

## A NATIONAL LEADER IN CLEAN ENERGY

### KEY FINDINGS

## #3

for total clean energy jobs in U.S. with 166K

## 95%

of new jobs in the energy sector were clean energy jobs

## 70K

NY clean energy jobs are in construction and manufacturing industries

## HALF

of all NY jobs in energy are in clean energy

## 6,000

new clean energy jobs added in 2022

## SECTOR SUMMARY HIGHLIGHTS



### CLEAN ENERGY

**OVERALL:** New York's clean energy economy grew 3.6 percent and added nearly 6,000 new workers in 2022. Clean energy now accounts for over 50 percent of all energy industry jobs in New York. The state's 166,014-person clean energy workforce is the third largest nationally, behind California and Texas.



### RENEWABLE ENERGY:

Renewable generation grew 6.2 percent and added over 1,000 jobs in 2022, led by jobs in solar energy (14,200) and wind energy (4,300). The sector is the second fastest growing clean energy sector over the previous two years (17%), behind only clean vehicles.



### ENERGY EFFICIENCY:

Energy efficiency is New York's largest energy sector with 126,000 workers. However, the sector has not yet recovered from the COVID-19 pandemic and remains just below its pre-pandemic high of 126,700.



### STORAGE AND GRID MODERNIZATION:

Jobs in battery, storage, and grid modernization grew 8.3 percent in 2022. This sector has grown more than 15 percent since 2021. At 4,600 workers, the state's storage and grid sector is the eighth largest in the nation.



### CLEAN VEHICLES:

Clean vehicle jobs are the fastest growing workforce in New York's entire energy industry, growing 20 percent in 2022 and over 50 percent since 2021. At nearly 13,000 workers statewide, New York has the eighth largest clean vehicle workforce in the nation.

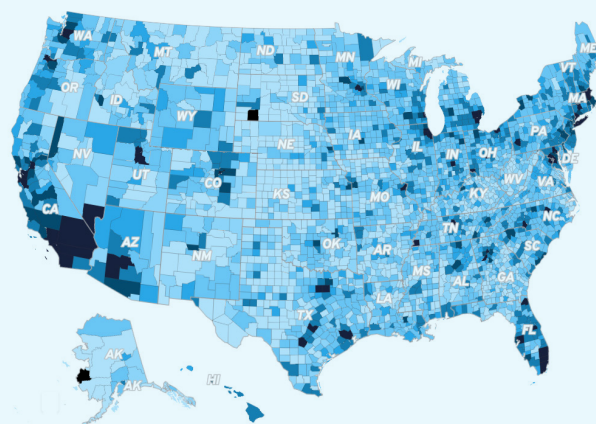


### BIOFUELS:

New York has the third largest biofuels workforce in the U.S., at 1,700. Biofuel jobs increased 3.2 percent in 2022 and over 9 percent since 2021.

## EXPLORE THE DATA FURTHER

Dive deeper into in this report further at [www.cleanjobsamerica.e2.org](http://www.cleanjobsamerica.e2.org) to explore the latest state and county clean energy employment data across the entire U.S., including national and statewide rankings by total clean energy jobs, jobs per capita, and employment growth.



For information on methodology and this report's analysis—including what technologies and sectors are counted as clean energy, what jobs are not counted, definitions of clean energy sectors and subsectors, and more—visit [www.cleanjobsamerica.e2.org](http://www.cleanjobsamerica.e2.org).

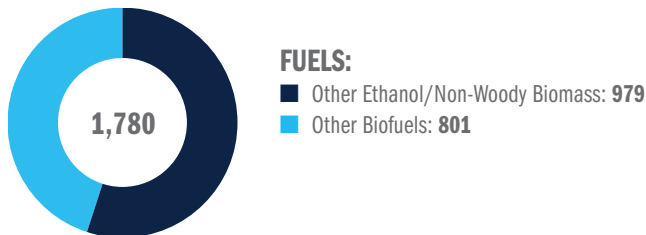
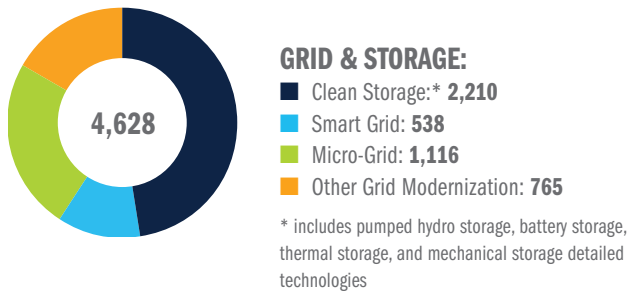
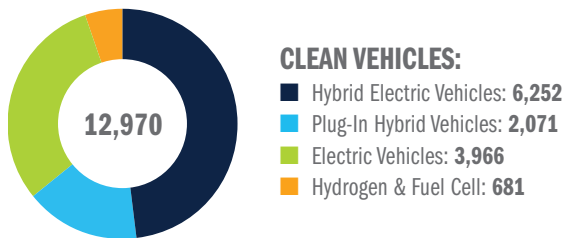
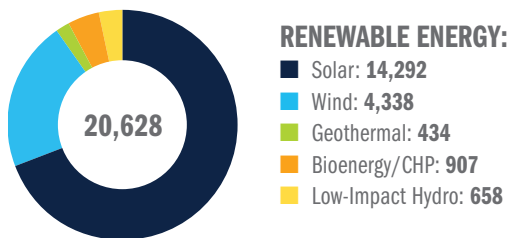
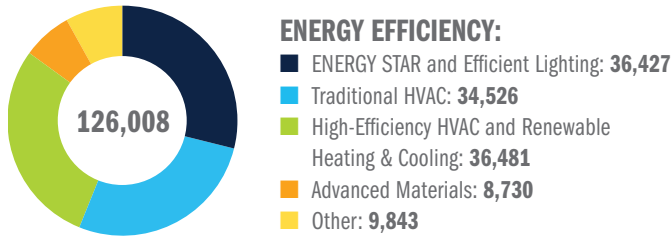


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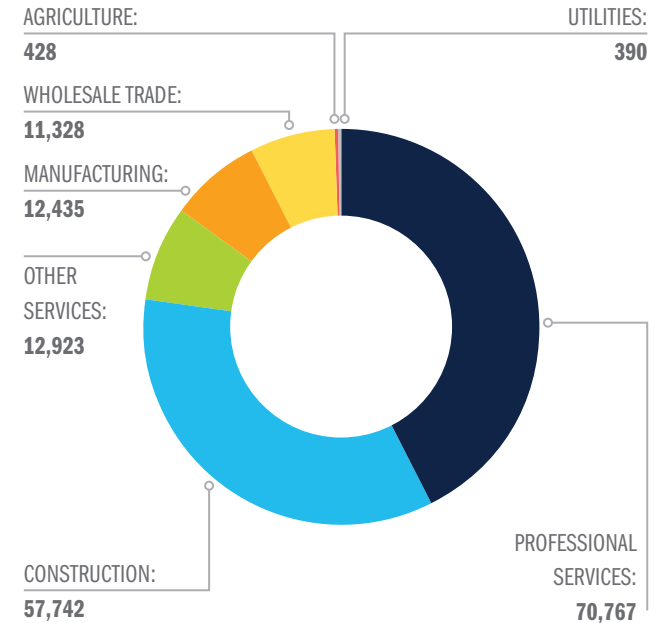
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# NEW YORK CLEAN ENERGY ECONOMY—AT A GLANCE

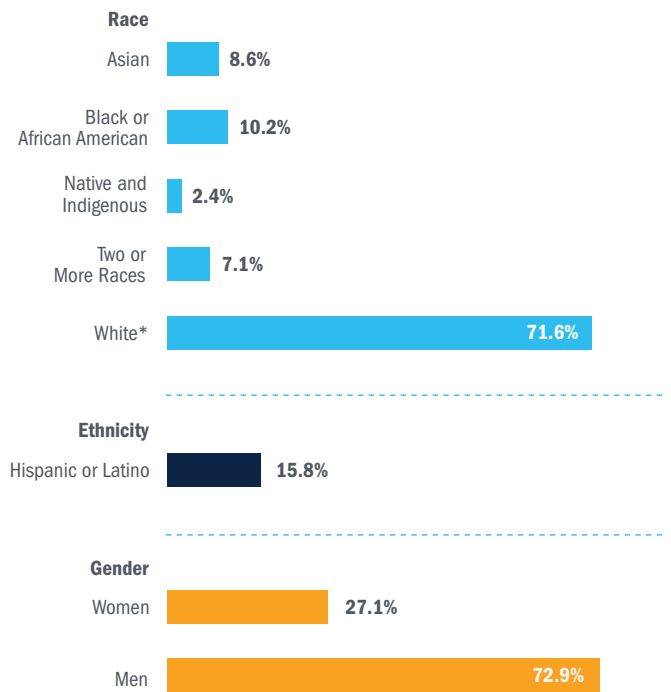
**FIG 1 // NEW YORK CLEAN ENERGY EMPLOYMENT by sectors 2022**



**FIG 2 // NEW YORK CLEAN ENERGY EMPLOYMENT by value chain 2022**

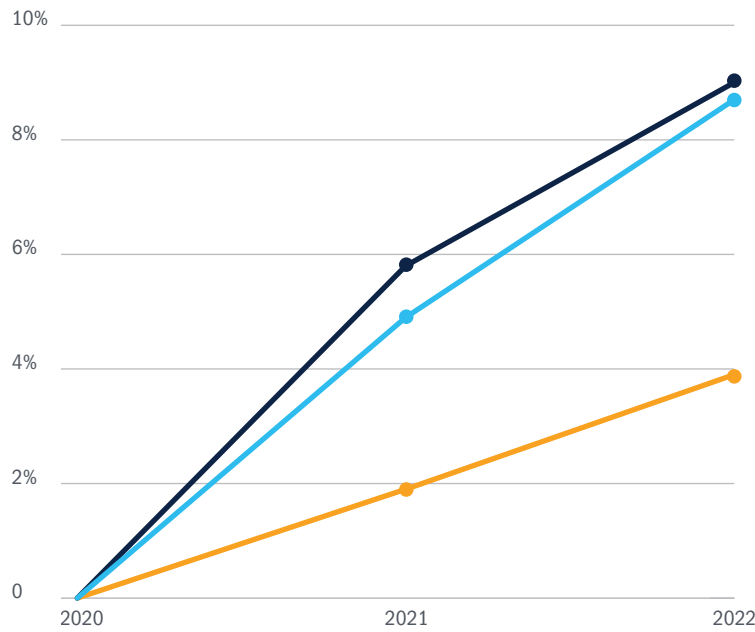


**FIG 3 // NEW YORK CLEAN ENERGY EMPLOYMENT by demographics 2022<sup>2</sup>**



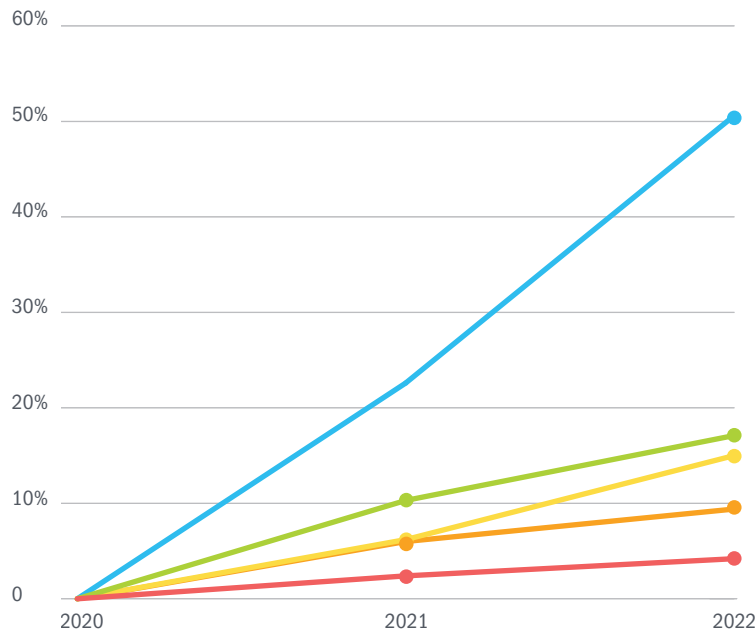
\* Includes non-Hispanic and Hispanic whites

**FIG 4 // NEW YORK ENERGY EMPLOYMENT by industry growth 2020–2022**



2020	2021	2022
<b>New York Clean Energy</b>		
152,789	160,183 (+4.9%)	166,014 (+8.7%)
<b>Overall New York Employment</b>		
8,693,446	9,195,839 (+5.8%)	9,476,185 (+9.0%)
<b>Overall New York Energy Industry</b>		
306,542	312,394 (+1.9%)	318,499 (+3.9%)

**FIG 5 // NEW YORK ENERGY EMPLOYMENT by clean energy sector growth 2020–2022**



2020	2021	2022
<b>New York Energy Efficiency</b>		
120,961	123,921 (+2.4%)	126,008 (+4.2%)
<b>New York Renewable Energy</b>		
17,619	19,429 (+10.3%)	20,628 (+17.1%)
<b>New York Storage/Grid</b>		
4,024	4,273 (+6.2%)	4,628 (+15.0%)
<b>New York Biofuels</b>		
1,627	1,725 (+6.0%)	1,780 (+9.4%)
<b>New York Clean Vehicles</b>		
8,558	10,835 (+26.6%)	12,970 (+19.7%)

# NEW YORK CLEAN ENERGY ECONOMY—APPENDIX

**Table 1 // NEW YORK CLEAN ENERGY EMPLOYMENT by county 2022<sup>3</sup>**

County	Total Clean Energy	Renewable Gen.	Storage/Grid	Biofuels	Energy Efficiency	Clean Vehicles	Job Growth	Workers Per 1K Jobs
Albany	4,205	611	243	18	3,018	315	8.0%	18.4
Allegany	198	18	<10	12	138	22	-0.3%	15.0
Bronx	3,145	487	66	26	2,095	472	2.8%	9.9
Broome	1,239	73	54	<10	950	154	1.4%	15.3
Cattaraugus	257	25	<10	<10	176	46	6.9%	9.4
Cayuga	496	21	15	15	302	144	1.8%	20.2
Chautauqua	748	39	<10	17	557	126	0.7%	16.3
Chemung	592	34	14	<10	427	110	0.6%	17.8
Chenango	187	13	<10	<10	132	32	2.2%	10.9
Clinton	643	154	33	24	309	123	24.2%	19.9
Columbia	337	40	<10	16	242	35	2.4%	16.5
Cortland	186	15	<10	<10	133	35	1.4%	10.8
Delaware	152	13	<10	<10	97	37	5.0%	10.5
Dutchess	2,021	178	142	22	1,485	193	1.7%	18.4
Erie	9,145	1,365	1,008	53	5,402	1,317	2.1%	20.0
Essex	135	12	<10	<10	106	12	-0.2%	9.5
Franklin	166	13	<10	<10	129	21	1.8%	9.8
Fulton	139	13	<10	<10	93	30	5.9%	8.6
Genesee	312	19	<10	17	216	58	-3.1%	13.7
Greene	167	12	<10	<10	126	24	1.4%	11.7
Hamilton	15	<10	<10	<10	13	<10	-2.7%	9.9
Herkimer	185	12	<10	<10	134	33	2.6%	11.9
Jefferson	509	48	10	<10	380	69	2.0%	13.0
Kings	8,060	840	112	36	6,438	633	1.2%	9.5
Lewis	151	53	<10	<10	76	16	5.8%	22.2
Livingston	325	13	43	<10	181	79	2.4%	16.9
Madison	226	13	<10	<10	166	36	0.7%	11.0
Monroe	5,760	338	123	85	4,479	733	1.7%	15.2
Montgomery	262	80	<10	<10	135	41	2.7%	13.8
Nassau	12,710	1,841	228	56	9,469	1,117	1.9%	20.1
New York	47,337	4,805	744	443	41,189	155	5.0%	19.5
Niagara	1,352	97	35	26	837	357	5.8%	20.1
Oneida	1,162	83	50	<10	750	270	4.4%	11.6
Onondaga	3,874	246	114	38	3,003	474	2.2%	15.9
Ontario	863	37	18	20	650	139	2.1%	16.6
Orange	2,368	484	43	36	1,458	347	1.8%	15.6
Orleans	409	<10	<10	268	75	58	133.7%	37.0
Oswego	724	252	113	12	272	75	1.4%	22.8
Otsego	187	40	<10	<10	117	24	-3.4%	8.8

County	Total Clean Energy	Renewable Gen.	Storage/ Grid	Biofuels	Energy Efficiency	Clean Vehicles	Job Growth	Workers Per 1K Jobs
Putnam	624	49	<10	<10	504	63	1.3%	23.9
Queens	11,590	667	207	35	9,601	1,079	1.1%	16.2
Rensselaer	1,196	352	37	14	707	86	2.3%	21.0
Richmond	2,212	154	29	<10	1,841	182	1.1%	16.5
Rockland	2,303	460	138	12	1,472	221	2.7%	17.4
St. Lawrence	419	81	11	<10	287	39	11.5%	12.1
Saratoga	2,229	239	35	15	1,773	167	3.9%	25.3
Schenectady	1,582	366	131	50	967	69	3.4%	28.1
Schoharie	184	78	10	<10	82	<10	20.7%	22.5
Schuyler	61	<10	<10	<10	49	<10	-0.3%	13.4
Seneca	61	<10	<10	<10	38	13	2.6%	6.0
Steuben	873	24	10	<10	560	271	17.8%	25.0
Suffolk	14,882	2,375	395	139	10,622	1,352	2.8%	22.7
Sullivan	298	35	<10	<10	211	47	3.5%	10.3
Tioga	105	<10	<10	<10	60	26	13.4%	8.1
Tompkins	931	190	<10	<10	506	225	4.0%	19.6
Ulster	949	107	10	33	674	124	1.0%	16.5
Warren	963	546	<10	<10	371	39	1.7%	27.6
Washington	174	25	<10	<10	114	28	-1.4%	11.9
Wayne	885	482	19	55	242	88	1.8%	32.4
Westchester	9,136	1,624	125	39	6,790	559	1.0%	21.8
Wyoming	294	117	<10	<10	98	67	26.7%	23.2
Yates	109	<10	<10	<10	56	40	5.7%	16.2
<b>N.Y. State</b>	<b>166,014</b>	<b>20,628</b>	<b>4,628</b>	<b>1,780</b>	<b>126,008</b>	<b>12,970</b>	<b>3.6%</b>	<b>17.5</b>

Note: 3,000 clean energy jobs are in an unknown or undefined county

**Table 2 // NEW YORK CLEAN ENERGY EMPLOYMENT by metro 2022**

Metro Area	Total Clean Energy	Renewable Gen.	Storage/ Grid	Biofuels	Energy Efficiency	Clean Vehicles
New York-Newark-Jersey City	<b>116,388</b>	13,965	2,235	848	92,966	6,373
Buffalo-Cheektowaga-Niagara Falls	<b>10,497</b>	1,462	1,042	79	6,239	1,674
Albany-Schenectady-Troy	<b>9,396</b>	1,646	455	104	6,547	645
Rochester	<b>8,350</b>	882	207	441	5,683	1,137
Syracuse	<b>4,825</b>	512	229	58	3,441	585
Utica-Rome	<b>1,346</b>	95	54	10	884	303
Binghamton	<b>1,344</b>	82	62	<10	1,010	180
Glens Falls	<b>1,137</b>	571	<10	<10	485	67
Kingston	<b>949</b>	107	10	33	674	124
Ithaca	<b>931</b>	190	<10	<10	506	225
Elmira	<b>592</b>	34	14	<10	427	110

Note: An additional 10,200 clean energy jobs are found in rural or nonmetropolitan areas<sup>4</sup>

- 1 Unless otherwise stated, all data is from the 2023 U.S. Energy and Employment Report (USEER), June 2023, Department of Energy (DOE). See Pages 201-206 for methodology questions.
- 2 Information on the representation of people with disabilities, lesbian, gay, bisexual, transgender, intersex, and queer people, migrants, religious minorities, and different age demographics in clean energy is limited. Based on the available data from the Bureau of Labor Statistics (BLS) and the supplemental employer survey used by the USEER, this analysis was unable to produce any findings regarding those groups.
- 3 United States Bureau of Labor Statistics (BLS) 2022 Q4 employment, all ownerships (accessed June 2023).
- 4 Rural clean energy jobs are calculated based on the Bureau of Labor Statistics' (BLS) nonmetropolitan area for every state, which is any area not designated as a metropolitan area by BLS. This is the most commonly used definition to analyze rural and small-town trends, and is available at <https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/what-is-rural>. New Jersey, Rhode Island, and the District of Columbia contain no nonmetropolitan statistical areas.



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