

PREPARED FOR **AMERICAN PETROLEUM INSTITUTE**

PREPARED BY **ICF**

9300 LEE HIGHWAY | FAIRFAX VA

JUNE 2017

# Benefits and Opportunities of Natural Gas Use, Transportation, and Production



## Louisiana

### Economic Impacts of Natural Gas

There were 201,319 jobs in Louisiana related to natural gas. These jobs represented 10.5 percent of total state jobs. The top three sectors with the greatest number of jobs were support activities for oil and gas, oil and gas pipeline construction, and industrial construction. The contribution to the Louisiana economy in terms of direct, indirect, and induced value added in 2015 was \$28.6 billion, of which \$13.9 billion was related to the end use segment, \$7.99 billion was from the infrastructure segment, and \$6.72 billion was from the production segment.

### Natural Gas Consumers

In 2015, Louisiana consumed 1.36 Tcf of natural gas in all sectors. There were a total of 947,000 customers. The value of natural gas delivered to consumers was \$5.03 billion.

Louisiana has 888,000 residential customers who consumed 36 Bcf in 2015. Average consumption was 41 Mcf per household. Residential demand was 64 percent for space heating, 27 percent for water heating, 4 percent for cooking, and 5 percent for other uses.

Louisiana has 57,900 commercial customers who consumed 30 Bcf in 2015. Average consumption per commercial customer was 515 Mcf. Commercial demand was 36 percent for space heating, 20 percent for water heating, 9 percent for cooking, and 35 percent for other uses.

There are 845 industrial customers who consumed 949 Bcf in 2015. Average consumption per industrial customer was 1,122 MMcf. The top industries for gas consumption were Chemicals (NAICS Code 325), Petroleum and Coal Products (324), Paper (322), Food (311), and Primary Metals (331), representing 97 percent of industrial demand.

Louisiana has 75 power plants consuming natural gas. In 2015, gas consumed was 343 Bcf, representing 61 percent of power generation in the state. Average consumption per customer was 4,570 MMcf.

### Natural Gas Infrastructure

In 2015, Louisiana had 21,388 producing oil wells and 19,196 producing gas wells. There were 13,640 miles of gas gathering lines and 50 gas processing plants in the state with a capacity of 10,870 MMcf/d. In addition, there were 26,750 miles of gas pipelines, 6,785 miles of crude oil pipelines, 7,419 miles of NGL pipelines, 1,618 miles of product pipelines, and 322 miles of CO<sub>2</sub> pipelines. There were 27,098 miles of gas distribution mains and 13,394 miles of service lines. There were 19 natural gas storage sites in the state with a working gas capacity of 454 Bcf.

### Natural Gas and Oil Production

In 2015, Louisiana produced 2.69 Tcf of dry natural gas, 61 million barrels of gas plant liquids, 24 million barrels of lease condensate, and 400 million barrels of crude. Louisiana has abundant conventional and unconventional oil and gas resources, and has the advantages of good access to gas pipeline and processing capacity and of proximity to LNG export facilities. The largest horizontal play in the state is the Haynesville gas play. The Haynesville has some of the highest gas well ultimate recoveries in the U.S. and is currently experiencing a

resurgence in activity due in part to proximity to LNG export markets. Louisiana is the location of large-scale current and planned LNG liquefaction infrastructure. Gulf of Mexico oil and gas production is piped to facilities along the Louisiana coast and the state accounts for a large fraction of jobs supporting offshore development and production. In April of 2017, Louisiana accounted for about 38 onshore and 20 offshore active rigs.

## Exhibit 7-20: Louisiana State Factsheet

Louisiana			Employment (# of Workers)			Labor Income (\$ million)			Value Added (\$ million)		
Summary	Segment	Category	Direct & Indirect	Induced	Total	Direct & Indirect	Induced	Total	Direct & Indirect	Induced	Total
	End-Use	Power Generation	3,891	5,827	9,717	306	294	600	1,451	512	1,963
		Industrial	17,408	21,455	38,864	1,580	1,217	2,797	5,387	1,895	7,282
		Residential/ Commercial	2,217	3,419	5,636	154	180	334	348	309	657
		Export	22,326	8,857	31,183	1,643	452	2,095	3,198	789	3,988
		Transportation	2	2	4	0	0	0	0	0	1
	Infrastructure	Processing	4,746	3,926	8,672	397	213	610	1,543	357	1,901
		Pipelines	19,812	11,911	31,723	1,534	600	2,134	3,286	1,092	4,378
		Distribution	8,702	6,482	15,184	612	319	931	1,043	587	1,630
		Wholesalers, Marketers, Other	370	244	614	28	12	40	54	22	77
	Production	Natural Gas/ NGLs	41,473	18,249	59,722	3,733	900	4,633	5,091	1,626	6,718
All Segments	Grand Total	120,947	80,371	201,319	9,987	4,187	14,174	21,403	7,191	28,594	

Jobs by Top Industries	Rank	NAICS	Industry Sector	Direct and Indirect Jobs
	1	213112	Support Activities for Oil & Gas Operations	14,557
	2	237120	Oil & Gas Pipeline Construction	10,455
	3	236210	Industrial Construction	8,904
	4	325	Chemical Manufacturing	7,451
	5	211111	Crude Petroleum & Natural Gas Extraction	6,223
	6	811310	Industrial Equip. & Machinery Repair & Maint.	4,406
	7	336611	Ship Building and Repairing	2,545
	8	213111	Drilling Oil & Gas Wells	2,236
	9	486210	Pipeline Transportation of Natural Gas	2,079
	10	221210	Natural Gas Distribution	1,335

Customers	Sector	Customer Count	Consumption Volume (MMcf/ year)	Value of Natural Gas Delivered to Customers (\$million)
	Residential Sector	888,023	36,046	\$392
	Commercial Sector	57,873	29,805	\$232
	Industrial Sector	845	948,918	\$3,420
	Transportation	24	61	\$1
	Power Sector	75	342,742	\$990
	All Sectors	946,840	1,357,572	\$5,034

Infrastructure	Gas Distribution Main (miles)	Gas Distribution Services (miles)	Gas Gathering (miles)	Gas Pipelines (miles)	Crude Oil Pipelines (miles)	NGL Pipelines (miles)	Oil Product Pipelines (miles)	CO2 Pipelines (miles)
	27,098	13,394	13,640	26,750	6,785	7,419	1,618	322

Production	Product	Annual Production
	Dry Natural Gas (mmcf)	2,693,969
	Gas Plant Liquids (barrels)	61,440,000
	Lease Condensate (barrels)	24,000,000
	Crude Oil (barrels)	399,756,400
	Annual Value Counted Toward Natural Gas Value Chain (\$million)	\$9,084
	Annual Value of All Produced Oil, Gas, NGLs (\$million)	\$28,444

Wells	Well Type	Operating Wells	New Wells Drilled
	Oil Wells	21,388	355
	Gas Wells	19,196	195
	All Wells	40,584	550

Annual 2015 Data for Louisiana  
Natural Gas Value Chain Basis