

Energy



Energy

Information for Job Seekers



The Tools You Need

Many occupations within Energy require postsecondary education. Some Colorado programs to help get you started:

- The Colorado Northwestern Community College offers two-year Associate of Applied Science degrees in Energy Management Technology and Industrial Electricians. They also conduct various Mining safety courses.
- The Colorado School of Mines provides various Energy-related degree programs, such as Mineral Exploration & Mining Geosciences, Mining & Earth Systems Engineering and Petroleum Engineering.
- Red Rocks Community College will begin to offer a Renewable Energy Technology program in the Fall of 2008 to prepare students for green collar jobs.
- Other related degrees:
 - Geology
 - Engineering



www.connectingcolorado.com

"Connecting Colorado, a place where individuals seeking employment and businesses seeking employees can be matched and brought together to fit each other's needs. The Colorado Department of Labor and Employment provides this site as a free resource to job seekers and employers who wish to use the Colorado Workforce Center system through a convenient and secure method."

Sample Energy Employers:

NREL, Golden, CO
 Department of Energy, Golden, CO
 Front Range Energy, Windsor, CO
 Noble Energy, Platteville, CO

Anadarko Petroleum, Denver, CO
 Halliburton Energy, Grand Junction, CO
 Xcel Energy, Denver, CO
 Northern Pipeline, Commerce City, CO

Source: Manta.com

www.coworkforce.com/lmgateway/

Providing specific information about Colorado's industries and occupations.

Brochure by Labor Market Information - Colorado Department of Labor and Employment

For information about jobs or training in this industry contact your local Workforce Center online at www.coworkforce.com/emp/wfcs.asp or call 1-877-US2-JOBS (1-877-872-5627)

Labor Market Information for Colorado



Our unique home-grown blend of wind, solar and agricultural energy supplies offers Colorado an unprecedented opportunity to create jobs, protect the environment and decrease our dependence on foreign oil.

- Governor Bill Ritter Jr.



Powering a brighter tomorrow

With rising gas and electricity prices, energy has raced to the forefront of national attention. This expanding industry is creating more jobs for Colorado. Colorado plays a key role in providing the nation with fuel, ranking 7th in the U.S. in the production of natural gas, 10th in crude oil and 12th in coal.

Several of the nation's 100 largest natural gas fields are in Colorado and make up 5% of U.S. annual production. The state is also responsible for more than one-quarter of all coal bed methane in the U.S., which is used for electrical power generation. Natural gas from coal beds currently accounts for about 7 - 10% of total U.S. natural gas production. Colorado's oil shale deposits hold an estimated 1 trillion barrels of oil - the largest known deposits in the world. However, oil production from shale remains speculative due to high extraction costs.

The state is poised to become a major player on the renewable energy scene, thanks to efforts by the Colorado Renewable Energy Collaboratory. The National Renewable Energy Laboratory (NREL), University of Colorado at Boulder, Colorado School of Mines and Colorado State University created the collaboratory in 2007 to research and develop new, cleaner energy technologies.

Currently, hydroelectric and wind power facilities make up most of our electricity generation from renewable sources. Sixteen wind farms are now operating in Colorado.

Energy includes three groups:

For more details go to www.coworkforce.com/lmgateway and click on *Products*

Fossil Energy

• Fossil Energy encompasses non-renewable resources that are found within the earth's crust. Companies extract these naturally-occurring materials - such as coal, petroleum and natural gas - to produce energy.

• 43,237 people employed in Colorado, 2007.

• 2,391 businesses in this industry group in Colorado, 2007.

Renewable Energy

• Renewable Energy uses natural, replenishable resources - like sun, wind and water - to produce energy. Environmental concerns and high oil prices are driving demand for renewable energy production.

• 1,095 people employed in Colorado, 2007.

• 79 businesses in this industry group in Colorado, 2007.

Energy Research

• Energy Research attempts to discover and develop more efficient energy sources and means of production. The research also investigates the best means to mitigate environmental impacts of energy development.

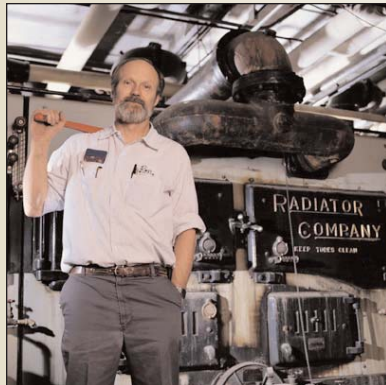
• 3,465 people employed in Colorado, 2007.

• 206 businesses in this industry group in Colorado, 2007.



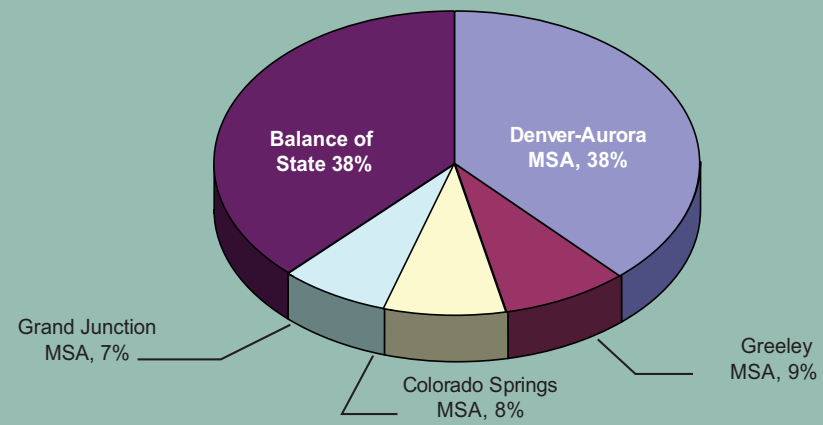
Energy

Information for Job Seekers



Today nearly half of Colorado's energy employment is in the Denver-Aurora and Greeley Metropolitan Statistical Areas (MSA). High concentrations of energy workers are also found in the Grand Junction MSA. As shown in the chart below, 38% of energy workers collect paychecks outside of these MSAs, largely due to vibrant oil and gas employment growth on Colorado's Western Slope.

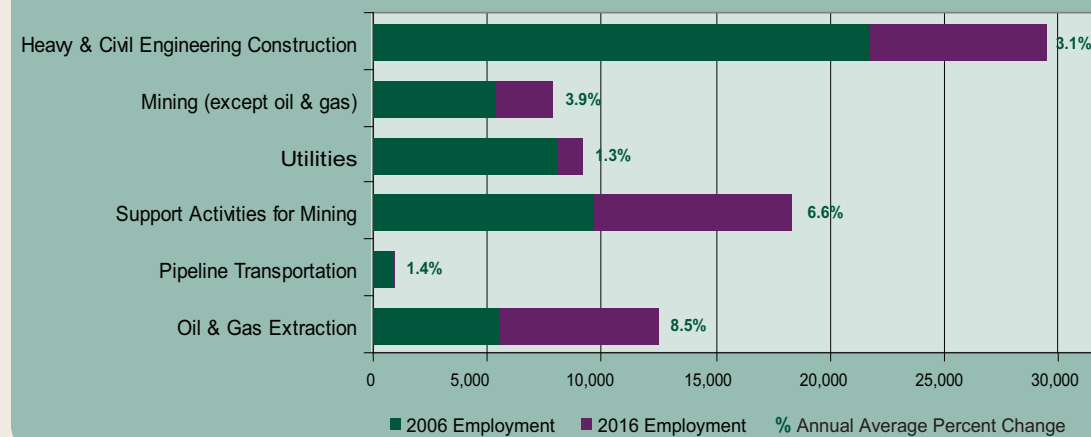
Energy Employment by Region



Source: CDLE, Quarterly Census of Employment and Wages, 2007

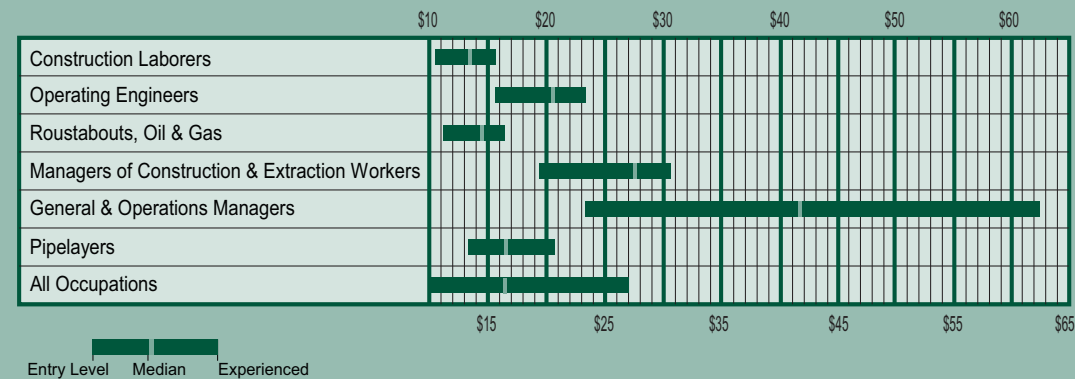
Energy employment fits into sub-categories of the industry groups on the chart below. Labor Market Information analysts estimate projections at the industry group level to ensure a higher degree of statistical accuracy. Over the projected period, many of the industry groups associated with energy are expected to grow faster than all industries combined, which will see a 2.1% average annual change through 2016.

Industry Group Projections



The occupations shown below are a sample of the jobs associated with the energy industry. While these occupations primarily require on-the-job training, job opportunities exist at several levels of experience and educational attainment. Generally, on-the-job experience in addition to educational background will result in higher wages. This chart includes wages paid to entry-level employees, highly experienced employees and everyone in-between. Notice the wage ranges for energy occupations and how they compare with the wage range for All Occupations.

Wages for Occupations Associated with Energy



Source: CDLE, Occupational Employment Statistics, Statewide, 2007

As you can see, many occupations associated with energy are expected to grow at a faster pace than all jobs over the projected period. Although some of the projected growth rates are higher than expected for All Occupations, the energy industry makes up a small portion of Colorado's jobs in today's marketplace. Note the numbers of jobs associated with each of the occupations listed below.

Projected Growth of Occupations Associated with Energy

	Estimated Employment				Average Annual Openings		
	2006	2016	Change	Annual Average % Change	New Jobs	Replacements	Total Openings
Construction Laborers	26,511	36,838	10,327	3.3%	1,033	200	1,233
Operating Engineers	10,035	13,424	3,389	3.0%	339	194	533
Roustabouts, Oil & Gas	2,462	4,686	2,224	6.6%	222	73	295
Managers of Construction & Extraction Workers	17,744	24,651	6,907	3.3%	691	248	939
General & Operations Managers	37,869	42,964	5,095	1.3%	510	913	1,423
Pipelayers	1,735	2,346	611	3.1%	61	36	97
All Occupations	2,482,548	3,046,586	564,038	2.1%	57,402	55,455	112,857

Source: CDLE, Occupational Employment Statistics, Statewide all industries, 2008



Education

Moderate-term on-the-job training :

- Construction Laborers
- Operating Engineers
- Roustabouts, Oil & Gas
- Pipelayers

Work experience :

- Managers of Construction & Extraction Workers

Work experience, plus

Bachelor's Degree :

- General & Operations Managers