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



Alaska

Economic Impacts of Natural Gas

There were 21,510 jobs in Alaska related to natural gas. These jobs represented 6.5 percent of total state jobs. The top three sectors with the greatest number of jobs were support activities for oil and gas operations, crude petroleum and natural gas extraction, and oil and gas pipeline construction. The contribution to the Alaska economy in terms of direct, indirect, and induced value added in 2015 was \$3.09 billion, of which \$0.33 billion was related to the end use segment, \$1.11 billion was from the infrastructure segment, and \$1.66 billion was from the production segment.

Natural Gas Consumers

In 2015, Alaska consumed 70 Bcf of natural gas in all sectors. There were a total of 142,000 customers. The value of natural gas delivered to consumers was \$509 million.

Alaska has 128,600 residential customers who consumed 19 Bcf in 2015. Average consumption was 144 mcf per household. Residential demand was 67 percent for space heating, 26 percent for water heating, 2 percent for cooking, 1 percent for clothes drying, and 4 percent for other uses.

Alaska has 13,500 commercial customers who consumed 18 Bcf in 2015. Average consumption per commercial customer was 1.4 MMcf. Commercial demand was 34 percent for space heating, 23 percent for water heating, 8 percent for cooking, and 35 percent for other uses.

Industrial customers in Alaska consumed 4.9 Bcf. Average consumption per customer was 1,216 MMcf. The top industries for gas consumption were Food (NAICS Code 311), Mining (21), Petroleum and Coal Products (324), Construction (23), and Fabricated Metal Products (332), representing 95 percent of industrial demand.

Alaska has 18 power plants consuming natural gas. Gas consumed was 28 Bcf. Average consumption per customer was 1,540 MMcf.

Natural Gas Infrastructure

In 2015, Alaska had 1,619 producing oil wells and 329 producing gas wells. There were 292 miles of gas gathering lines in the state. In addition, there were 973 miles of gas pipelines, 1,133 miles of crude oil pipelines, 0 miles of NGL pipelines, 119 miles of product pipelines, and no CO2 pipelines. There were 3,405 miles of gas distribution mains and 2,440 miles of service lines. There were 5 natural gas storage sites in the state with a working gas capacity of 68 Bcf.

Natural Gas and Oil Production

In 2015, Alaska produced 326 Bcf of dry natural gas, 15 million barrels of gas plant liquids, no lease condensate, and 176 million barrels of crude.

Exhibit 7-3: Alaska State Factsheet

Alaska			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	285	487	772	22	24	47	87	43	130
		Industrial	72	580	652	5	29	34	8	51	59
		Residential/ Commercial	315	398	713	20	20	41	94	36	129
		Export	23	64	86	2	3	5	2	6	7
		Transportation	0	0	1	0	0	0	0	0	0
	Infrastructure	Processing	990	590	1,580	55	22	77	429	54	483
		Pipelines	1,718	1,067	2,785	175	67	243	262	98	360
		Distribution	1,149	804	1,952	109	47	156	181	73	254
		Wholesalers, Marketers, Other	39	26	65	4	2	5	6	2	8
	Production	Natural Gas/ NGLs	9,300	3,604	12,904	1,101	227	1,328	1,336	321	1,657
All Segments	Grand Total	13,891	7,619	21,510	1,494	441	1,935	2,405	684	3,088	

Rank	NAICS	Industry Sector	Direct and Indirect Jobs
1	213112	Support Activities for Oil & Gas Operations	4,420
2	211111	Crude Petroleum & Natural Gas Extraction	1,575
3	237120	Oil & Gas Pipeline Construction	1,247
4	213111	Drilling Oil & Gas Wells	457
5	811310	Industrial Equip. & Machinery Repair & Maint.	429
6	221210	Natural Gas Distribution	287
7	236210	Industrial Construction	138
8	4841	Freight Truck	114
9	221112	Gas-fired Electric Power Generation	65
10	811412	Household Appliance Repair & Maintenance	54

Sector	Customer Count	Consumption Volume (MMcf/ year)	Value of Natural Gas Delivered to Customers (\$million)
Residential Sector	128,605	18,574	\$178
Commercial Sector	13,549	18,472	\$148
Industrial Sector	4	4,864	\$33
Transportation	1	10	\$0
Power Sector	18	27,722	\$149
All Sectors	142,177	69,642	\$509

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)
3,405	2,440	292	973	1,133	0	119	0

Product	Annual Production
Dry Natural Gas (mmcf)	326,066
Gas Plant Liquids (barrels)	14,987,000
Lease Condensate (barrels)	0
Crude Oil (barrels)	176,241,000
Annual Value Counted Toward Natural Gas Value Chain (\$million)	\$1,272
Annual Value of All Produced Oil, Gas, NGLs (\$million)	\$8,517

Well Type	Operating Wells	New Wells Drilled
Oil Wells	1,619	156
Gas Wells	329	13
All Wells	1,948	169

Annual 2015 Data for Alaska
Natural Gas Value Chain Basis