

# The Future of Natural Gas Introduction

**Presentation to:**  
The Energy Summit

By:  
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# Slide 1

US Natural Gas Prices (Henry Hub) (\$/mmbtu)



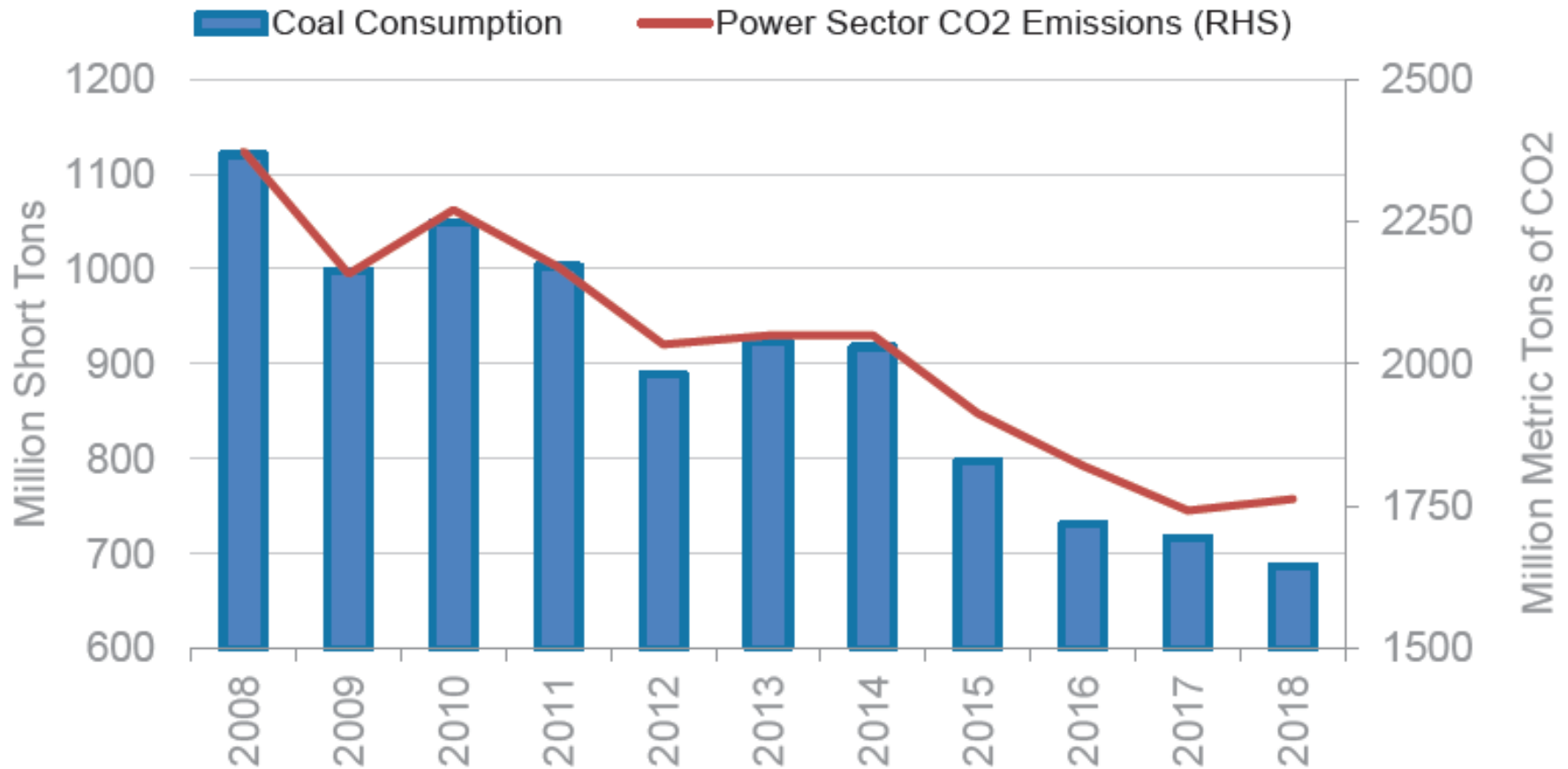
Source: Eikon, Morgan Stanley Research

## Slide 2

- U.S. coal consumption has collapsed by nearly 50% since 2008
- During that same time period, there has been a 25% reduction in U.S. power sector carbon emissions
- 66 GW (20% of installed capacity) of U.S. coal-fired electric generation retired permanently

# Slide 3

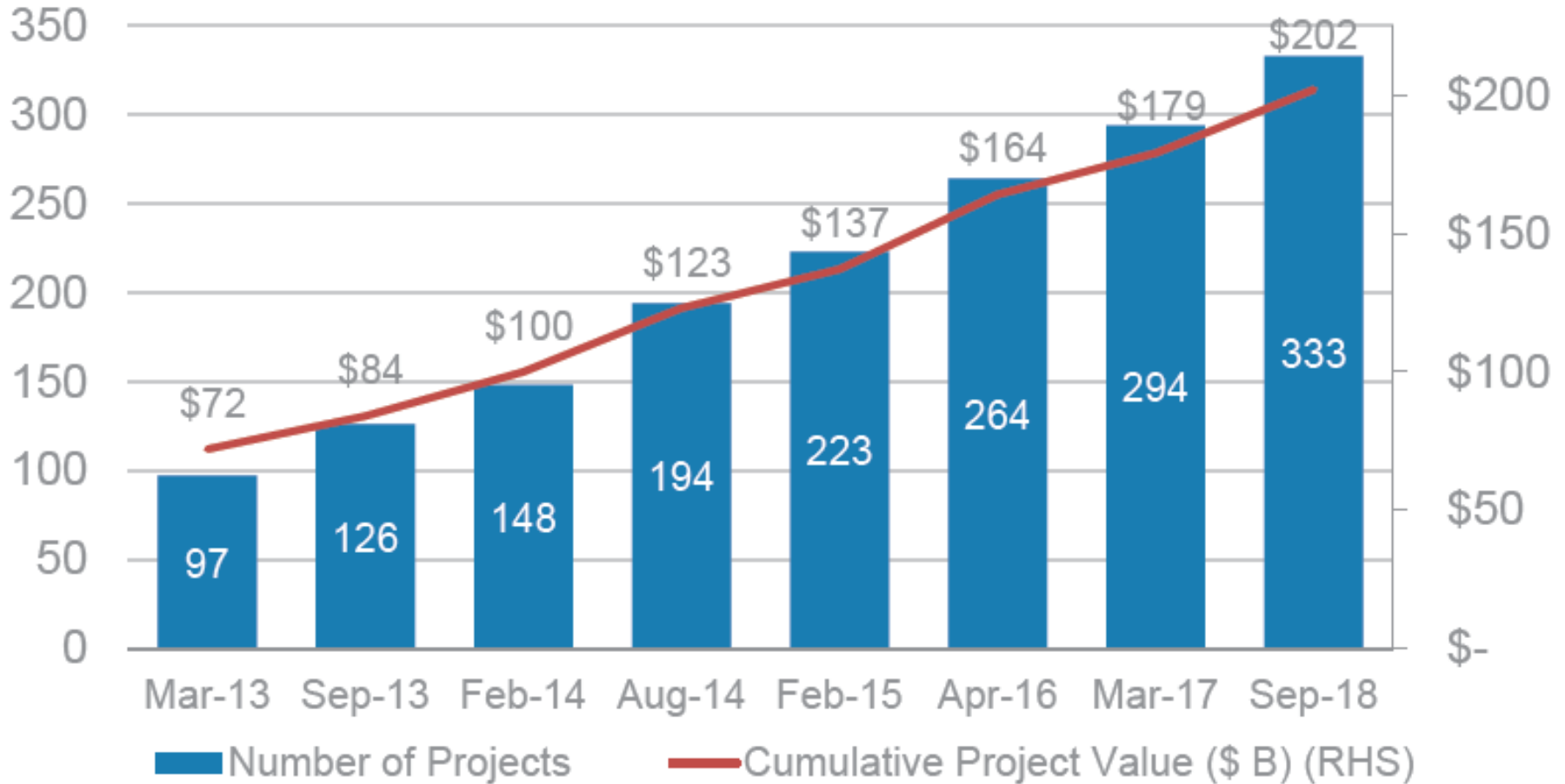
## US Coal Consumption and Power Sector Emissions



Source: EIA, Morgan Stanley Research

# Slide 4

## Cumulative Value of US Shale-Based Chemical Projects



Source: ACC, Morgan Stanley Research

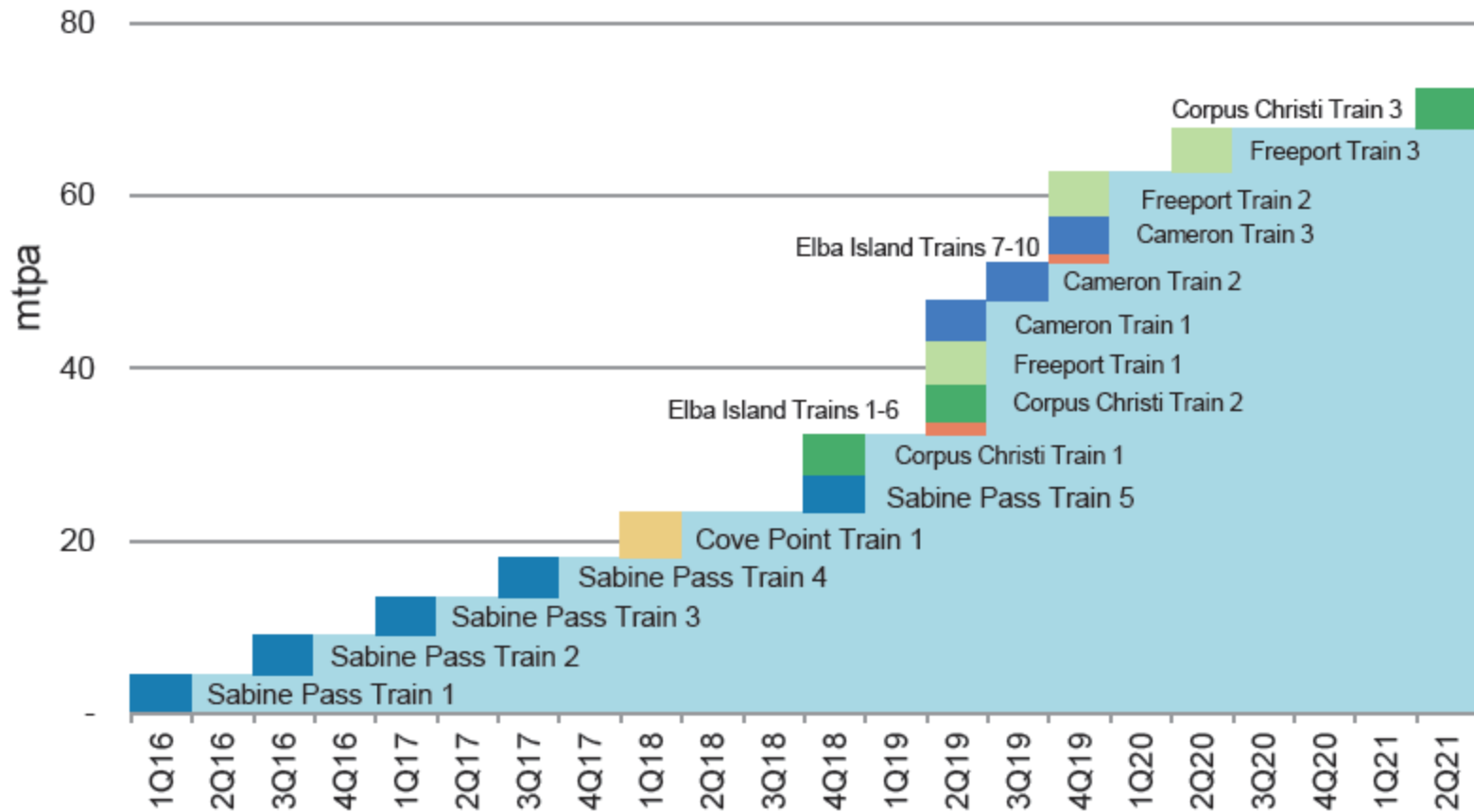
# Slide 5

- Lower commodity costs for consumers have allowed the utility sector to invest \$800 billion into infrastructure without an increase in average inflation-adjusted electric and gas rates



# Slide 6

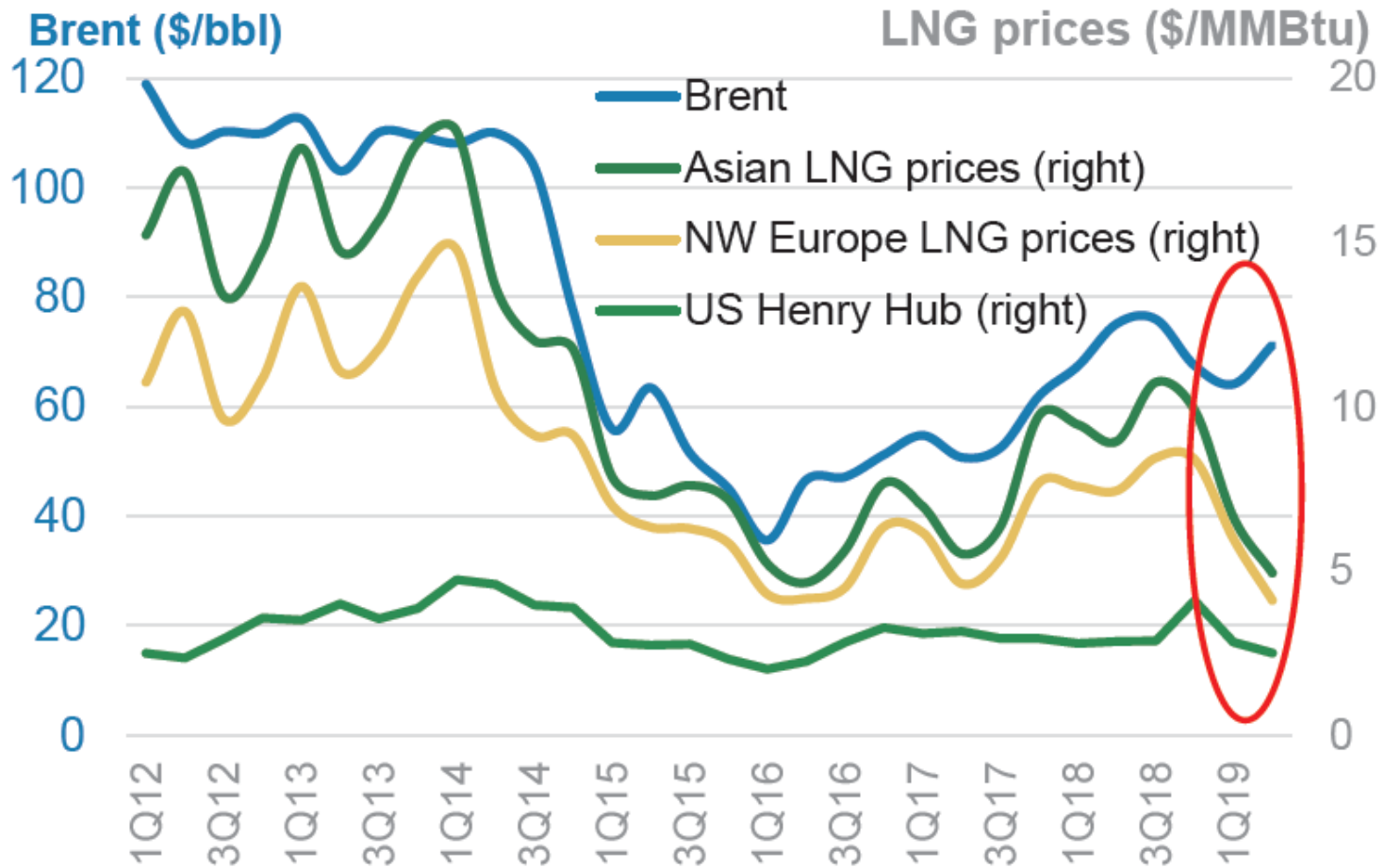
- Forecast of \$40 billion invested each year in the next 5 years on U.S. LNG projects



Source: Morgan Stanley Research estimates

# Slide 7

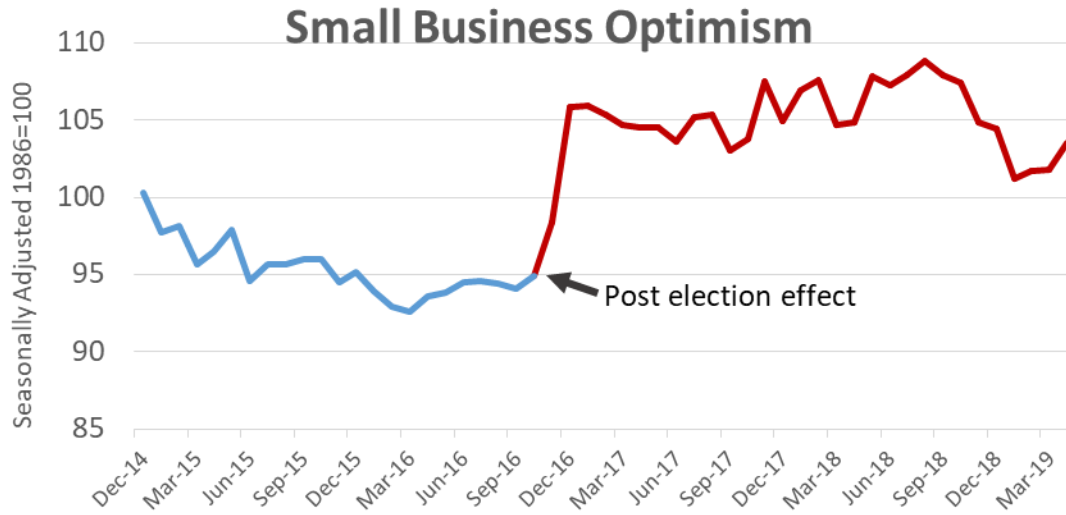
- U.S. shale gas and U.S. LNG exports have caused worldwide oil and natural gas prices to be de-coupled



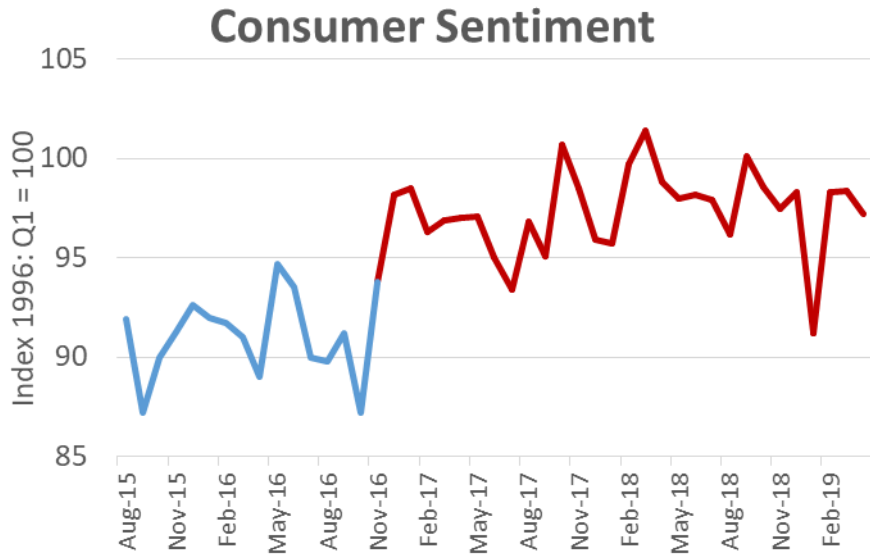
Source: Eikon, Platts, Morgan Stanley Research



# The Trump Effect



Source: NFIB



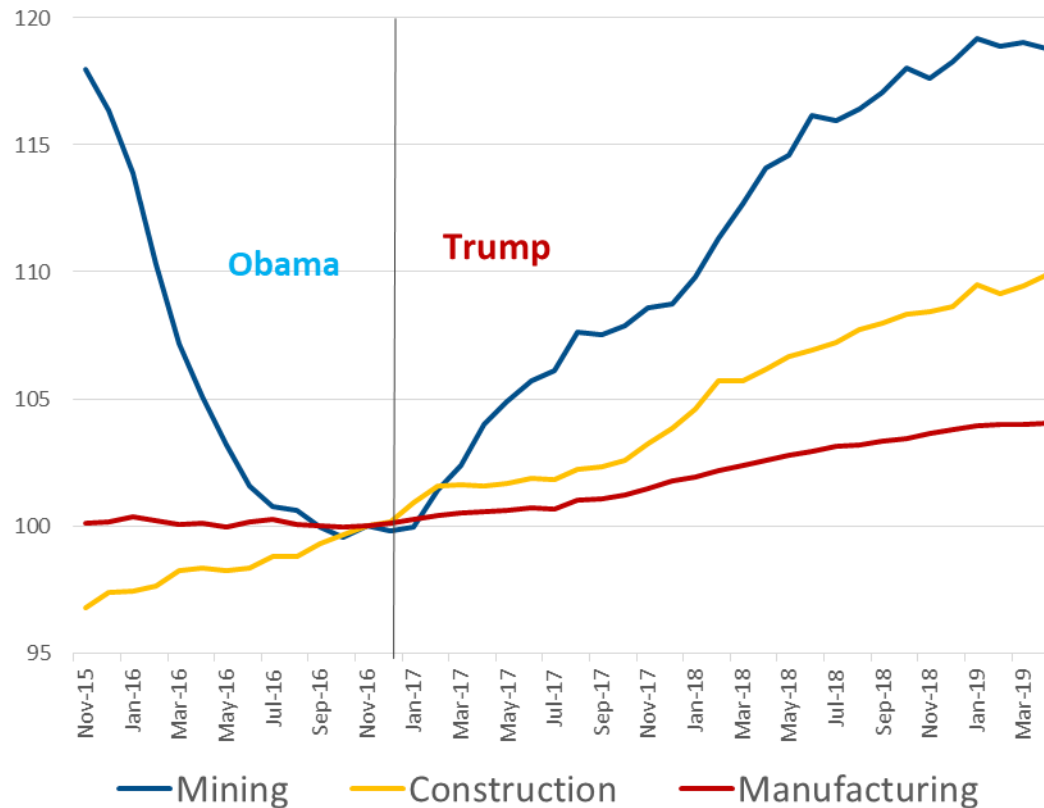
Source: University of Michigan



Source: Quinnipiac University Poll

# Growth in Manufacturing, Mining, Construction Since Election

1,326,000 Blue-collar Jobs Added Since Election Day  
Employment Indexed to Election Day



Source: Bureau of Labor and Statistics

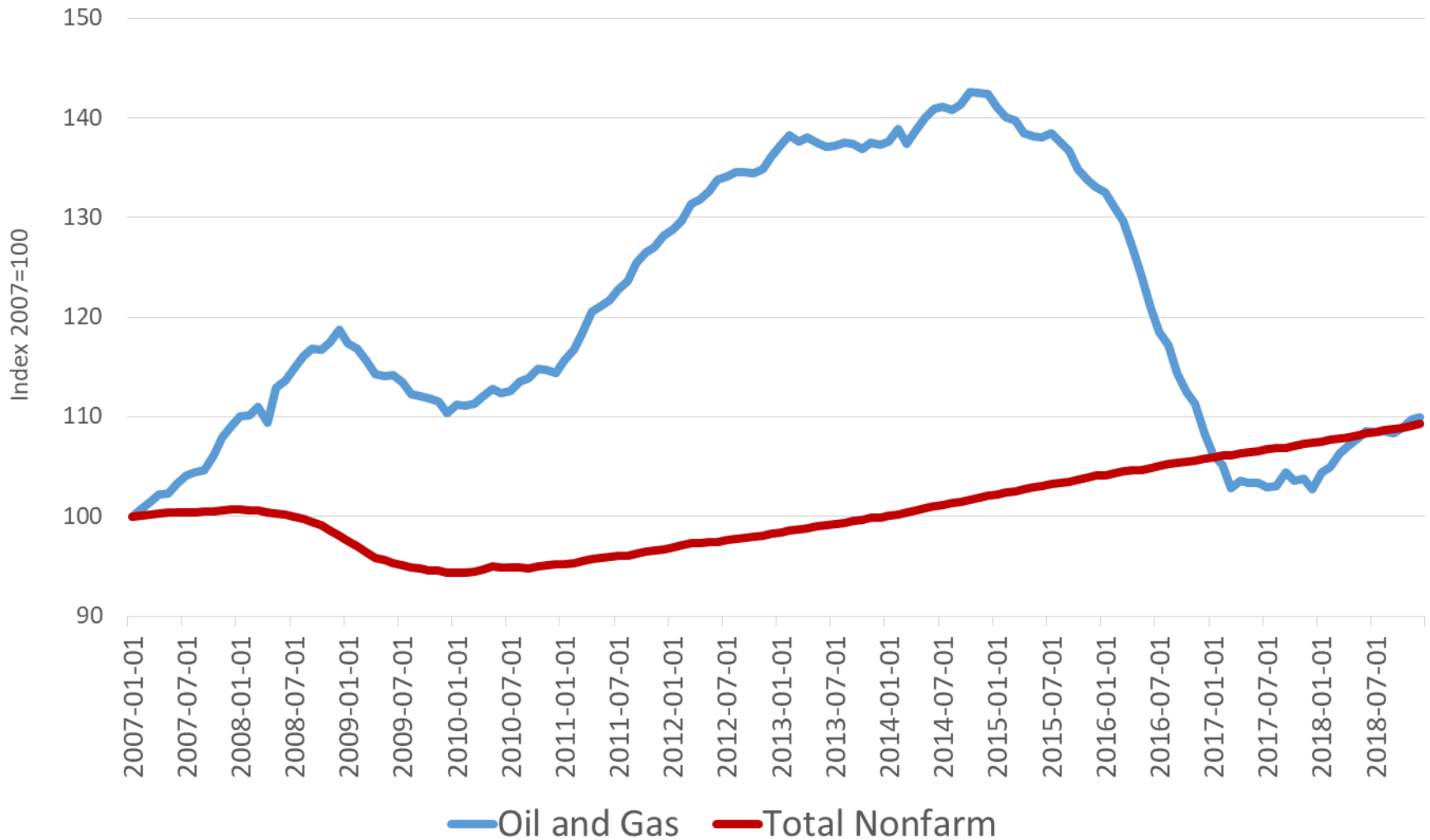
Manufacturing has added 515,000 jobs

Construction has added 697,000 jobs

Mining has added 114,300 jobs

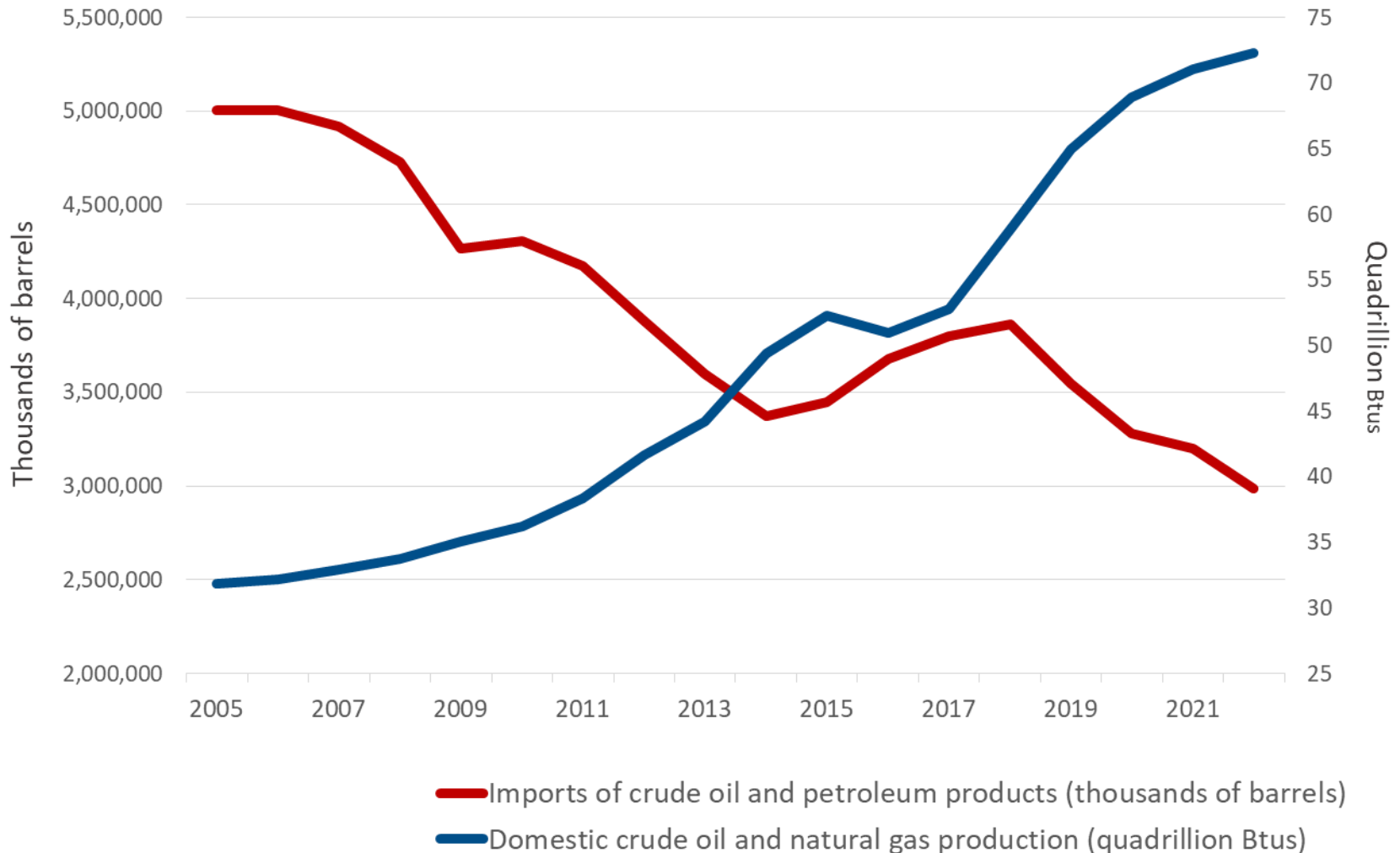
# America's Oil Boom

## Growth in Oil & Gas Employment Outpaces the Rest of the Economy



# Oil Imports Plunge

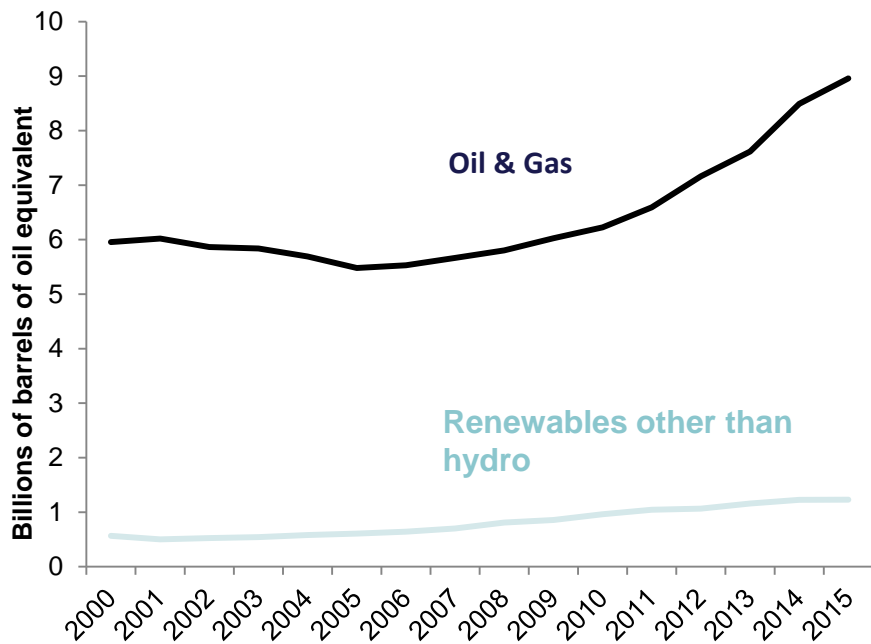
## Oil Imports Plunge As U.S. Oil and Natural Gas Production Increases



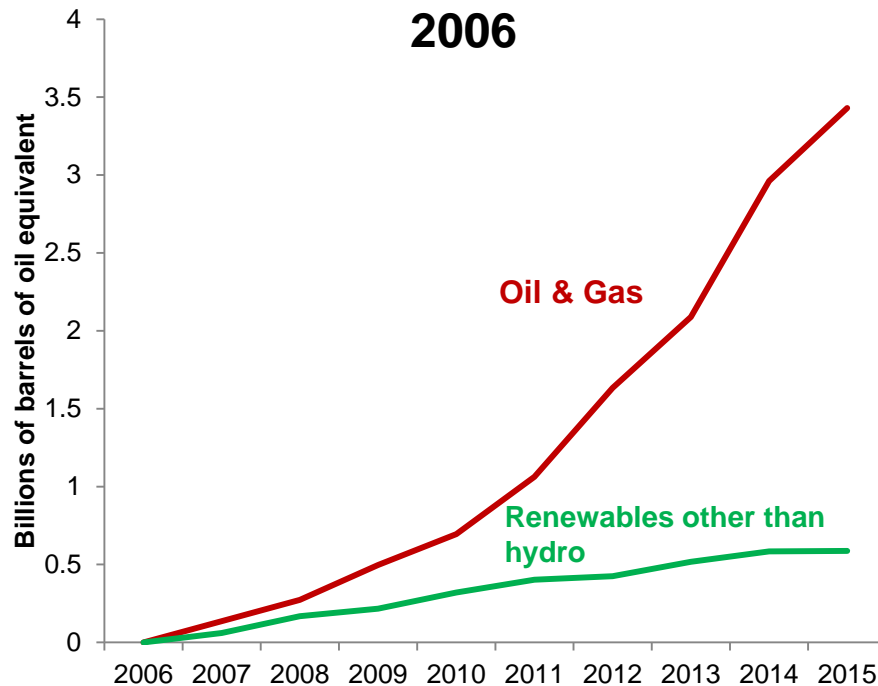
Source: U.S. Energy Information Administration

# America's Soaring Gas and Oil Output

## Total Production Since 2000



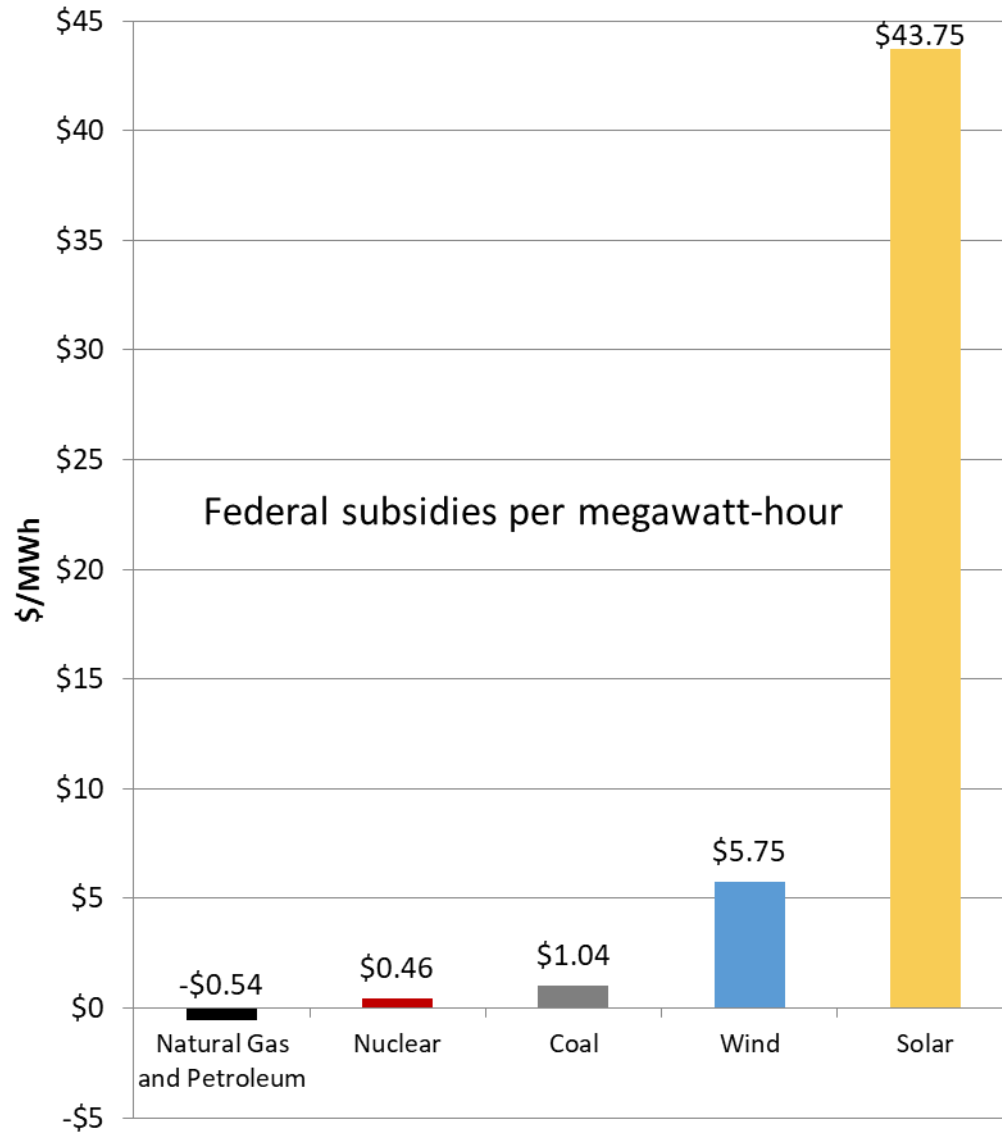
## Growth in Production Since 2006



*The growth in oil & gas production in the eight years exceeds by nearly two fold the total current production of energy from all renewable resources (excluding hydro dams). Most recent annual data through 2015.*

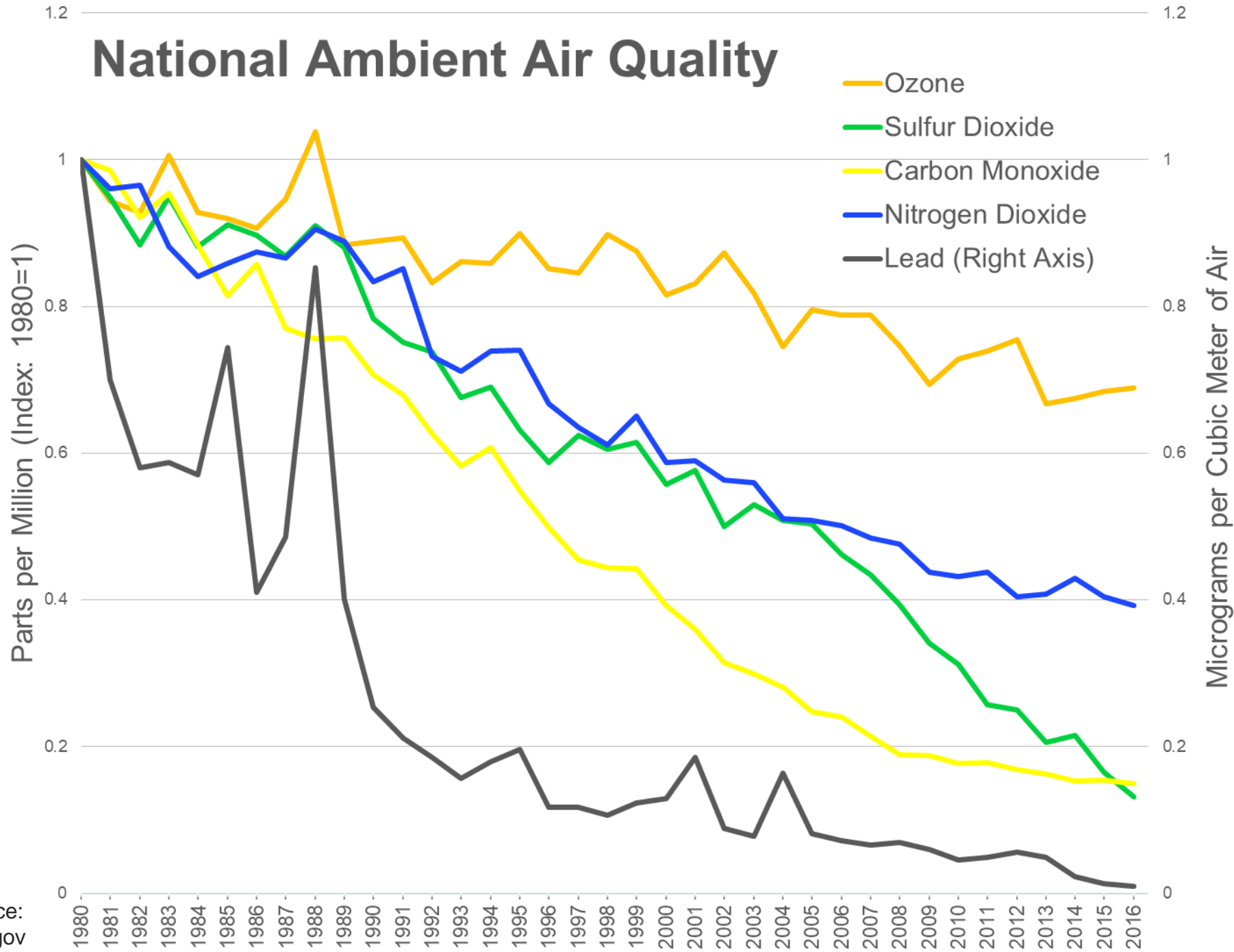
Source: Energy Information Administration, Monthly Energy Review

# Who Gets Taxpayer Subsidies?



Source: EIA (FY 2016)

# National Ambient Air Quality



Source: epa.gov

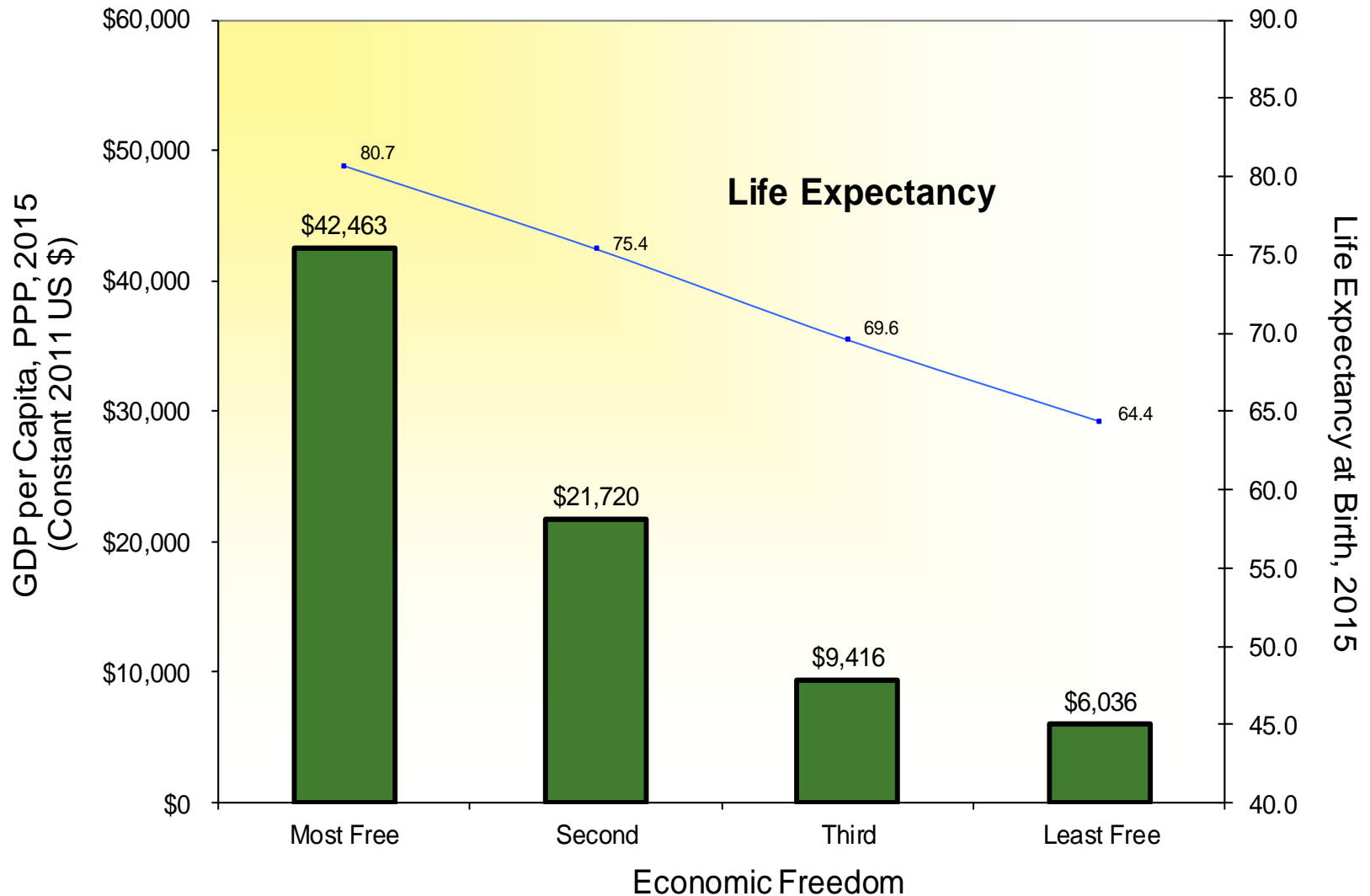
# No EU Countries Meeting Targets for Paris Agreement Emission Reduction



Source: Climate Action Network Europe



# Free Countries are Wealthier and Healthier



Source: Cato Institute and Fraser Institute, *Economic Freedom of the World*, 2017.

# State Economic Outlook Ranking

Rank	Top Ten States	Rank	Bottom Ten States
1.	Utah	41.	Oregon
2.	Idaho	42.	Maine
3.	Indiana	43.	Montana
4.	North Dakota	44.	Minnesota
5.	Arizona	45.	Hawaii
6.	Florida	46.	New Jersey
7.	North Carolina	47.	California
8.	Wyoming	48.	Illinois
9.	South Dakota	49.	Vermont
10.	Virginia	50.	New York

Source: Rich States Poor States, Eleventh Edition, American Legislative Exchange Council