# SELECTED LOUISIANA ENERGY STATISTICS

Among the 50 states, Louisiana's rankings (in 2012, unless otherwise indicated) were:

### PRIMARY ENERGY PRODUCTION

(Including Louisiana OCS\*)

2<sup>nd</sup> in crude oil

1st in OCS crude oil

1<sup>st</sup> in OCS natural gas

1<sup>st</sup> in OCS revenue generated for federal government

1st in mineral revenues from any source to the federal government

1<sup>st</sup> in LNG terminal capacity

2<sup>nd</sup> in natural gas

2<sup>nd</sup> in crude oil proved reserves

2<sup>nd</sup> in dry natural gas proved reserves

3<sup>rd</sup> in total energy from all sources

## REFINING AND PETROCHEMICALS

2<sup>nd</sup> in primary petrochemical production

2<sup>nd</sup> in natural gas processing capacity

2<sup>nd</sup> in petroleum refining capacity

### PRIMARY ENERGY PRODUCTION

(Excluding Louisiana OCS)

7<sup>th</sup> in crude oil

2<sup>nd</sup> in natural gas

3<sup>rd</sup> in dry natural gas proved reserves

10<sup>th</sup> in crude oil proved reserves

18<sup>th</sup> in coal

16<sup>th</sup> in nuclear electricity

# **ENERGY CONSUMPTION (2011)**

2<sup>nd</sup> in industrial energy

2<sup>nd</sup> in per capita energy

3<sup>rd</sup> in natural gas

3<sup>rd</sup> in petroleum

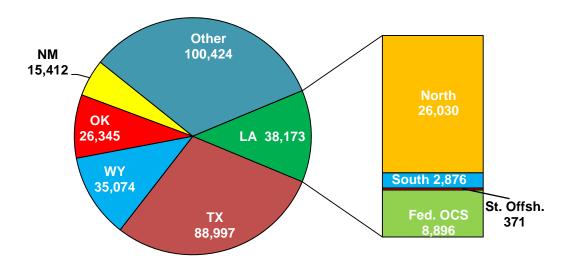
4<sup>th</sup> in total energy

24<sup>th</sup> in residential energy

Figure 1

# 2012 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, the 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. Then in 2012, production fell to 2.96 TCF or a 0.6% drop from the previous year, and it is expected to continue to drop as prices continue to be below \$4 per MCF and the stock of U.S. gas in storage remains high.

State controlled crude oil and condensate production peaked at 566 million barrels (mmbls) per year in 1970, declined to 211 mmbls in 1980, declined to 148 mmbls in 1990, declined to 107 mmbls in 2000, and declined to 68 mmbls in 2010. Then in 2011, oil production reversed its trend; 2011 production was 72 mmbls, and in 2012, it increased to 78 mmbls. The recent oil production increase comes mostly from mature fields using new recovery techniques and high crude oil prices. If oil prices stay above \$100 per barrel, production will be sustained at the present level, but if the Tuscaloosa Marine Shale or the Brown dense shale productions take off, state oil production will continue to surge.

2012 U.S. Crude Oil Reserves (Million Barrels) North 103 South ND 264 2,649 Other CA St. Offsh. 5,017 3.005 50 Fed. OCS 4,855 AK 4,438 3,816 TX 7,202

Figure 2

Louisiana OCS (federal) territory is the most extensively developed and mature OCS territory in the U.S. It has produced approximately 86.9% of the 19.5 billion barrels of crude oil and condensate and 80.3% of the 176 TCF of natural gas extracted from all federal OCS territories, from the beginning of time through the end of 2012. In 2012, Louisiana OCS territory produced 17% of the oil and 4.6% of the natural gas produced in the entire U.S., and 84.4% of the oil and 78.7% of the natural gas produced in the Gulf of Mexico OCS.

- Louisiana OCS gas production peaked at 4.07 TCF per year in 1979, declined to 2.95 TCF in 1989, recovered to 3.84 TCF in 1999, fell to 2.02 TCF in 2007, fell to 1.65 TCF in 2008, rose to 1.73 TCF in 2009, fell to 1.63 TCF in 2010, fell to 1.32 TCF in 2011, and fell to 1.11 TCF in 2012.
- Louisiana OCS crude oil and condensate production first peaked at 388 mmbls per year in 1972, and then declined to 246 mmbls in 1989. The production rose from 264 mmbls in 1990 to 508 mmbls in 2002, due to the development of deep water drilling. In 2007, production dropped to 427 mmbls, in 2008 it dropped to 385 mmbls, in 2009 production increased to 528 million barrels, in 2010 it fell to 520 mmbls, in 2011 it fell to 435 mmbls, and it fell to 407 mmbls in 2012. The roller coaster ride in oil production can be attributed to weather events and production mishaps.

#### **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 2008/09, oil and gas revenue was \$1.54 billion or 14% of state income. In FY 2010/11, it was \$1.31 billion or 14% of state income, in FY 2011/12 it was \$1.40 or 14% of state income; and in FY 2011/13, it was around \$1.32 billion or 13% of the state income.

At constant production, the state treasury gains or loses about \$10 million of direct revenue from oil severance taxes and royalty payments for every \$1 per barrel change in oil prices.

For every \$1 per MCF change in gas price, at constant production, the state treasury gains or loses around \$40 million in royalty payments. Increases or decreases in gas full rate severance tax by 1.0 cent per MCF would have caused an \$8 million dollar change in revenue in the past. Today, however, it is hard to estimate due to the advent of large production volumes from Haynesville shale, which are mostly exempted from severance taxes and fast dismissing production in other areas of the state.

There are no studies available on indirect revenue to the state from changes in gas and oil prices.

### 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 2007, permits increased to 2,150, in 2008 they increased to 2,374 permits, in 2009 permits decreased to 1365, in 2010 they increased to 1,956 permits, in 2011 they decreased to 1,676 permits, and in 2012 there was a decrease to 1,581 permits.

The average active rotary rig count for Louisiana, excluding OCS, reached a high of 386 active rigs in

• Note: Louisiana OCS or Outer Continental Shelf is federal offshore territory adjacent to Louisiana's coast beyond the three mile limit of the state's offshore boundary.

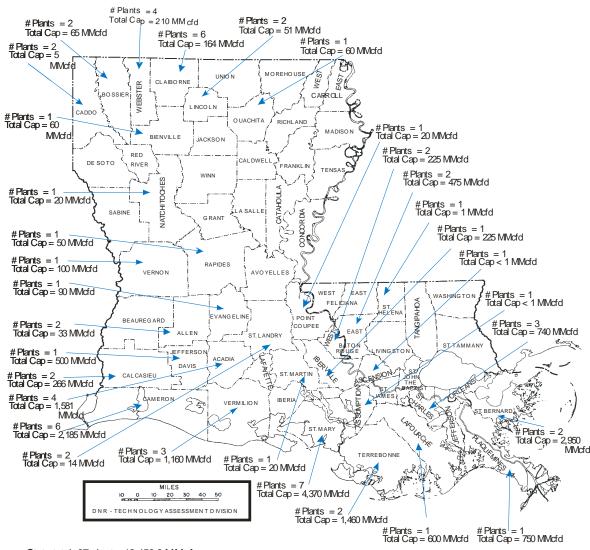
• 1981 and fell to 76 active rigs in 2002. In 2007, there were an average of 119 active rigs, the count fell to 117 rigs in 2008 and it fell again in 2009 to 113 rigs; in 2010, the count increased to 138 active rigs due to low gas prices, and in 2012, it decreased to 81 active rigs due to continued low gas prices. The lowest year average between 1981 and 2010 was 64 active rigs in 1993.

The annual average active rotary rig count for Louisiana OCS reached a high of 109 rigs in 2001 and it is in a downward trend; it was 70 in 2006, 59 in 2007, 50 in 2008, 36 in 2009, and 26 in 2010. In 2011, the trend reversed and increased 27 rigs, and in 2012, it increased to 42 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, 2013



State total: 67 plants, 18,450.3 MMcfg

Data source: Oil & Gas Journal