CLEAN JOBS WASHINGTON

83,728 CLEAN ENERGY JOBS ACROSS WASHINGTON'

CLEAN ENERGY INCREASINGLY INTEGRAL TO EVERGREEN STATE ECONOMY

Clean energy is more important to Washington's energy economy than ever, accounting for more than half of the Evergreen State's energy jobs according to E2's analysis. Washington's clean energy economy—now ranked 14th among all 50 states with nearly 84,000 workers—is providing new job opportunities in every metro area, county, and legislative district.

While Washington State ranks among the top 15 states for employment in most clean energy categories, its clean energy economy has ample room to grow. In fact, when compared to its west coast neighbors, Washington's clean energy employment per capita lags behind Oregon and California. Additionally, growth of clean energy jobs year-over-year in Washington has slowed, standing at only 2.2 percent in 2018 versus 3.6 percent nationally.

However, by passing a suite of smart, ambitious policies in 2019, the state has made important strides to improve its competitiveness with California and the growing clean economies in the Midwest and Northeast. Paramount among the policy successes in 2019 was the passage of a hallmark 100 percent clean electricity bill (SB 5116). That law places Washington among an elite group of states striving to phase out fossil fuels from their electricity grid by 2045, transitioning to a grid exclusively powered by solar, wind, and other clean technologies. 2019 also marked the year Washington lawmakers passed ambitious building decarbonization and energy efficiency standards, as well as strong electric vehicle incentives covering all vehicle classes.

These policies are helping to create the market structures needed to drive investment and job growth to supercharge the state's clean energy economy.

However, significant work remains if Washington State is to realize its full potential and become a true national front-runner in America's burgeoning clean energy economy. To lead in a rapidly shifting energy market, Washington's legislature should pass strong measures to cut carbon across all sectors of its economy in the coming legislative sessions, including authorizing a zero-emission vehicle program, a low carbon fuel standard, and an economy-wide cap-and-invest carbon pricing program.

CLEAN ENERGYJOBS IN PERSPECTIVE

11x

in Washington than fossi fuel jobs

10.1% Veterans

of wasnington clean energy workers are veterans, nearly double the national average (6%)

8.3k

rural Washington residents work in clean energy

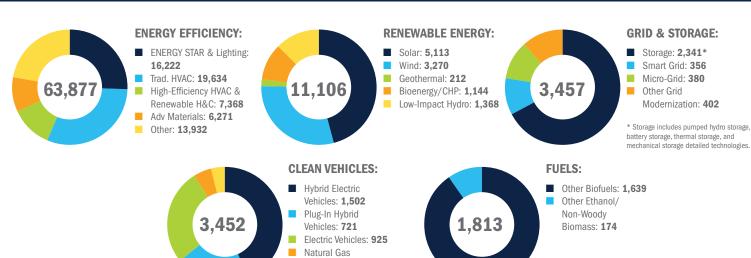
7 OUT OF 10

in Washington work at companies with fewer than 20 employees

55%

of Washington energy sector jobs are in clean energy

INDUSTRY BREAKDOWN: JOBS



PRESENTED BY:



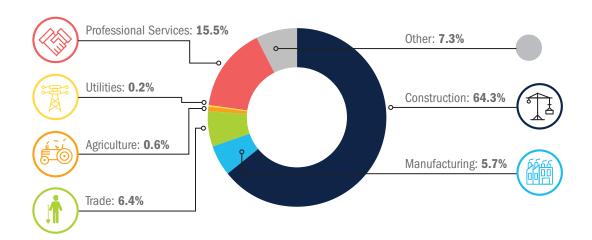
WWW.E2.ORG/CLEANJOBSWA WWW.CLEANJOBSCOUNT.ORG #CLEANJOBSWA #CLEANJOBSAMERICA For more information, contact E2 Advocate **Zach Amittay** at **zamittay@e2.org**.

For questions regarding this report, visit E2's report FAQ at https://www.e2.org/reports/clean-jobs-america-faq.

Vehicles: **171** Hydrogen & Fuel Cell: **134**



CLEAN JOBS BREAKDOWN BY VALUE CHAIN



WASHINGTON

A LEADING CLEANTECH DESTINATION

WASHINGTON RANKS AMONG THE TOP 15 STATES FOR EMPLOYMENT IN 10 CLEAN ENERGY CATEGORIES:

- **#11** TOTAL RENEWABLE ENERGY
- **#13** ENERGY EFFICIENCY
 - **#6** CLEAN STORAGE
- **#11** GEOTHERMAL
- **#12** BIOENERGY
 - **#3** SMALL HYDROPOWER
- **#10** WIND
 - **#2** OTHER BIOFUELS
- **#12** OVERALL TRANSMISSION, STORAGE AND DISTRIBUTION
- **#14** OVERALL CLEAN ENERGY

SMALL BUSINESSES

FUEL SUCCESS



7 OUT OF EVERY 10 CLEAN ENERGY WORKERS

are employed by businesses with fewer than 20 employees

1-4 EMPLOYEES: **43.4**%

5-19 EMPLOYEES: **26.5**%

20-99 EMPLOYEES: **26.5**%

100-499 EMPLOYEES: **2.4**%

500+ EMPLOYEES: **1.2%**

RURAL & SMALL-TOWN IMPACT

No.2

If counted as a single metro area, Washington's rural areas rank second in the state for clean energy jobs, behind only the Seattle-Tacoma-Bellevue metro area

45%

of Washington's clean energy workforce is located outside the Seattle metro area



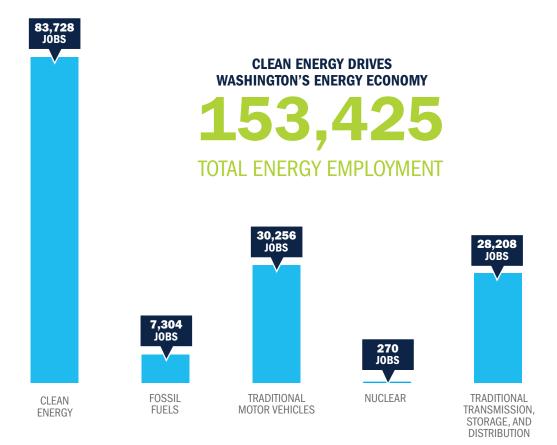
Of the top 10 counties by clean energy jobs per capita, 5 have populations under 100,000—including No. 1 Jefferson County which is home to 23 clean energy jobs for every 1,000 employable residents

13k

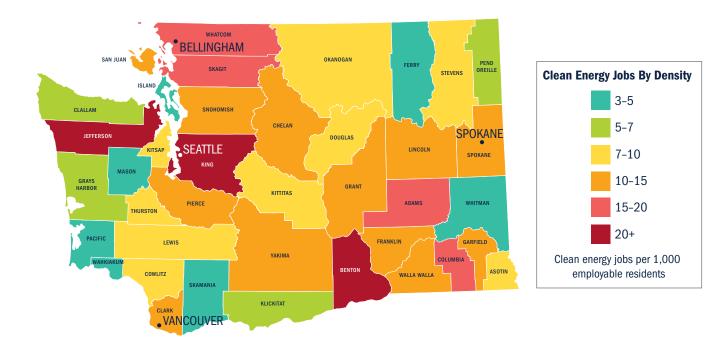
jobs are located in counties with populations of less than 200,000

OTHER

CLEAN ENERGY DRIVES WASHINGTON'S ENERGY ECONOMY



WASHINGTON CLEAN ENERGY JOBS BY DENSITY²



WASHINGTON METRO AREAS BY CLEAN ENERGY JOBS

Metro Area	Clean Energy Jobs*	Renewable Energy Jobs	Energy Efficiency Jobs
Bellingham	3,360	746	2,302
Bremerton- Silverdale	2,812	265	2,243
Kennewick- Richland-Pasco	2,124	205	1,688
Lewiston	178	18	141
Longview	935	93	741
Mount Vernon- Anacortes	1,310	125	1,000

Metro Area	Clean Energy Jobs*	Renewable Energy Jobs	Energy Efficiency Jobs
Olympia	2,886	278	2,300
Portland-Vancouver- Beaverton	5,643	700	4,366
Seattle-Tacoma- Bellevue	46,804	6,905	35,101
Spokane	6,154	594	4,900
Wenatchee	1,237	119	984
Yakima	1,983	225	1,546

^{*} Total includes all clean energy jobs categories, including solar, wind, EE, clean vehicles, battery storage, advanced biofuels, low-impact hydro and other areas.

Note: More than 8,300 additional jobs are located in Washington's rural areas.

WASHINGTON CLEAN ENERGY JOBS BY COUNTY

County	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
Jefferson	617	442	161
Benton	3,104	395	2,396
King	36,592	4,433	29,235
Whatcom	2,989	875	1,879
Skagit	1,564	469	908
Columbia	54	32	10

County	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
Adams	206	144	35
Clark	5,217	499	4,247
San Juan	199	11	179
Chelan	795	44	554
Snohomish	7,865	1,205	6,017
Walla Walla	627	260	259

WASHINGTON CLEAN ENERGY JOBS BY COUNTY CONTINUED

County	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
Spokane	4,913	600	3,758
Grant	805	31	496
Yakima	2,026	138	1,267
Pierce	7,031	613	5,540
Garfield	18	13	3
Lincoln	87	12	67
Franklin	631	35	463
Douglas	302	66	165
Stevens	328	139	155
Thurston	1,909	163	1,518
Kittitas	310	33	224
Cowlitz	681	66	527
Okanogan	272	20	144
Asotin	148	11	124

County	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
Kitsap	1,662	142	1,373
Lewis	446	19	339
Klickitat	115	18	65
Grays Harbor	360	23	296
Clallam	363	25	298
Pend Oreille	63	4	54
Island	321	44	249
Whitman	198	16	157
Wahkiakum	15	1	12
Ferry	26	2	22
Pacific	68	5	54
Mason	191	9	161
Skamania	32	2	27

WASHINGTON CLEAN ENERGY JOBS BY DISTRICT

Data shows that distribution of clean energy jobs in Washington crosses all political boundaries, with clean energy jobs in every congressional and state assembly district.

U.S. CONGRESSIONAL DISTRICTS

District	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
1 (Rep. DelBene)	15,403	2,647	11,184
2 (Rep. Larsen)	6,873	868	5,283
3 (Rep. Herrera Beutler)	7,819	832	6,147
4 (Rep. Newhouse)	5,889	614	4,641
5 (Rep. McMorris Rodgers)	7,344	717	5,840

District	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
6 (Rep. Kilmer)	9,072	877	7,213
7 (Rep. Jayapal)	15,634	2,499	11,559
8 (Rep. Schrier)	8,138	1,033	6,250
9 (Rep. Smith)	4,048	682	2,964
10 (Rep. Heck)	3,507	337	2,795

STATE LEGISLATIVE DISTRICTS

District	Legislators	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
1	Sen. Stanford Reps. Duerr and Kloba	3,831	484	2,945
2	Sen. Becker Reps. Barkis and Wilcox	2,050	257	1,578
3	Sen. Billig Reps. Riccelli and Ormsby	3,938	395	3,118
4	Sen. Padden Reps. Shea and McCaslin	1,426	129	1,150
5	Sen. Mullet Reps. Ramos and Callan	3,099	385	2,388

District	Legislators	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
6	Sen. Holy Reps. Volz and Graham	58	465	587
7	Sen. Short Reps. Maycumber and Kretz	109	841	1,065
8	Sen. Brown Reps. Klippert and Boehnke	167	1,404	1,763
9	Sen. Schoesler Reps. Dye and Schmick	144	1,119	1,417
10	Sen. Muzzall Reps. Smith and Paul	702	2,405	3,484

CLEAN JOBS WASHINGTON

STATE LEGISLATIVE DISTRICTS

District	Legislators	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
11	Sen. Hasegawa Reps. Hudgins and Bergquist	935	3,750	5,196
12	Sen. Hawkins Reps. Goehner and Steele	148	1,185	1,495
13	Sen. Warnick Reps. Dent and Ybarra	137	1,025	1,304
14	Sen. King Reps. Corry and Mosbrucker	237	1,599	2,054
15	Sen. Honeyford Reps. Chandler and Dufault	16	115	147
16	Sen. Walsh Reps. Jenkin and Rude	24	190	240
17	Sen. Wilson Reps. Kraft and Harris	357	2,300	2,972
18	Sen. Rivers Reps. Vick and Hoff	84	713	894
19	Sen. Takko Reps. Walsh and Blake	194	1,534	1,937
20	Sen. Braun Reps. DeBolt and Orcutt	175	1,354	1,714
21	Sen. Liias Reps. Peterson and Ortiz-Self	235	1,428	1,858
22	Sen. Hunt Reps. Dolan and Doglio	64	586	723
23	Sen. Rolfes Reps. Appleton and Hansen	238	1,991	2,499
24	Sen. Van De Wege Reps. Chapman and Tharinger	130	1,020	1,289
25	Sen. Zeiger Reps. Chambers and Gildon	216	1,278	1,668
26	Sen. Randall Reps. Young and Caldier	154	955	1,240
27	Sen. Darneille Reps. Jinkins and Fey	253	1,626	2,101
28	Sen. O'Ban Reps. Leavitt and Kilduff	136	830	1,080
29	Sen. Conway Reps. Morgan and Kirby	47	387	487
30	Sen. Wilson Reps. Pellicciotti and Reeves	241	1,425	1,860

District	Legislators	Clean Energy Jobs	Renewable Energy Jobs	Energy Efficiency Jobs
31	Sen. Fortunato Reps. Stokesbary and Irwin	18	97	129
32	Sen. Salomon Reps. Ryu and Davis	113	689	891
33	Sen. Keiser Reps. Orwall and Gregerson	84	355	488
34	Sen. Nguyen Reps. Cody and Fitzgibbon	140	724	963
35	Sen. Sheldon Reps. Griffey and MacEwen	60	495	622
36	Sen. Carlyle Reps. Frame and Tarleton	960	4,789	6,403
37	Sen. Saldaña Reps. Santos and Pettigrew	580	1,870	2,708
38	Sen. McCoy Reps. Robinson and Sells	217	1,326	1,725
39	Sen. Wagoner Reps. Sutherland and Eslick	165	1,038	1,345
40	Sen. Lovelett Reps. Lekanoff and Morris	714	2,005	2,990
41	Sen. Wellman Reps. Senn and Thai	548	3,452	4,471
42	Sen. Ericksen Reps. Van Werven and Shewmake	87	729	916
43	Sen. Pedersen Reps. Macri and Chopp	215	1,216	1,597
44	Sen. Hobbs Lovick and Mead	<10	<10	<10
45	Sen. Dhingra Reps. Goodman and Springer	233	1,493	1,929
46	Sen. Frockt Reps. Pollet and Valdez	44	281	363
47	Sen. Das Reps. Entenman and Sullivan	<10	<10	<10
48	Sen. Kuderer Reps. Slatter and Walen	<10	<10	<10
49	Sen. Cleveland Reps. Wylie and Stonier	77	611	771

CLEAN JOBS WASHINGTON

ENDNOTES

- 1 Unless otherwise stated, the data and analyses presented in Clean Jobs America E2 (Environmental Entrepreneurs) are based on data collected for the 2019 U.S. Energy Employment Report (2019 USEER), produced by the Energy Futures Initiative (EFI) in partnership with the National Association of State Energy Officials (NASEO) and collected and analyzed by BW Research Partnership (BWRP). See Pages 9-13 for methodology questions. For more questions regarding methodology, visit https://www.e2.org/clean-jobs-america-faq.
- 2 County employable population data based on 2017 American Community Survey (ACS) 5-year estimate of residents 16 years and older from the U.S. Census Bureau accessible at https://factfinder.census.gov.

PRESENTED BY:



E2 is a national, nonpartisan group of business leaders, investors and others who advocate for smart policies that are good for the environment and good for the economy.



Clean Jobs Count is a campaign to raise awareness of the economic importance of the clean economy. Visit www.cleanjobscount.org to join thousands of business leaders, workers and others to tell lawmakers and policymakers that clean jobs count.

THANKS TO SUPPORT FROM:

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