

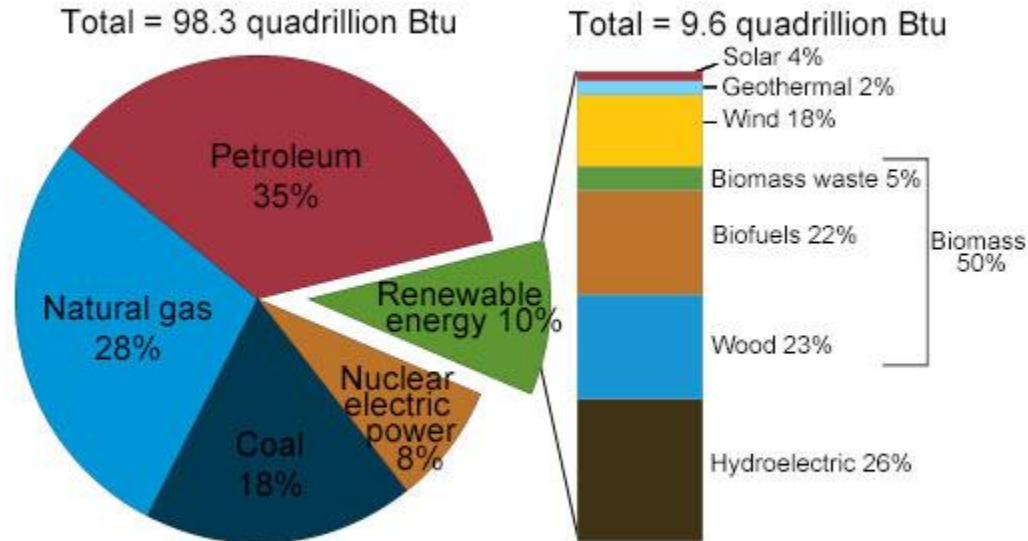
The Clean Power Plan:  
A Legal Analysis of the EPA's Final  
Rule

Robert Paul

Western Michigan University

# Energy Use by Source

U.S. energy consumption by energy source, 2014



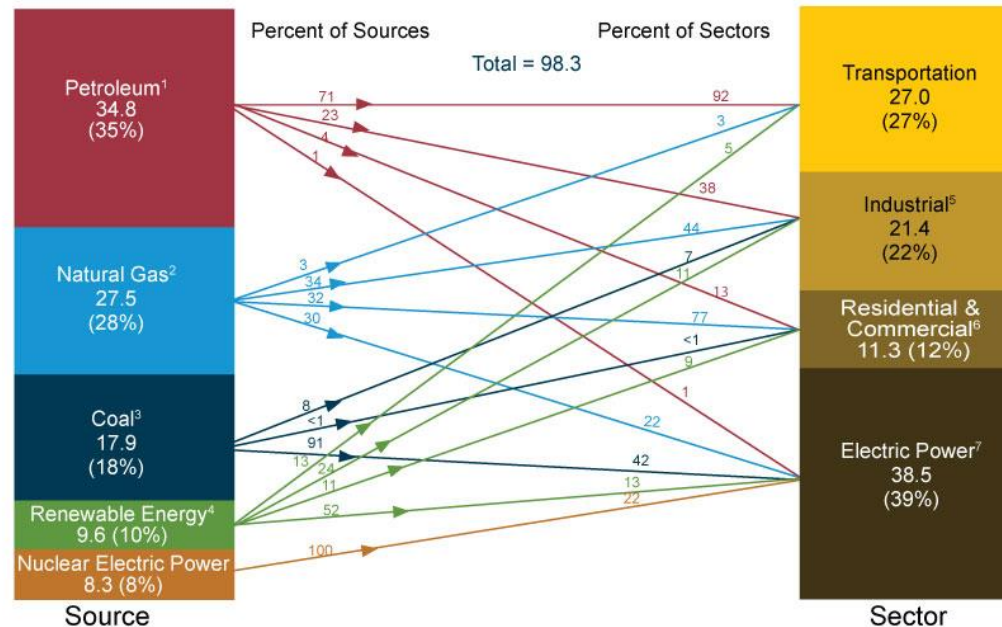
Note: Sum of components may not equal 100% as a result of independent rounding.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, Table 1.3 and 10.1 (March 2015), preliminary data.



# Energy Use by Source and Sector

**Primary Energy Consumption by Source and Sector, 2014**  
(Quadrillion Btu)



<sup>1</sup> Does not include biofuels that have been blended with petroleum—biofuels are included in "Renewable Energy."

<sup>2</sup> Excludes supplemental gaseous fuels.

<sup>3</sup> Includes less than -0.1 quadrillion Btu of coal coke net imports.

<sup>4</sup> Conventional hydroelectric power, geothermal, solar/photovoltaic, wind, and biomass.

<sup>5</sup> Includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

<sup>6</sup> Includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

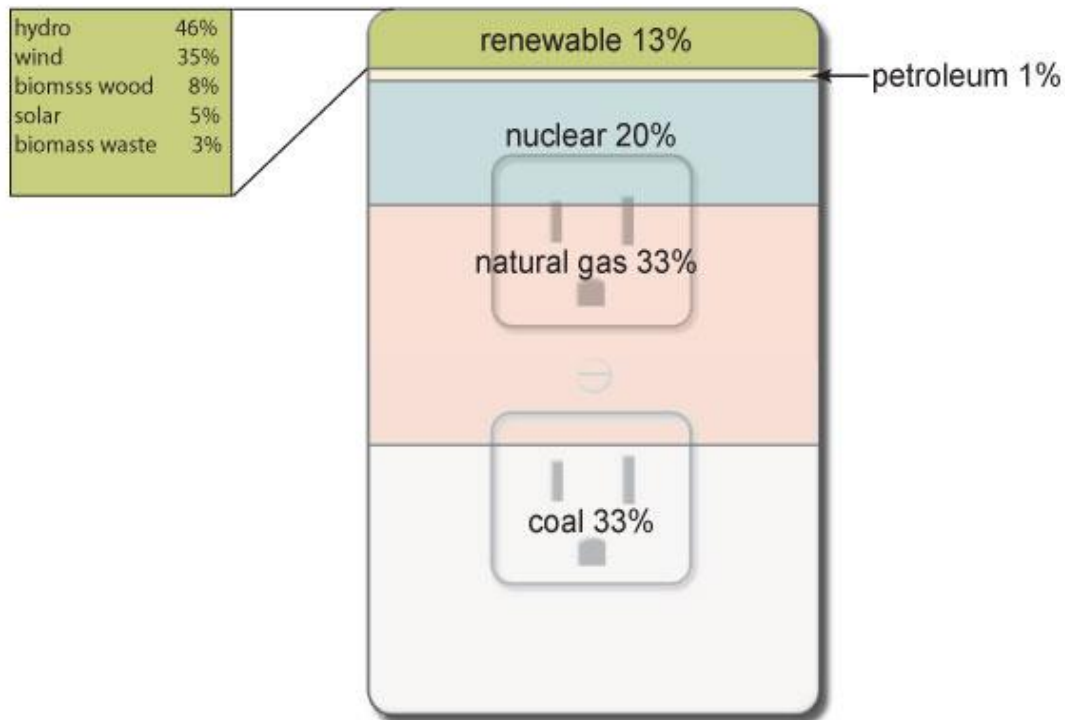
<sup>7</sup> Electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes 0.2 quadrillion Btu of electricity net imports not shown under "Source."

Notes: Primary energy in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy (for example, coal is used to generate electricity). \* Sum of components may not equal total due to independent rounding.

Sources: U.S. Energy Information Administration, Monthly Energy Review (March 2015), Tables 1.3, 2.1-2.6.

# Sources of Electric Power

## Sources of U.S. electricity generation, 2015

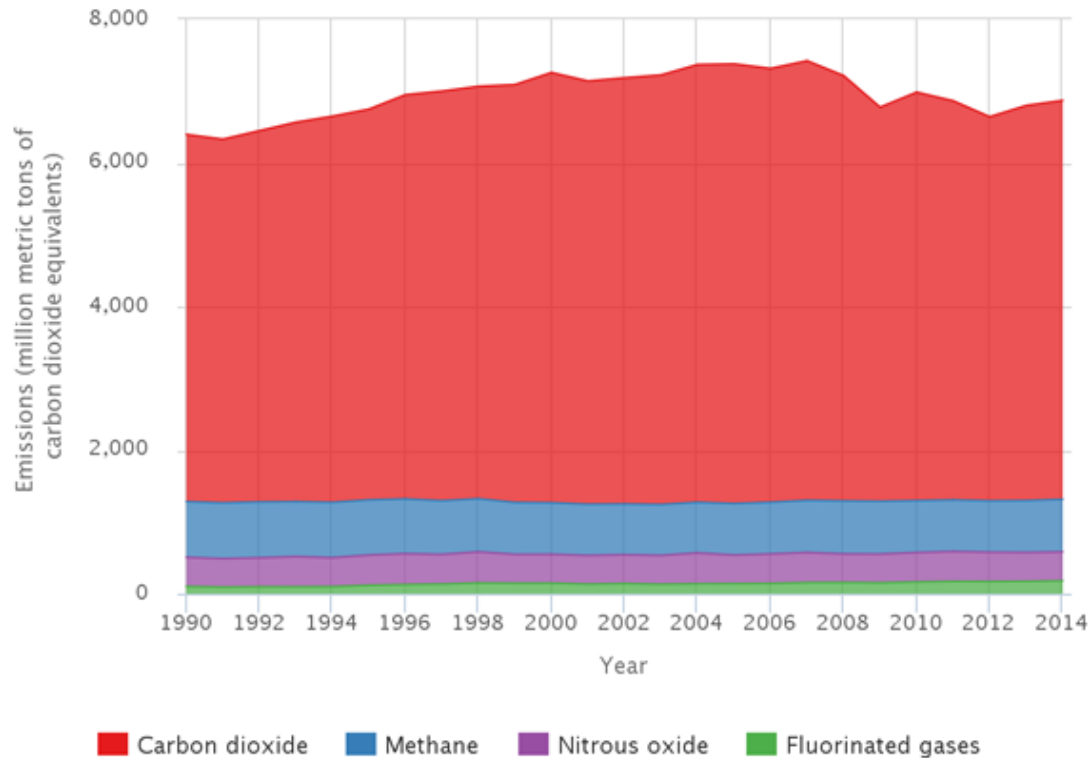


Source: U.S. Energy Information Administration, *Electric Power Monthly* (February 2016). Preliminary data for 2015

Note: Sum of components may not equal 100% due to independent rounding.

# GHG Emissions by Gas

U.S. Greenhouse Gas Emissions by Gas, 1990-2014



Source: U.S. EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014.  
<http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html>

# The Impacts of Climate Change on American Communities

- increased severity of dangerous smog in cities;
- intensified precipitation events, hurricanes, and storm surges;
- reduced precipitation and runoff in the arid West;
- reduced crop yields and livestock productivity;
- increases in fires, insect pests, and the prevalence of diseases transmitted by food, water, and insects;
- And increased risk of illness and death due to extreme heat.

Source: U.S. Global Change Research Program, Global Climate Change Impacts in the United States, at 92- 93 (2009)

# Addressing Climate Change

- Congress has consistently failed to address the problem of climate change.
  - 1997 Kyoto Protocol
  - The American Clean Energy and Security Act of 2009 (ACES)
  - CAA Title 1, Sections 108-110, NAAQS
  - Paris Agreement (2015)

# Regulation of GHGs – Legal Authority

- Massachusetts v. EPA (2007)
- Endangerment Finding and Cause or Contribute Finding (2009)
- American Electric Power Co., Inc. v. Connecticut (2011)
- The Clean Air Act and Section 111(d)



# The Clean Power Plan

- Climate Action Plan (2013)
- Registered October 23<sup>rd</sup>, 2015
- Final Rule
  - Effective December 22<sup>nd</sup>, 2015
- States and Industry sue for stay
- D.C. Circuit Court denies
- U.S. Supreme Court grants Petitioner's request for stay while the suit is pending its appeal.

# The Final Rule

## “Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units”

- Mandates reductions in CO<sub>2</sub> emissions from existing fossil fuel-fired power plants
- Emissions Guidelines (EGs)
- The “best” “system of emissions reductions” (BSERs)
- SIPs (Section 111(d) Plans)

# The Plan's BSER-based building blocks for existing EGUs

- (1) **improving** heat rates at coal-fired steam plants;
- (2) **substituting** increased generation from lower-emitting existing natural gas combined cycle plants for generation from higher-emitting steam plants (which are primarily coal-fired); and
- (3) **substituting** increased generation from new zero-emitting renewable energy generating capacity for generation from fossil-fuel-fired plants (which are primarily coal- or gas-fired).

# My Research Question

Analyze the legality of the Clean Power Plan and determine whether Clean Air Act Section 111(d) is the correct legal avenue for the EPA to implement its Final Rule.

# Relevant Sections

- Title II
- Title I:
  - Sections 108-110
  - Sections 111
  - Sections 112
- Section 112 Exclusion

# Challenging the Authority

- Congressional Intent
- The problem with BSERs.
- Can EPA essentially regulate State's energy – federalism.

# Legal Analysis and Conclusion

- The Plan's Legal Permissibility
- The Plan's future – the Courts