

Energy Data Transparency at the United States Energy Information Administration (EIA)



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Topics

- EIA Mission and Organization
- Authority, Trust, and Transparency
- Best Practices in EIA Data Collection
- Putting it together: administrative data and survey data



Mission: EIA collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment.

EIA is the Nation's premier source of energy information. By law, its data and analyses do not require approval by any other officer or employee of the United States Government.

The screenshot shows the EIA website homepage with a navigation bar at the top. The main banner features a large image of solar panels and a power line tower, with a text box announcing the 'Annual Energy Outlook 2016 Early Release with summary of Reference case projections through 2040'. Below the banner, there are three main sections: 'What's New' with links to the AEO2016 Early Release and 2012 C&ES consumption data; 'Today in Energy' featuring an article on 'Future power sector carbon dioxide emissions depend on status of Clean Power Plan' with a line chart showing CO2 emissions from 1990 to 2040; and 'Data Highlights' listing various energy prices and inventories.

What's New

- AEO2016 Early Release: Summary of Two Cases - May 17
- 2012 C&ES consumption and expenditures: detailed tables, and public use microdata - May 17
- International Energy Outlook 2016 - May 17

Coming Up

- India Country Analysis Brief
- Uranium Marketing Annual
- Annual Energy Outlook

Today in Energy *Posted May 18, 2016*

Future power sector carbon dioxide emissions depend on status of Clean Power Plan

Trends in carbon dioxide (CO₂) emissions from electricity generation through 2040 depend significantly on whether or not the Clean Power Plan (CPP) rule issued last August by the U.S. Environmental Protection Agency (EPA) is implemented. Analysis in EIA's Annual Energy Outlook 2016 (AEO2016) examines what the CPP could mean for the fuels used to generate electricity, especially coal. [More](#).

U.S. energy related carbon dioxide (CO₂) emissions (1990-2040)

gigajoules metric tons

history | projection

6,000
5,000
4,000
3,000
2,000
1,000
0

1990 1995 2000 2005 2010 2015 2020 2025 2030 2035 2040

Total energy related CO₂ emissions

power sector CO₂ emissions

No Clean Power Plan case
Reference case (includes Clean Power Plan)

No Clean Power Plan case
Reference case (includes Clean Power Plan)

Source: EIA, Annual Energy Outlook 2016

Data Highlights

- WTI crude oil futures price 5/17/2016: \$48.31/barrel
 - ↑ \$0.09 from week earlier
 - ↓ \$11.12 from year earlier
- Natural gas futures price 5/17/2016: \$2.048/MMBtu
 - ↓ \$0.110 from week earlier
 - ↓ \$0.862 from year earlier
- Retail gasoline price 5/16/2016: \$2.242/gal
 - ↑ \$0.022 from week earlier
 - ↓ \$0.502 from year earlier
- Crude oil inventories 5/13/2016: 541.3 million barrels
 - ↑ 1.8 million barrels from week earlier
 - ↑ 56.1 million barrels from year earlier
- Weekly coal production 5/7/2016: 10.949 million tons
 - ↓ 0.310 million tons from week earlier
 - ↓ 0.104 million tons from year earlier

Legal rights to collect

- * Federal Energy Administration Act of 1974 (Public Law 93-275)
- * Department of Energy (DOE) Organization Act of 1977 (Public Law 95-91)
- * Other legal mandates

Legal obligations to protect

- * Confidential Information Protection and Statistical Efficiency Act (CIPSEA), Title V of the E-Government Act of 2002 (Public Law 107-347)
- * Freedom of Information Act, 5 USC. 552, exemptions 3, 4, and 6
- * Paperwork Reduction Act, 44 U.S.C. 3501
- * Information Quality Act, P.L. No. 106-554; H.R. 5658, Section 515(a)

Trust

Amicable relationship with data suppliers

Maximizing public access to information while maintaining confidentiality

Integrity & transparency

- * Transparency with data users about data sources and survey methods
- * Transparency with data suppliers on use and purpose for collecting the information and how the data will be protected

What Actions Contribute to Transparency?

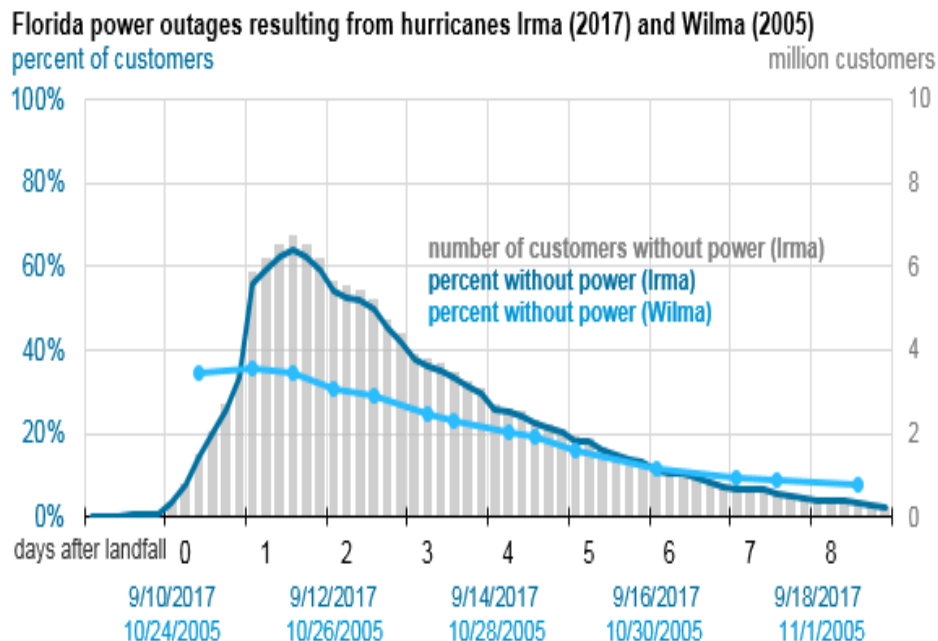
- Effective Survey Methods
 - Survey Instructions
 - Help features
 - Training for collection staff
 - Orientation for respondents
 - Uniform communications and methods

- Effective Editing
 - Expected mean edits
 - Bands using historical data
 - Graphical edits
 - Consistency and logic checks

- Labels for Data Quality
 - Preliminary and final data indicators
 - Reporting of relative standard errors
 - Labeling imputed values

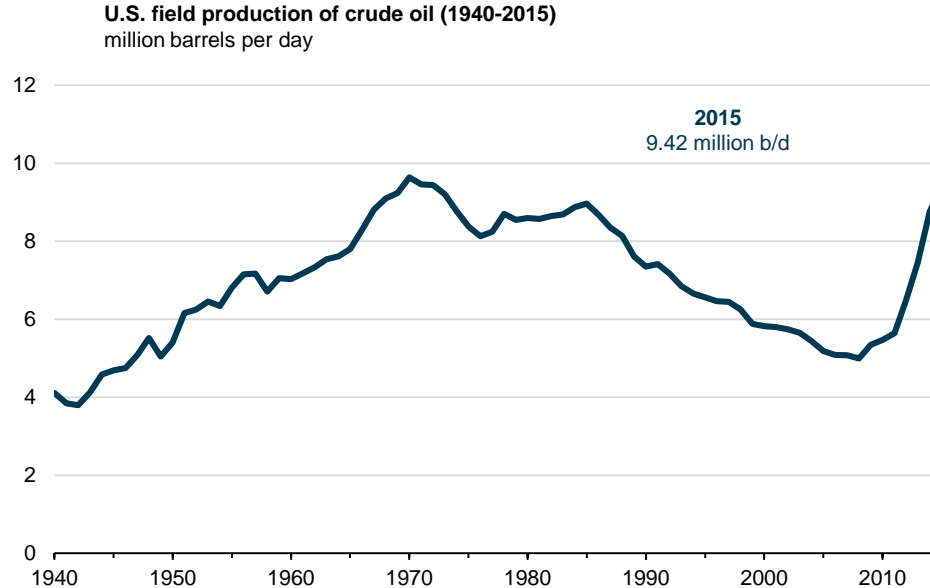
Even with extensive collection authority, EIA often uses administrative data...

- To reduce reporting lags
- To fill data gaps
- To review the quality of survey results
- To provide inputs to models
- EIA uses at least 62 administrative datasets for data publications and models



In 2015, EIA Implemented Direct Collection from Oil and Gas Producers. EIA...

- Collects data from oil producers
- Updates samples on a monthly basis to capture entry and exit
- Supports expanded data collection through an automated data collection system
- Uses automated edits and improved quality tools to report accurate data quickly



Then, EIA Used Administrative Data to Improve Estimates of U.S. Crude Exports

