

Densified Biomass Fuel Report

U.S. Energy Information Administration



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About EIA

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Biomass energy

Growing part of the US and global renewable energy mix

Displacing fossil fuels for heating and electric power

Nearly 2.5 million households (2%) used wood as their primary residential space heating fuel in 2014

In 2010, biomass comprised over 4% of energy for heating in the northeast states (NEBTWG) and, in 2012, 3% in the Midwest (HTM). Both regions have stated visions to significantly increase biomass as a thermal energy source.

The U.S. exported nearly 5 million tons of wood pellets in 2016. In the UK, biomass made up 4% of the power needs in Q3 2016.

The United States is the largest global wood pellet exporter surpassing Canada since 2012.

History and Purpose

- EIA received a letter from two Senators (Maine and New Hampshire) in 2014 asking to increase coverage of energy from woody biomass.
- PFI interest in a comprehensive data source for wood pellets
- Greenhouse gas reduction strategies recognize biomass as part of a sustainable energy mix, especially in European markets

Comparison of heating fuels in the northeast

Heating Fuels	MMBtu per unit	\$/unit	\$/MMBtu
1 gallon heating oil	0.1385	\$ 2.60	\$ 18.77
1000 cubic ft natural gas	1.032	\$ 10.76	\$ 10.43
1 gallon propane	0.091333	\$ 2.29	\$ 25.07
1 ton wood pellets	16.221	\$ 242.00	\$ 14.92

Comparison does not take into account efficiency of heating appliances

<http://www.eia.gov/tools/faqs/faq.cfm?id=987&t=5> – How do I compare the cost of heating fuels?

Respondents and requirements

- All manufacturers of densified biomass fuel products must report on EIA-63C. Both currently operating and those planning to begin operating within one year.
- Those with less than 10,000 tons/year capacity report once a year, shortened form
- Those with capacity of 10,000 tons/year or more report monthly
- **CAPACITY** is defined as the ability to produce with the equipment installed under ideal conditions
- Plants producing only animal bedding, absorbents, and/or grilling pellets are not required to report. All others should report **ONLY FUEL** intended for heating or electric power.
- Currently, about 90 manufacturers report each month.



DATA REQUIRED

- The current annual capacity and planned (or additional) capacity
- The status – operating, temporarily not operating, shut down permanently (ceased operations) and planned/under construction
- FTEs
- Download the form and instructions:

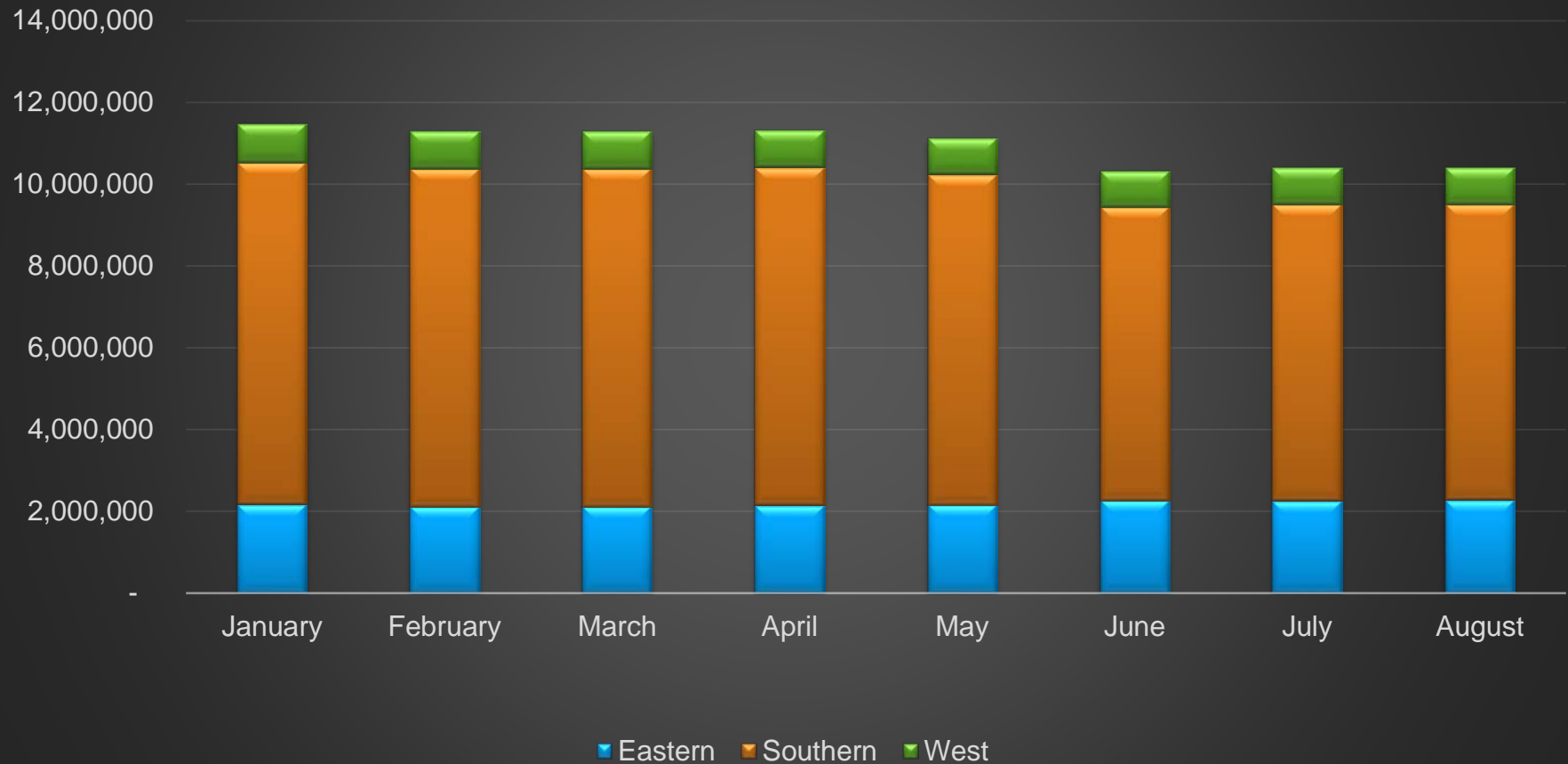
<http://www.eia.gov/survey/#eia-63C>

DATA REQUIRED

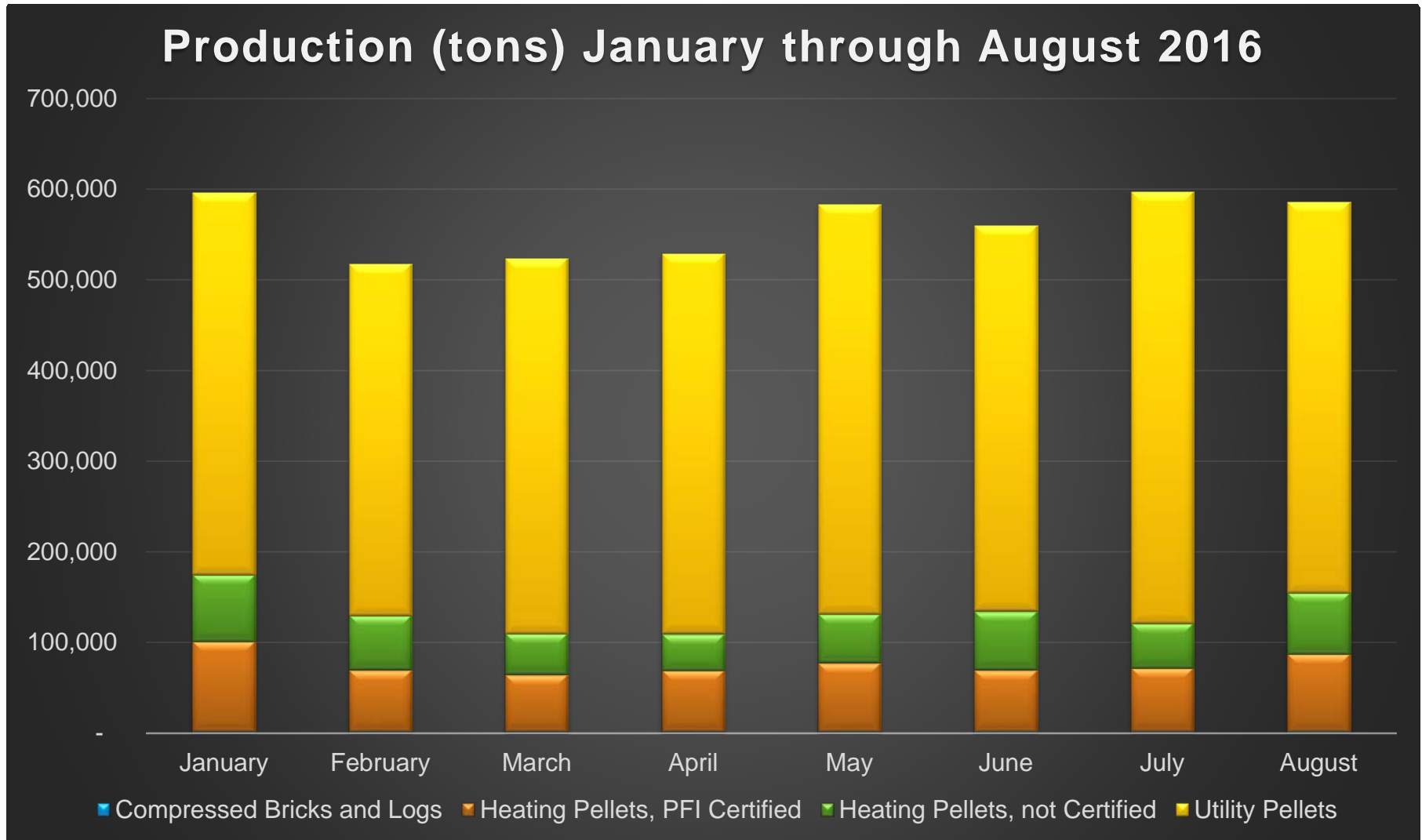
- Feedstocks: type, source, quantities and costs
- Production: type of product, quantities and characteristics
- Inventory: tons held not sold
- Sales: Domestic and Export, quantities and revenues

Annual Capacity January through August 2016

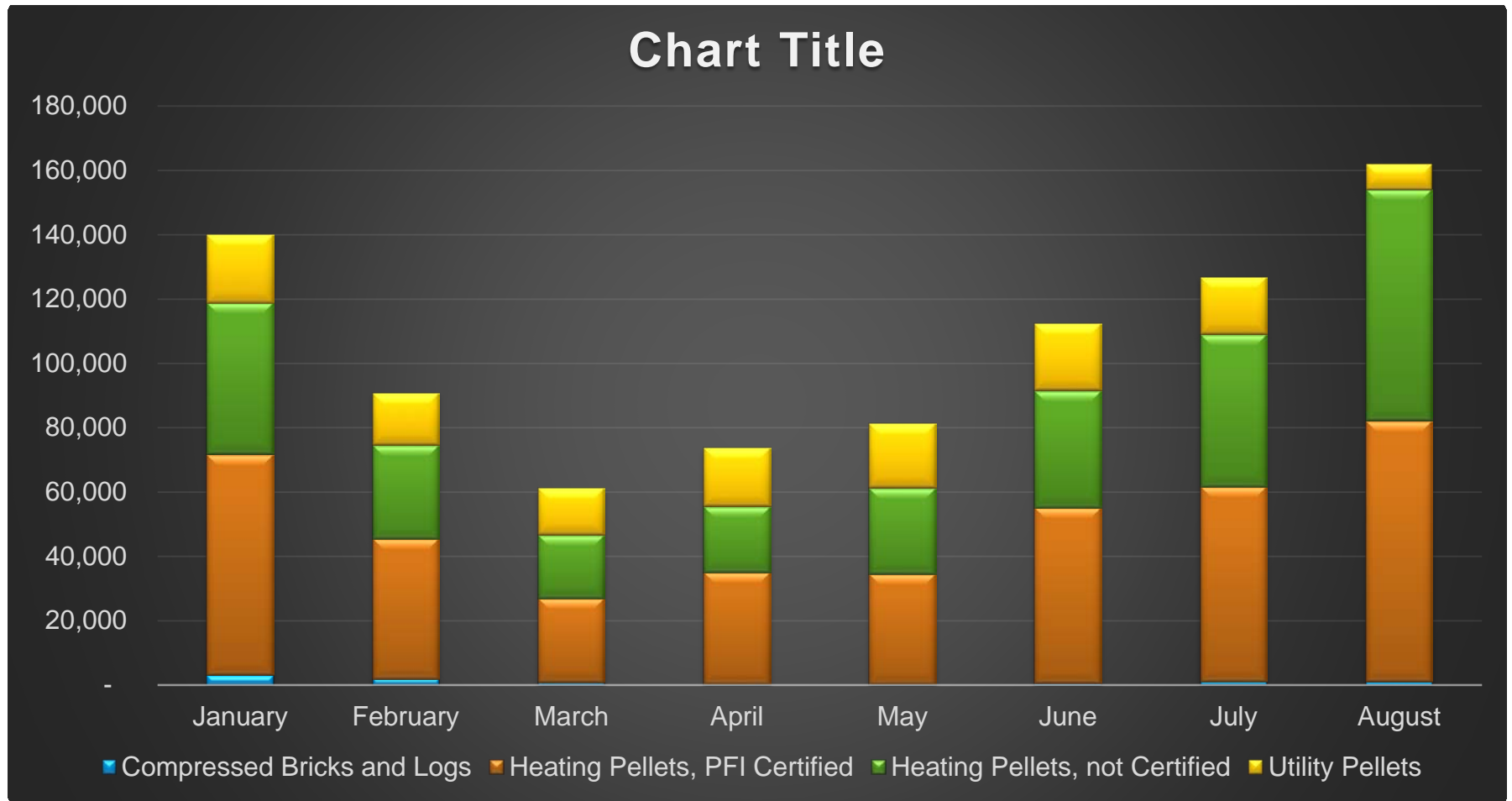
Annual Capacity (tons per year)



Production January through August 2016

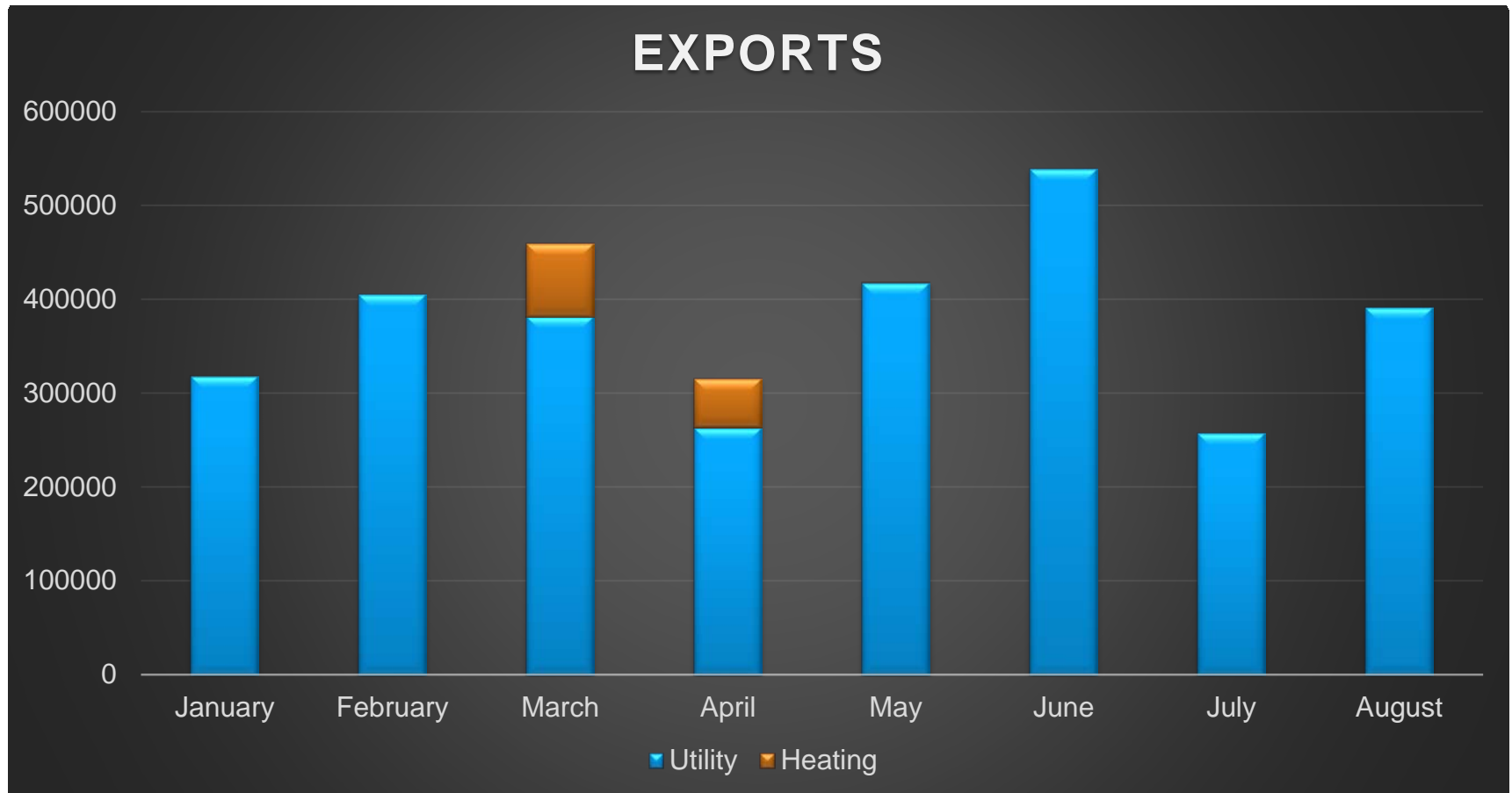


Sales Domestic Heating Pellets (tons) January through August 2016



Sales Export (tons)

January through August 2016



Data Quality

New Survey plus new respondents = Big data quality effort

Data Quality means we review data and compare it across time and within a form.

Range checks, consistency checks

Statistical outliers

What can we do to make the reporting

1. easier for respondents?
2. make the form better?

In the coming months, we will begin the clearance process – your opportunity to provide input to changes

Publication of Data

<http://www.eia.gov/biofuels/biomass/>

Data are regional or national to protect individual company data

At times, some data may be withheld where too few plants report in a month for some data elements.

Publication will be monthly on a regular schedule, with January 2017 at end of March 2017 – a two month lag

On schedule publication depends on receipt of data by the due date AND minimizing data quality problems.

Work together!

QUESTIONS?

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- Annual Energy Outlook | www.eia.gov/aeo
- International Energy Outlook | www.eia.gov/ieo
- Monthly Energy Review | www.eia.gov/mer
- Electric Power Monthly | www.eia.gov/epm
- Today in Energy | www.eia.gov/todayinenergy
- State Energy Portal | www.eia.gov/state
- RECS | www.eia.gov/consumption/residential