

# Key Drivers Affecting the Outlook for Renewables



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*For*

*US Power & Renewable Finance Conference*

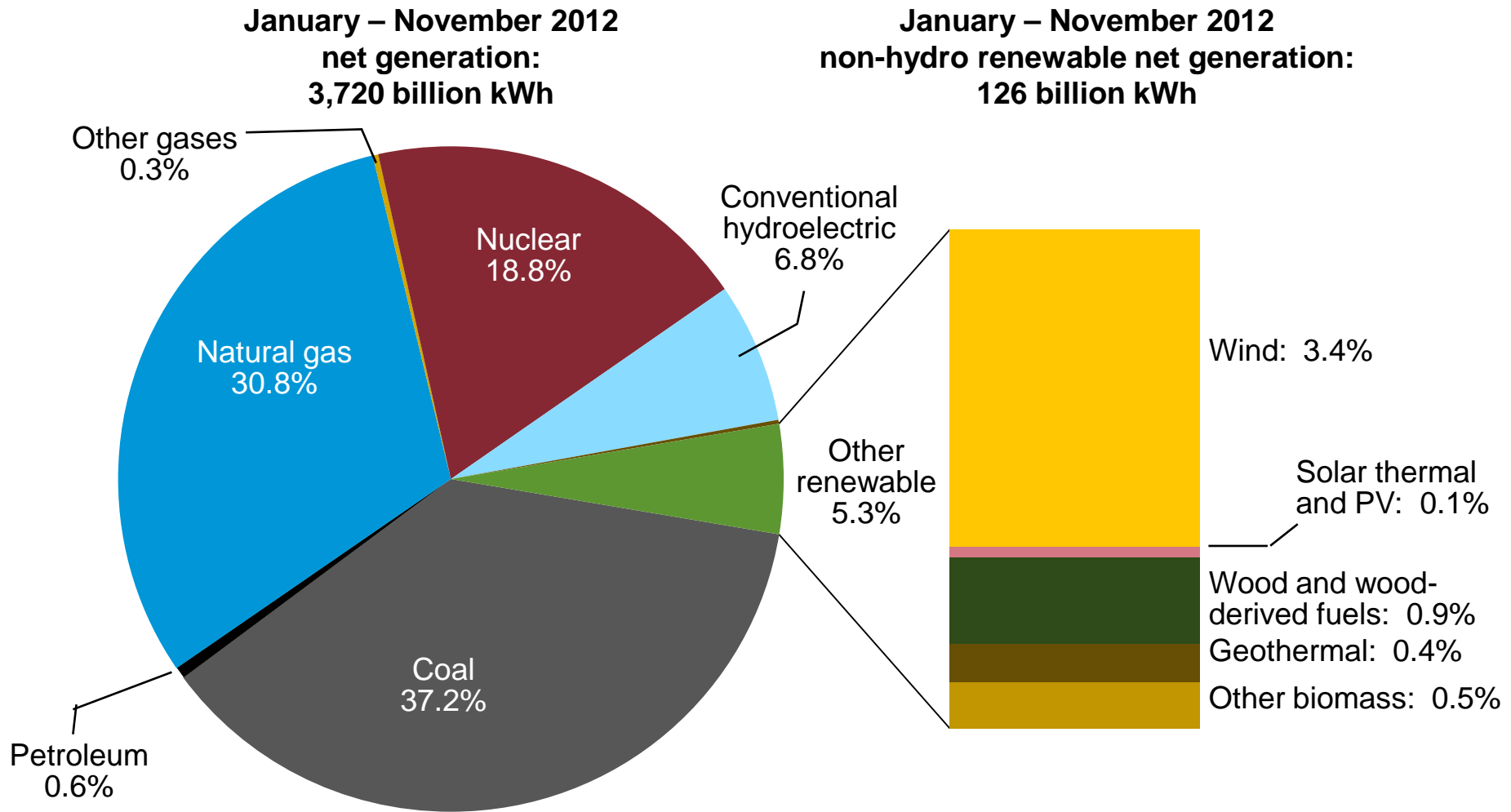
*February 14, 2013 | New York, NY*

*By*

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*Deputy Administrator*

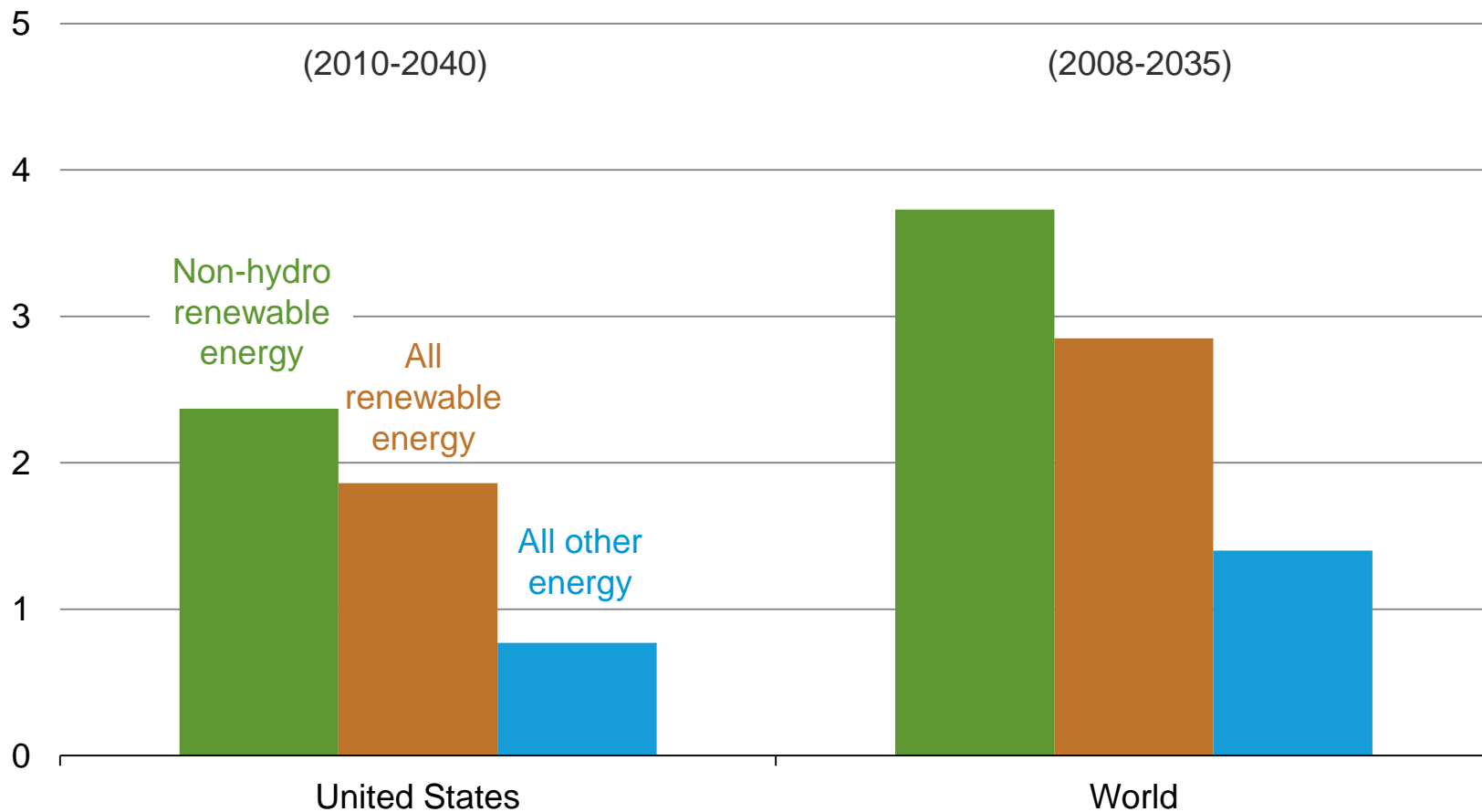
# In 2012, U.S. electricity generation was 69% fossil fuels, 19% nuclear, and 12% renewables



Source: EIA, *Electric Power Monthly*, January 2013

# Renewable energy is projected to grow far more robustly than other types of energy

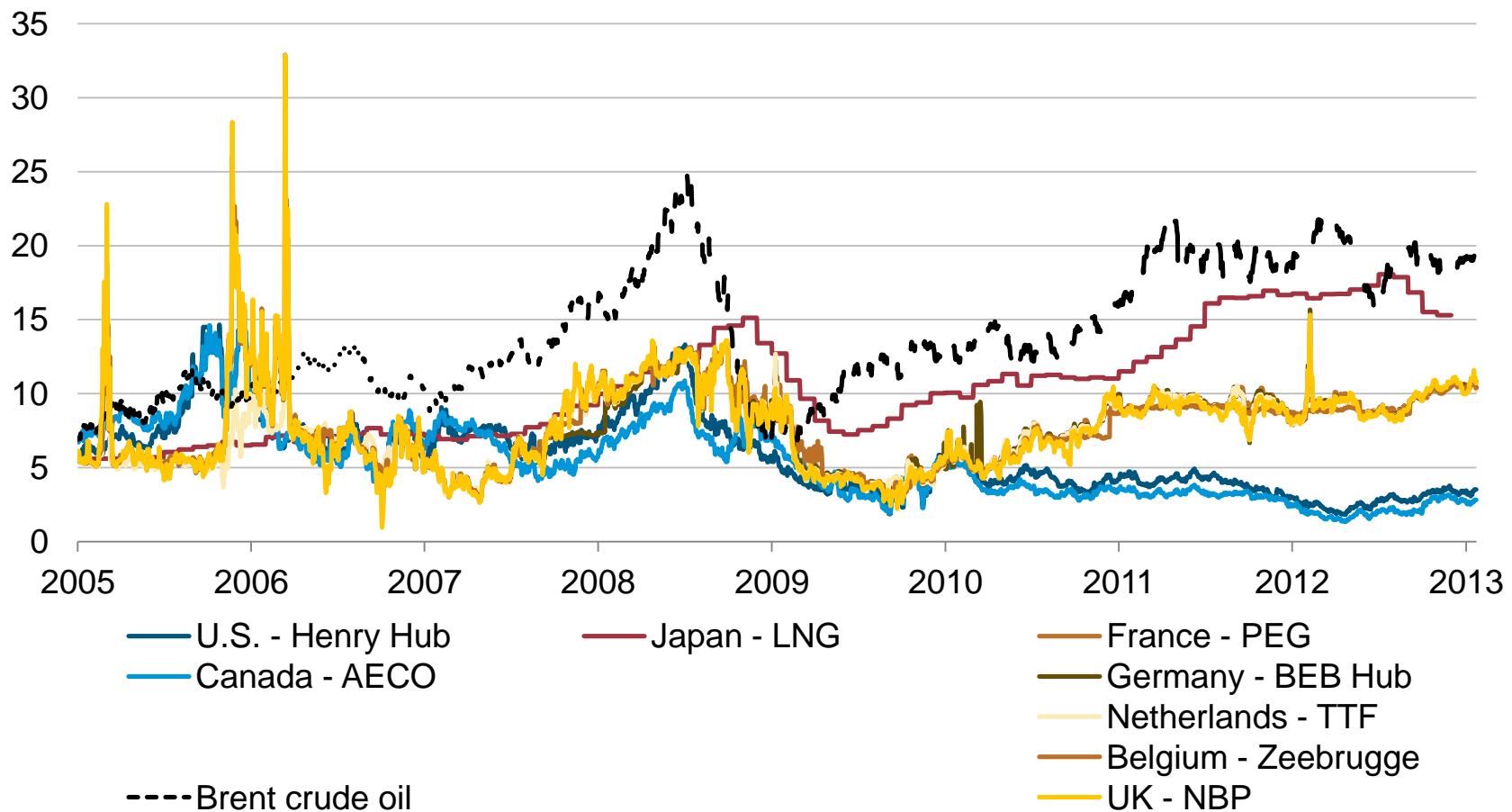
Average annual growth rates  
percent per year



Source: EIA, Annual Energy Outlook 2013 Early Release, International Energy Outlook 2011

# Spot natural gas prices vary significantly across global markets since 2008, with many markets far below oil-related benchmarks

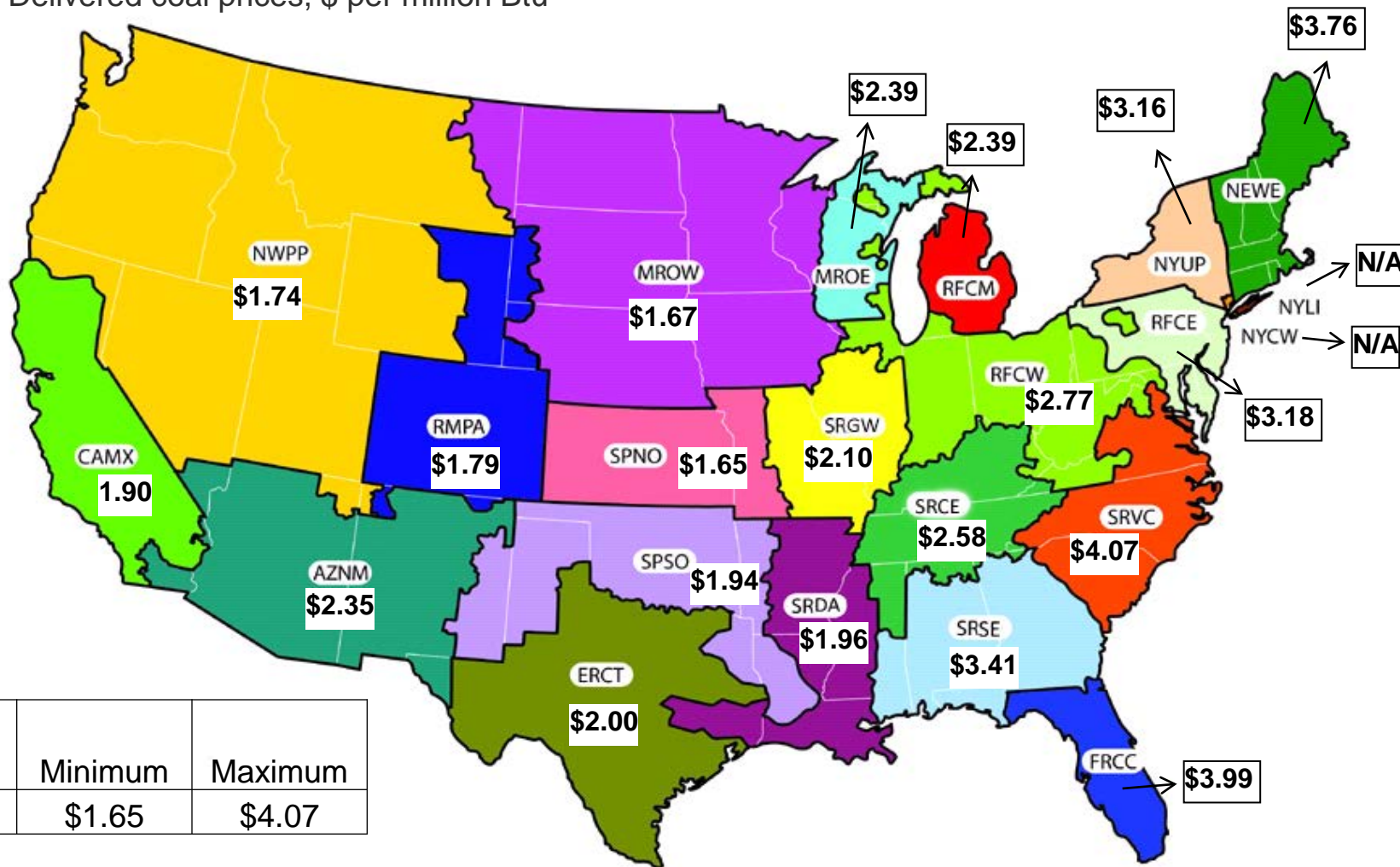
Global spot natural gas, crude oil, and LNG prices  
U.S. dollars per million British thermal unit



Source: Derived from Bloomberg, L.P.

# The average delivered price of coal to electricity generators varies widely across U.S. regions – transport costs are a key reason

2011 Delivered coal prices, \$ per million Btu

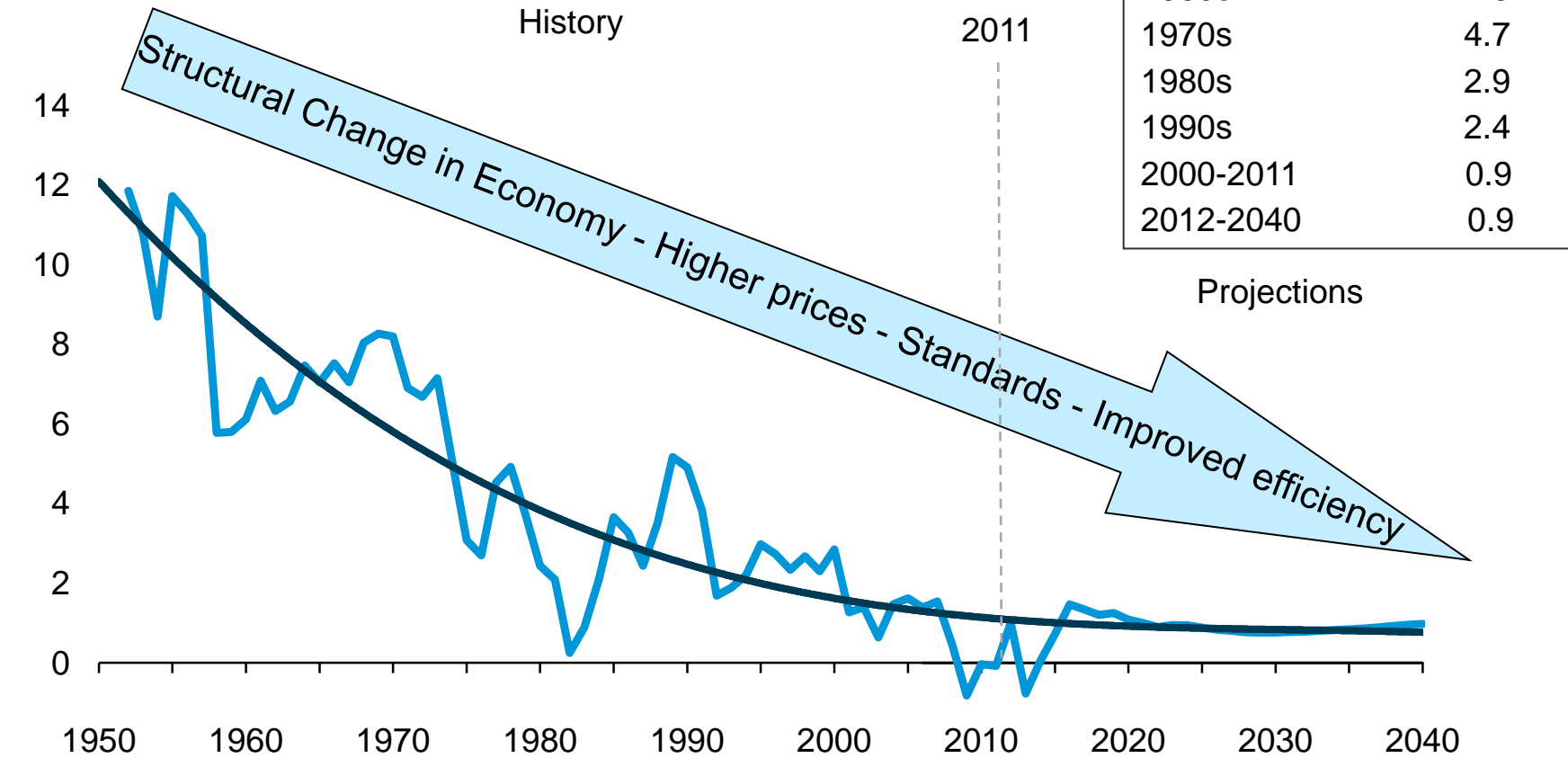


National Average	Minimum	Maximum
\$2.38	\$1.65	\$4.07

Source: EIA, Annual Energy Outlook 2013 Early Release

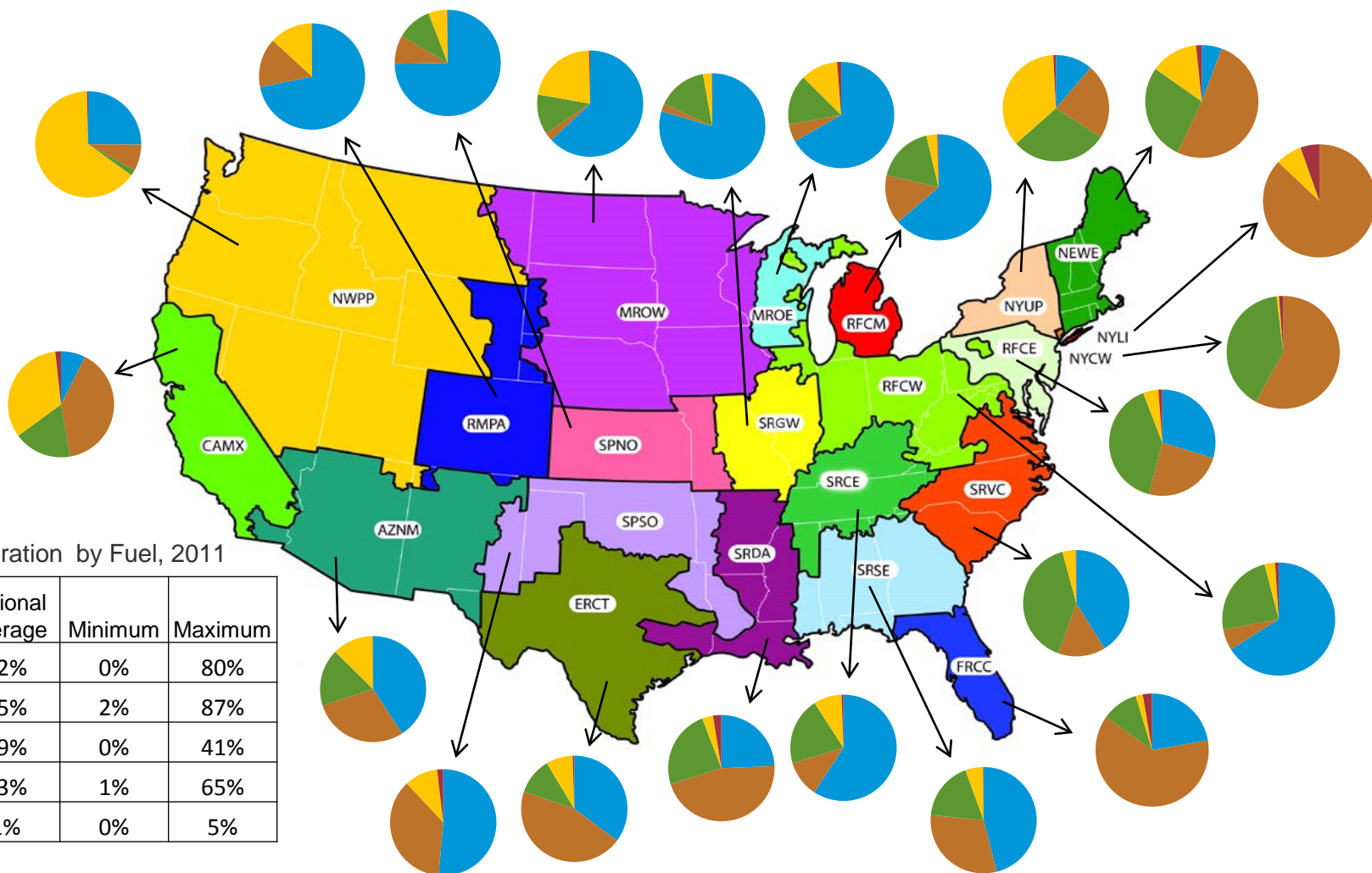
# Growth in electricity use slows, but still increases by 28% from 2012 to 2040

U.S. electricity use  
percent growth (3-year rolling average)



Source: EIA, Annual Energy Outlook 2013 Early Release

# The fuel mix for electricity generation varies widely across U.S. regions (2011)



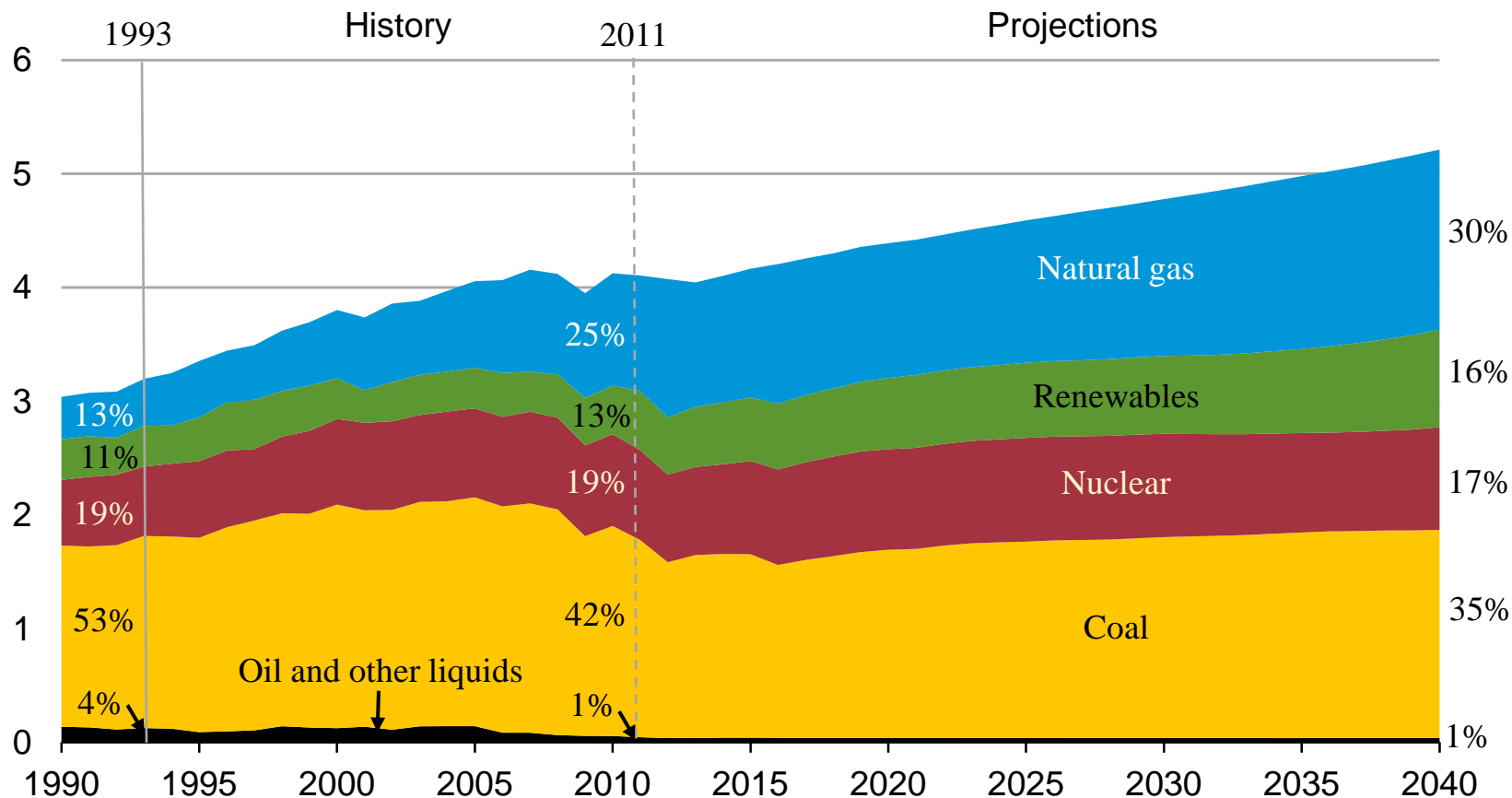
Share of Generation by Fuel, 2011

	National Average	Minimum	Maximum
Coal	42%	0%	80%
Natural Gas	25%	2%	87%
Nuclear	19%	0%	41%
Renewables	13%	1%	65%
Oil / Other	1%	0%	5%

Source: EIA, Annual Energy Outlook 2013 Early Release, based on Form EIA-923

# The U.S. electricity mix in EIA's reference case gradually shifts to lower-carbon options, led by growth in gas and renewable generation

U.S. electricity net generation  
trillion kilowatthours



Source: EIA, Annual Energy Outlook 2013 Early Release



# For more information

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

Annual Energy Outlook | [www.eia.gov/forecasts/aeo](http://www.eia.gov/forecasts/aeo)

Short-Term Energy Outlook | [www.eia.gov/forecasts/steo](http://www.eia.gov/forecasts/steo)

International Energy Outlook | [www.eia.gov/forecasts/ieo](http://www.eia.gov/forecasts/ieo)

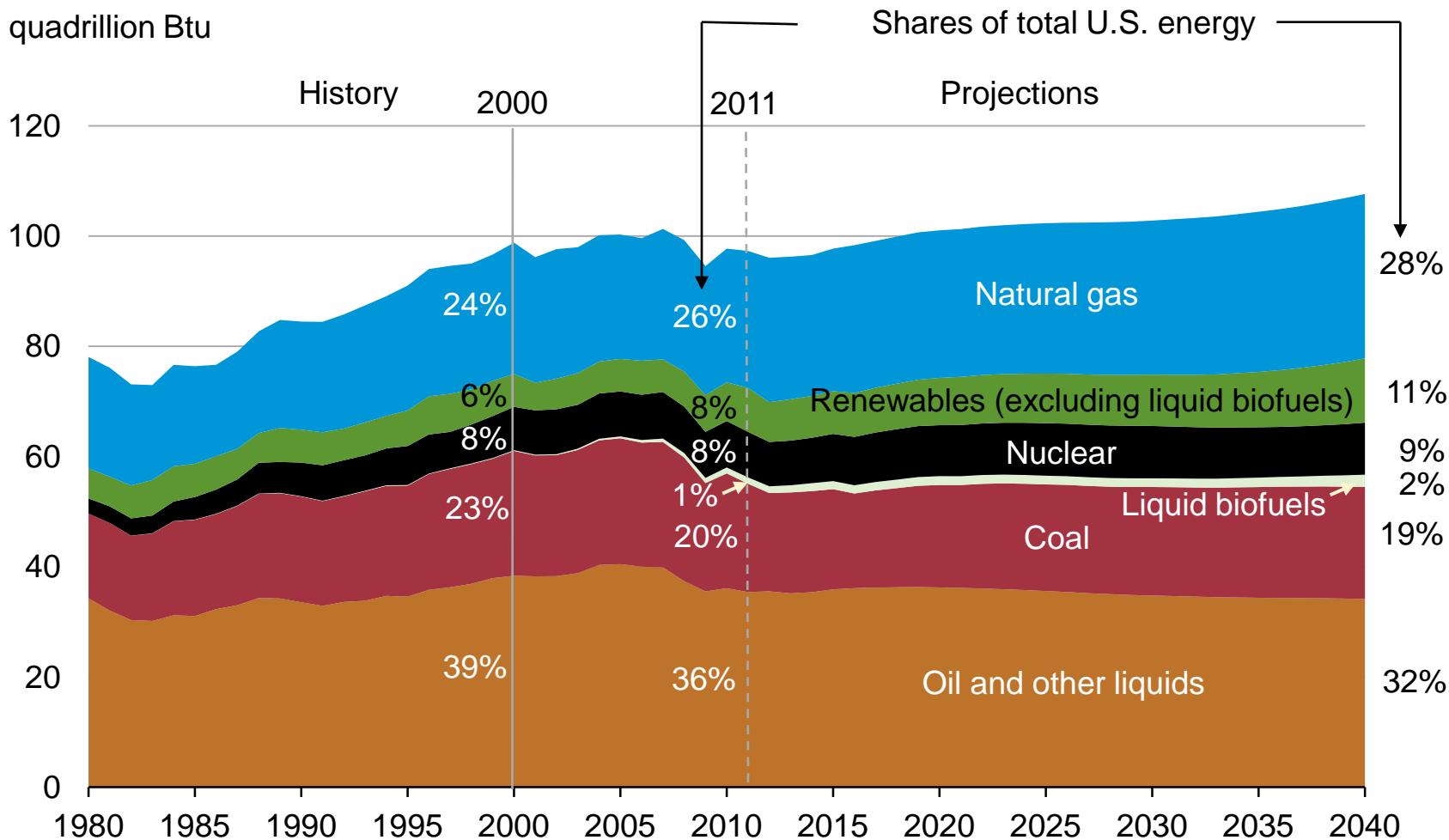
Today In Energy | [www.eia.gov/todayinenergy](http://www.eia.gov/todayinenergy)

Monthly Energy Review | [www.eia.gov/totalenergy/data/monthly](http://www.eia.gov/totalenergy/data/monthly)

Annual Energy Review | [www.eia.gov/totalenergy/data/annual](http://www.eia.gov/totalenergy/data/annual)

# U.S. energy use grows slowly over projection reflecting improving energy efficiency and a slow and extended economic recovery

U.S. primary energy consumption  
quadrillion Btu



Source: EIA, Annual Energy Outlook 2013 Early Release