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



## Colorado

### Economic Impacts of Natural Gas

There were 75,210 jobs in Colorado related to natural gas. These jobs represented 3.0 percent of total state jobs. The top three sectors with the greatest number of jobs were support activities for oil and gas, crude petroleum and natural gas extraction, and oil and gas pipeline construction. The contribution to the Colorado economy in terms of direct, indirect, and induced value added in 2015 was \$10.4 billion, of which \$2.24 billion was related to the end use segment, \$3.93 billion was from the infrastructure segment, and \$4.22 billion was from the production segment.

### Natural Gas Consumers

In 2015, Colorado consumed 348 Bcf of natural gas in all sectors. There were a total of 1.87 million customers. The value of natural gas delivered to consumers was \$2.04 billion.

Colorado has 1.71 million residential customers who consumed 122 Bcf in 2015. Average consumption was 71 Mcf per household. Residential demand was 69 percent for space heating, 25 percent for water heating, 2 percent for cooking, and 4 percent for other uses.

Colorado has 150,500 commercial customers who consumed 54 Bcf in 2015. Average consumption per commercial customer was 359 Mcf. Commercial demand was 55 percent for space heating, 17 percent for water heating, 13 percent for cooking, and 15 percent for other uses.

There are 8,100 industrial customers of natural gas in Colorado who consumed 79 Bcf. Average consumption per industrial customer was 10 MMcf. The top industries for gas consumption were Chemicals (NAICS Code 325), Food (311), Non-metallic Mineral Products (327), Fabricated Metal Products (332), and Petroleum and Coal Products (324), representing 72 percent of industrial demand.

Colorado has 44 power plants consuming natural gas. In 2015, gas consumed was 93 Bcf, representing 22 percent of power generation in the state. Average consumption per customer was 2,108 MMcf.

### Natural Gas Infrastructure

In 2015, Colorado had 14,852 producing oil wells and 46,322 producing gas wells. There were 14,579 miles of gas gathering lines and 43 gas processing plants in the state with a capacity of 6,130 MMcf/d. In addition, there were 7,775 miles of gas pipelines, 888 miles of crude oil pipelines, 1,897 miles of NGL pipelines, 1,034 miles of product pipelines, and 229 miles of CO<sub>2</sub> pipelines. There were 35,859 miles of gas distribution mains and 19,844 miles of service lines. There were 10 natural gas storage sites in the state with a working gas capacity of 64 Bcf.

### Natural Gas and Oil Production

In 2015, Colorado produced 1.60 Tcf of dry natural gas, 74 million barrels of gas plant liquids, 15 million barrels of lease condensate, and 111 million barrels of crude. Drilling activity in Colorado since the start of the horizontal drilling boom has concentrated on the Niobrara gas and liquids play in northeastern Colorado. The Niobrara formation is productive across a large area and has dry gas, wet gas, and liquids areas. Colorado also has large-scale tight gas sand

resources in the northwest and coalbed resources in the southwest. In April of 2017, Colorado had 28 active rigs, most of which were targeting the Niobrara.

## Exhibit 7-7: Colorado State Factsheet

Colorado			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	1,657	3,263	4,920	126	162	287	316	287	603
		Industrial	1,555	5,386	6,942	102	259	361	288	476	764
		Residential/ Commercial	2,146	2,874	5,020	136	145	281	525	260	785
		Export	374	564	938	26	28	55	29	50	79
		Transportation	16	15	31	1	1	1	3	1	4
	Infrastructure	Processing	2,644	2,031	4,675	313	132	445	705	186	890
		Pipelines	6,949	5,156	12,105	572	271	843	1,395	473	1,868
		Distribution	4,165	3,894	8,059	322	205	527	780	353	1,133
		Wholesalers, Marketers, Other	149	124	273	12	7	18	29	11	40
	Production	Natural Gas/ NGLs	21,796	10,451	32,247	2,409	601	3,010	3,285	931	4,217
	All Segments	Grand Total	41,452	33,758	75,210	4,019	1,810	5,828	7,355	3,028	10,382

Jobs by Top Industries	Rank	NAICS	Industry Sector	Direct and Indirect Jobs
	1	213112	Support Activities for Oil & Gas Operations	6,389
	2	211111	Crude Petroleum & Natural Gas Extraction	5,372
	3	237120	Oil & Gas Pipeline Construction	3,170
	4	4841	Freight Truck	1,444
	5	486210	Pipeline Transportation of Natural Gas	1,067
	6	213111	Drilling Oil & Gas Wells	931
	7	811310	Industrial Equip. & Machinery Repair & Maint.	869
	8	221210	Natural Gas Distribution	751
	9	211112	Natural Gas Liquid Extraction	636
	10	45431NGL	NGL Retail	476

Customers	Sector	Customer Count	Consumption Volume (MMcf/ year)	Value of Natural Gas Delivered to Customers (\$million)
	Residential Sector	1,712,153	122,364	\$1,008
	Commercial Sector	150,545	54,004	\$403
	Industrial Sector	8,098	78,694	\$297
	Transportation	46	365	\$3
	Power Sector	44	92,757	\$327
	All Sectors	1,870,886	348,183	\$2,037

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)
	35,859	19,844	14,579	7,775	888	1,897	1,034	229

Production	Product	Annual Production
	Dry Natural Gas (mmcf)	1,600,203
	Gas Plant Liquids (barrels)	73,956,000
	Lease Condensate (barrels)	15,000,000
	Crude Oil (barrels)	111,232,000
	Annual Value Counted Toward Natural Gas Value Chain (\$million)	\$6,113
	Annual Value of All Produced Oil, Gas, NGLs (\$million)	\$10,619

Wells	Well Type	Operating Wells	New Wells Drilled
	Oil Wells	14,852	1,158
	Gas Wells	46,322	332
	All Wells	61,174	1,489

Annual 2015 Data for Colorado  
Natural Gas Value Chain Basis