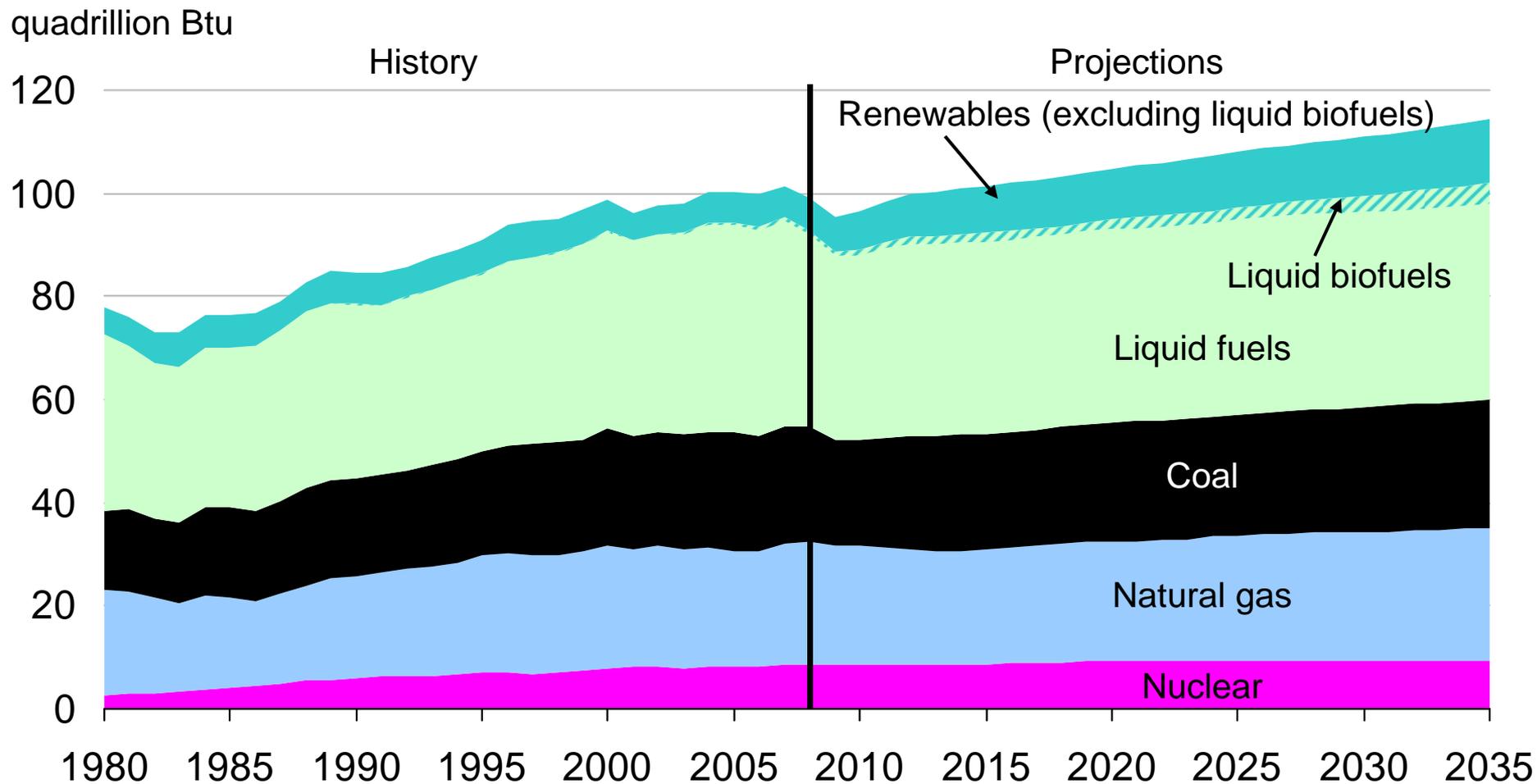


## Key results from the *AEO2010* reference case

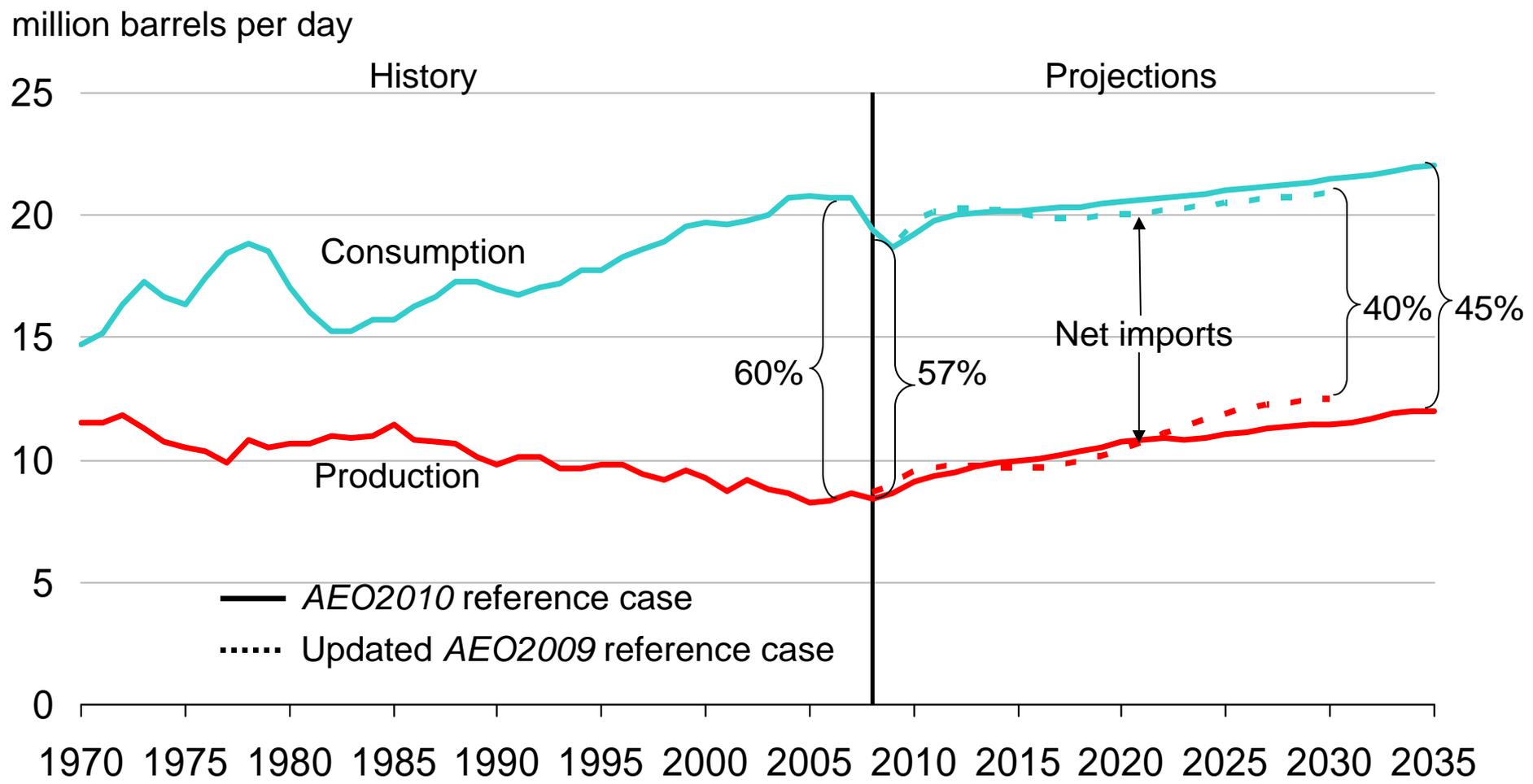
---

- Moderate energy consumption growth and greater use of renewables due to recent policies and rising energy prices
- Declining reliance on imported liquid fuels
  - U.S. oil use remains near its present level through 2035
  - growth in overall liquids demand is met by biofuels, and ethanol accounts for >17% of gasoline consumption by 2035
- Shale gas drives growth in U.S. natural gas production and reduces reliance on imported gas
- Electricity consumption grows by 1% per year over the projection
- Energy-related CO<sub>2</sub> emissions grow 0.3% per year, absent any new policies to limit emissions

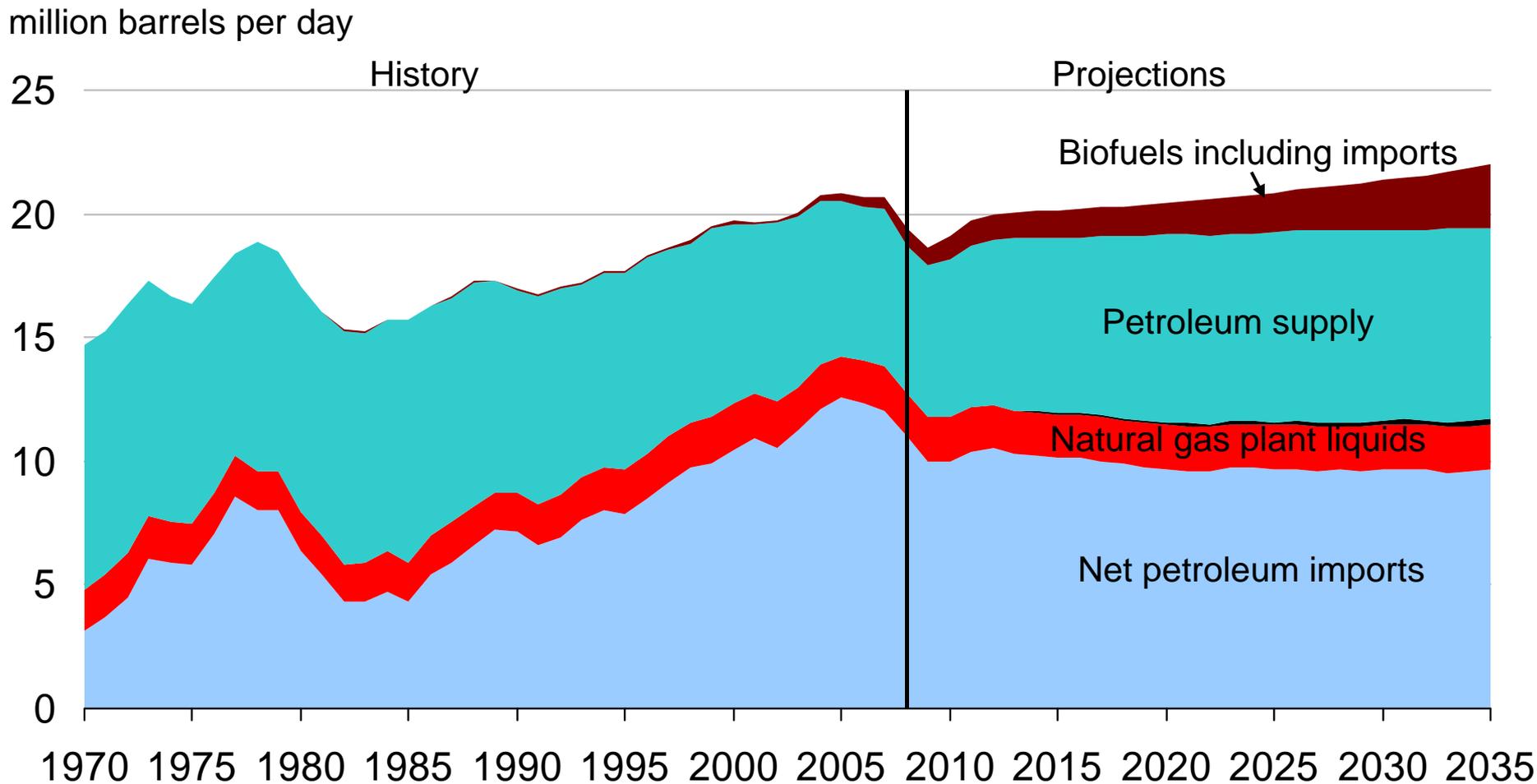
# Non-fossil energy use grows rapidly, but fossil fuels still provide 78 percent of total energy use in 2035



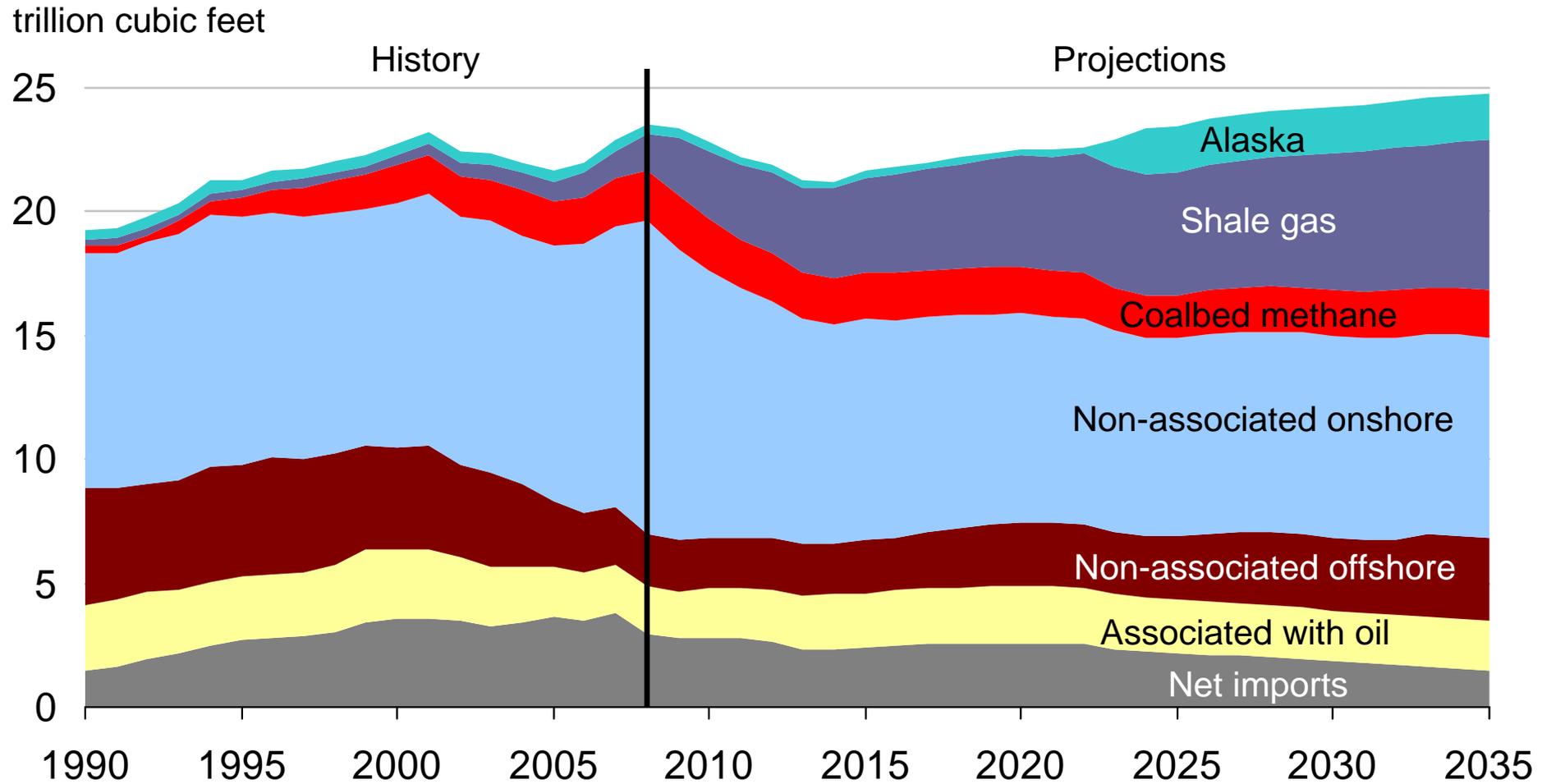
# U.S. reliance on imported liquid fuels is reduced by increased domestic production and greater fuel efficiency



# Biofuels meet most of the growth in liquid fuels supply

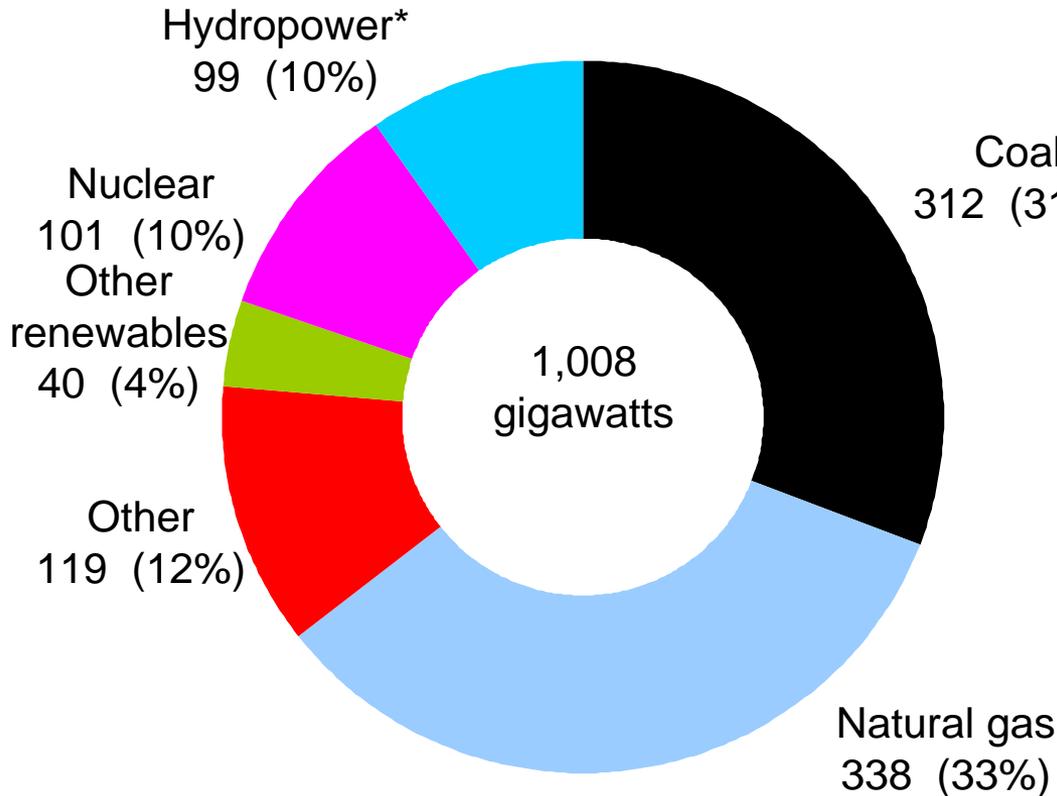


# Shale gas and Alaska production offset declines in supply to meet consumption growth and lower import needs

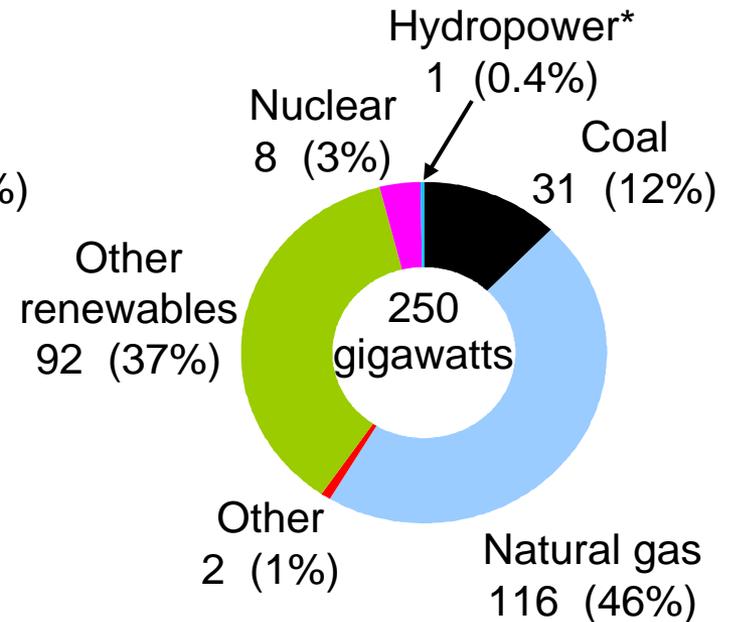


# Natural gas and renewables account for the majority of capacity additions from 2008 to 2035

## 2008 capacity

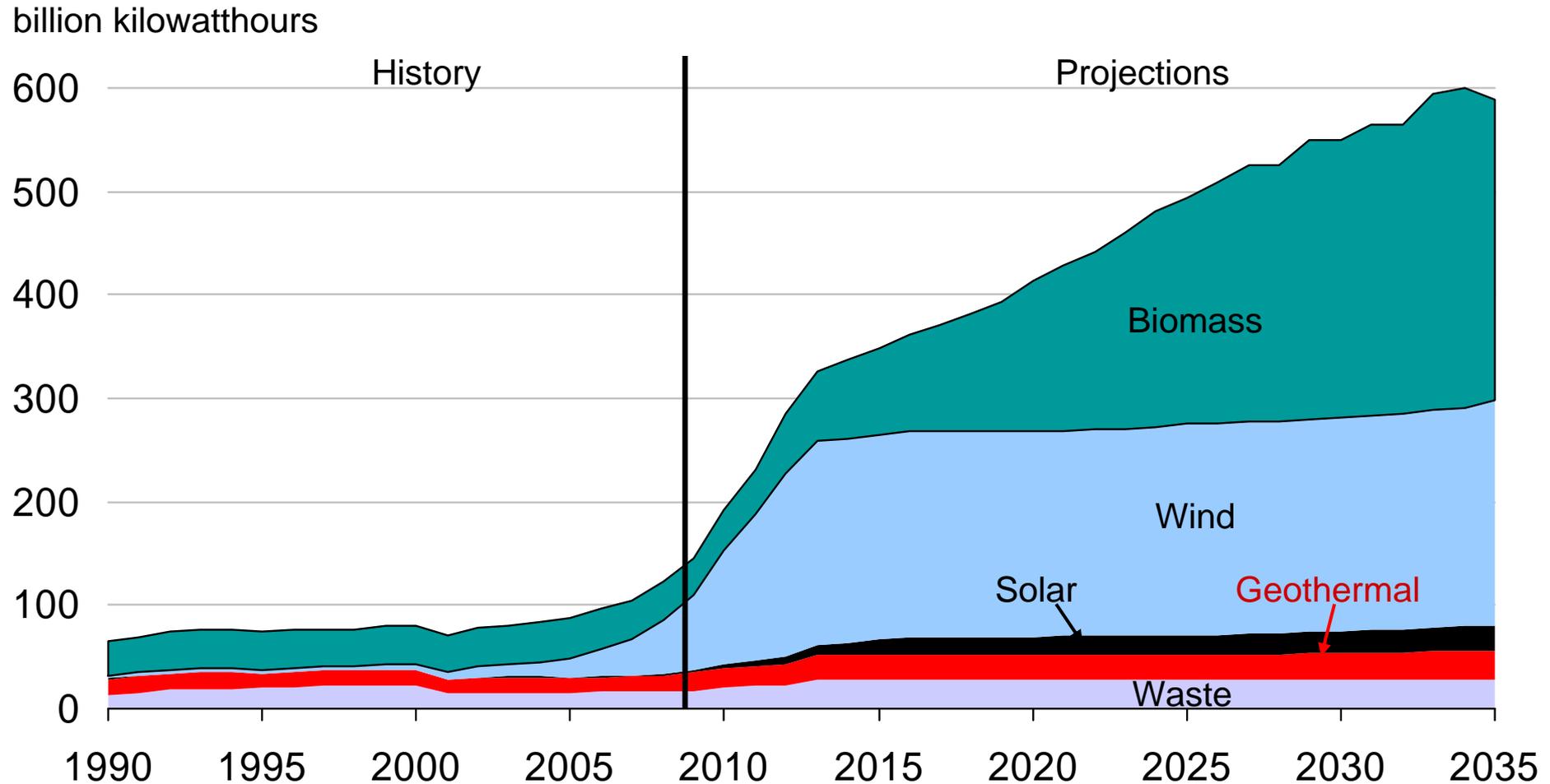


## Capacity additions 2008 to 2035

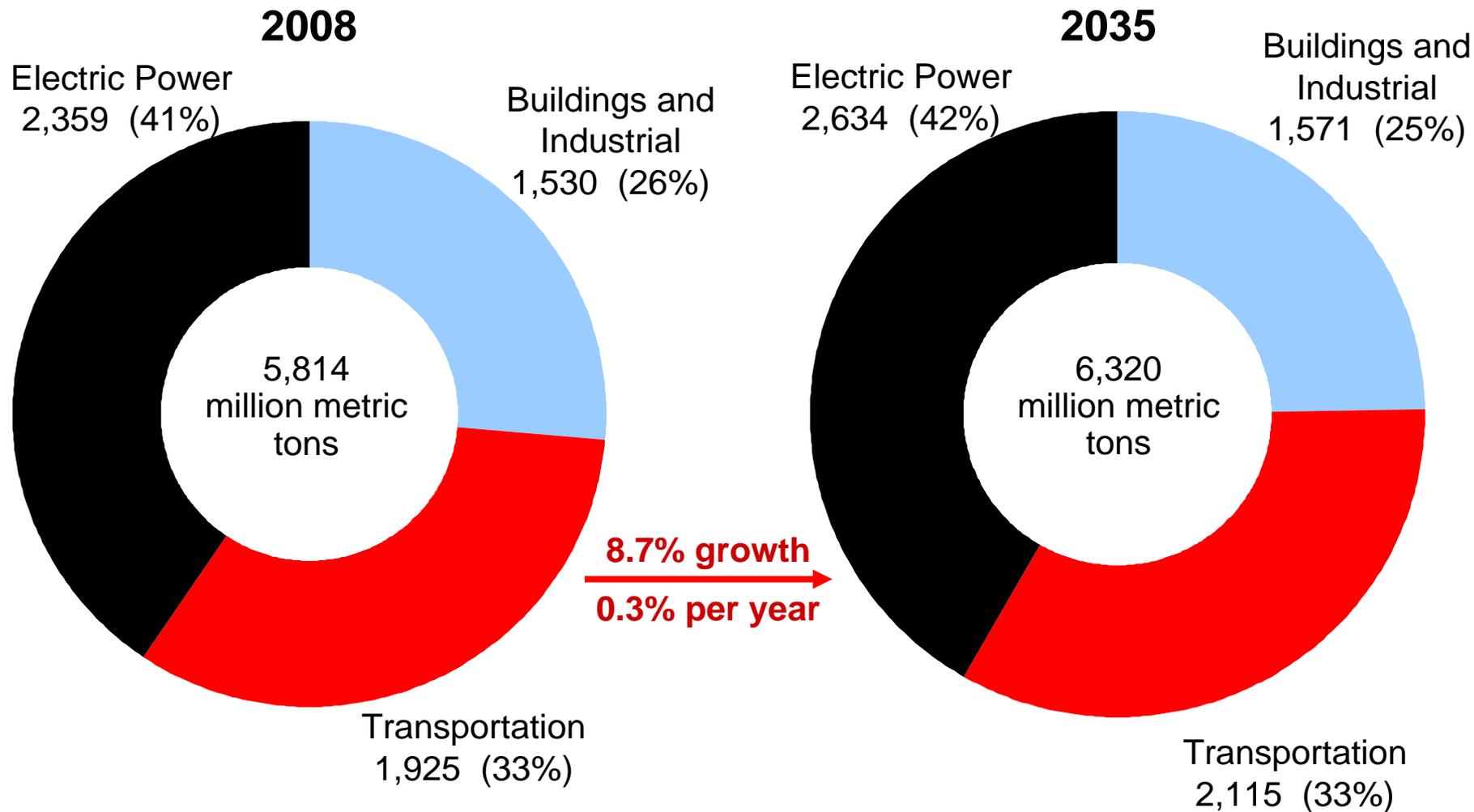


\* Includes pumped storage

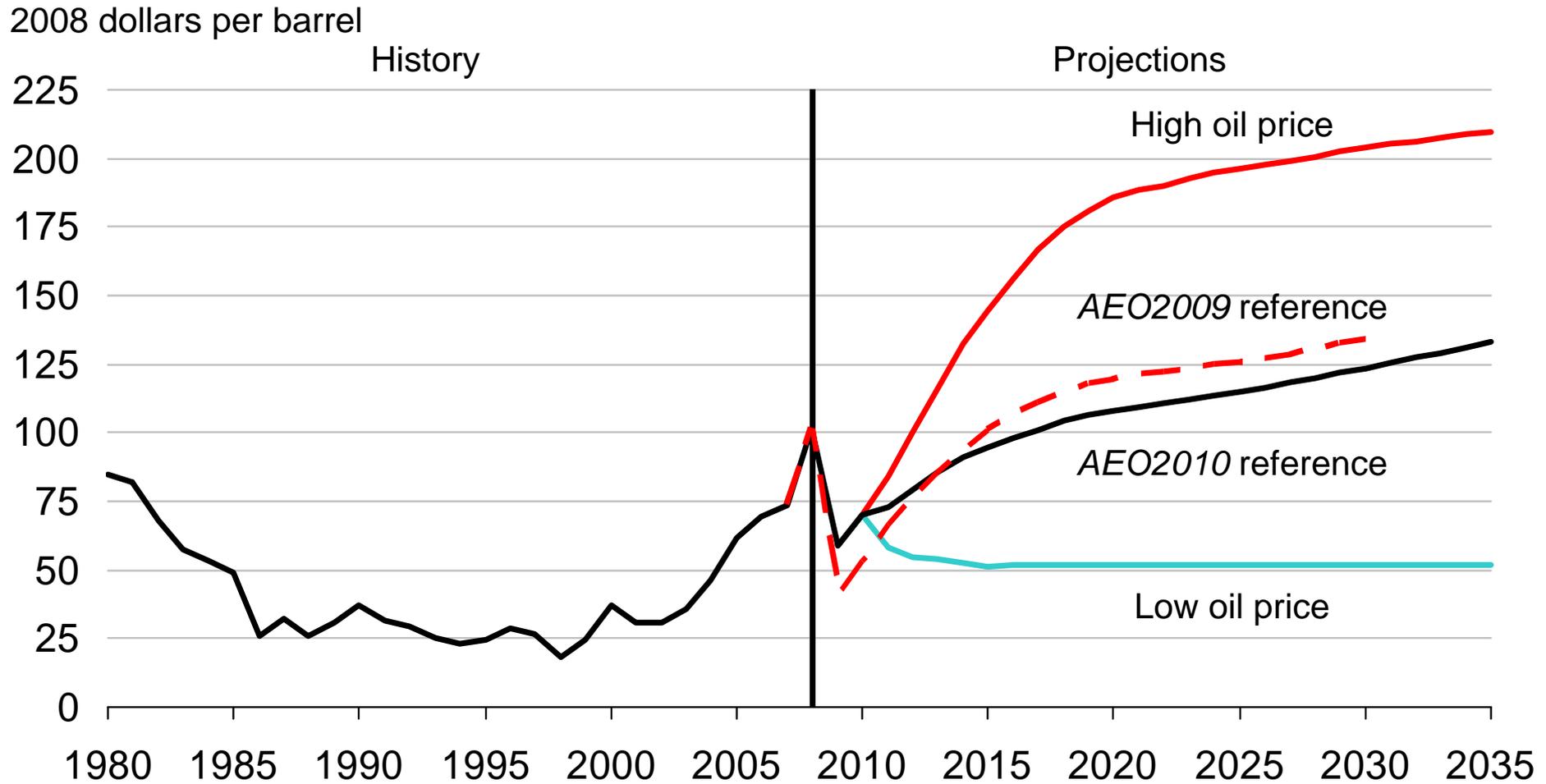
# Nonhydropower renewable sources meet 41% of total electricity generation growth from 2008 to 2035



# Assuming no new policies, growth in energy-related CO<sub>2</sub> is driven by electricity and transportation fuel use



# Oil prices in the reference case rise steadily, but are subject to considerable uncertainty



# Oil prices relate to many uncertain factors



# EIA recently launched the Energy and Financial Markets Initiative to track all the factors affecting energy prices

---

The Initiative has four main components relating to

1. Collection of critical energy information to improve market transparency
2. Analysis of energy and financial market dynamics
3. Outreach to experts and the public
4. Coordination with other Federal agencies



# New this year for State Energy Profiles and State Energy Data System

---

- State Energy Profiles
  - Territory Energy Profiles
  - Ranking charts
  - Updated energy maps
  - Expanded Quick Facts and Overviews
- State Energy Data System
  - Data.gov file
  - Expanded scope
  - Enhanced quality
  - Increased timeliness

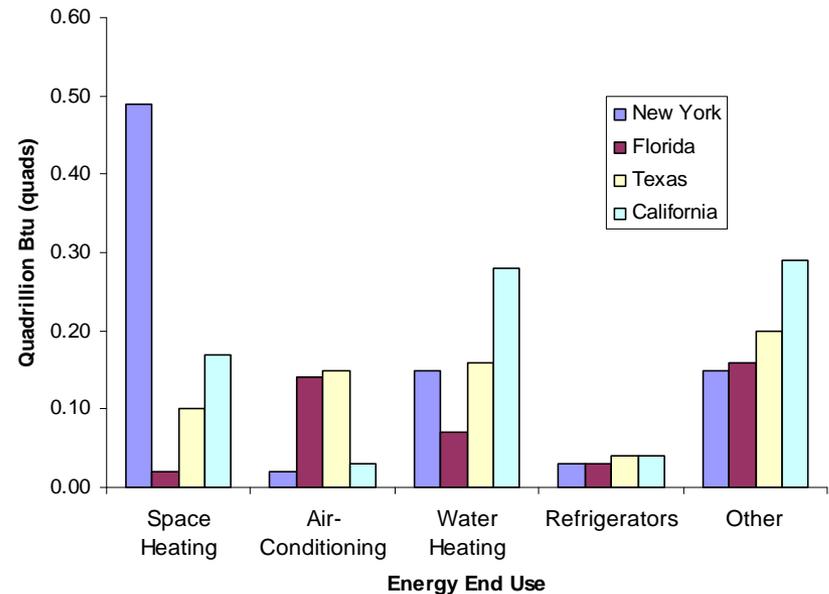
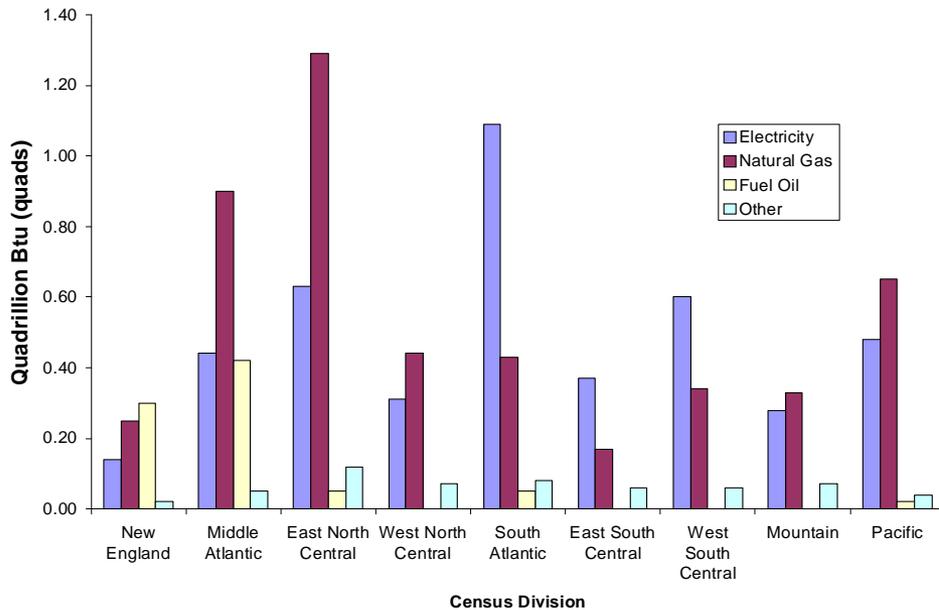
# Coming soon for State Energy Profiles and State Energy Data System

---

- State Energy Profiles
  - Add “Data Highlights” charts
  - Add regional maps of energy-intensive areas of the U.S.
  - Expand written analysis
  - Add “State in Focus”
- State Energy Data System
  - Calculate preliminary consumption estimates
  - Redesign website
  - Improve data quality
  - Expand scope

# Residential Energy Consumption Survey (RECS)

- Only comprehensive source of national data on energy-related characteristics and consumption for U.S. households
- The only EIA survey that collects household data
- Conducted every 4 years; next survey begins February 2010



# Expanded 2009 RECS (contingent on funding)

## RECS 2005

- ✓ 4,382 completed interviews
- ✓ Sampling precision poor for all areas: Region, Division, States
- ✓ National, census region and division estimates, but state level estimates for only 4 states, with low accuracy
- ✓ Sample too small for certain analyses

## RECS 2009

- ✓ 15,400 completed interviews
- ✓ Greater precision assured for all areas and key estimates
- ✓ Estimates for at least 15 states, with high accuracy
- ✓ Greater statistical power for multivariate analyses

## For more information

---

U.S. Energy Information Administration home page [www.eia.gov](http://www.eia.gov)

Short-Term Energy Outlook [www.eia.gov/emeu/steo/pub/contents.html](http://www.eia.gov/emeu/steo/pub/contents.html)

Annual Energy Outlook [www.eia.gov/oiaf/aeo/index.html](http://www.eia.gov/oiaf/aeo/index.html)

International Energy Outlook [www.eia.gov/oiaf/ieo/index.html](http://www.eia.gov/oiaf/ieo/index.html)

Monthly Energy Review [www.eia.gov/emeu/mer/contents.html](http://www.eia.gov/emeu/mer/contents.html)

National Energy Information Center [\(202\) 586-8800](tel:(202)586-8800)  
Live expert from 9:00 AM – 5:00 p.m. EST  
Monday – Friday (excluding Federal holidays)  
email: [InfoCtr@eia.doe.gov](mailto:InfoCtr@eia.doe.gov)

U.S. Energy Information Administration  
[www.eia.gov](http://www.eia.gov)

