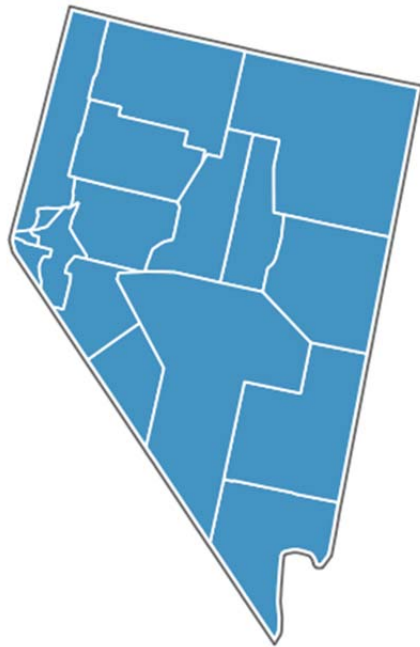


Nevada's Clean Energy Sector



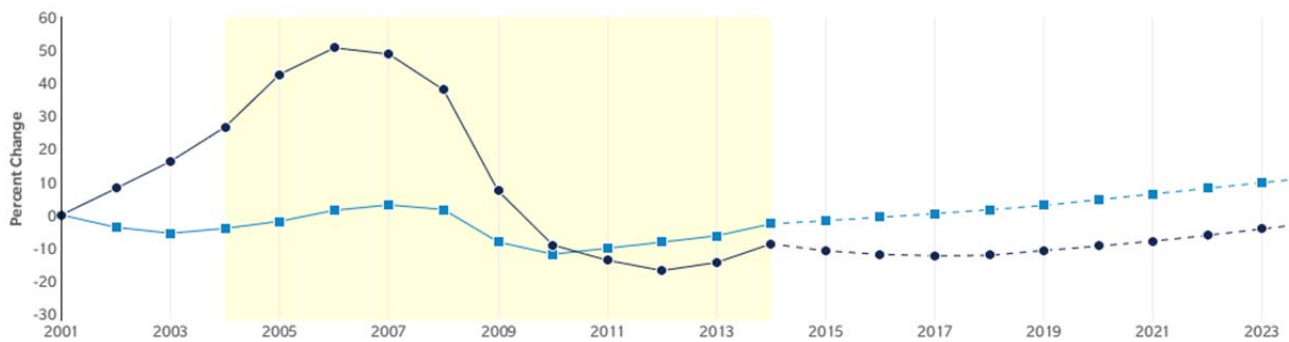
Industry Summary for Nevada's Clean Energy Sector

23,811 Jobs (2014) 20% below National average	-28.0% % Change (2004-2014) Nation: 1.4%	\$80,097 Avg. Earnings Per Job (2014) Nation: \$83,690
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Industry Detail

Establishments (2014)	1,856
Jobs Multiplier	3.51

Regional Trends



	Region	2004 Jobs	2014 Jobs	% Change
●	Nevada	33,078	23,811	-28.0%
●	United States	3,413,971	3,463,138	1.4%

Regional Breakdown of Nevada's Clean Energy Sector

County Name	2004 Jobs	2014 Jobs	2004 - 2014 Change	Current Total Earnings	2014 Location Quotient
Clark County	22,123	14,921	(7,202)	\$80,855	0.69
Washoe County	5,575	4,109	(1,466)	\$71,789	0.86
Douglas County	1,461	1,394	(67)	\$80,587	3.08
Elko County	820	801	(19)	\$76,254	1.44
Carson City County	1,075	591	(484)	\$75,122	0.87
Churchill County	448	434	(14)	\$88,912	1.98
Nye County	255	426	171	\$77,771	1.53
Lyon County	401	307	(94)	\$70,955	1.01
Humboldt County	267	296	29	\$117,869	1.42
[Nevada, county not reported]	201	134	(67)	\$130,669	0.93
Storey County	88	126	38	\$131,225	1.25
White Pine County	138	124	(14)	\$67,970	1.18
Eureka County	<10	81	Insf. Data	\$143,642	0.70
Lander County	17	25	8	\$100,378	0.28
Lincoln County	<10	19	Insf. Data	\$34,585	0.65
Pershing County	176	12	(164)	\$100,024	0.26
Esmeralda County	0	<10	Insf. Data	Insf. Data	0.29
Mineral County	20	<10	Insf. Data	Insf. Data	0.29
	33,078	23,811	(9,267)	\$80,097	

Industry Breakdown of Nevada's Clean Energy Sector

Description	2004 Jobs	2014 Jobs	2004 - 2014 Change	Current Total Earnings	2014 Location Quotient
Plumbing, Heating, and Air-Conditioning Contractors	11,497	7,480	(4,017)	\$63,315	0.93
Site Preparation Contractors	5,383	2,417	(2,966)	\$62,581	0.93
Water and Sewer Line and Related Structures Construction	2,846	2,065	(781)	\$71,618	1.39
Power and Communication Line and Related Structures Construction	2,635	1,966	(669)	\$71,996	1.33
Electric Power Distribution	2,731	1,739	(992)	\$145,650	0.99
Natural Gas Distribution	1,103	1,265	162	\$130,141	1.29
Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	1,008	845	(163)	\$95,631	1.67
Oil and Gas Pipeline and Related Structures Construction	964	780	(184)	\$54,957	0.62
Environmental Consulting Services	554	676	122	\$79,343	0.93
Fossil Fuel Electric Power Generation	996	615	(381)	\$167,458	0.73
Environment, Conservation and Wildlife Organizations	165	429	264	\$40,389	0.83
All Other Miscellaneous Electrical Equipment and Component Manufacturing	186	353	167	\$106,405	1.49
Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers	646	343	(303)	\$60,578	0.69
Industrial Valve Manufacturing	87	263	176	\$71,459	1.12
Other Basic Inorganic Chemical Manufacturing	174	234	60	\$126,060	0.67
Geothermal Electric Power Generation	76	188	112	\$112,064	20.94
Other Electronic Component Manufacturing	147	184	37	\$41,738	0.34
Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	138	175	37	\$86,160	0.24
Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	137	163	26	\$45,605	0.68
Pump and Pumping Equipment Manufacturing	98	151	53	\$72,132	0.60
Electronic Connector Manufacturing	19	138	119	\$42,338	0.86
Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	45	136	91	\$55,532	0.85
Roofing, Siding, and Insulation Material Merchant Wholesalers	225	102	(123)	\$63,034	0.38
Water Supply and Irrigation Systems	90	89	(1)	\$48,951	0.26
Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing	222	88	(134)	\$63,453	0.58
Geophysical Surveying and Mapping Services	66	80	14	\$85,456	0.47
Instrument Manufacturing for Measuring and	120	79	(41)	\$64,048	0.25

Testing Electricity and Electrical Signals					
Air and Gas Compressor Manufacturing	23	78	55	\$96,555	0.42
Steam and Air-Conditioning Supply	70	74	4	\$117,158	5.07
Turbine and Turbine Generator Set Units Manufacturing	52	73	21	\$95,798	0.29
Fluid Power Valve and Hose Fitting Manufacturing	120	70	(50)	\$76,382	0.21
Fluid Power Pump and Motor Manufacturing	<10	67	Insf. Data	\$76,302	0.41
Other Measuring and Controlling Device Manufacturing	81	65	(16)	\$67,566	0.22
Power, Distribution, and Specialty Transformer Manufacturing	0	54	54	\$120,104	0.25
Other Communication and Energy Wire Manufacturing	12	48	36	\$62,561	0.44
All Other Basic Organic Chemical Manufacturing	28	45	17	\$68,043	0.14
Other Metal Valve and Pipe Fitting Manufacturing	47	43	(4)	\$70,930	0.31
Pipeline Transportation of Natural Gas	23	33	10	\$122,420	0.14
Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	50	31	(19)	\$62,567	0.18
Wind Electric Power Generation	0	25	25	\$112,669	0.89
Industrial Process Furnace and Oven Manufacturing	<10	18	Insf. Data	\$50,529	0.21
Industrial Gas Manufacturing	<10	14	Insf. Data	\$90,507	0.09
Power Boiler and Heat Exchanger Manufacturing	0	10	10	\$60,140	0.05
Solar Electric Power Generation	0	<10	Insf. Data	Insf. Data	0.30
Current-Carrying Wiring Device Manufacturing	128	<10	Insf. Data	Insf. Data	0.00
Primary Battery Manufacturing	12	<10	Insf. Data	Insf. Data	0.02
Sewage Treatment Facilities	16	<10	Insf. Data	Insf. Data	0.10
Plumbing Fixture Fitting and Trim Manufacturing	<10	<10	Insf. Data	Insf. Data	0.07
Heating Equipment (except Warm Air Furnaces) Manufacturing	<10	<10	Insf. Data	Insf. Data	0.01
Fluid Power Cylinder and Actuator Manufacturing	22	<10	Insf. Data	Insf. Data	0.02
Biomass Electric Power Generation	0	0	0	\$0	0.00
Nuclear Electric Power Generation	0	0	0	\$0	0.00
Hydroelectric Power Generation	26	0	(26)	\$0	0.00
Natural Gas Liquid Extraction	0	0	0	\$0	0.00
Other Electric Power Generation	0	0	0	\$0	0.00
Carbon and Graphite Product Manufacturing	0	0	0	\$0	0.00
Storage Battery Manufacturing	0	0	0	\$0	0.00
Electric Bulk Power Transmission and Control	<10	0	Insf. Data	\$0	0.00
Ethyl Alcohol Manufacturing	0	0	0	\$0	0.00
	33,078	23,811	(9,267)	\$80,097	

Top Occupations Employed by these Industries

Description	Employed in Industry Group (2014)	% of Total Jobs in Industry Group (2014)
Office Clerks, General	965	4.1%
First-Line Supervisors of Construction Trades and Extraction Workers	777	3.3%
Construction Laborers	1,618	6.8%
Plumbers, Pipefitters, and Steamfitters	1,756	7.4%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,578	6.6%

Industry Requirements (Lead Supply Chain)

Industry	Amount	In-Region	Out of Region
Petroleum Refineries	\$191,907,087	5.4%	94.6%
Crude Petroleum and Natural Gas Extraction	\$94,043,470	0.5%	99.5%
Commercial Banking	\$45,348,625	52.6%	47.4%
Ready-Mix Concrete Manufacturing	\$36,662,303	38.9%	61.1%
Engineering Services	\$36,483,656	61.1%	38.9%

Industry Gender Breakdown

	Gender	2014 Jobs	2014 Percent	
•	Males	18,542	77.9%	
•	Females	5,269	22.1%	

Industry Age Breakdown

	Age	2014 Jobs	2014 Percent	
•	14-18	208	0.9%	
•	19-24	1,539	6.5%	
•	25-34	5,366	22.5%	
•	35-44	5,914	24.8%	
•	45-54	6,296	26.4%	
•	55-64	3,628	15.2%	
•	65+	858	3.6%	

Industry Race/Ethnicity Breakdown

	Race/Ethnicity	2014 Jobs	2014 Percent	
•	White	16,615	69.8%	
•	Hispanic or Latino	4,920	20.7%	
•	Black or African American	908	3.8%	
•	Asian	832	3.5%	
•	Two or More Races	288	1.2%	
•	American Indian or Alaska Native	172	0.7%	
•	Native Hawaiian or Other Pacific Islander	76	0.3%	

Data Sources and Calculations

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Input-Output Data

The input-output model in this report is EMSI's gravitational flows multi-regional social account matrix model (MR-SAM). It is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, several EMSI in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

State Data Sources

This report uses state data from the following agencies: Nevada Department of Employment, Training and Rehabilitation, Information Development and Processing Division, Research and Analysis Bureau