Fuel Use in Electricity Generation

The changing landscape

for

Bipartisan Policy Center: Understanding the New Energy Landscape

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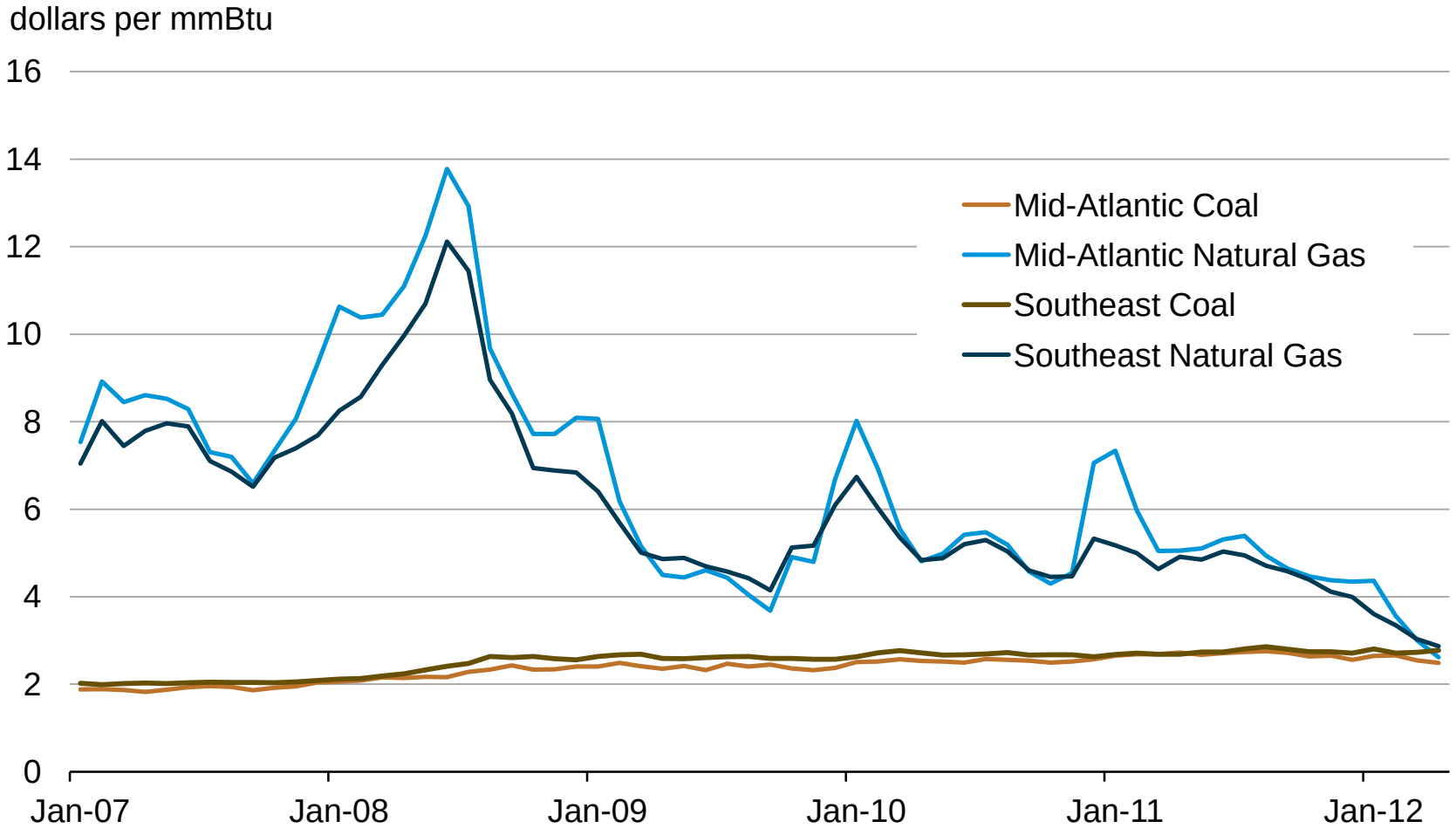
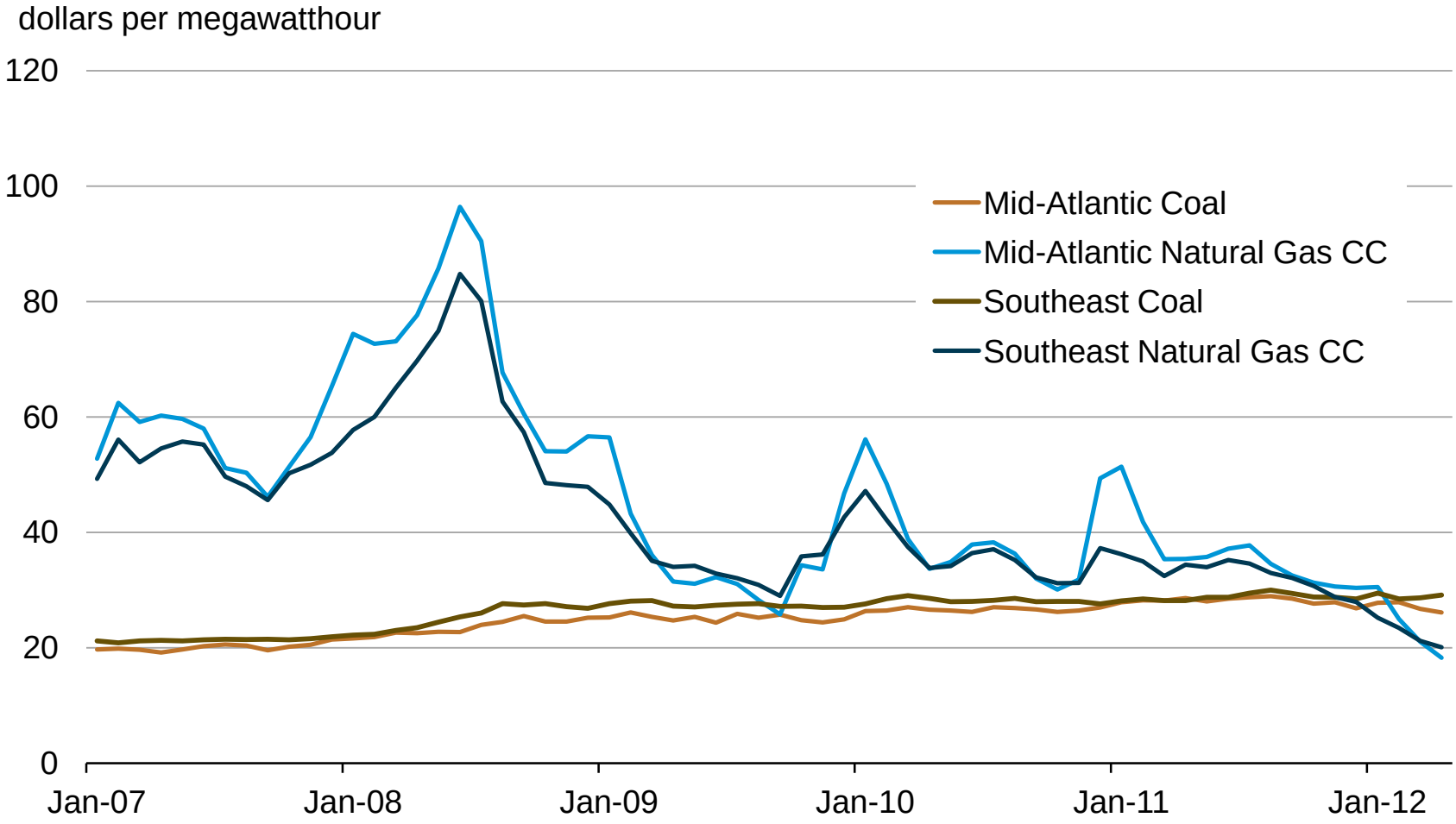
Cost of coal and natural gas delivered to electric power plants in the Mid-Atlantic and Southeast, Jan 2007- April 2012



Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report

Average estimated cost of power generation in the Mid-Atlantic and Southeast, Jan 2007- April 2012

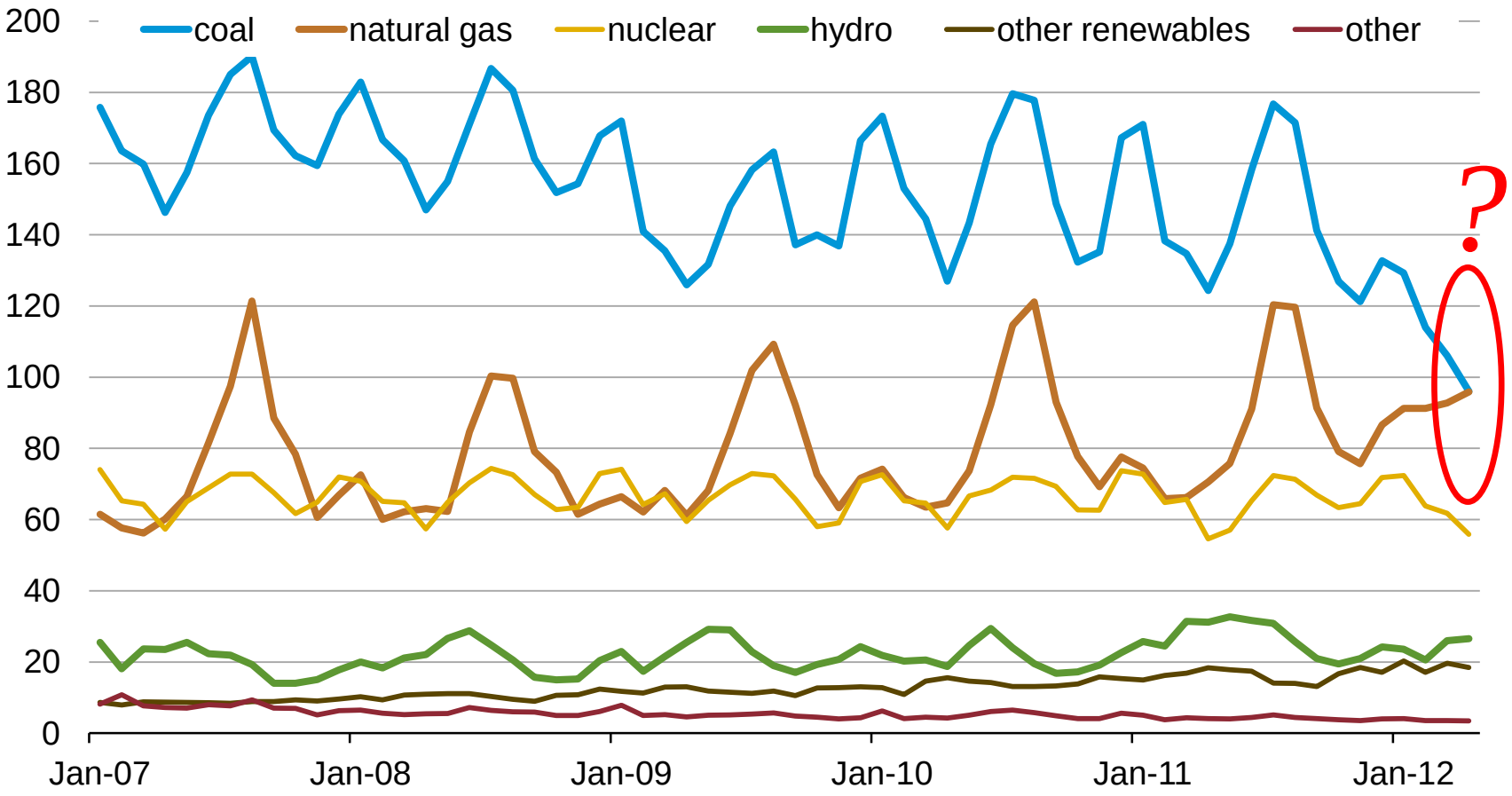


Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report

Electricity generation by fuel, Jan 2007- April 2012

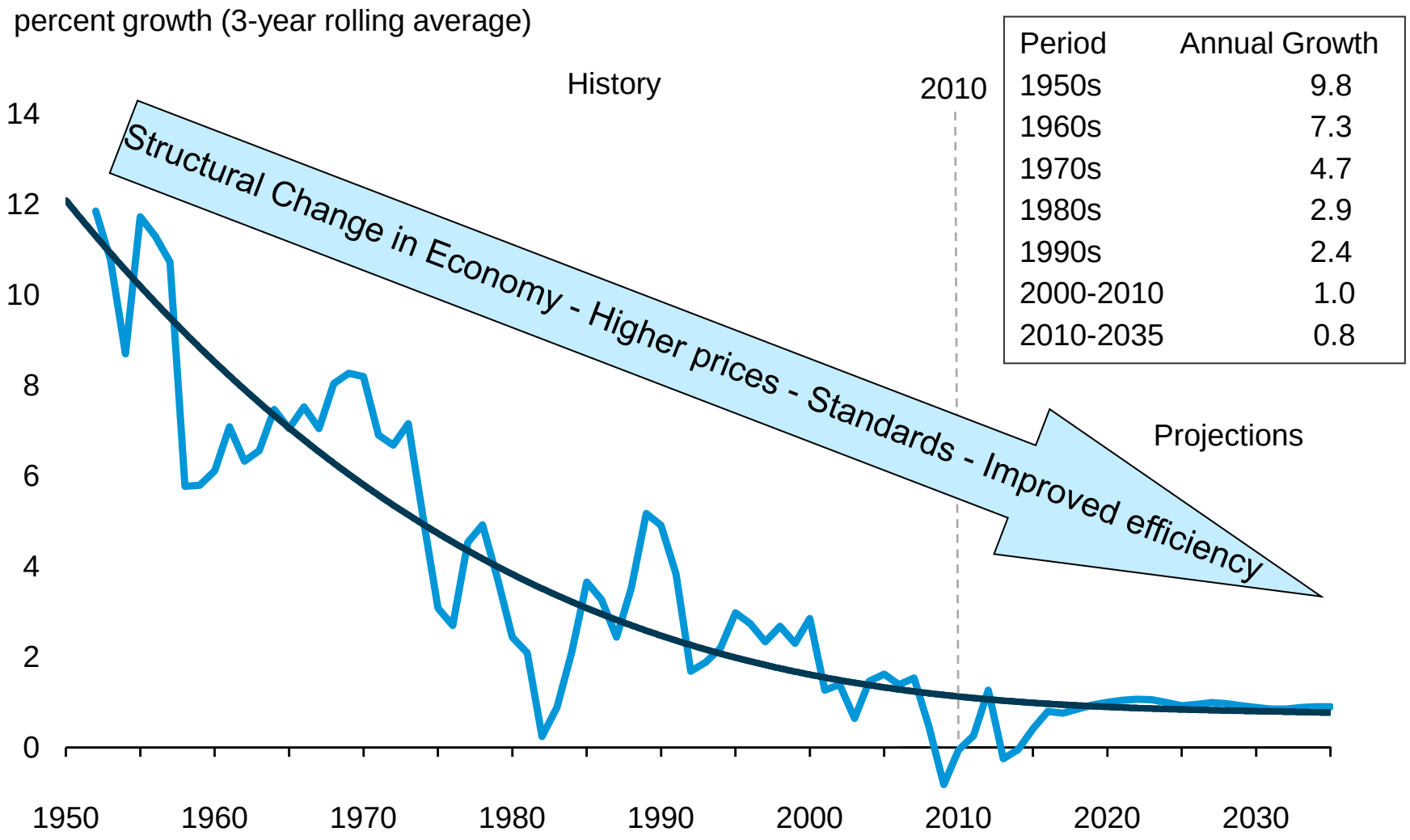
Net generation

million megawatthours



Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report

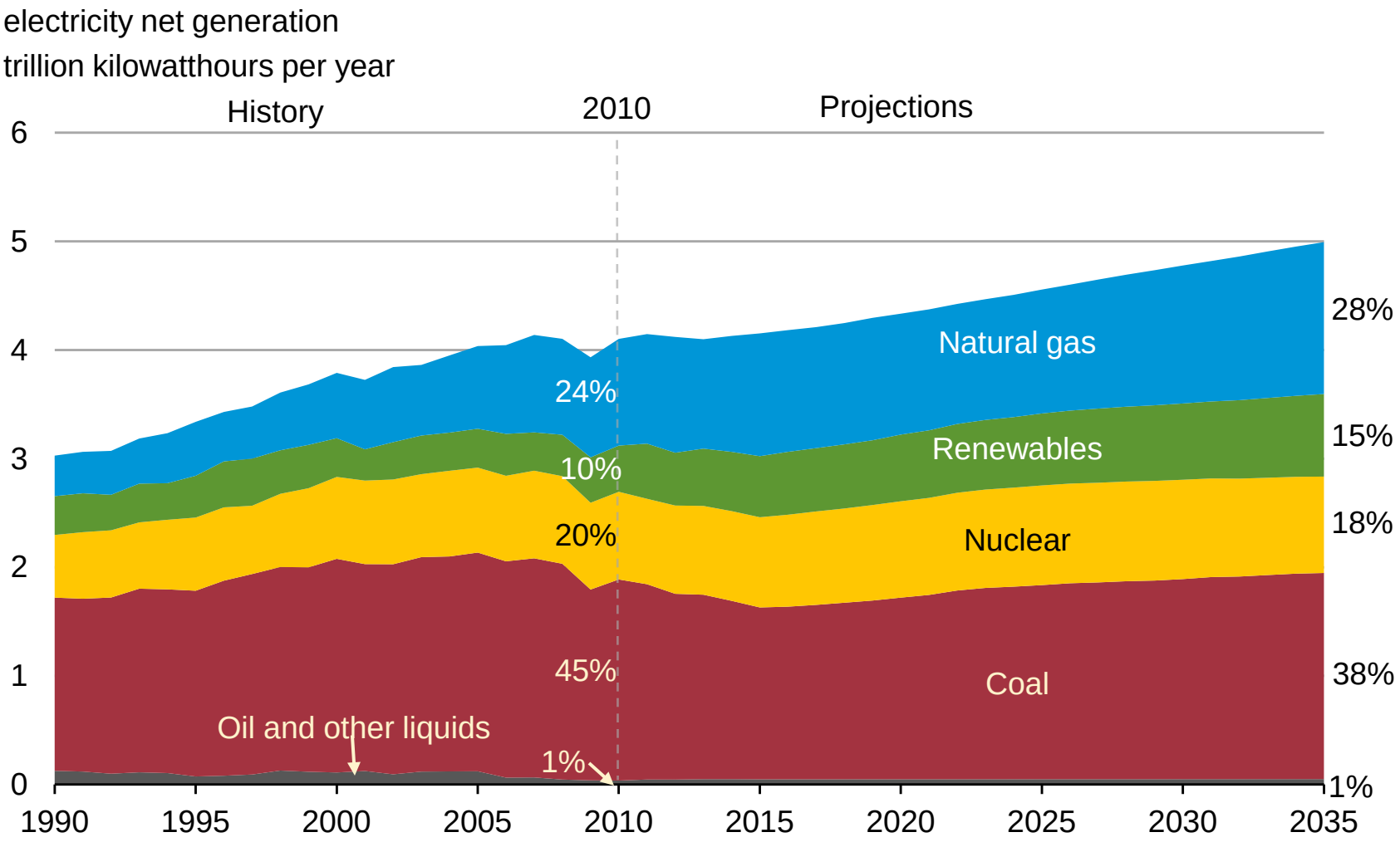
Annual growth in electricity consumption continues to slow



Period	Annual Growth
1950s	9.8
1960s	7.3
1970s	4.7
1980s	2.9
1990s	2.4
2000-2010	1.0
2010-2035	0.8

Source: EIA, Annual Energy Outlook 2012

Reference case electricity mix gradually shifts to lower-carbon options, led by growth in renewables and natural gas



Source: EIA, Annual Energy Outlook 2012

Why ~~might~~ ~~could~~ will we be wrong?

- Different relative fuel prices
- Faster / slower electricity demand growth
- Changing policies and regulations
- Changing consumer preferences
- Faster / slower technological progress
- Technological breakthroughs

Key sensitivities

Natural Gas Price Sensitivities

(Henry Hub Natural Gas Prices in 2010 dollars per mmBtu)

	2025	2035
Lowest	3.45	4.25
Reference	5.63	7.37
Highest	6.93	8.26

Coal Price Sensitivities

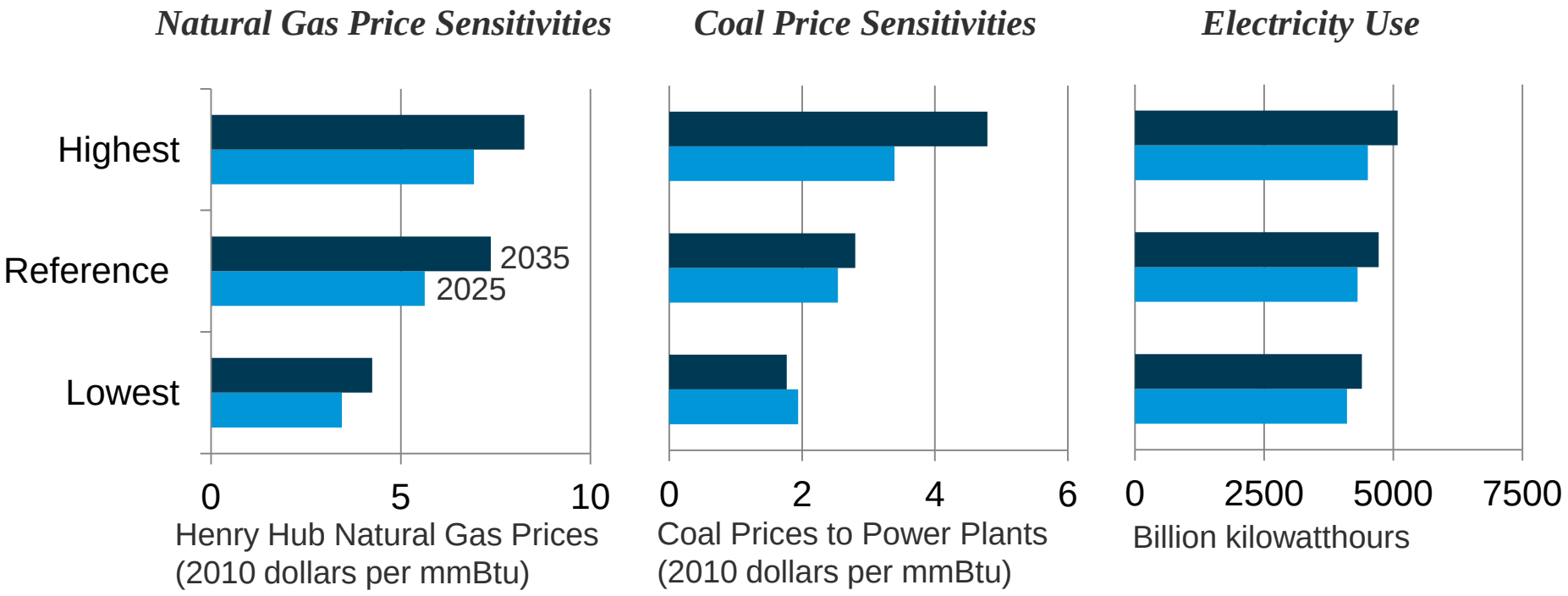
(Coal Prices to Power Plants in 2010 dollars per mmBtu)

	2025	2035
Lowest	1.94	1.77
Reference	2.54	2.80
Highest	3.39	4.79

Electricity Use

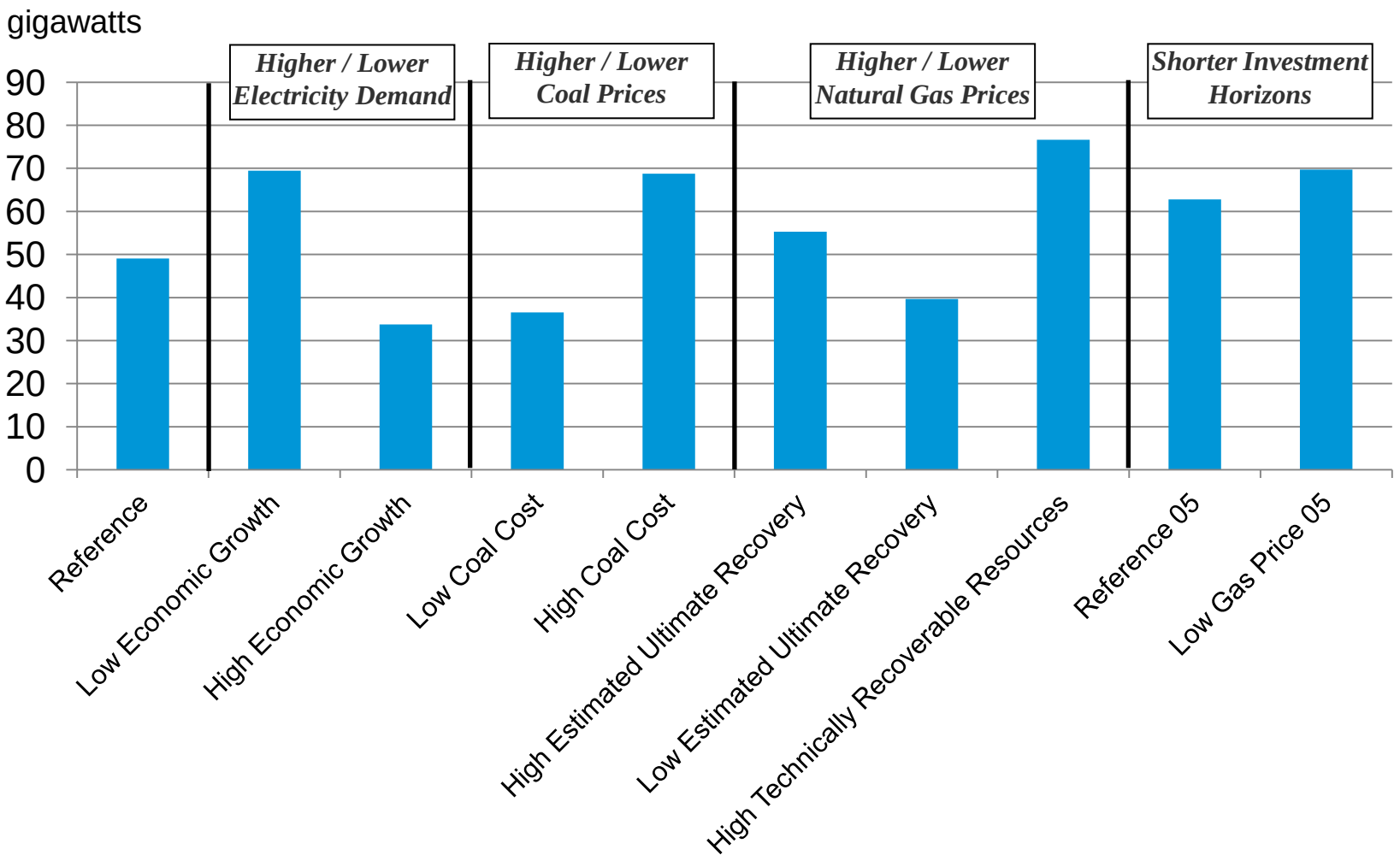
	Billion Kilowatthours		Annual Growth 2010 to 2035
	2025	2035	%
Lowest	4,104	4,393	0.5%
Reference	4,311	4,716	0.8%
Highest	4,508	5,082	1.1%

Key sensitivities



Source: EIA, Annual Energy Outlook 2012

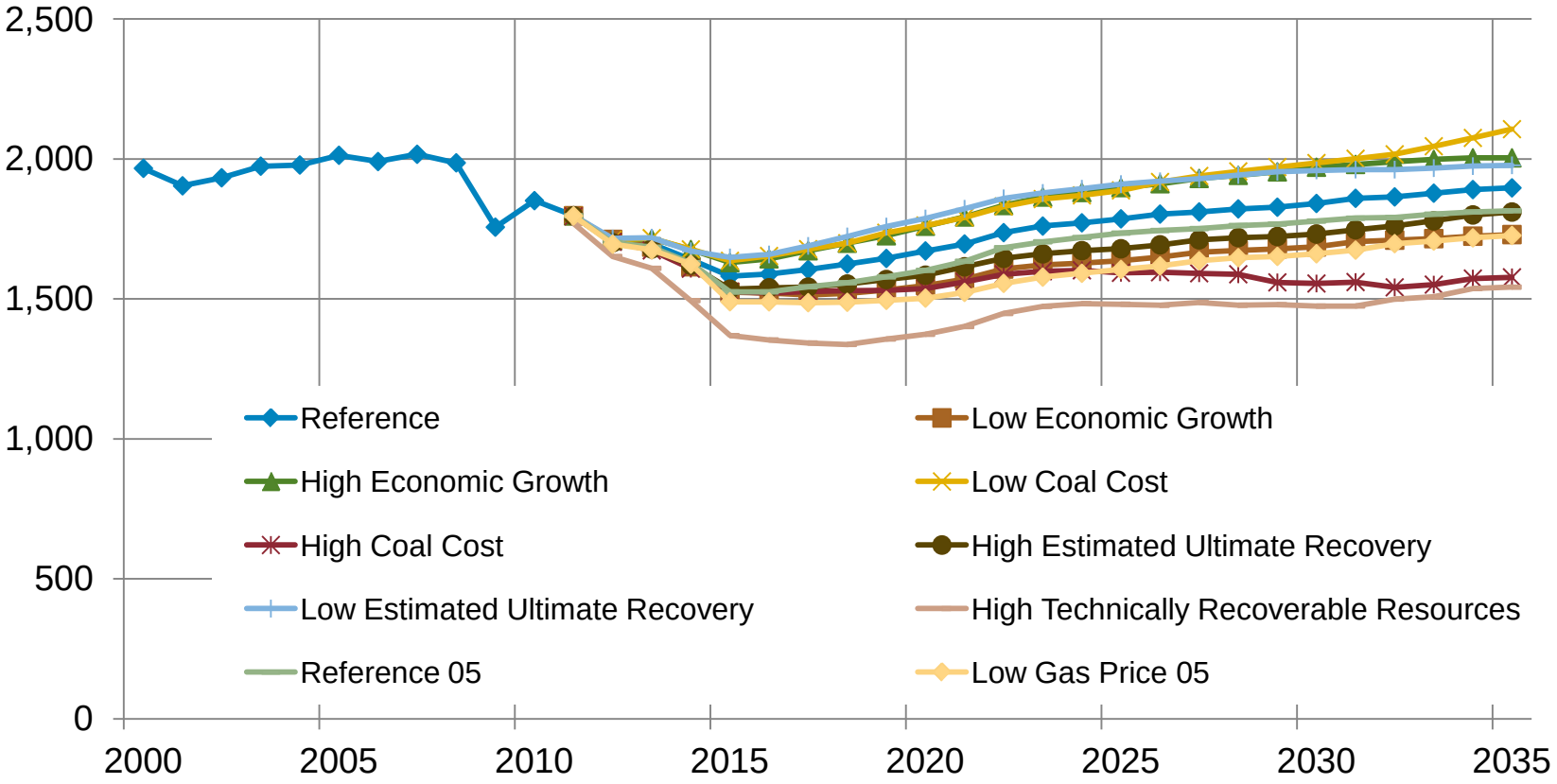
Coal plant retirements



Source: EIA, Annual Energy Outlook 2012

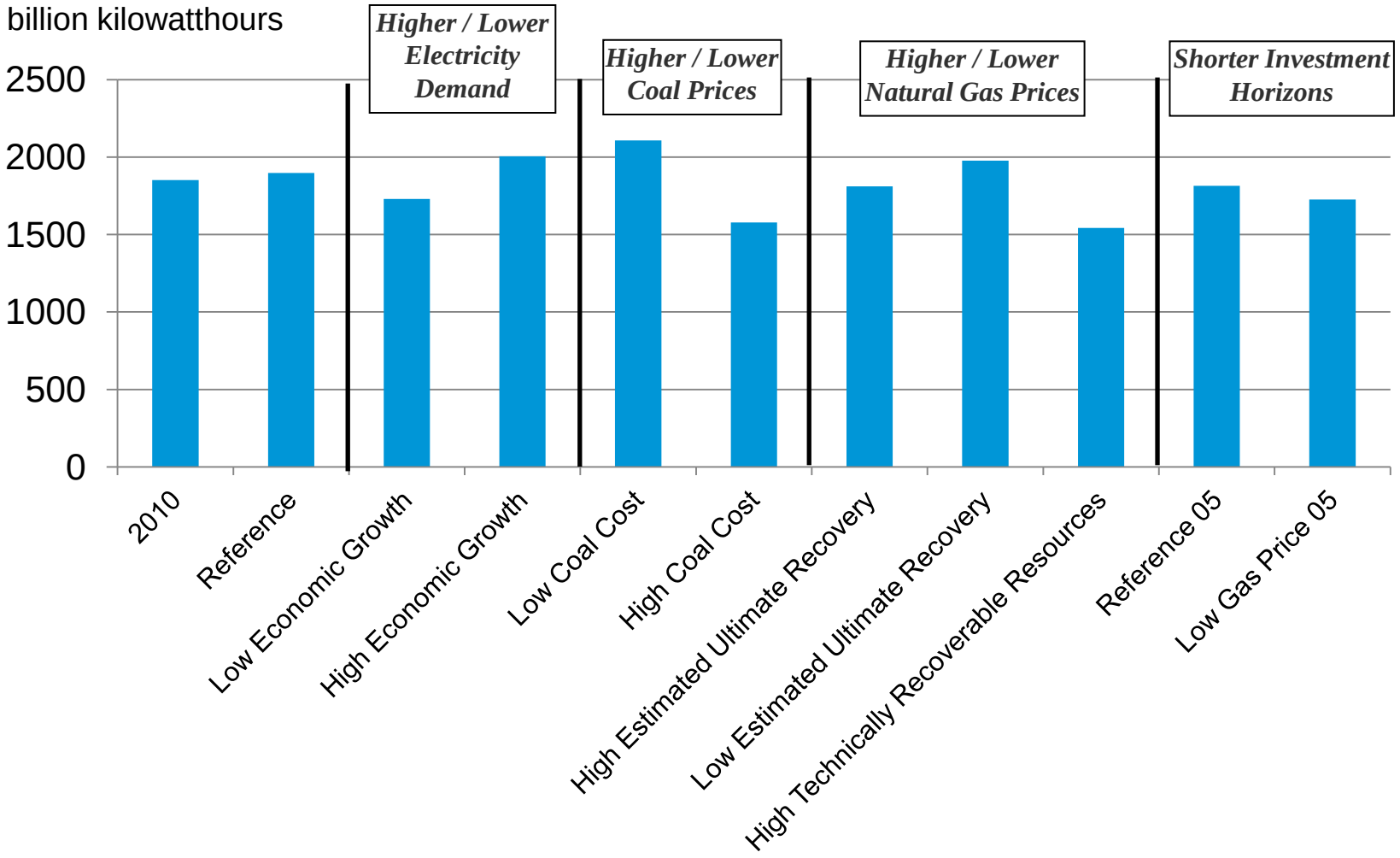
Coal generation

billion kilowatthours



Source: EIA, Annual Energy Outlook 2012

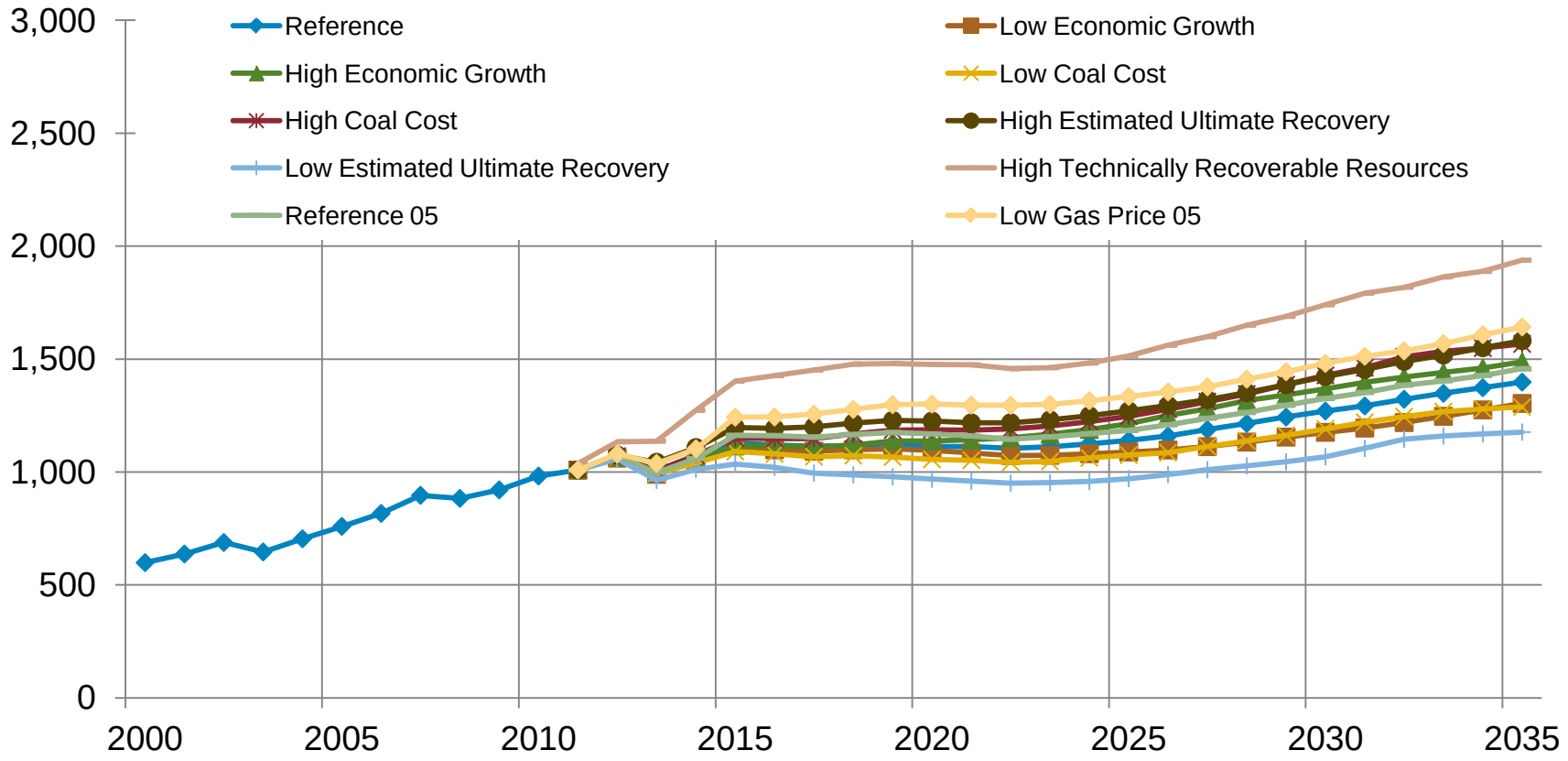
2035 coal generation



Source: EIA, Annual Energy Outlook 2012

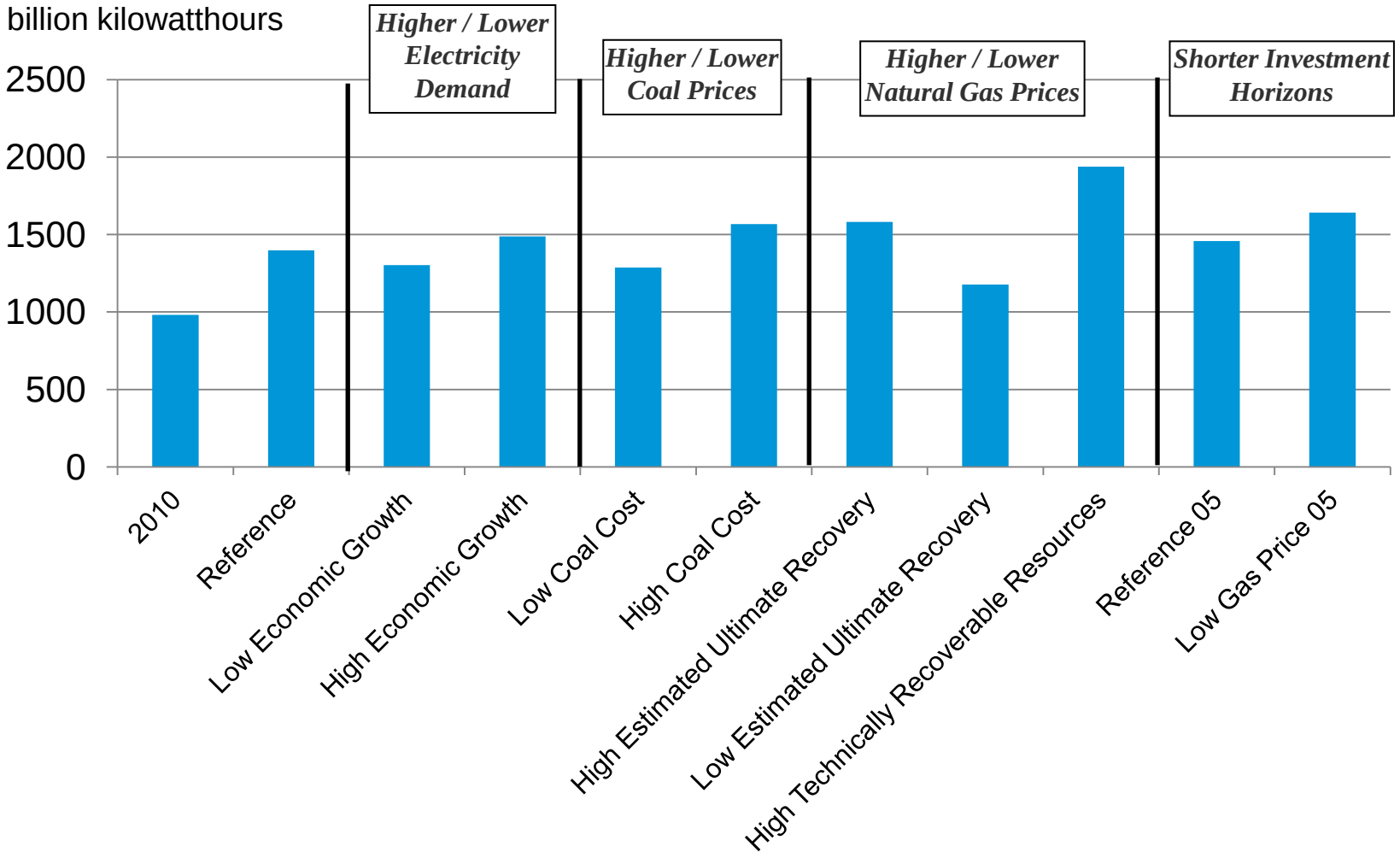
Natural gas generation

billion kilowatthours



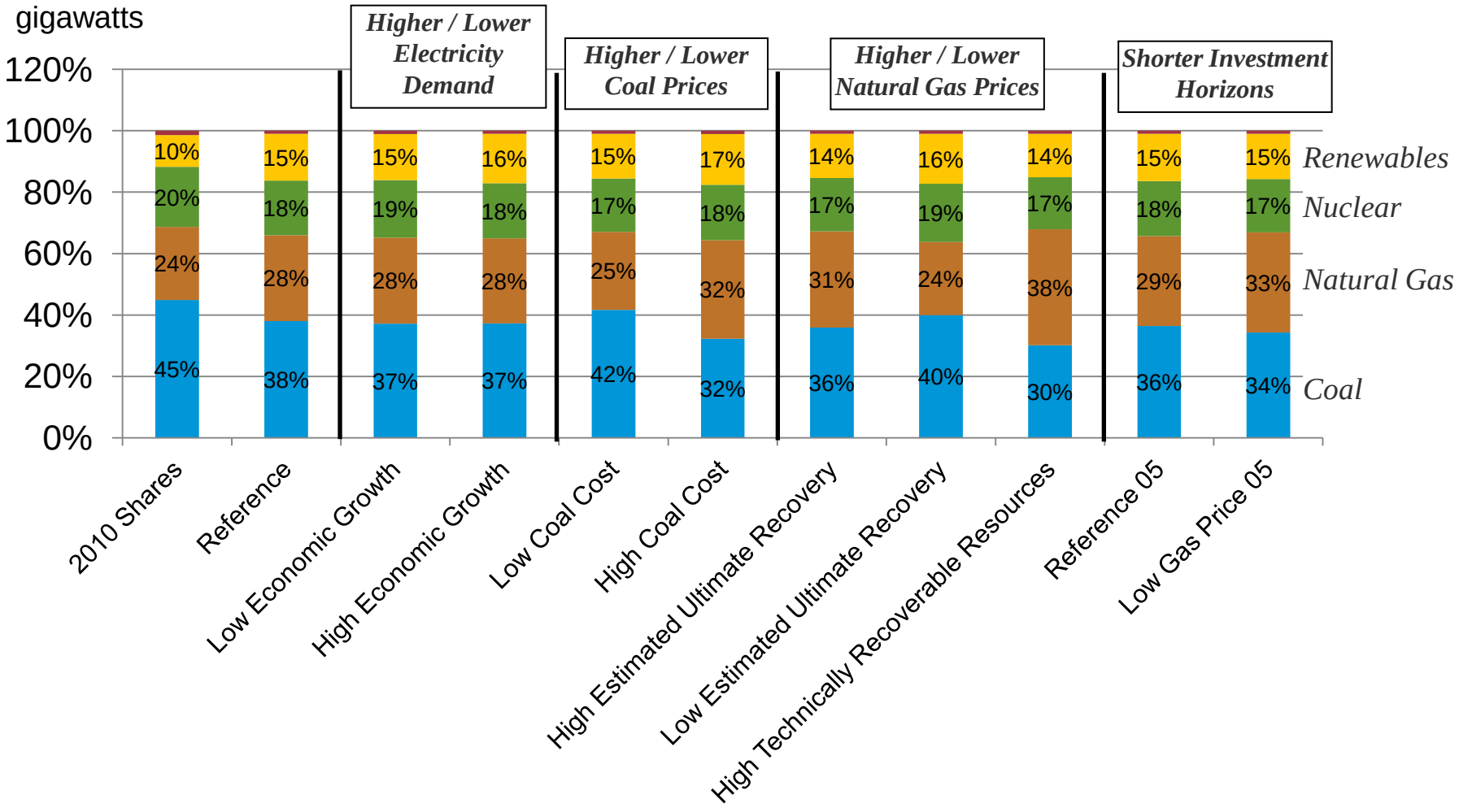
Source: EIA, Annual Energy Outlook 2012

2035 Natural gas generation



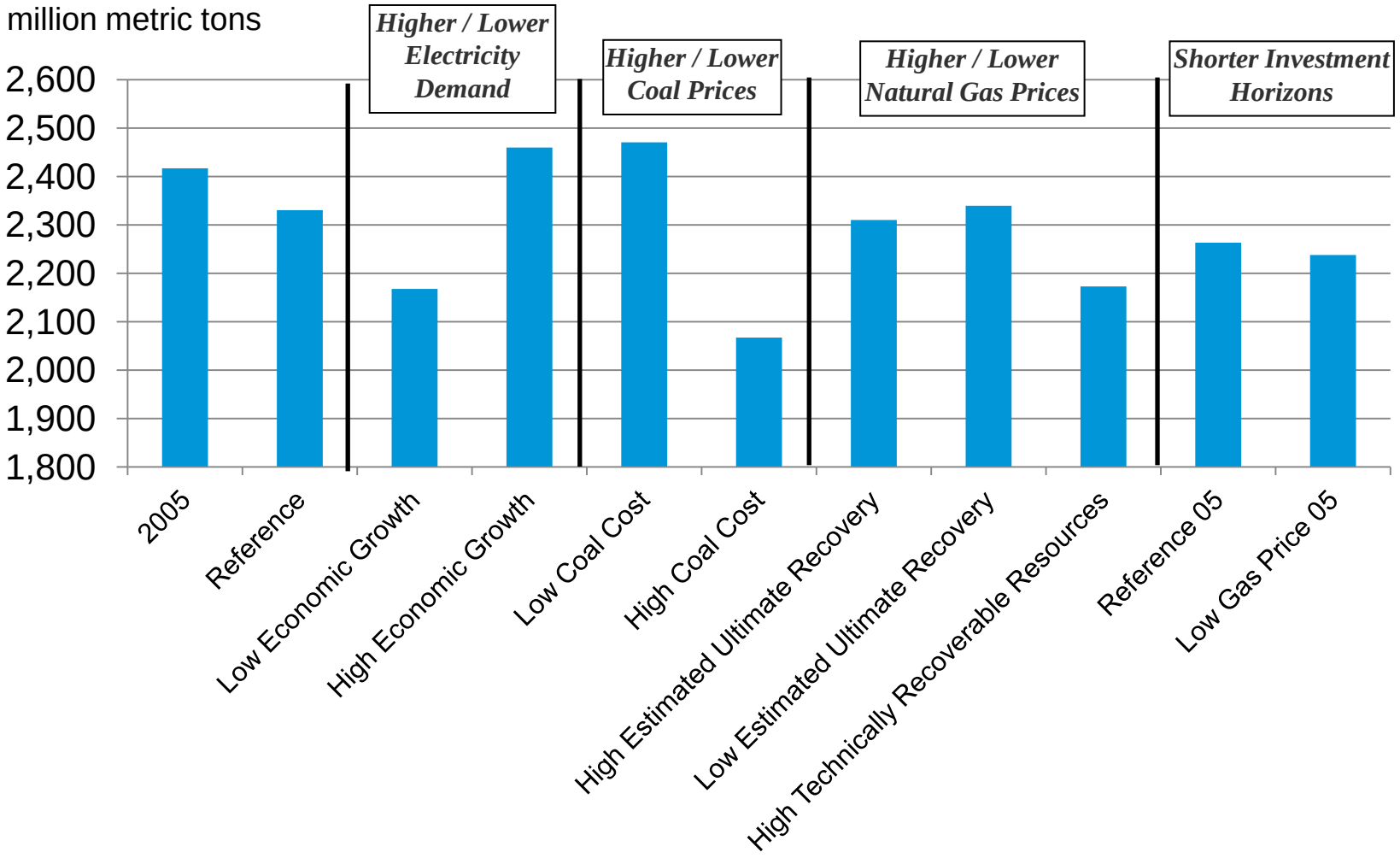
Source: EIA, Annual Energy Outlook 2012

2035 electricity generation shares



Source: EIA, Annual Energy Outlook 2012

2035 power sector CO^2 emissions



Source: EIA, Annual Energy Outlook 2012

For more information

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

Annual Energy Outlook | www.eia.gov/forecasts/aeo

Short-Term Energy Outlook | www.eia.gov/forecasts/steo

International Energy Outlook | www.eia.gov/forecasts/ieo

Monthly Energy Review | www.eia.gov/totalenergy/data/monthly

Annual Energy Review | www.eia.gov/totalenergy/data/annual

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