

SELECTED LOUISIANA ENERGY STATISTICS

Among the 50 states, Louisiana's rankings (in 2016, unless otherwise indicated) were:

PRIMARY ENERGY PRODUCTION

(Including GOM Central OCS region)

- 2nd in crude oil
- 1st in OCS crude oil
- 1st in OCS natural gas
- 1st in OCS revenue generated for federal government
- 1st in mineral revenues from any source to the federal government
- 1st in LNG terminal capacity
- 3rd in natural gas
- 3rd in crude oil proved reserves
- 4th in natural gas proved reserves
- 4th in total energy from all sources

REFINING AND PETROCHEMICALS

- 2nd in primary petrochemical production
- 2nd in natural gas processing capacity
- 2nd in petroleum refining capacity

PRIMARY ENERGY PRODUCTION

(Excluding GOM Central OCS region)

- 9th in crude oil
- 4th in natural gas
- 7th in natural gas proved reserves
- 9th in crude oil proved reserves
- 18th in coal
- 18th in nuclear electricity

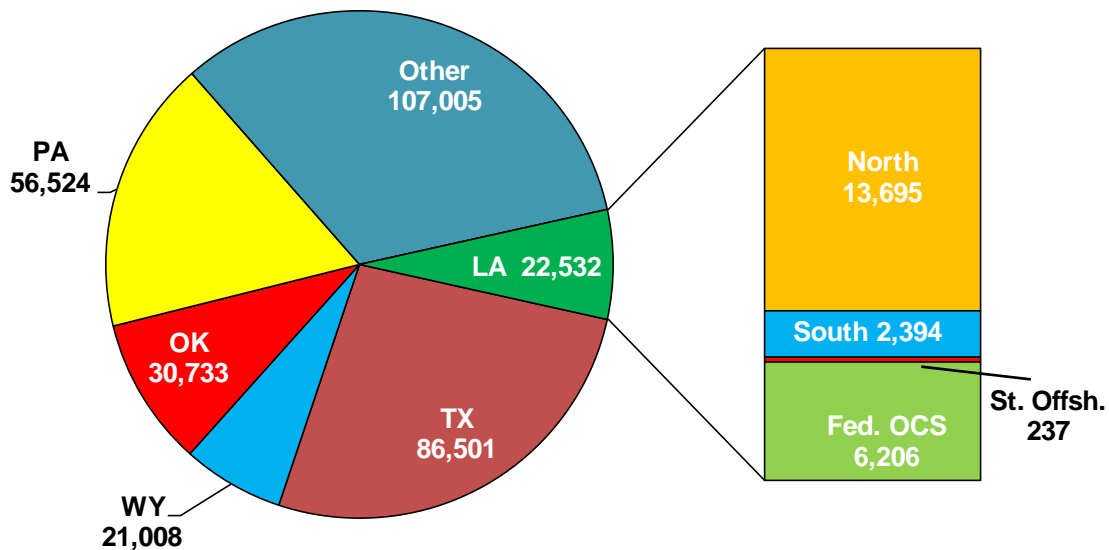
ENERGY CONSUMPTION (2015)

- 2nd in industrial energy
- 1st in per capita energy
- 3rd in natural gas
- 3rd in petroleum
- 3rd in total energy
- 26th in residential energy

Figure 1

2016 U.S. Natural Gas Reserves

(Billion Cubic Feet)

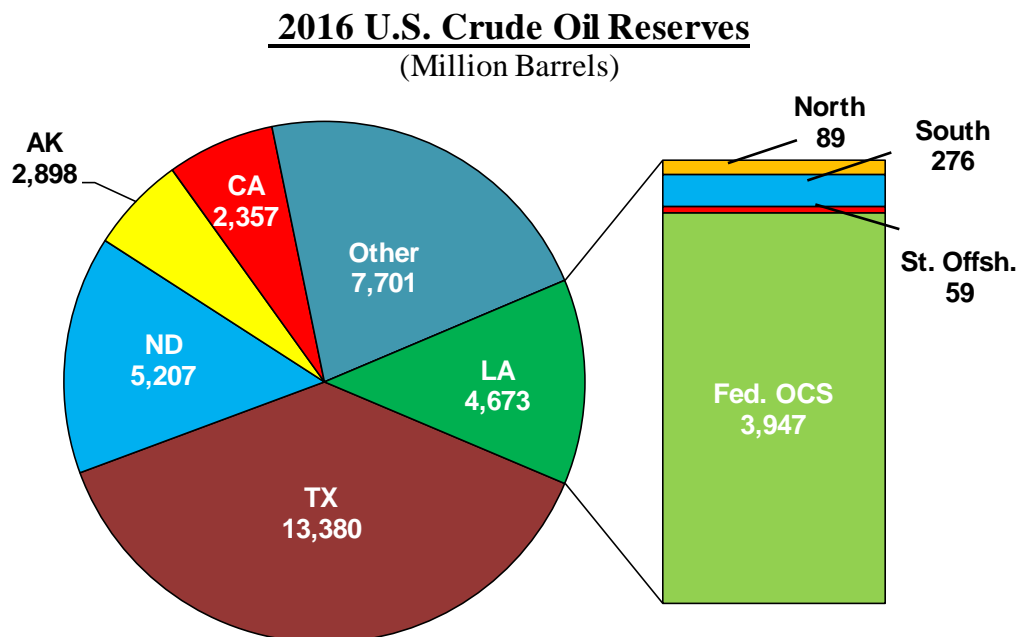


PRODUCTION

State controlled natural gas and casinghead gas production peaked at 5.6 trillion cubic feet (TCF) per year in 1970 and declined to 1.28 TCF in 2005. The trend started to reverse in 2006 when production increased to 1.35 TCF. The rising trend continued until 2011 when it peaked at 2.98 TCF. This production surge was due to production in the Haynesville shale play. Prior to the Haynesville discovery, the long-term decline rate was around 3.2% per year. With the start of production in Haynesville in 2007, the state production has shown an increase of 0.3% in 2008 over the previous year, 12.4% in 2009, 42.3% in 2010, and 37.1% in 2011. In 2012, production fell to 2.96 TCF; in 2013, it fell to 2.31 TCF; in 2014, it fell to 1.94 TCF; in 2015, it fell to 1.78 TCF; and in 2016, it fell to 1.72 TCF or a 3.2% drop from the previous year. This decline is expected to continue as long as prices continue to be below \$3.50 per MCF and storage gas level remains high.

State controlled crude oil and condensate production peaked at 566 million barrels (mmbbls) per year in 1970, declined to 211 mmbbls in 1980, declined to 148 mmbbls in 1990, declined to 107 mmbbls in 2000, and declined to 68 mmbbls in 2010. Then in 2011, oil production reversed its trend; 2011 production was 69 mmbbls, in 2012 it increased to 71 mmbbls, in 2013 it increased to 72 mmbbls, in 2014 it decreased to 69 mmbbls, in 2015 it decreased to 63 mmbbls, and in 2016 it decreased to 57 mmbbls. The oil production decrease is caused by declining oil prices and low drilling activities. If oil prices stay below \$65 per barrel, production is expected to decrease from the present level, but if the Tuscaloosa Marine Shale, the Brown dense shale, or enhance recovery in older fields' productions increase, state oil production might reverse the declining trend.

Figure 2



Gulf of Mexico (GOM) Central OCS region is the most extensively developed and mature OCS territory in the U.S. It has produced approximately 89% of the 22 billion barrels of crude oil and

condensate and 82% of the 181 TCF of natural gas extracted from all federal OCS territories, from the beginning of offshore production through the end of 2016.

In 2016, GOM Central OCS region produced 16.5% and the state territory produced 1.7% of the U.S. oil domestic production. The GOM Central OCS region produced 3.9% and the state territory produced 6.2% of the natural gas produced in the U.S.

GOM Central OCS region gas production first peaked at 4.10 TCF per year in 1981, then declined to 3.00 TCF in 1986, started to recover as prices increased, reaching a second peak at 4.11 TCF in 2010. Production then slowly started to decline, caused first by the moratorium on deep water drilling and later by the decline in price and increased gas shale production. In 2014, it produced 1.14 TCF; in 2015, it produced 1.07 TCF; and in 2016, it produced 1.09 TCF.

GOM Central OCS region crude oil and condensate production first peaked at 374 mmbbls per year in 1972 and then declined to 249 mmbbls in 1981. The production rose from 248 mmbbls in 1990 to 524 mmbbls in 2001, due to the development of deep water drilling. In 2008, production dropped to 396 mmbbls due to weather; in 2009, production reached its second peak at 544 mmbbls; in 2011, production began to slow down after the Macondo oil spill and subsequent moratorium, but by 2014, production was on the upswing with discovery of deep oil reservoirs. The Central OCS produced 470 mmbbls in 2014, 514 mmbbls in 2015, and 534 mmbbls in 2016.

REVENUE

In Fiscal Year (FY) 2007/08, oil and gas revenue (severance tax, royalties, and bonuses) reached an all time high of \$1.94 billion, or 16% of state income (total state taxes, licenses, and fees); the previous peak occurred in FY 1981/82 at \$1.62 billion, but it was 41% of state income. In FY 2012/13, it was \$1.37 billion or 13% of the state income; in FY 2013/14, it was \$1.32 billion or 13% of state income; in FY 2014/15, it was \$1.01 billion or 10% of state income; and, in FY 2015/16, it is expected to be around \$707 million.

DRILLING ACTIVITY

Drilling permits issued on state controlled territory peaked at 7,631 permits in 1984 and declined to a low of 1,017 permits in 1999. Since 2000, the annual number of drilling permits issued has been on a roller coaster ride. In 2008, they increased to 2,374 permits; in 2009, permits decreased to 1365; in 2010, they increased to 1,956 permits; in 2013, they decreased to 1,578 permits; in 2014, they decreased to 1,408 permits; in 2015, they decreased to 643; and, in 2016, they decreased to 475.

The average active rotary rig count for Louisiana, excluding OCS, reached a high of 386 active rigs in 1981 and fell to 76 active rigs in 2002. In 2008, there was an average of 117 active rigs. The count fell to 113 rigs in 2009. It increased to 166 active rigs in 2010 because of Haynesville run up; in 2014, it decreased to 60 active rigs due to competitions from shale productions; in 2015, the count decreased to 44 rigs; and, in 2016, it decreased to 26 rigs due to low oil and gas prices. The lowest year average between 1981 and 2010 was 64 active rigs in 1993.

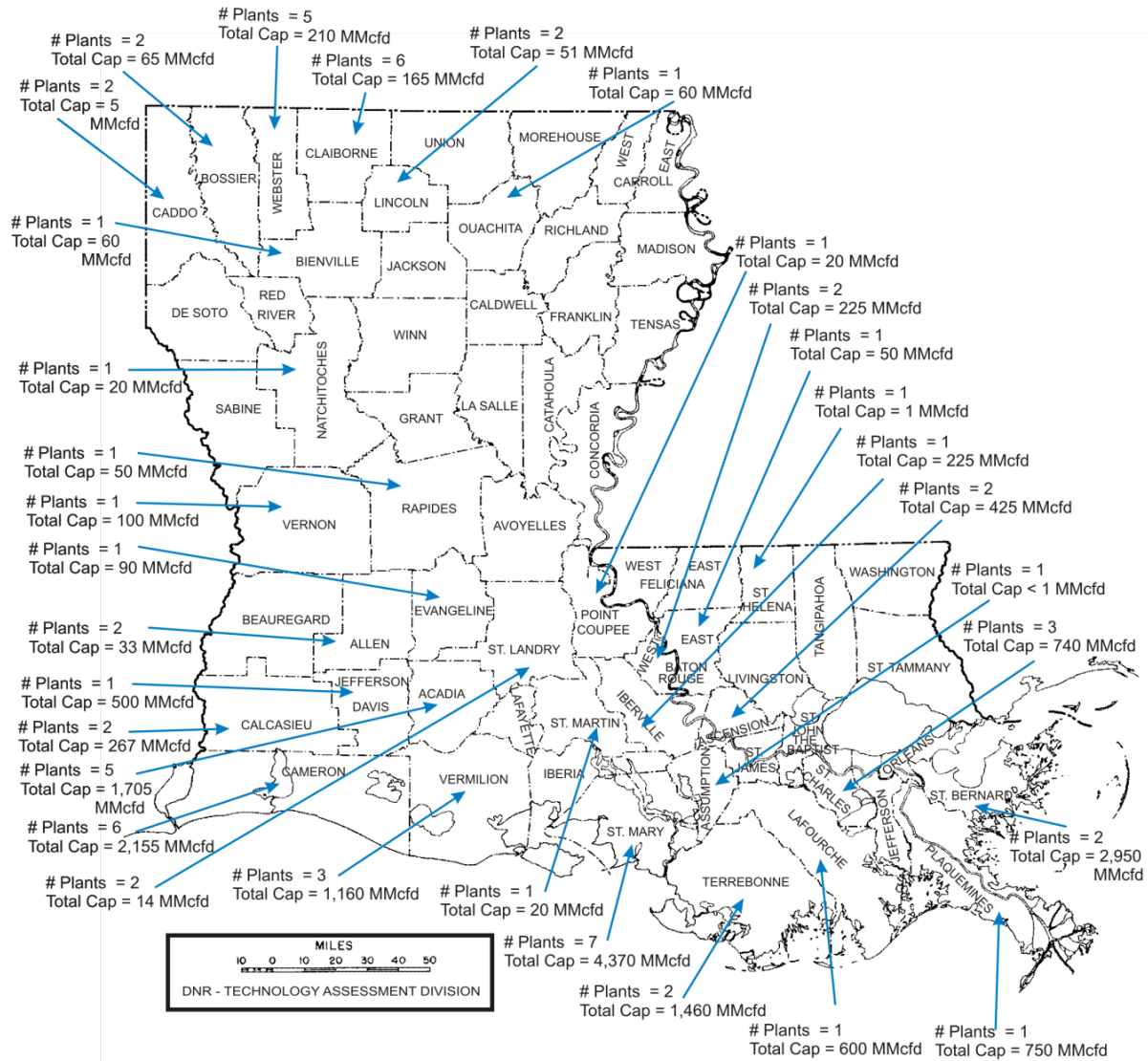
- Note: **GOM Central OCS** (Outer Continental Shelf) region is the federal offshore territory adjacent to Louisiana's coast beyond the three-mile limit of the state's offshore boundary and includes Alabama federal offshore production.

The annual average active rotary rig count for GOM Central OCS region reached a high of 109 rigs in 2001 and it is in a downward trend; it was 70 rigs in 2006, 50 rigs in 2008, and 26 rigs in 2010. After the moratorium, the trend reversed; in 2013, it increased to 47 rigs; in 2014, it increased to 51 rigs; but, in 2015, it reversed to 33 rigs; and, in 2016, it decreased to 21 rigs. The lowest year average between 1981 and 2010 was 23 active rigs in 1992.

Figure 3

Louisiana Gas Plants and Total Capacity by Parish

As of January 1, 2015



State total: 73 plants, 18,546.3 MMcfd

Data source: Oil & Gas Journal