SELECTED LOUISIANA ENERGY STATISTICS

Among the 50 states, Louisiana's rankings (in 2011, unless otherwise indicated) were:

PRIMARY ENERGY PRODUCTION

(Including Louisiana OCS*)

- 1st 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
- 1st in foreign oil import volume
- 2nd in natural gas
- 2nd in crude oil proved reserves
- 3rd in dry natural gas proved reserves
- 4th in total energy from all sources

REFINING AND PETROCHEMICALS

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

PRIMARY ENERGY PRODUCTION

(Excluding Louisiana OCS)

- 7th in crude oil
- 2nd in natural gas
- 3rd in dry natural gas proved reserves
- 9th in crude oil proved reserves
- 12th in total energy
- 16th in nuclear electricity

ENERGY CONSUMPTION (2009)

- 2nd in industrial energy
- 3rd in per capita energy
- 3rd in natural gas
- 3rd in petroleum
- 4th in total energy
- 24th in residential energy

Figure 1



(Billion Cubic Feet)



PRODUCTION

- State controlled natural 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 increasing trend continued with 1.36 TCF in 2008, 1.53 TCF in 2009, 2.26 TCF in 2010, and 3.05 TCF in 2011. The production surge is primarily 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, 47.9% in 2010, and 34.8% in 2011. The production rate is expected to dip in 2012 due to low natural gas prices and then remain steady for the next five years if the natural gas price averages around \$3.00 per MCF.
- State controlled crude oil and condensate production peaked at 566 million barrels (mmbls) per year in 1970, declined to 129 mmbls in 1996, declined to 72.6 mmbls in 2008, declined to 69.2 mmbls in 2009, declined to 67.6 mmbls in 2010, and increased to 69.2 mmbls in 2011.
- State controlled crude oil production decline rate averaged 1.4% per year for the past five years, and the projected decline rate for the next five years is 2.5%, if the price of oil is around \$90 per barrel. If the oil price were above \$100 per barrel, the decline trend would be negligible, and if the Tuscaloosa Marine Shale takes off, the state oil production will reverse its decline rate.





Louisiana OCS territory has produced approximately 87.2% of the 18.9 billion barrels of crude oil and condensate, and 80.3% of the 174 TCF of natural gas extracted from all federal OCS territories from the beginning of time through the end of 2011. Currently, Louisiana OCS territory produces 21% of the oil and 6% of the natural gas produced in the entire U.S., and 95% of the oil and 73% 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, and fell to 1.32 TCF in 2011.
- 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, and in 2011, it fell to 433 mmbls. The roller coaster ride in oil production can be attributed to weather events and production mishaps.
- Louisiana OCS (federal) territory is the most extensively developed and mature OCS territory in the U.S.

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 FY1981/82 at \$1.62 billion, but it was 41% of state income. In FY2008/09, oil and gas revenue was \$1.54 billion or 14% of state income. In FY2010/11, it was \$1.31 billion or 14% of state income, and in FY2011/12, it is expected to be around \$1.41 billion or 15% 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 \$40 million in royalty payments. In the recent past, 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. Today, shale gas is mostly exempted from severance taxes due to the horizontal drilling incentives, thus it is hard to estimate due to the advent of large production volumes from the Haynesville shale.

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, the number increased to 2,150 permits, in 2008, it increased to 2,374 permits, in 2009, it decreased to 1365 permits, in 2010, it increased to 1,956 permits, and in 2011, the number decreased to 1,676 permits.
- 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 2007, there was an average of 119 active rigs. The number fell to 117 rigs in 2008 and decreased again in 2009 to 113 rigs. In 2010, the number

Note: Louisiana OCS or Outer Continental Shelf is federal offshore territory adjacent to Louisiana's coast beyond the threemile limit of the state's offshore boundary. increased to 166 rigs in 2010 due to the strength in the development in the Haynesville Shale gas, and in 2011, it decreased to 138 rigs due to 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. The active rig count was 70 in 2006, 59 in 2007, 50 in 2008, 36 in 2009, 26 in 2010, and 27 in 2011. The lowest year average between 1981 and 2010 was 23 active rigs in 1992.





State total: 69 plants, 18,140.3 MMcfg

Data source: Oil & Gas Journal