
Annual Energy Outlook 2011 and an update on EIA activities

NGA Center for Best Practices
State Energy Working Group
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Richard Newell, Administrator



U.S. Energy Information Administration
Independent Statistics and Analysis

Key results from the *AEO2011* Reference case, which assumes current laws remain unchanged

- Increased estimates for U.S. shale gas resources drive increased U.S. production, lower prices, and lower imports of natural gas
- Industrial natural gas demand recovers, reversing recent trend
- Non-hydro renewables and natural gas are the fastest growing electricity generation sources, but coal remains the dominant fuel because of the large amount of existing capacity
- Oil imports fall due to increased domestic production—including biofuels—and greater fuel efficiency
- U.S. carbon dioxide emissions rise slowly, but do not pass 2005 levels again until 2027

What is included (and excluded) in developing EIA's "Reference Case" projections?

- Generally assumes current laws and regulations
 - excludes potential future laws and regulations (e.g., proposed greenhouse gas legislation and proposed fuel economy standards are not included)
 - provisions sunset as specified in law (e.g., renewable tax credits expire)
- Includes technologies that are commercial or reasonably expected to become commercial over next decade or so
 - includes projected cost and efficiency improvements due to technology improvements, as well as cost reductions linked to cumulative deployment levels.
 - does not assume revolutionary or breakthrough technologies

Key updates included in the *AEO2011* Reference case

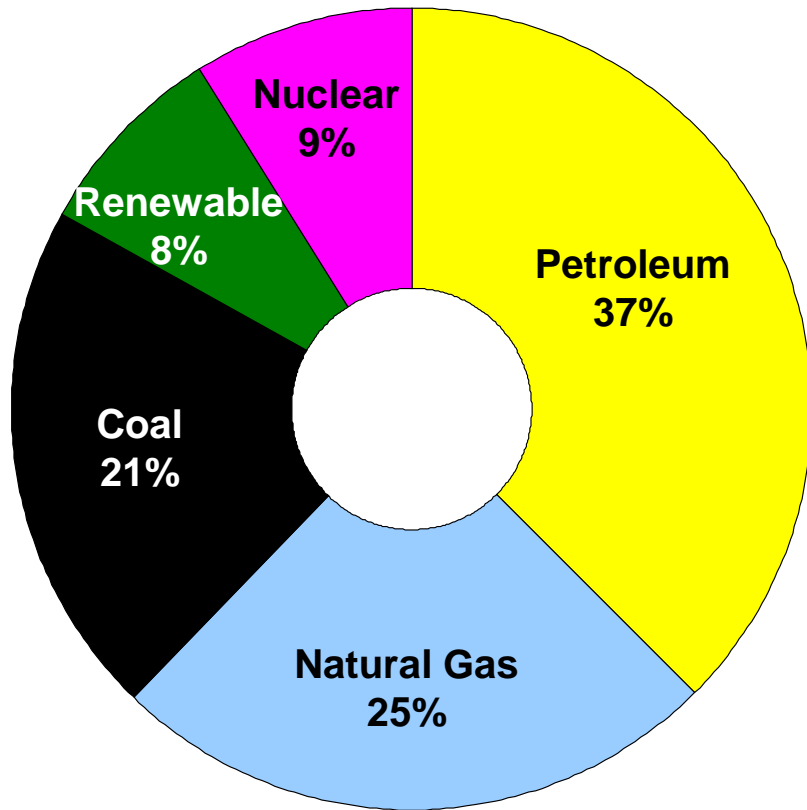
- Natural gas and oil supply
 - More than doubled the technically recoverable U.S. shale gas resources assumed in *AEO2010* and added new shale oil resources
 - Updated offshore data and assumptions, pushing out start dates for several projects as a result of the drilling moratoria and delaying Atlantic and Pacific offshore leasing beyond 2017
- Electricity
 - Updated costs for new power plants
 - Expanded number of electricity regions to 22 from 13, allowing better regional representation of market structure and power flow
- Transport
 - Increased limit for ethanol blending into gasoline from E10 to E15 for approved vehicles, as a result of the EPA waiver granted in October 2010
 - Includes California's Low Carbon Fuel Standard, which reduces the carbon intensity of gasoline and diesel fuels in that state by 10% from 2012 through 2020
 - Revised light duty vehicle miles travelled downward
 - Updated electric and plug-in hybrid electric battery cost and size

U.S. Energy Consumption

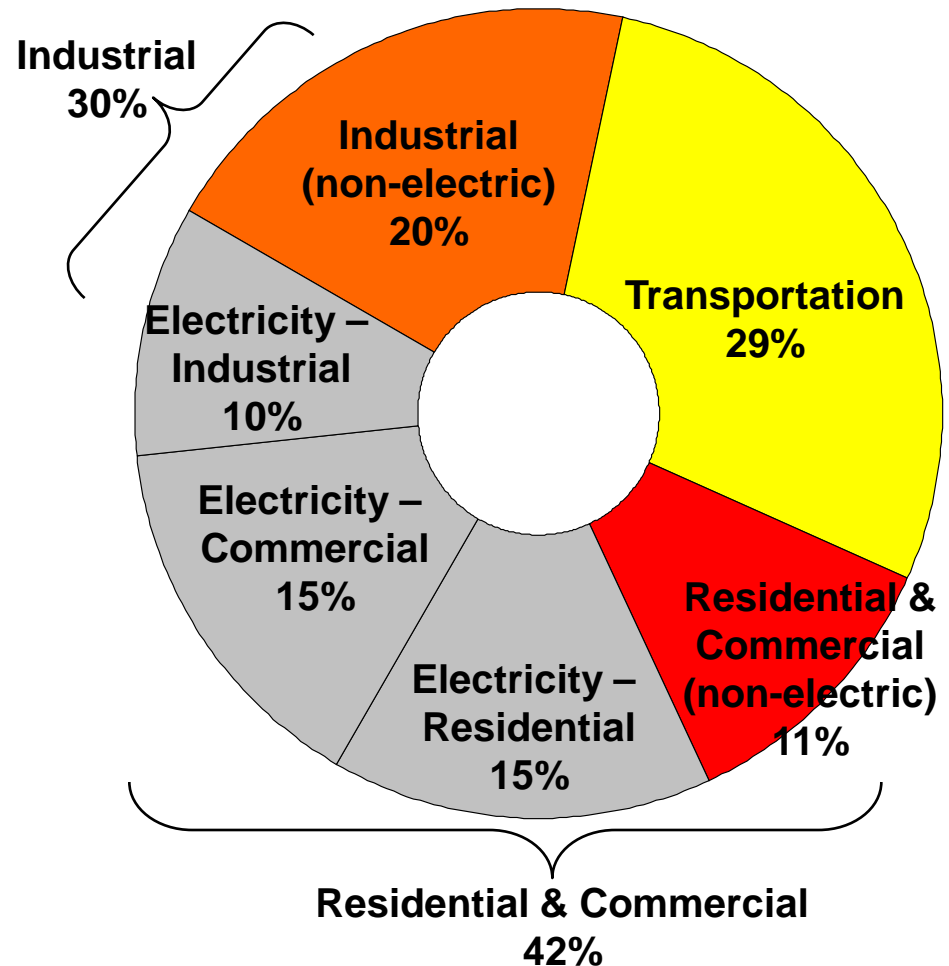
Current U.S. energy supply is 83% fossil fuels; demand is broadly distributed among the major sectors

2009 total U.S. energy use = 94.6 quadrillion Btu

Energy supply

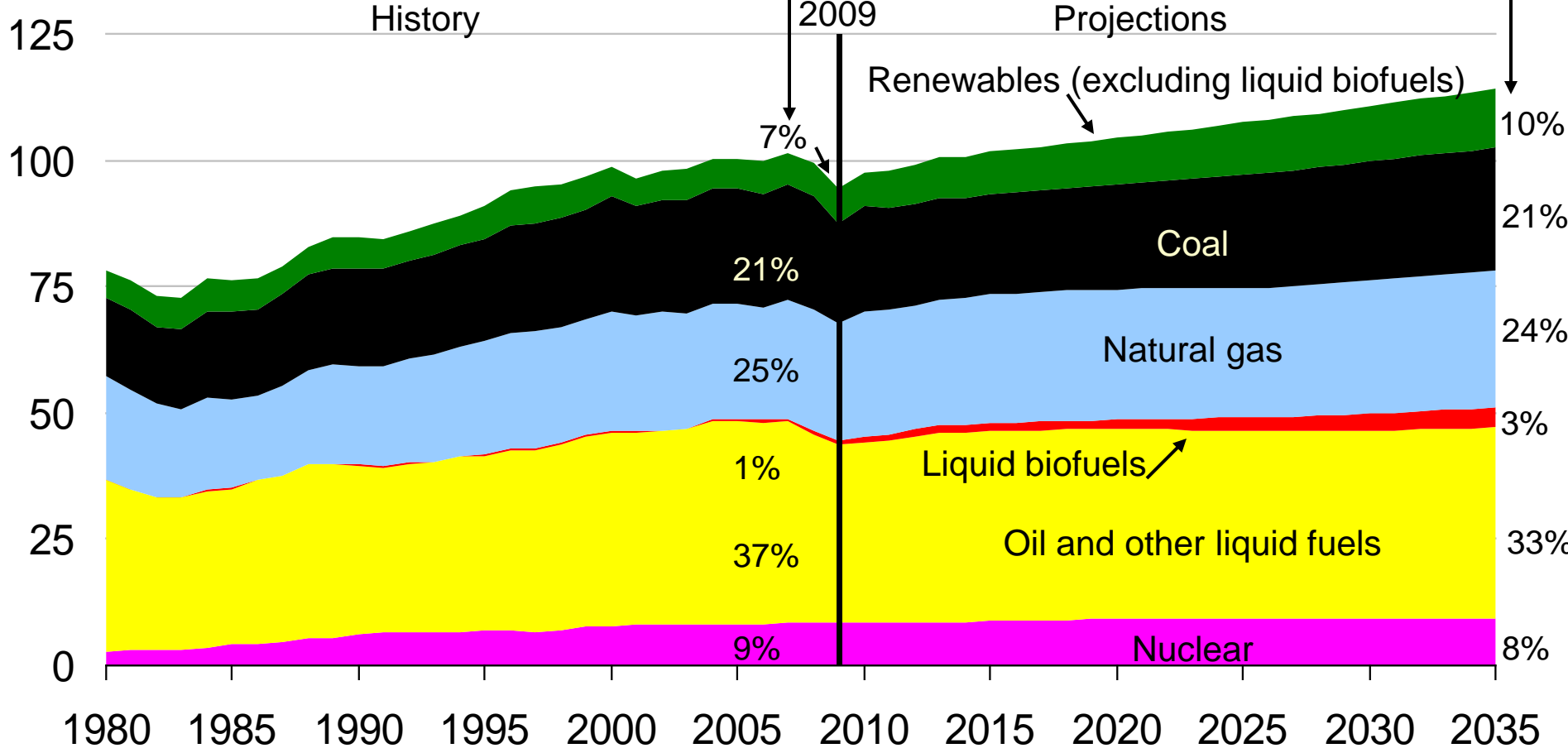


Energy demand

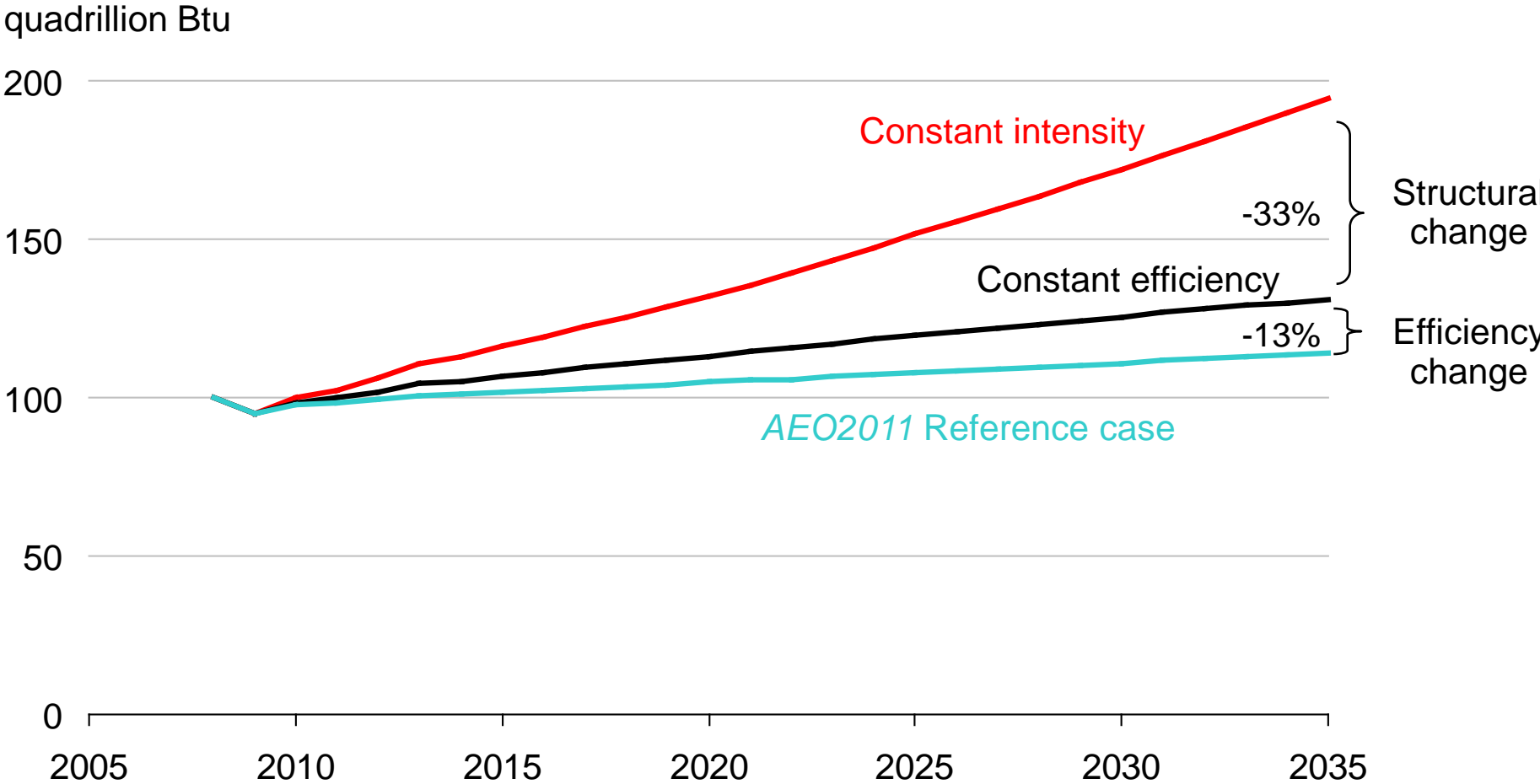


Renewables grow rapidly, but under current policies fossil fuels still provide 78% of U.S. energy use in 2035

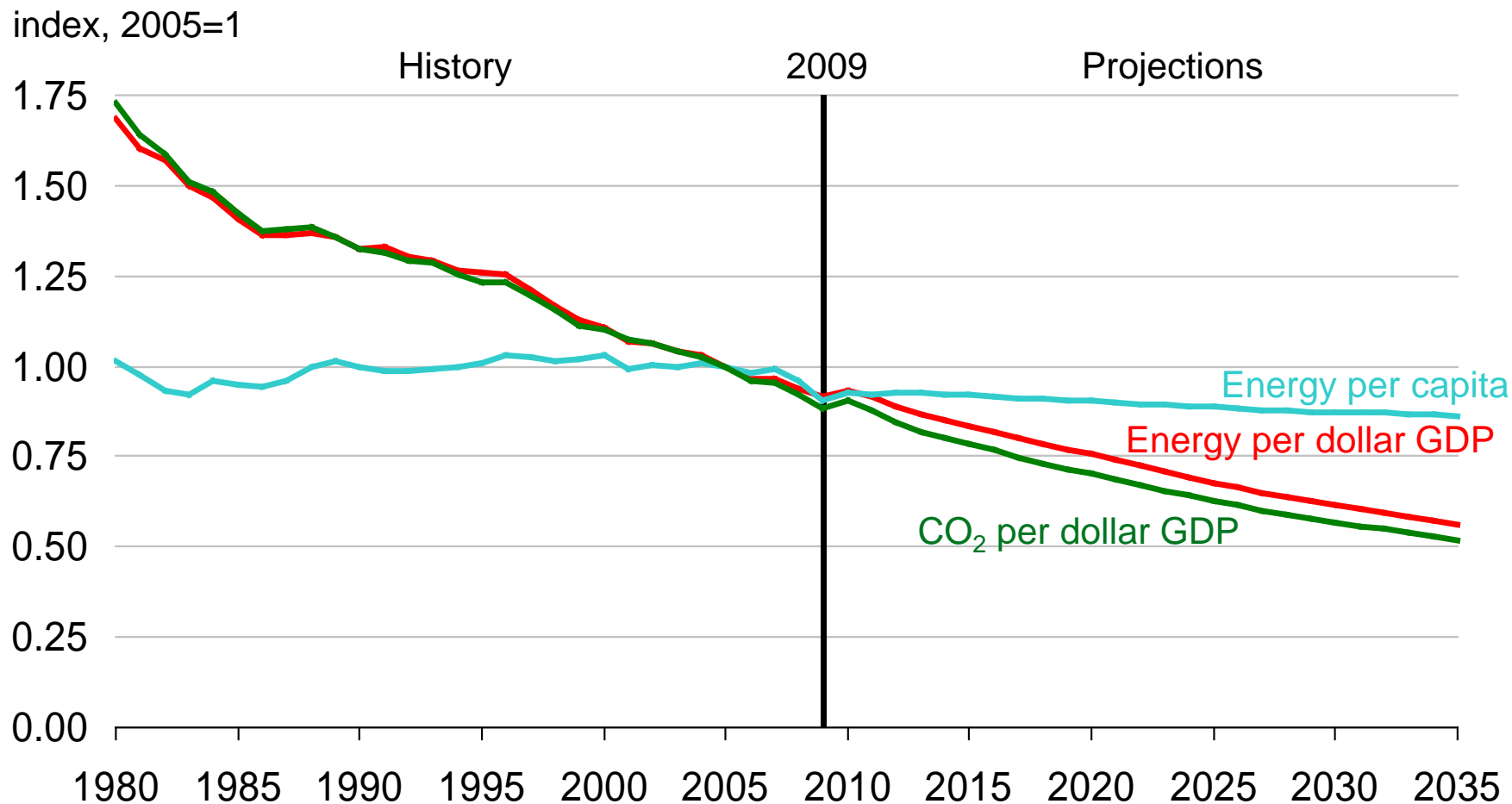
U.S. primary energy consumption
quadrillion Btu per year



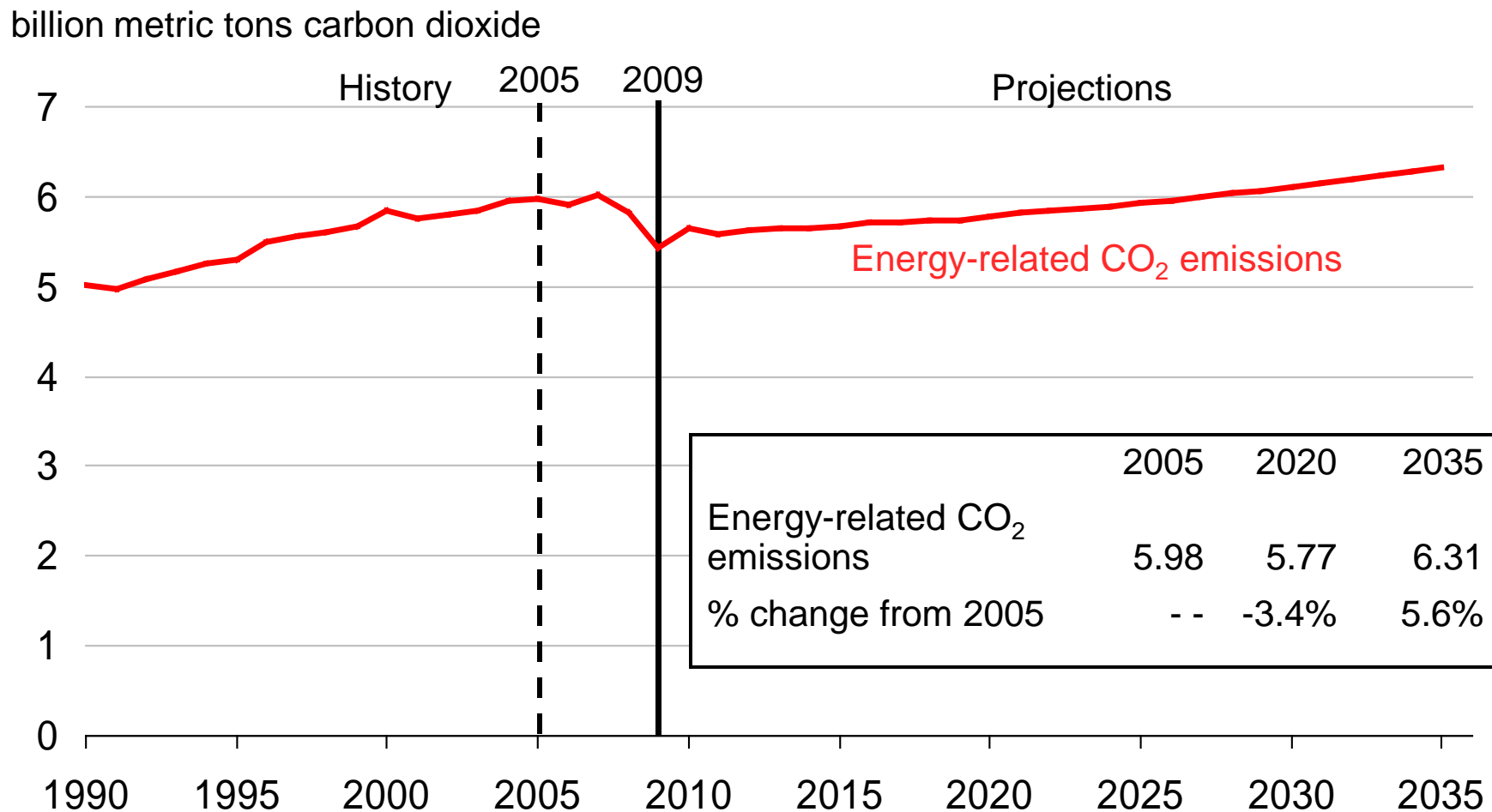
Energy efficiency gains reduce consumption 13% from where it would otherwise be; structural change is even larger



Energy and CO₂ per dollar of GDP continue to decline; per-capita energy use also declines



In the *AEO2011* Reference case, energy-related CO₂ emissions grow almost 6% over 2005 levels by 2035

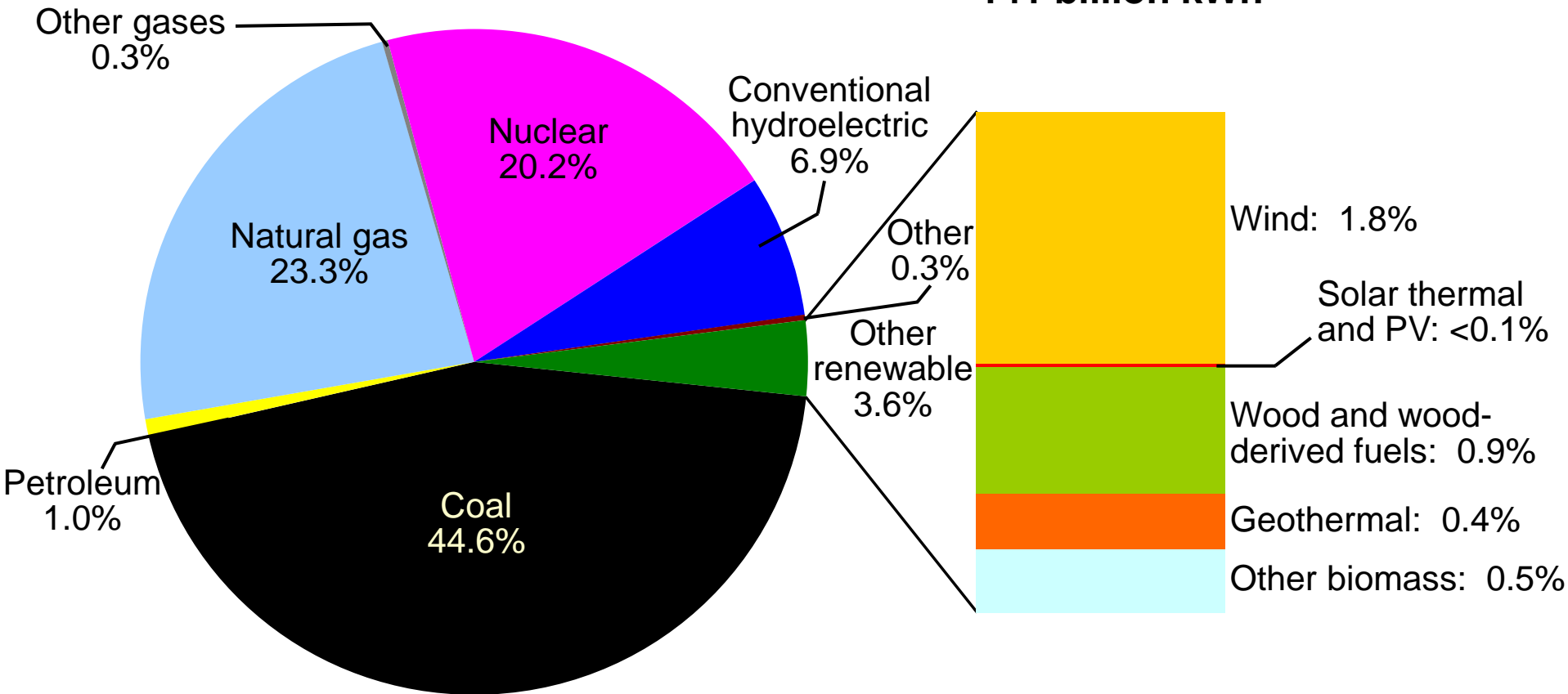


Electricity

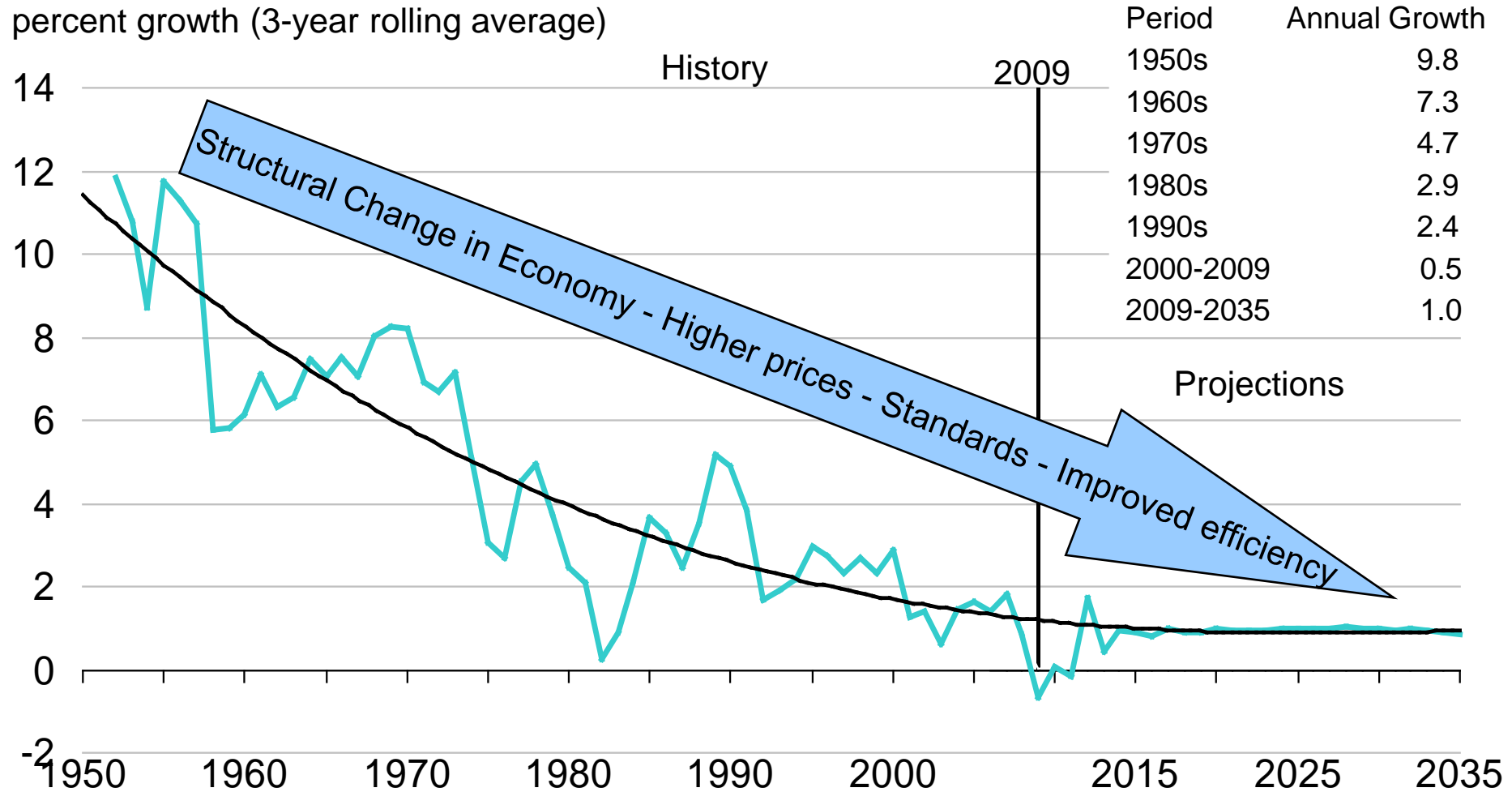
In 2009, electricity generation was 70% fossil fuels, 20% nuclear, and 10% renewable

**2009 Total net generation:
3,953 billion kWh**

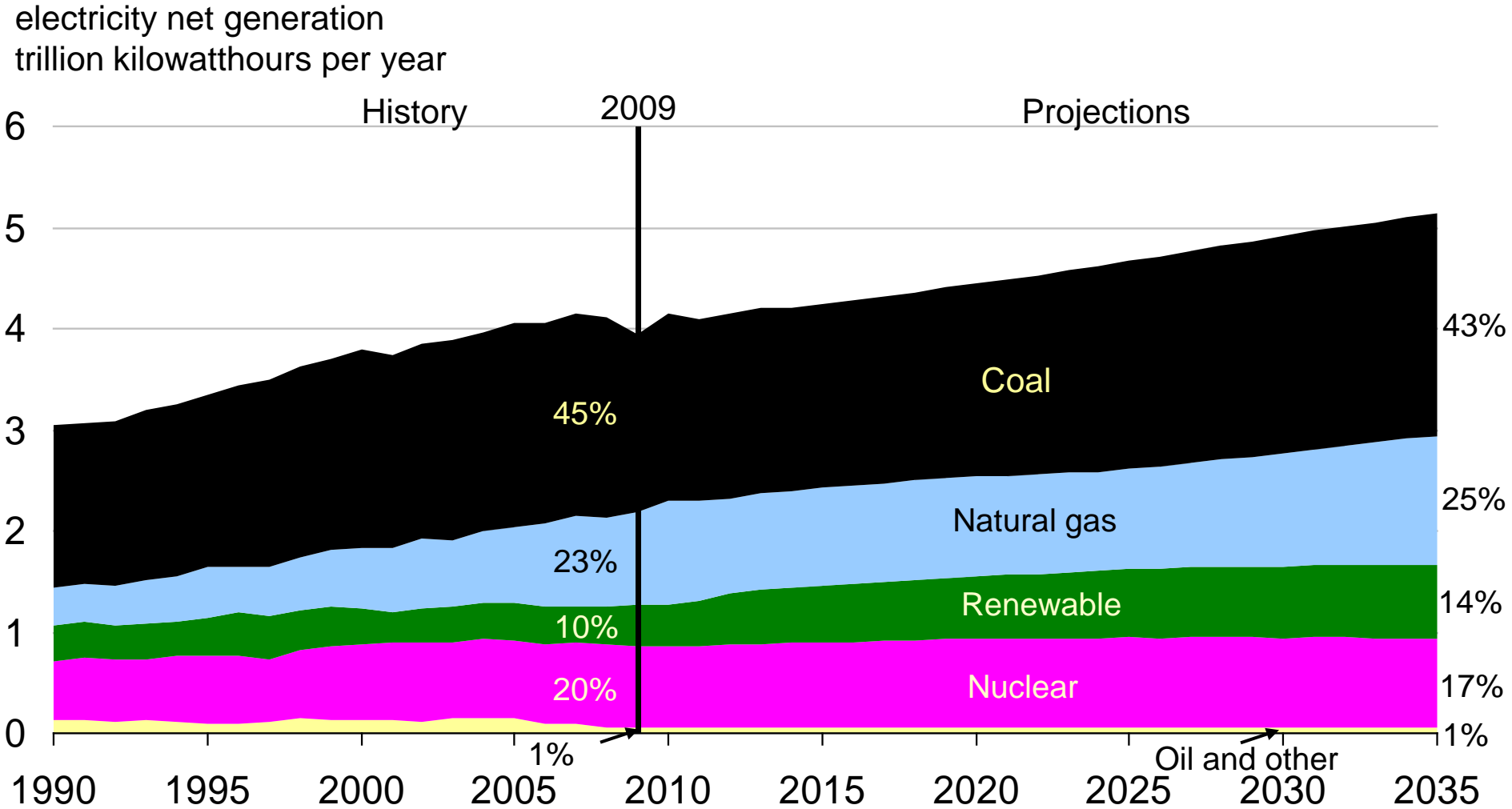
**2009 Non-hydro renewable
net generation:
141 billion kWh**



While projected electricity consumption grows by 30%, the rate of growth has slowed

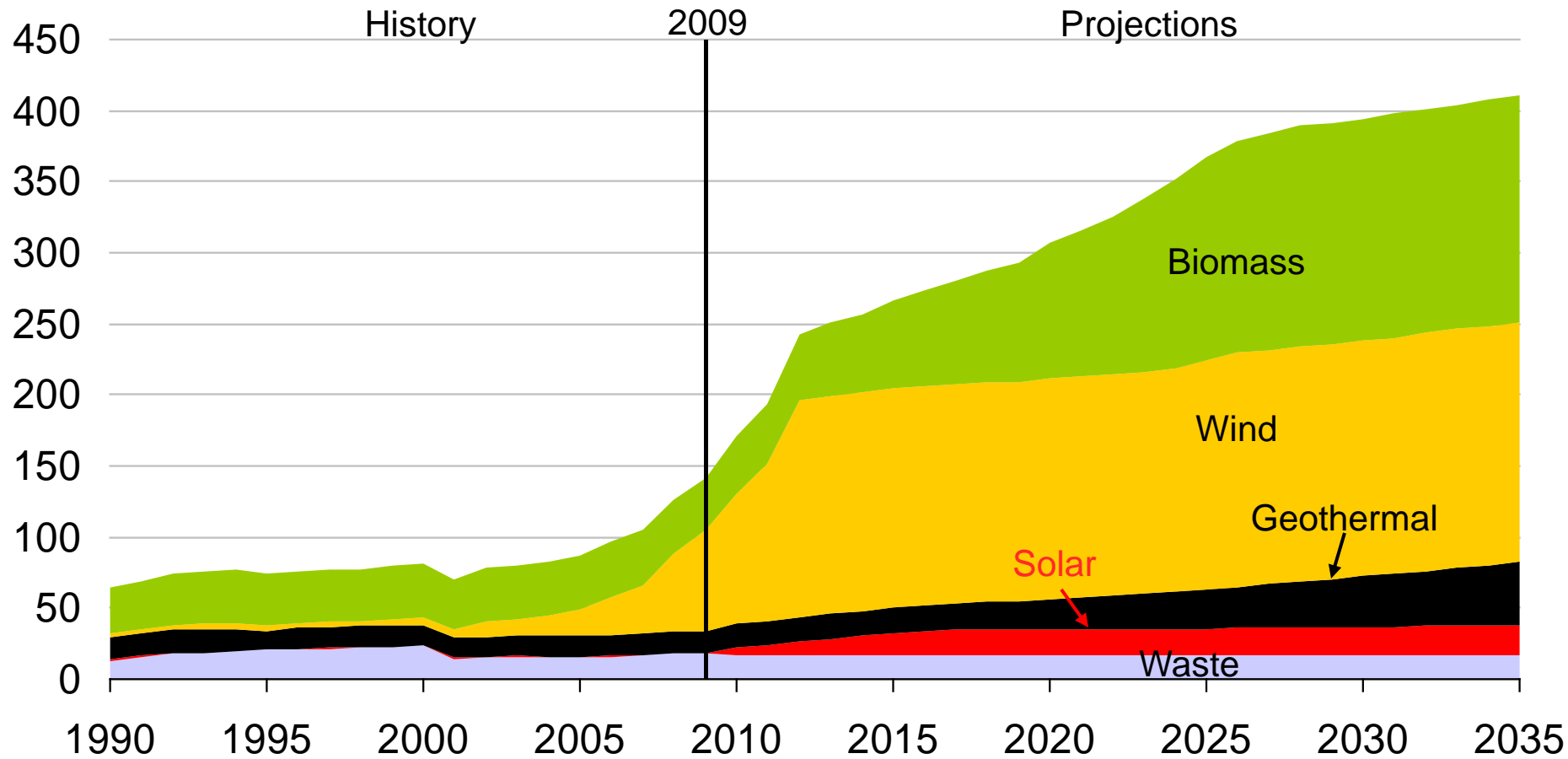


The projected electricity mix gradually shifts to lower-carbon options, with generation from natural gas rising 37% and renewables rising 73%

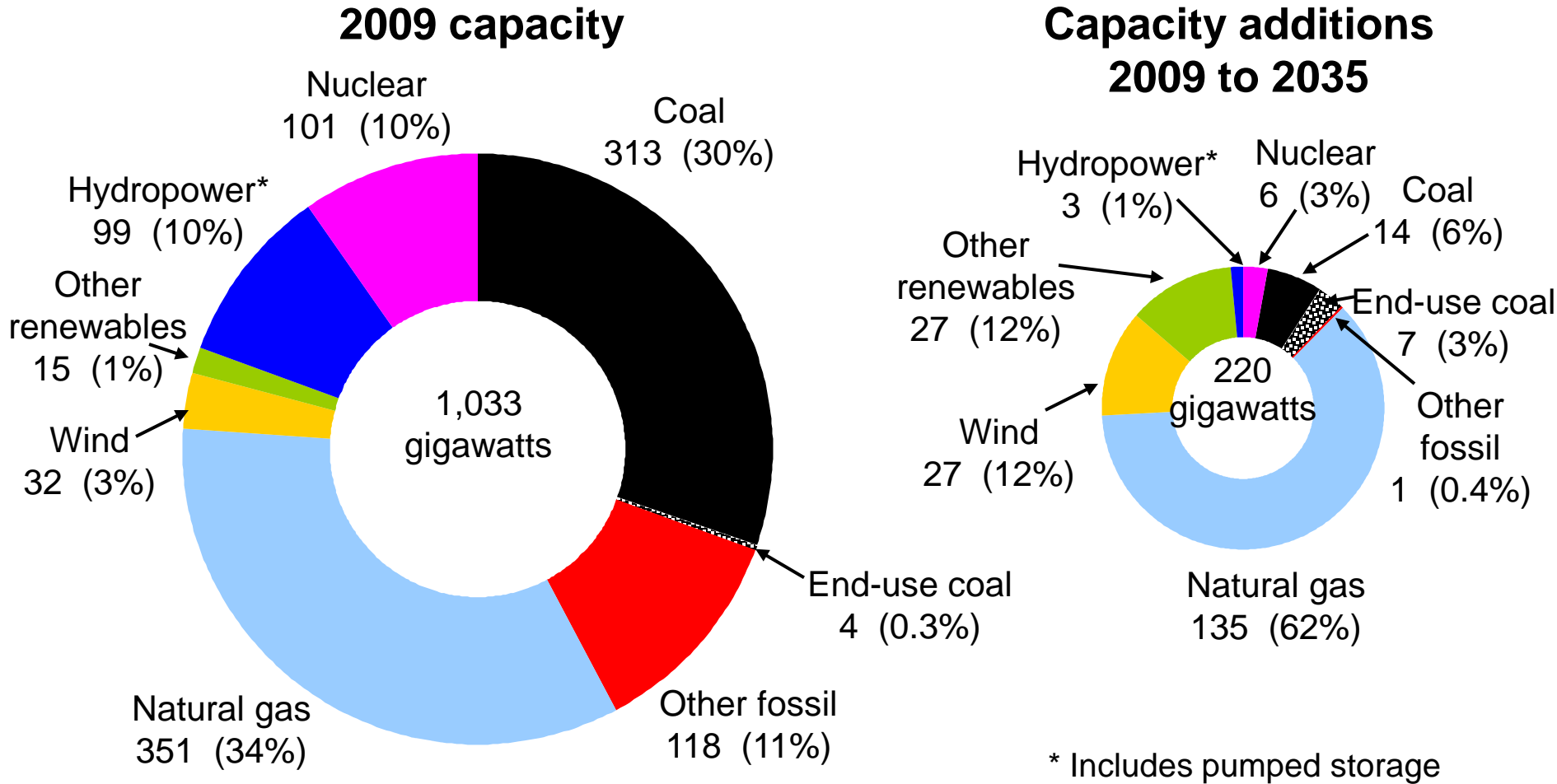


Non-hydro renewable sources grow nearly three-fold, meeting 23% of projected electricity generation growth

non-hydropower renewable generation
billion kilowatthours per year

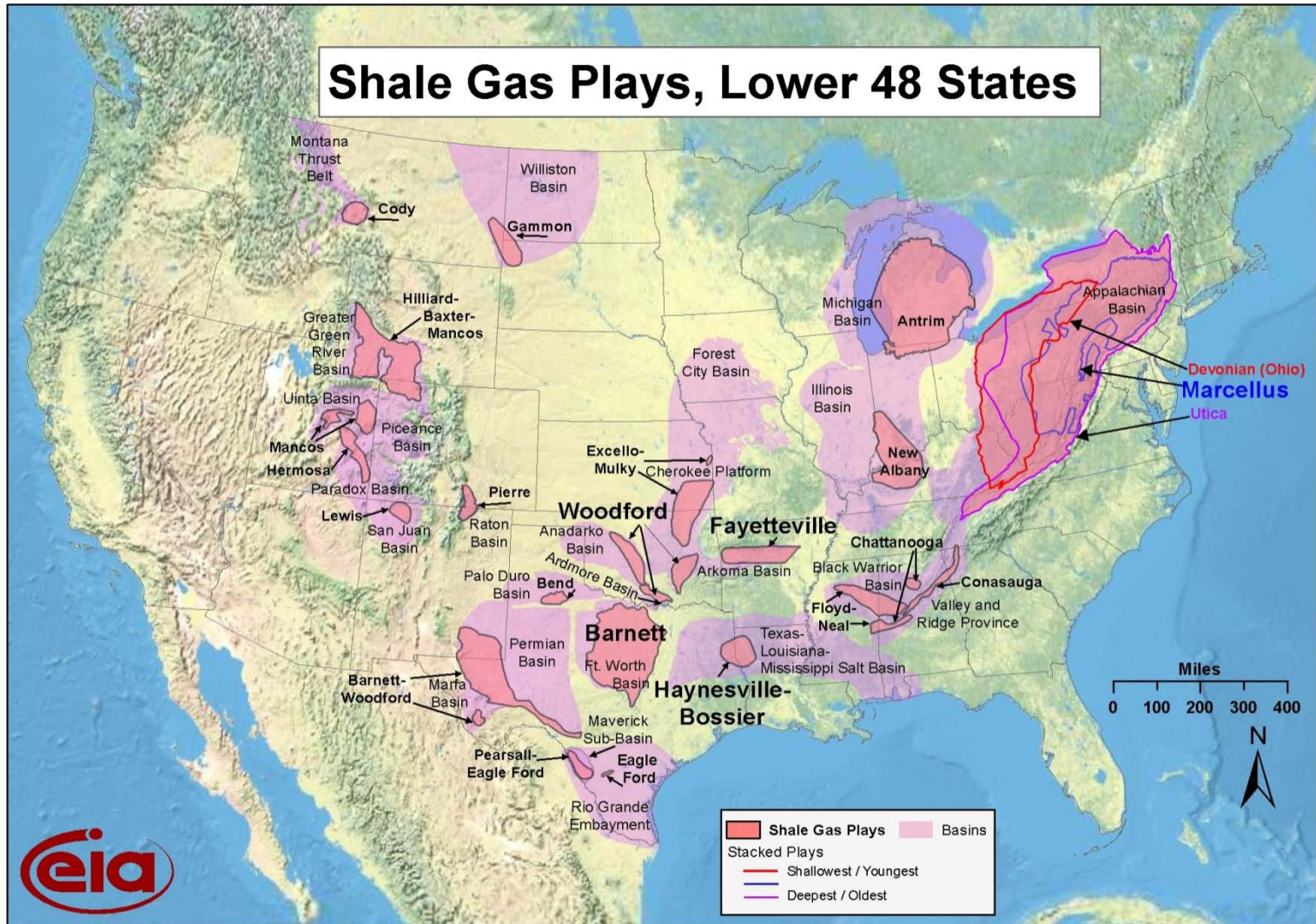


Natural gas, wind and other renewables account for the vast majority of capacity additions from 2009 to 2035



Natural gas

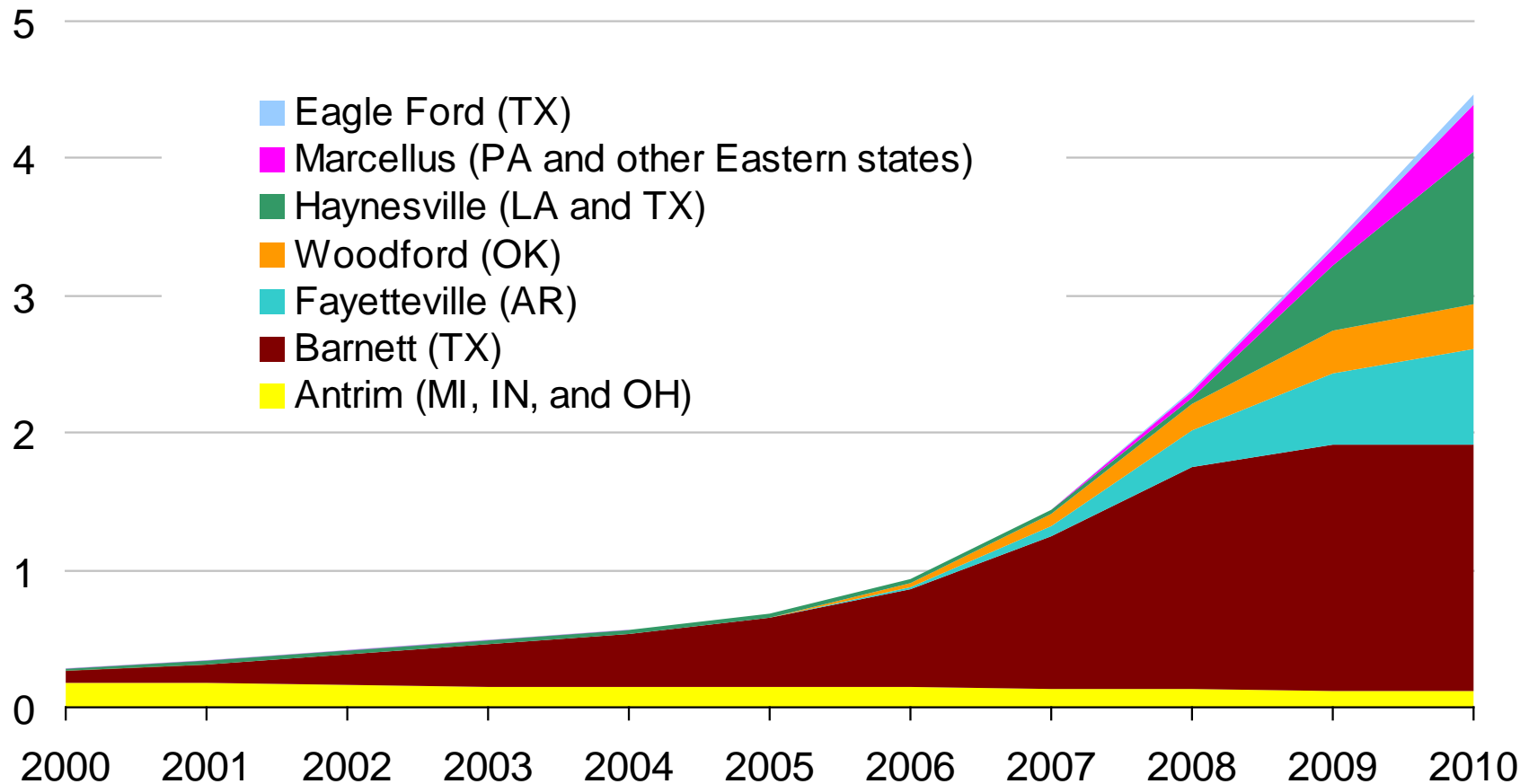
Success in the Barnett prompted companies to look at other shale gas formations in the United States



Source: Energy Information Administration based on data from various published studies.
 Updated: March 10, 2010

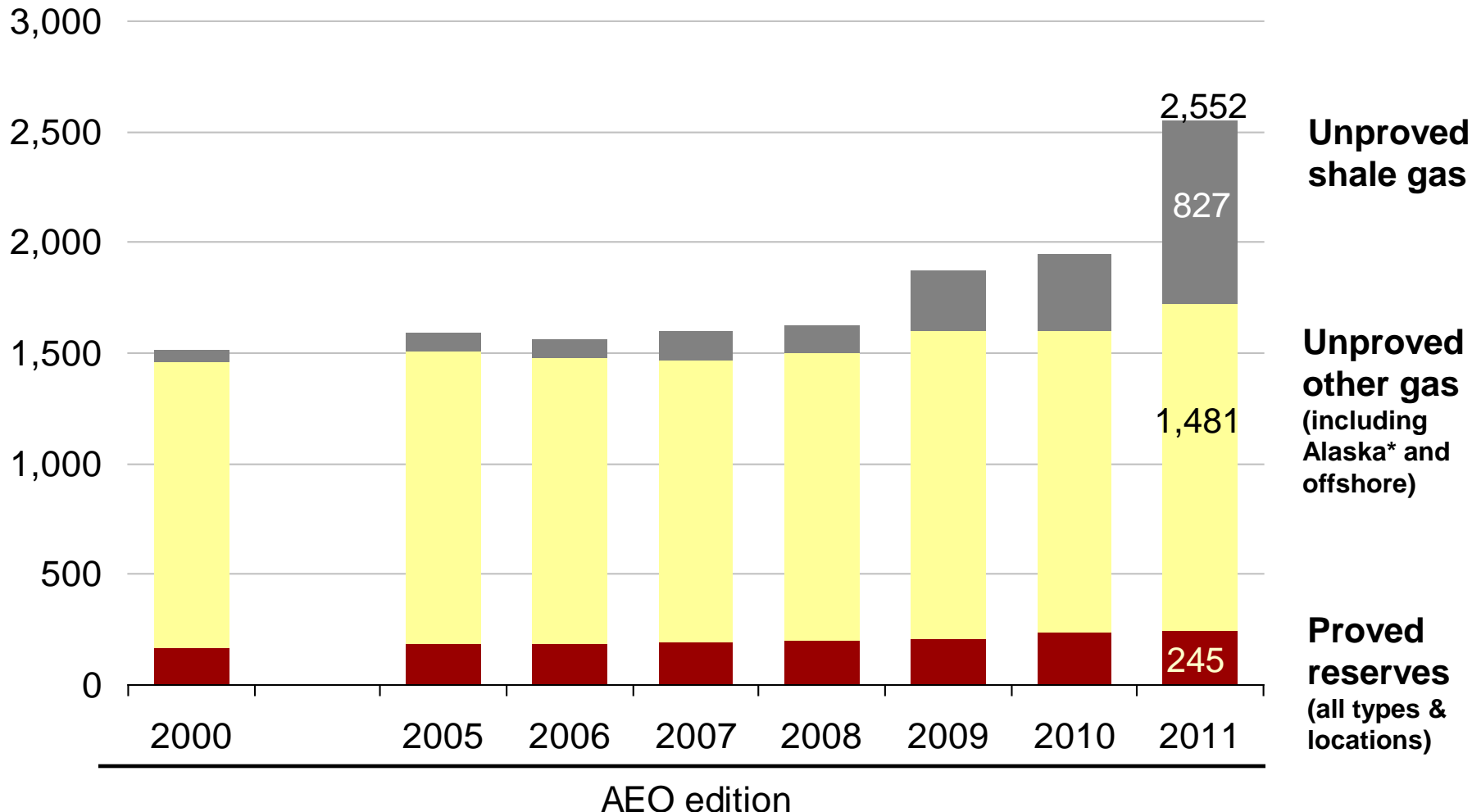
U.S. shale gas production increased 14-fold over the last decade; reserves tripled over the last few years

annual shale gas production
trillion cubic feet per year



Shale gas has been the primary source of recent growth in U.S. technically recoverable natural gas resources

U.S. dry gas resources
trillion cubic feet

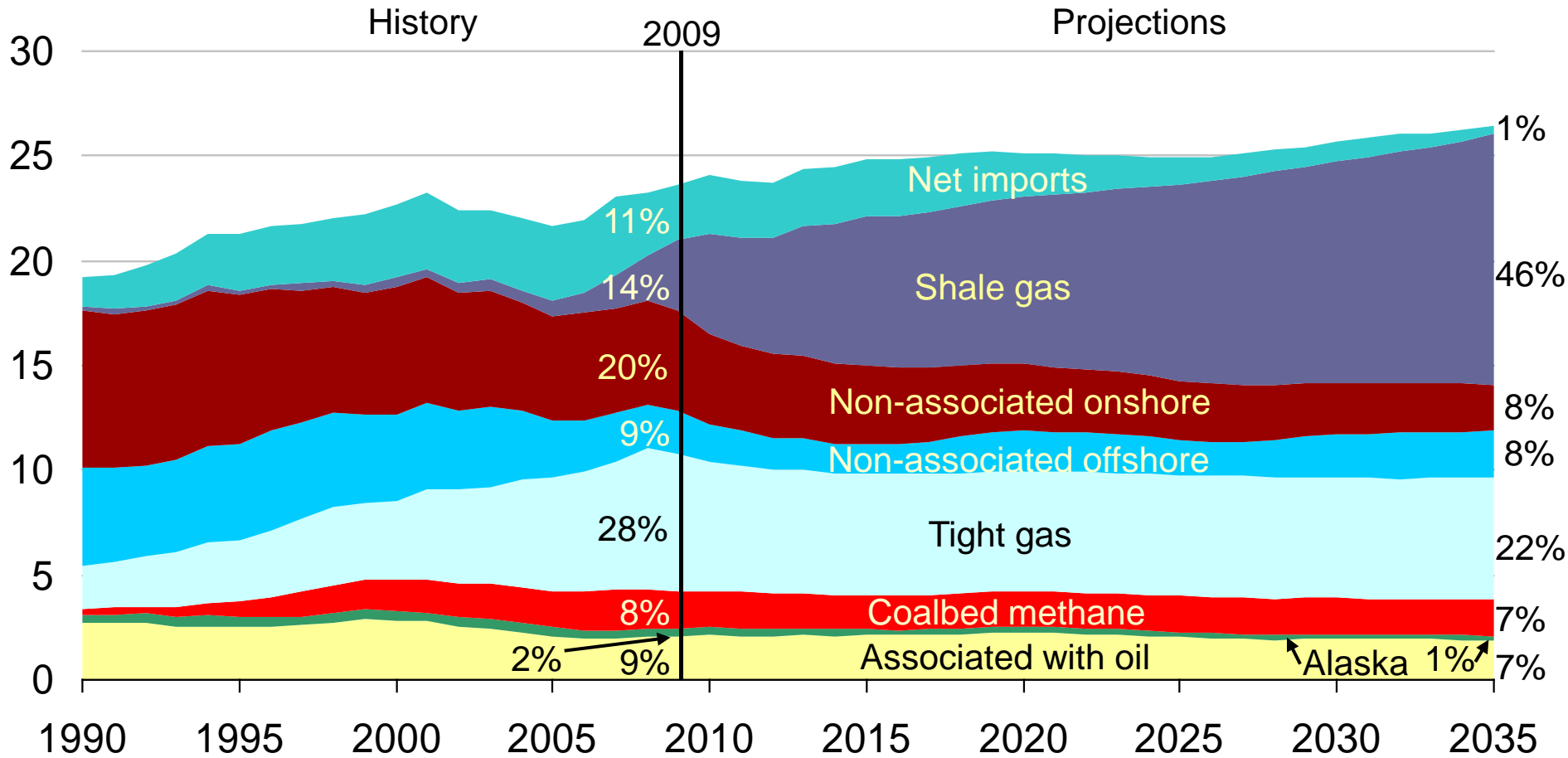


* Alaska resource estimates prior to AEO2009 reflect resources from the North Slope that were not included in previously published documentation.



Four-fold increase in shale gas production offsets declines in other U.S. supply, meeting consumption growth and lowering import needs

U.S. dry gas
trillion cubic feet per year

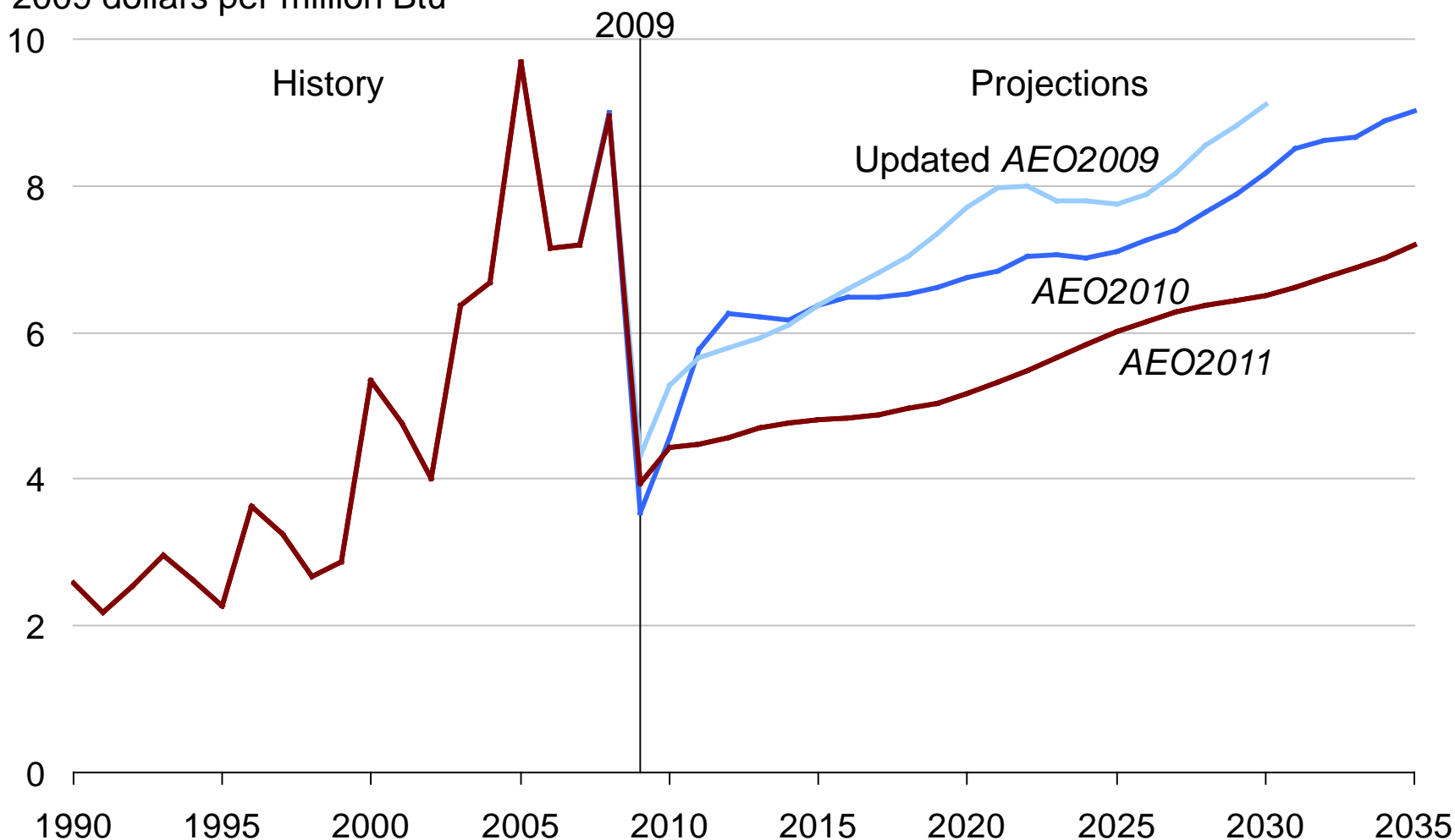


Natural gas consumption is quite dispersed; a number of key economic and market drivers underpin natural gas consumption growth

| Sector | TCF gas consumption | | Growth (2009-2035) | Key drivers |
|---|---------------------|------|-----------------------|--|
| | 2009 | 2035 | | |
| Industrial, including combined heat- and-power | 7.3 | 9.3 | 26% | +187% combined heat-and-power generation; +30% output of gas-intensive industry; lower natural gas prices |
| Central electric power | 6.9 | 7.8 | 13% | +30% electricity consumption; lower natural gas prices; offset by +72% renewable generation and +24% coal generation |
| Commercial | 3.1 | 3.8 | 22% | +37% commercial floorspace; -3% energy intensity |
| Residential | 4.7 | 4.8 | <1% | +30% number of households; +19% total square footage; -16% energy intensity |

Natural gas price projections are significantly lower than past years due to an expanded shale gas resource base

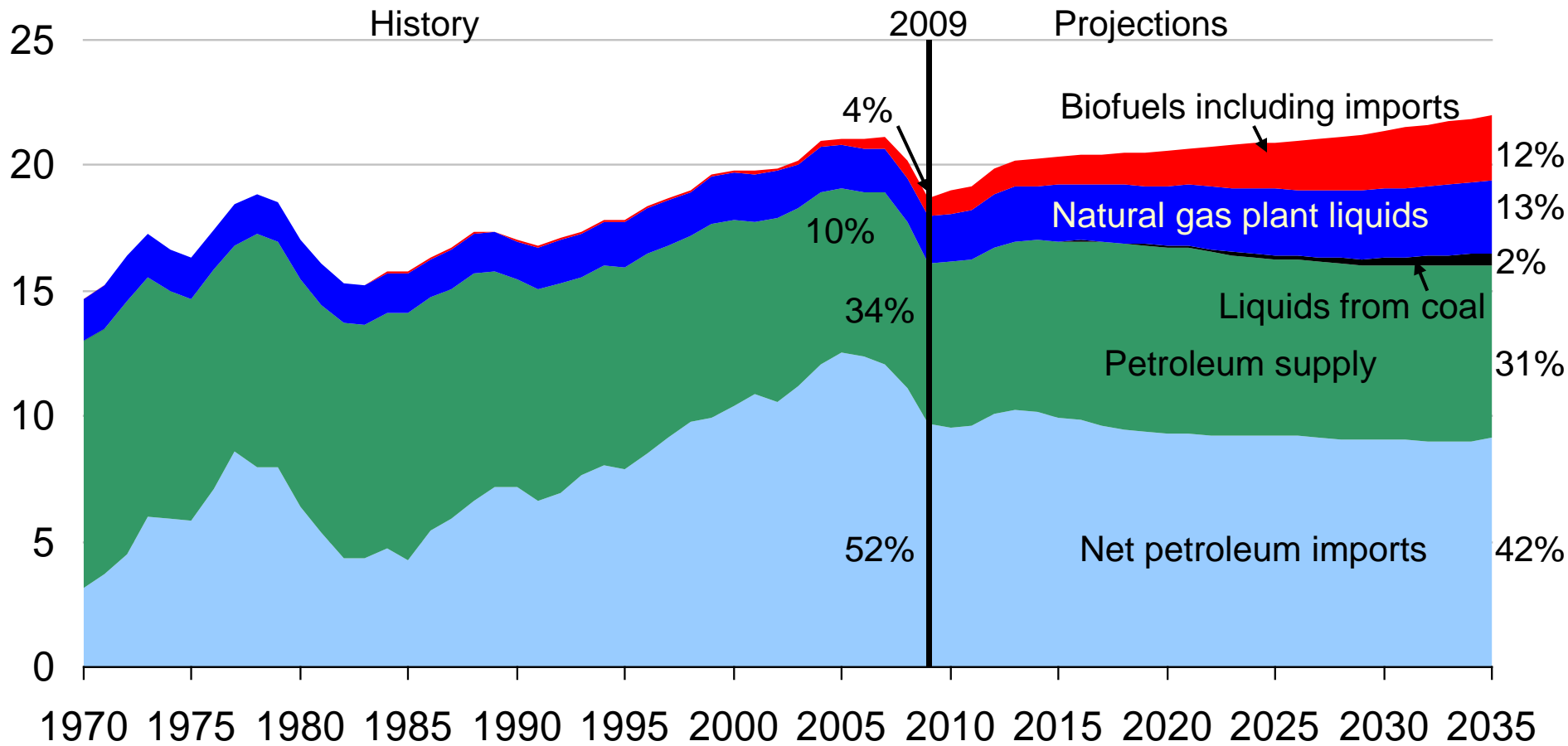
natural gas spot price (Henry Hub)
2009 dollars per million Btu



Oil and other liquid fuels

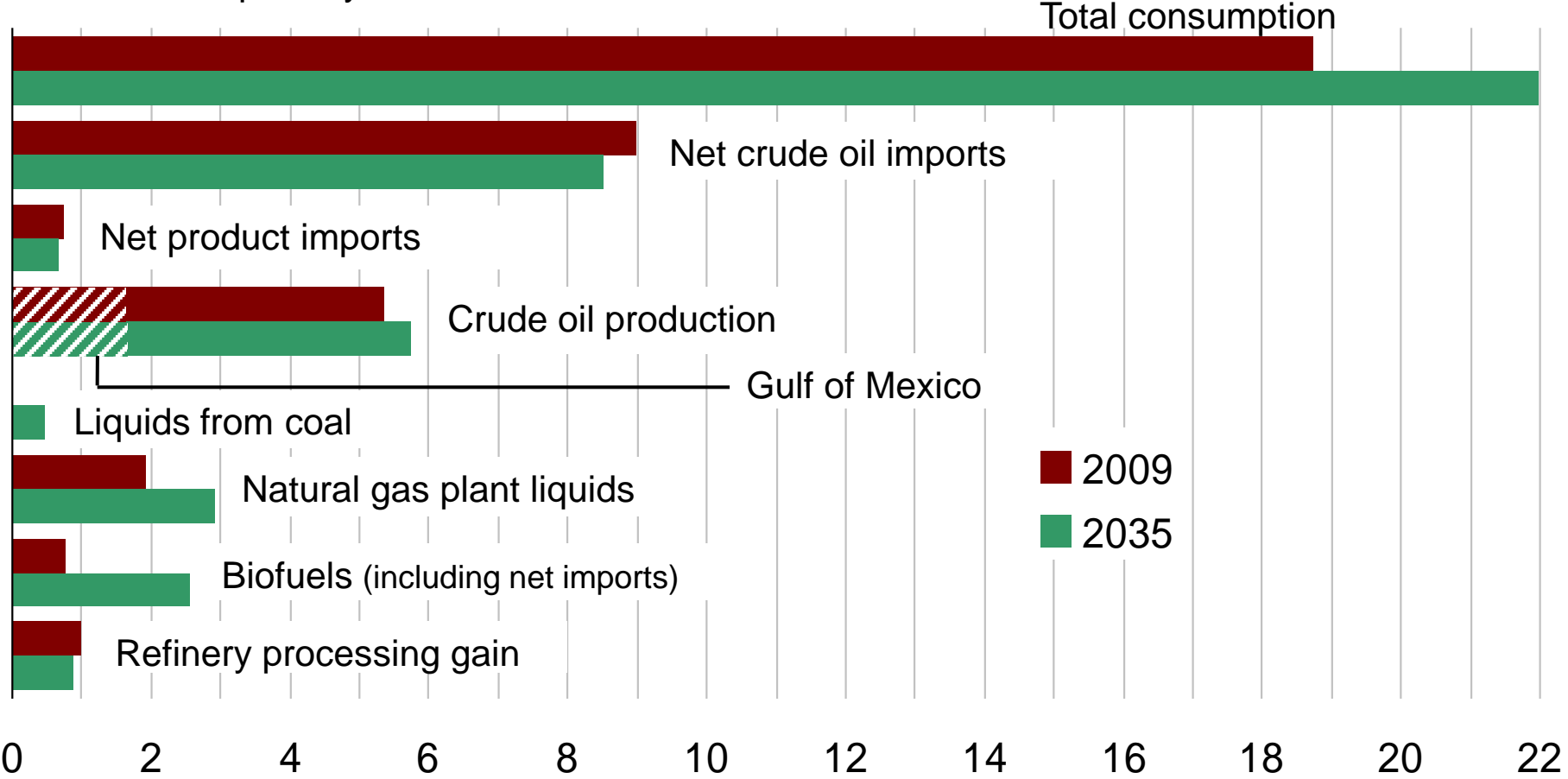
U.S. imports of liquid fuels fall due to increased domestic production—including biofuels—and greater fuel efficiency

U.S. liquid fuels consumption
million barrels per day



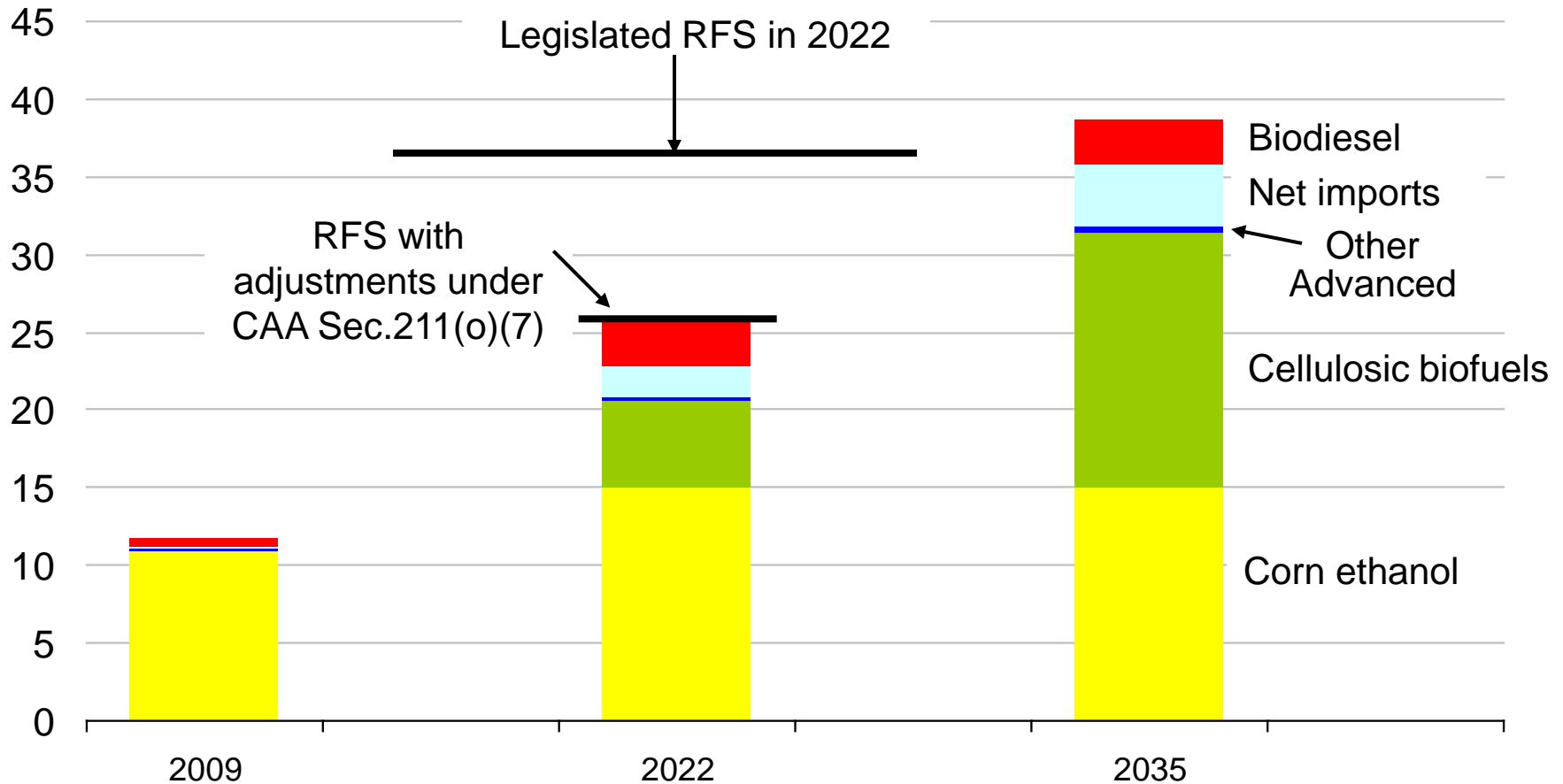
Biofuels, natural gas liquids, and crude oil production are key sources of increased domestic liquids supply

U.S. liquid fuels
million barrels per day



Biofuels fall short of the goal in 2022, but exceed the 36 billion gallon RFS target by 2030

billions ethanol-equivalent gallons



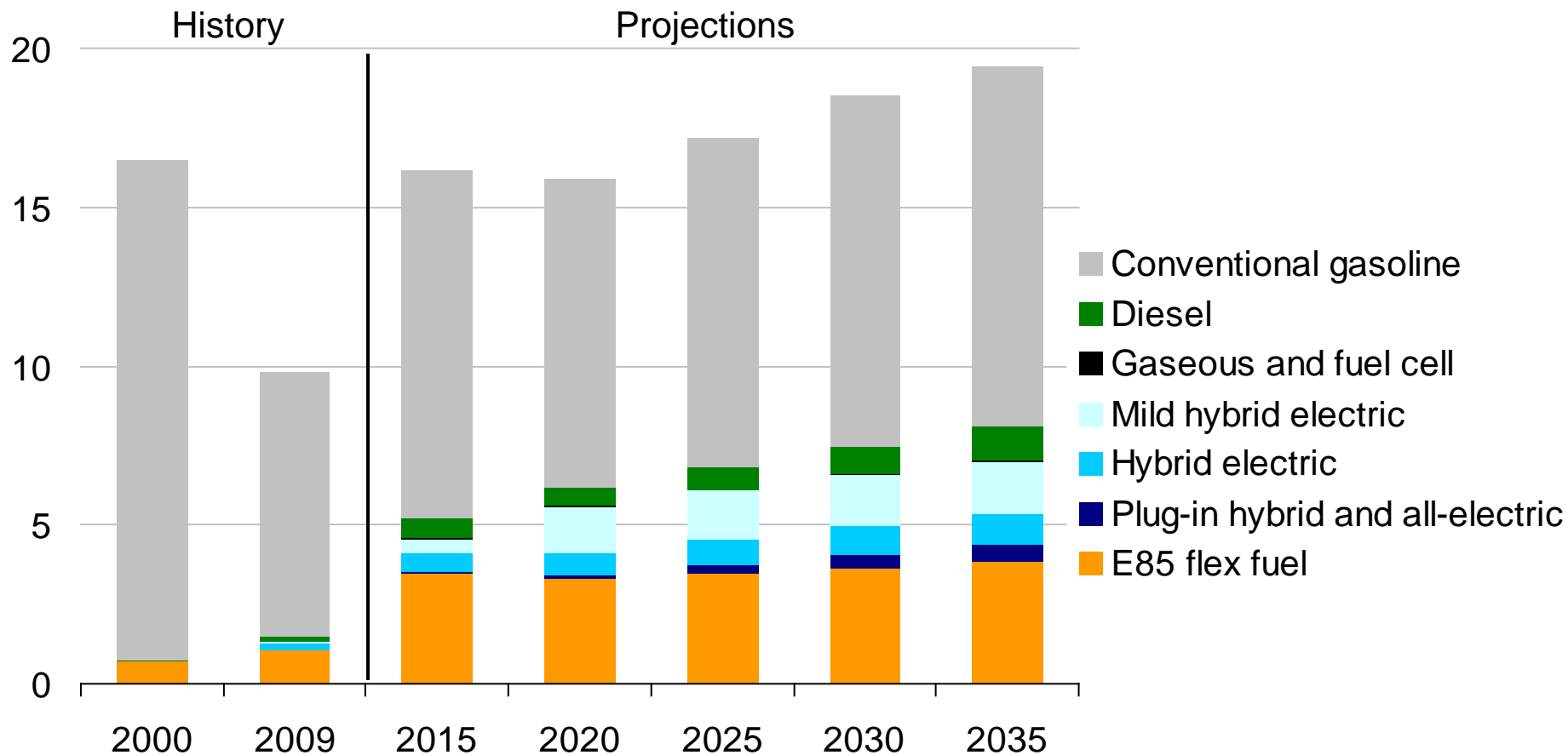
Efficiency improvements partially offset underlying drivers of growth in transportation services

| | 2009 | 2035 | Growth (2009-2035) |
|---|--------|--------|-----------------------|
| Light duty vehicles | | | |
| Fuel consumption (million barrels per day oil equivalent) | 8.9 | 10.2 | 15% |
| Number of licensed drivers (millions) | 207 | 265 | 28% |
| Miles per licensed driver | 13,100 | 15,300 | 17% |
| Efficiency of vehicle stock (mpg) | 20.8 | 27.8 | 34%* |
| Heavy duty vehicles | | | |
| Fuel consumption (million barrels per day oil equivalent) | 2.2 | 3.2 | 47% |
| Manufacturing output (billion 2005 dollars) | 4,197 | 6,761 | 61% |
| Number of freight trucks (millions) | 8.7 | 16.6 | 90% |
| Miles per vehicle | 23,700 | 20,200 | -15% |
| Efficiency of vehicle stock (mpg) | 6.1 | 6.6 | 9%** |

* Equal to a 25% reduction in fuel use per mile. ** Equal to an 8% reduction in fuel use per mile.

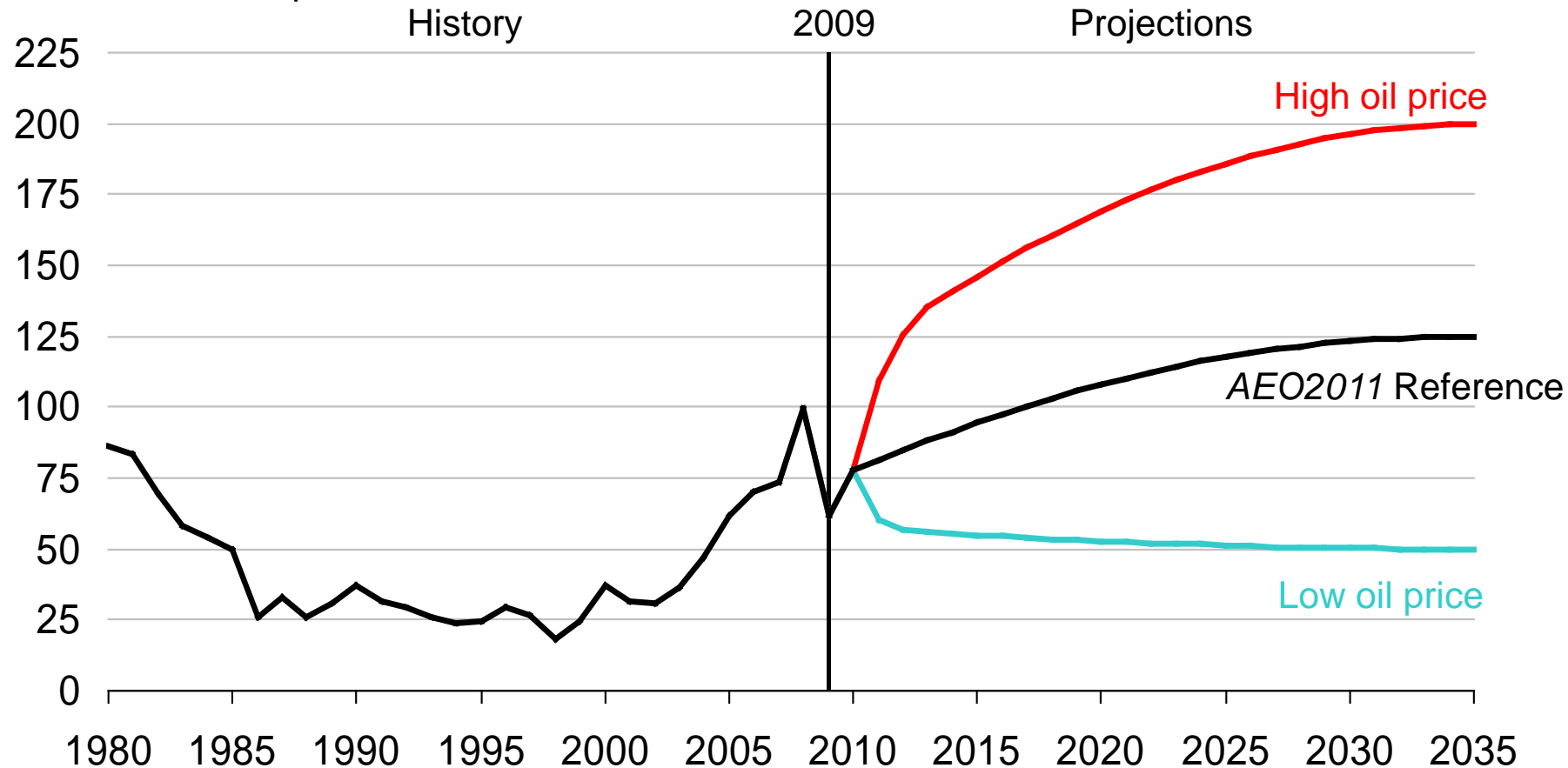
Unconventional vehicles meet over 40% of U.S. light-duty vehicle sales in 2035

U.S. light car and truck sales
millions



Oil prices in the Reference case rise steadily; the full *AEO2011* will include a wide range of oil prices

annual average price of low sulfur crude oil
real 2009 dollars per barrel



Other EIA activities

EIA's Energy and Financial Markets Initiative

- Collection of critical energy information to improve market transparency
 - improved petroleum storage capacity data
 - other improvements to data quality and coverage
- Analysis of energy and financial market dynamics to improve understanding of what drives energy prices
 - internal analysis and sponsorship of external research
- Outreach with other Federal agencies, experts, and the public
 - expert workshops
 - public sessions at EIA's energy conferences
 - solicitation of public comment on EIA's data collections

On Dec. 1, 2010, EIA started publishing much-improved data on petroleum products storage capacity

- Analysis of inventory levels in the context of storage capacity is important for understanding petroleum market activity and price movements, especially at key market centers such as Cushing, OK
- EIA's new storage capacity data will be a major improvement over previous data
 - **greater coverage:** EIA is collecting the new data from terminals and pipelines, in addition to refineries
 - **more frequent:** unlike prior annual refinery-only data collection, the new data will be semi-annual, which is particularly important given opportunities to shift storage capacity across products to meet seasonal needs that vary across products
 - **market center information:** in addition to standard PADD-level reporting, the new data will break out storage capacity at Cushing

Many factors influence the formation of oil prices and other energy prices

Supply

Affected by current conditions and future expectations for:

- energy prices
- OPEC supply capacity
- usable spare capacity
- non-OPEC capacity
- geopolitics
- weather
- E&P costs
- E&P investments
- E&P innovations

Physical balancing

- Inventories

Markets & market behavior

- Energy prices
 - spot
 - futures
 - options
 - spreads
 - swaps
- Other financial markets
 - other commodity prices
 - commodity investment
 - currency exchange rates
 - stocks and other assets
 - interest rates

Demand

Affected by current conditions and future expectations for:

- energy prices
- economic growth
- industrial production
- goods transport
- personal transport
- weather
- innovation in energy-using equipment

EIA portals provide State energy data in one convenient place

U.S. Overview STATE ENERGY PROFILES

Last Update: April 23, 2009
Next Update: May 7, 2009

Select a State

Distribution Refineries Power Plants Coal Mines Renewables

Energy Distribution

- Electricity Transmission Line (min. 345 kV)
- Oil Seaport & Import Sites (min. 10,000 barrels/day) U.S. Total = 72
- Natural Gas Flow (above 100 million cu ft/day; 1 mile band width = 100 million cu ft/day)
- Natural Gas Hub U.S. Total = 26

Comprehensive State Energy Profiles with detailed data for each State

| | | | | | | |
|-------------|----------------------|---------------|---------------|----------------|----------------|---------------|
| Alabama | District of Columbia | Kansas | Mississippi | New York | South Carolina | West Virginia |
| Alaska | Florida | Kentucky | Missouri | North Carolina | South Dakota | Wisconsin |
| Arizona | Georgia | Louisiana | Montana | North Dakota | Tennessee | Wyoming |
| Arkansas | Hawaii | Maine | Nebraska | Ohio | Texas | |
| California | Illinois | Maryland | Nevada | Oklahoma | Utah | |
| Colorado | Indiana | Massachusetts | New Hampshire | Oregon | Vermont | |
| Connecticut | Iowa | Michigan | New Jersey | Pennsylvania | Virginia | |
| Delaware | | Minnesota | New Mexico | Rhode Island | Washington | |

State Energy Profiles feature...

- **Quick Facts** to provide the most important State energy information
- **Overviews and maps** to explain each State's energy markets
- **Data tables** to provide the most current State-level statistics from EIA surveys

State Energy Data System (SEDS)

- Comprehensive data for analysis
- Analytical tool
- Common units
- All fuels, all sectors

Table S1. Energy Consumption Estimates by Source and End-Use Sector, 2007
(Tillicion Btu)

| State | Total Energy ¹ | Sources | | | | | | | | | | End-Use Sectors ² | | | | | |
|----------------------|---------------------------|----------|-------------|------------------------|---------|---------------------|---------|------------|---------|-------|----------|------------------------------|------------|------------|----------------|--|--|
| | | Coal | Natural Gas | Petroleum ³ | Nuclear | Hydroelectric Power | Biomass | Geothermal | Solar | Wind | Other | Residential | Commercial | Industrial | Transportation | | |
| Alabama | 3,122.0 | 988.4 | 4,314.4 | 435.4 | 362.0 | 43.9 | 183.4 | 0.2 | 404.5 | 0.0 | 493.5 | 295.6 | 261.1 | 504.4 | | | |
| Alaska | 1,737.6 | 433.0 | 271.9 | 524.3 | 82.0 | 13.2 | 1.2 | 0.1 | 42.4 | 0.0 | 42.4 | 82.4 | 294.2 | 225.5 | | | |
| Arizona | 1,577.6 | 491.0 | 4,022.1 | 5,024.4 | 1,024.9 | 102.9 | 84.6 | 0.0 | 20.9 | 0.0 | 20.9 | 1,024.9 | 217.7 | 841.4 | | | |
| Arkansas | 1,143.1 | 491.0 | 2,228.3 | 3,944.3 | 182.9 | 32.0 | 84.6 | 0.0 | 20.9 | 0.0 | 20.9 | 1,024.9 | 217.7 | 841.4 | | | |
| California | 6,491.1 | 745.4 | 2,440.4 | 3,944.3 | 3,104.4 | 230.2 | 145.0 | 0.0 | 12.0 | 0.0 | 12.0 | 1,813.9 | 1,155.1 | 3,246.9 | | | |
| Colorado | 1,676.2 | 286.0 | 526.2 | 3,524.4 | 1,024.9 | 102.9 | 84.6 | 0.0 | 20.9 | 0.0 | 20.9 | 1,024.9 | 217.7 | 841.4 | | | |
| Connecticut | 870.9 | 20.9 | 194.1 | 3,944.3 | 171.0 | 0.6 | 22.7 | 0.0 | 45.4 | 0.0 | 45.4 | 1,024.9 | 217.7 | 841.4 | | | |
| Delaware | 307.2 | 0.0 | 49.0 | 1,506.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 307.2 | | | |
| District of Columbia | 4,681.9 | 720.9 | 862.0 | 1,863.0 | 307.2 | 1.0 | 162.4 | 34.9 | 437.2 | 0.0 | 1,339.9 | 1,687.2 | 688.9 | 1,614.3 | | | |
| Florida | 2,121.2 | 414.7 | 414.7 | 1,302.2 | 414.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,121.2 | | | |
| Georgia | 2,421.1 | 102.1 | 81.9 | 3,649.0 | 102.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,421.1 | | | |
| Hawaii | 452.1 | 102.1 | 379.1 | 1,419.1 | 1,419.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 452.1 | | | |
| Idaho | 2,394.0 | 1,574.5 | 546.1 | 877.7 | 2.0 | 4.4 | 35.3 | 2.9 | 1,328.8 | -3.9 | 501.5 | 380.1 | 1,248.0 | 846.6 | | | |
| Illinois | 2,052.2 | 684.4 | 281.4 | 4,414.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,052.2 | | | |
| Indiana | 1,182.0 | 88.3 | 291.4 | 423.4 | 102.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1,182.0 | | | |
| Iowa | 2,323.0 | 1,520.4 | 234.0 | 747.4 | 0.0 | 18.3 | 35.0 | 11.7 | 29.1 | -0.1 | 272.9 | 246.9 | 881.9 | 497.9 | | | |
| Kansas | 3,792.1 | 249.9 | 1,423.1 | 1,423.9 | 178.1 | 0.2 | 141.2 | 1.2 | 163.8 | 0.0 | 356.4 | 76.1 | 2,403.0 | 712.9 | | | |
| Kentucky | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Louisiana | 1,944.0 | 120.1 | 477.5 | 684.4 | 1,024.9 | 17.0 | 0.0 | 0.0 | 102.1 | 0.0 | 434.9 | 344.0 | 497.7 | 497.7 | | | |
| Maine | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Maryland | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Massachusetts | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Michigan | 3,524.4 | 745.9 | 847.0 | 587.2 | 3,324.5 | 12.6 | 88.0 | 0.0 | 36.1 | -4.1 | 780.0 | 624.0 | 618.0 | 737.9 | | | |
| Minnesota | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Mississippi | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Missouri | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Montana | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Nebraska | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Nevada | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| New Hampshire | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| New Jersey | 2,121.2 | 414.7 | 414.7 | 1,302.2 | 414.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,121.2 | | | |
| New Mexico | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| New York | 4,681.9 | 720.9 | 862.0 | 1,863.0 | 307.2 | 1.0 | 162.4 | 34.9 | 437.2 | 0.0 | 1,339.9 | 1,687.2 | 688.9 | 1,614.3 | | | |
| North Carolina | 2,323.0 | 1,520.4 | 234.0 | 747.4 | 0.0 | 18.3 | 35.0 | 11.7 | 29.1 | -0.1 | 272.9 | 246.9 | 881.9 | 497.9 | | | |
| North Dakota | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Ohio | 4,681.9 | 720.9 | 862.0 | 1,863.0 | 307.2 | 1.0 | 162.4 | 34.9 | 437.2 | 0.0 | 1,339.9 | 1,687.2 | 688.9 | 1,614.3 | | | |
| Oklahoma | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Oregon | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Pennsylvania | 4,681.9 | 720.9 | 862.0 | 1,863.0 | 307.2 | 1.0 | 162.4 | 34.9 | 437.2 | 0.0 | 1,339.9 | 1,687.2 | 688.9 | 1,614.3 | | | |
| Rhode Island | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| South Carolina | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| South Dakota | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Tennessee | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Texas | 11,534.1 | 1,603.1 | 3,844.4 | 6,884.9 | 420.0 | 16.3 | 88.0 | 0.0 | 36.1 | -4.1 | 1,584.1 | 1,381.6 | 5,584.9 | 2,387.9 | | | |
| Utah | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Vermont | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Virginia | 2,121.2 | 414.7 | 414.7 | 1,302.2 | 414.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,121.2 | | | |
| Washington | 2,121.2 | 414.7 | 414.7 | 1,302.2 | 414.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2,121.2 | | | |
| West Virginia | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Wisconsin | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| Wyoming | 1,405.0 | 37.9 | 451.9 | 237.5 | 1,000.0 | 18.1 | 115.0 | 0.0 | 47.9 | 11.5 | 426.0 | 414.4 | 1,444.0 | 423.2 | | | |
| United States | 101,489.0 | 22,759.9 | 23,677.6 | 40,358.1 | 6,457.8 | 2,444.4 | 2,372.0 | 770.2 | 0.0 | 420.4 | 18,276.7 | 32,484.1 | 29,910.0 | | | | |

2007 SUMMARIES

¹ End-use sector data include electricity sales and associated electricity losses; some loss in the State that were not used by the State during the year. U.S. total energy and U.S. industrial sector include 25.2 trillion Btu of net energy of coal coke that is not used and associated to the production of iron and steel. ² Includes: net impacts of electricity, energy losses and co-products from the production of fuel ethanol (U.S. only), and associated to the production of ethanol, gasohol, ethanol, and ethanol. ³ Includes: net impacts of electricity, energy losses and co-products from the production of fuel ethanol (U.S. only), and associated to the production of ethanol, gasohol, ethanol, and ethanol. ⁴ Includes: net impacts of electricity, energy losses and co-products from the production of fuel ethanol (U.S. only), and associated to the production of ethanol, gasohol, ethanol, and ethanol. ⁵ Includes: net impacts of electricity, energy losses and co-products from the production of fuel ethanol (U.S. only), and associated to the production of ethanol, gasohol, ethanol, and ethanol. ⁶ Includes: net impacts of electricity, energy losses 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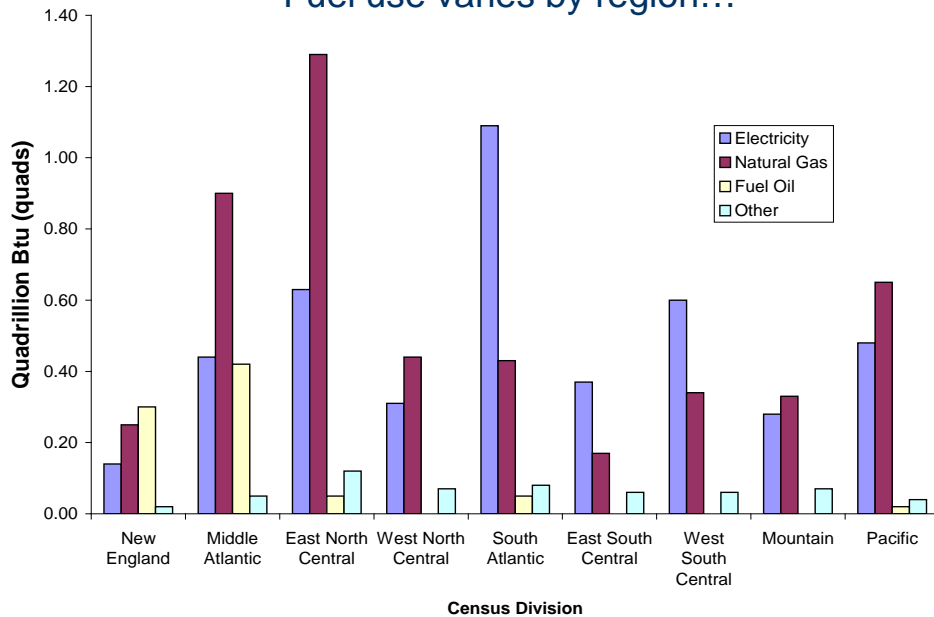
New this year for State Energy Profiles and State Energy Data System

- State Energy Profiles
 - New maps of selected energy-intensive areas (June 2010)
 - New dynamic graphs on State profile pages (in development)
 - Website redesign (launching soon)
- State Energy Data System
 - Improved estimation methodology (June 2010)
 - New tables for total end-use consumption (publishing soon)
 - Website redesign (launching soon)

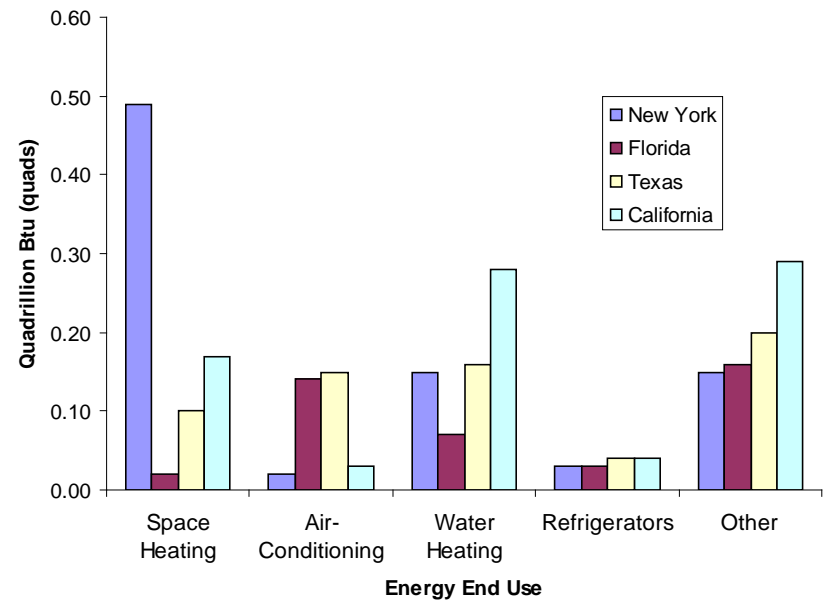
Residential Energy Consumption Survey (RECS)

- Only comprehensive source of energy-related characteristics and consumption across U.S. households
- Only EIA survey that collects household data; conducted every 4 years

Fuel use varies by region...



...due in part to different end-use needs



Expanded 2009 RECS

RECS 2005

- ✓ 4,382 completed interviews
- ✓ Low sampling precision for all areas (census regions, divisions, States)
- ✓ National, census region and division estimates, but state-level estimates for only four states
- ✓ Sample too small to support complex analyses

RECS 2009

- ✓ 12,083 completed interviews
- ✓ Greater precision assured for key geographies and statistics
- ✓ End use statistics for 16 states, with more precision (MA, NY, PA, NJ, VA, GA, FL, TN, MI, IL, WI, MO, TX, CO, AZ, CA)
- ✓ Greater statistical power for multivariate analyses
- ✓ First release of 2009 RECS Home Energy Characteristics in March 2011

A new EIA.gov goes live this week

- New homepage and improved navigation
- Updated logo and new visual identity
- A new “Today in Energy” education product that:
 - Publishes a daily release of timely and topical bites of our information, on the EIA homepage, in plain language.
 - Allows us to highlight current issues, topics, and trends.

The screenshot shows the new EIA.gov homepage with several key features highlighted by handwritten blue annotations:

- new logo**: Points to the updated EIA logo at the top left.
- newest & upcoming information**: Points to the 'What's New' section on the left.
- global navigation wherever you are**: Points to the search bar and navigation menu at the top.
- updated daily**: Points to the 'Today in Energy' section, which features a bar chart titled 'Retail Gasoline Prices Experiencing Quarter-Seasonal Increase'. The chart shows prices for September, October, November, and December, with a '2009-2010 Average' line. The 'Today in Energy' section also includes a 'Data Highlights' box with various price updates.
- topical highlights**: Points to the 'Features' section, which includes 'Emissions of Greenhouse Gases Report', 'Country Analysis Brief: Saudi Arabia', and 'Solar Thermal Manufacturing Activities'.
- information targeted to your interests**: Points to the 'Our Experts Speak' and 'EIA Conference' sections.
- connect with us**: Points to the footer navigation and social media links.



For more information

U.S. Energy Information Administration home page www.eia.gov

Short-Term Energy Outlook www.eia.gov/emeu/steo/pub/contents.html

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International Energy Outlook www.eia.gov/oiaf/ieo/index.html

Monthly Energy Review www.eia.gov/emeu/mer/contents.html

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Some supply sources and demand sectors are strongly linked, while others are more dispersed

