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



## Tennessee

### Economic Impacts of Natural Gas

There were 86,700 jobs in Tennessee related to natural gas. These jobs represented 3.1 percent of total state jobs. The top three sectors with the greatest number of jobs were chemical manufacturing, natural gas distribution, and other major household appliance manufacturing. The contribution to the Tennessee economy in terms of direct, indirect, and induced value added in 2015 was \$12.94 billion, of which \$9.52 billion was related to the end use segment, \$2.62 billion was from the infrastructure segment, and \$0.80 billion was from the production segment.

### Natural Gas Consumers

In 2015, Tennessee consumed 305 Bcf of natural gas in all sectors. There were a total of 1.26 million customers. The value of natural gas delivered to consumers was \$1.74 billion.

Tennessee has 1.12 million residential customers who consumed 67 Bcf in 2015. Average consumption was 60 Mcf per household. Residential demand was 72 percent for space heating, 24 percent for water heating, 2 percent for cooking, and 2 percent for other uses.

Tennessee has 132,000 commercial customers who consumed 53 Bcf in 2015. Average consumption per commercial customer was 401 Mcf. Commercial demand was 49 percent for space heating, 28 percent for water heating, 9 percent for cooking, 2 percent for cogeneration, and 12 percent for other uses.

There are 2,700 industrial customers in Tennessee who consumed 115 Bcf in 2015. Average consumption per customer was 43 MMcf. The top industries for gas consumption were Non-metallic Mineral Products (NAICS Code 327), Chemicals (325), Primary Metals (331), Food (311), and Transportation Equipment (336), representing 77 percent of industrial demand.

Tennessee has 17 power plants consuming natural gas. Gas consumed was 69 Bcf, representing 12 percent of power generation in the state. Average consumption per customer was 4,107 MMcf.

### Natural Gas Infrastructure

In 2015, Tennessee had 250 producing oil wells and 1,089 producing gas wells. There were 861 miles of gas gathering lines and 1 gas processing plant in the state with a capacity of 25 MMcf/d. In addition, there were 4,900 miles of gas pipelines, 277 miles of crude oil pipelines, 14 miles of NGL pipelines, 864 miles of product pipelines, and 0 miles of CO2 pipelines. There were 39,050 miles of gas distribution mains and 26,113 miles of service lines. There were 2 natural gas storage sites in the state with a working gas capacity of 1.8 Bcf.

### Natural Gas and Oil Production

In 2015, Tennessee produced 4 Bcf of dry natural gas, 0.3 million barrels of plant liquids, no lease condensate, and 0.3 million barrels of crude.

## Exhibit 7-44: Tennessee State Factsheet

Tennessee			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	2,825	5,149	7,975	208	251	459	494	453	946
		Industrial	9,897	15,418	25,316	811	786	1,597	3,155	1,359	4,514
		Residential/ Commercial	10,063	8,706	18,769	609	418	1,028	3,113	787	3,899
		Export	952	981	1,933	67	49	116	74	87	161
		Transportation	11	10	21	1	0	1	2	1	3
	Infrastructure	Processing	1,078	1,695	2,773	75	82	157	84	154	238
		Pipelines	3,992	4,574	8,566	292	228	520	568	419	988
		Distribution	6,180	5,705	11,885	344	255	600	847	517	1,364
		Wholesalers, Marketers, Other	151	149	300	9	7	16	21	14	34
Production	Natural Gas/ NGLs	3,665	5,536	9,201	275	268	543	304	493	797	
All Segments	Grand Total	38,815	47,923	86,738	2,691	2,346	5,036	8,660	4,284	12,944	

Jobs by Top Industries	Rank	NAICS	Industry Sector	Direct and Indirect Jobs
	1	325	Chemical Manufacturing	4,835
	2	221210	Natural Gas Distribution	1,629
	3	335228	Other Major Household Appliance Manufacturing	1,498
	4	335221	Household Ovens Manufacturing	1,072
	5	45431NGL	NGL Retail	939
	6	33241	Power Boiler & Heat Exchanger Manufacturing	930
	7	811310	Industrial Equip. & Machinery Repair & Maint.	831
	8	237120	Oil & Gas Pipeline Construction	787
	9	236210	Industrial Construction	509
	10	486210	Pipeline Transportation of Natural Gas	478

Customers	Sector	Customer Count	Consumption Volume (MMcf/ year)	Value of Natural Gas Delivered to Customers (\$million)
	Residential Sector	1,124,572	67,301	\$645
	Commercial Sector	132,392	53,041	\$439
	Industrial Sector	2,651	114,673	\$464
	Transportation	25	246	\$2
	Power Sector	17	69,830	\$190
	All Sectors	1,259,657	305,092	\$1,740

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)
	39,050	26,113	861	4,882	277	14	864	0

Production	Product	Annual Production
	Dry Natural Gas (mmcf)	3,937
	Gas Plant Liquids (barrels)	252,000
	Lease Condensate (barrels)	0
	Crude Oil (barrels)	296,000
	Annual Value Counted Toward Natural Gas Value Chain (\$million)	\$15
	Annual Value of All Produced Oil, Gas, NGLs (\$million)	\$28

Wells	Well Type	Operating Wells	New Wells Drilled
	Oil Wells	250	21
	Gas Wells	1,089	3
	All Wells	1,339	25

Annual 2015 Data for Tennessee  
Natural Gas Value Chain Basis