

CLEAN JOBS NEW YORK

148,453 CLEAN ENERGY JOBS ACROSS NEW YORK¹

CLEAN JOBS RISE IN EMPIRE STATE

Encompassing nearly 150,000 jobs, New York's booming clean energy economy employs more New Yorkers than giants like Northwell Health (around 54,000 workers), Mount Sinai Health System (32,000) and Walmart (28,000). New York ranks in the nation's top 10 for jobs in energy efficiency (No. 3), solar (No. 3), advanced transportation (No. 9), and wind (No. 10). Among all U.S. cities, New York City has the second most clean energy jobs.

With the adoption of various policies and programs through its Reforming the Energy Vision (REV) initiative, New York has expanded clean energy development and deployment, creating additional job opportunities and making clean energy more affordable—all while reducing greenhouse gas emissions. New York has set aggressive renewable energy and energy storage goals, including a strong offshore wind target and solar program, and is speeding up transportation sector electrification. Recently, New York adopted an ambitious energy efficiency target and released a roadmap to achieve it, including a workforce development program for nearly 20,000 New Yorkers. This framework was followed by bold commitments to move toward 100% clean electricity and carbon neutrality. To drive more clean energy job growth, New York must continue to prioritize energy efficiency and implement policies that help increase private investment in low-carbon transportation, solar, and wind.

CLEAN ENERGY JOBS IN PERSPECTIVE

TOP 5 New York ranks in the Top 5 of every major clean job category including total jobs (No. 4), renewable energy jobs (No. 5), and energy efficiency jobs (No. 3)

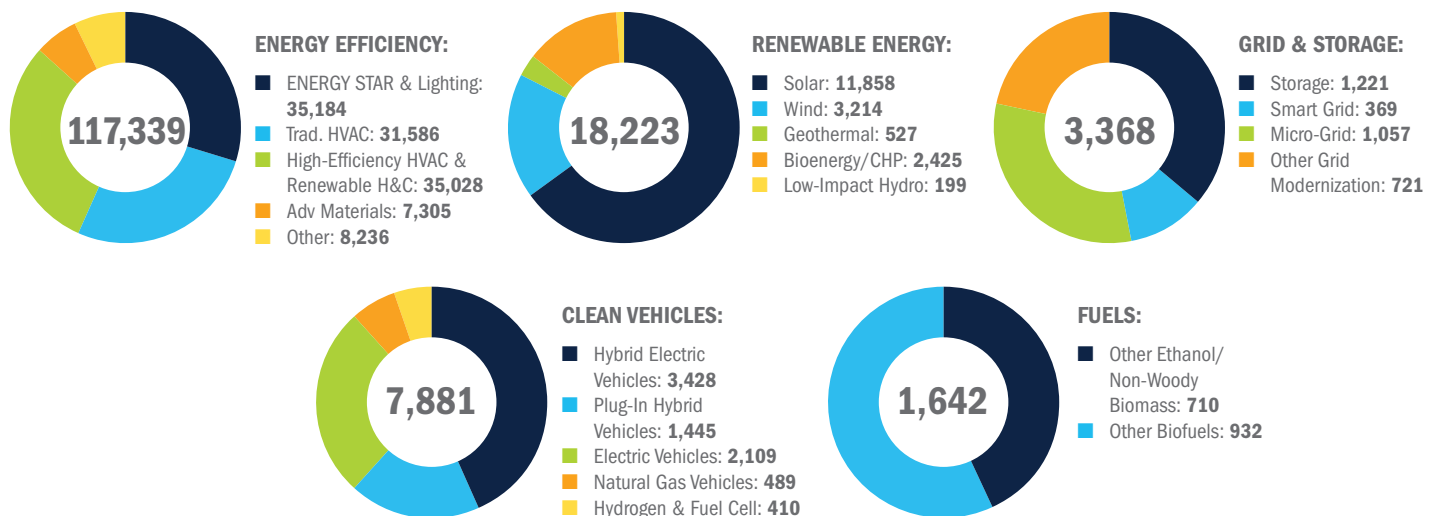
135,507 Clean energy jobs outnumber fossil fuel jobs in New York by over 135,000

11.5% VETERANS of New York's clean energy workforce are veterans

All 62 COUNTIES in New York employ workers in clean energy

No. 2 The New York City metro area has the second most clean energy jobs in the country

INDUSTRY BREAKDOWN: JOBS



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WWW.CLEANJOBSCOUNT.ORG
#CLEANJOBSNY
#CLEANJOBSAMERICA

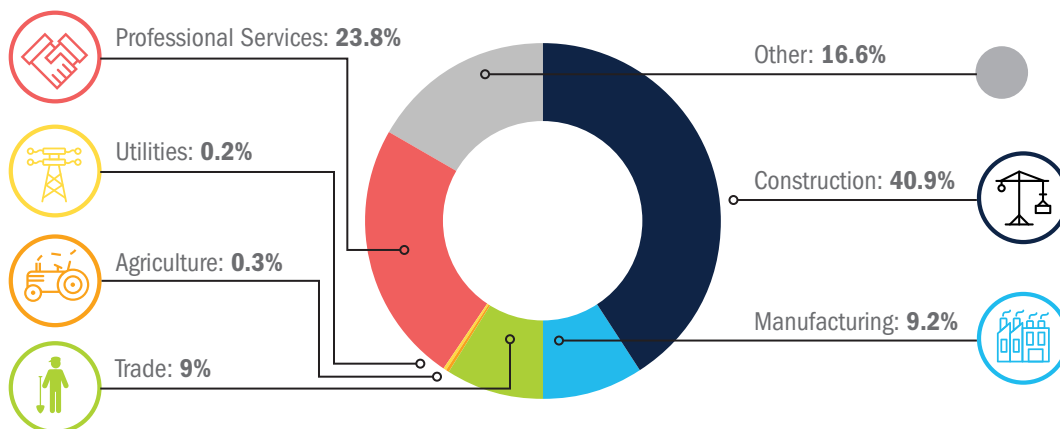
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For questions regarding this report, visit E2's Clean Jobs America FAQ at www.e2.org/cleanjobsamerica/FAQ.

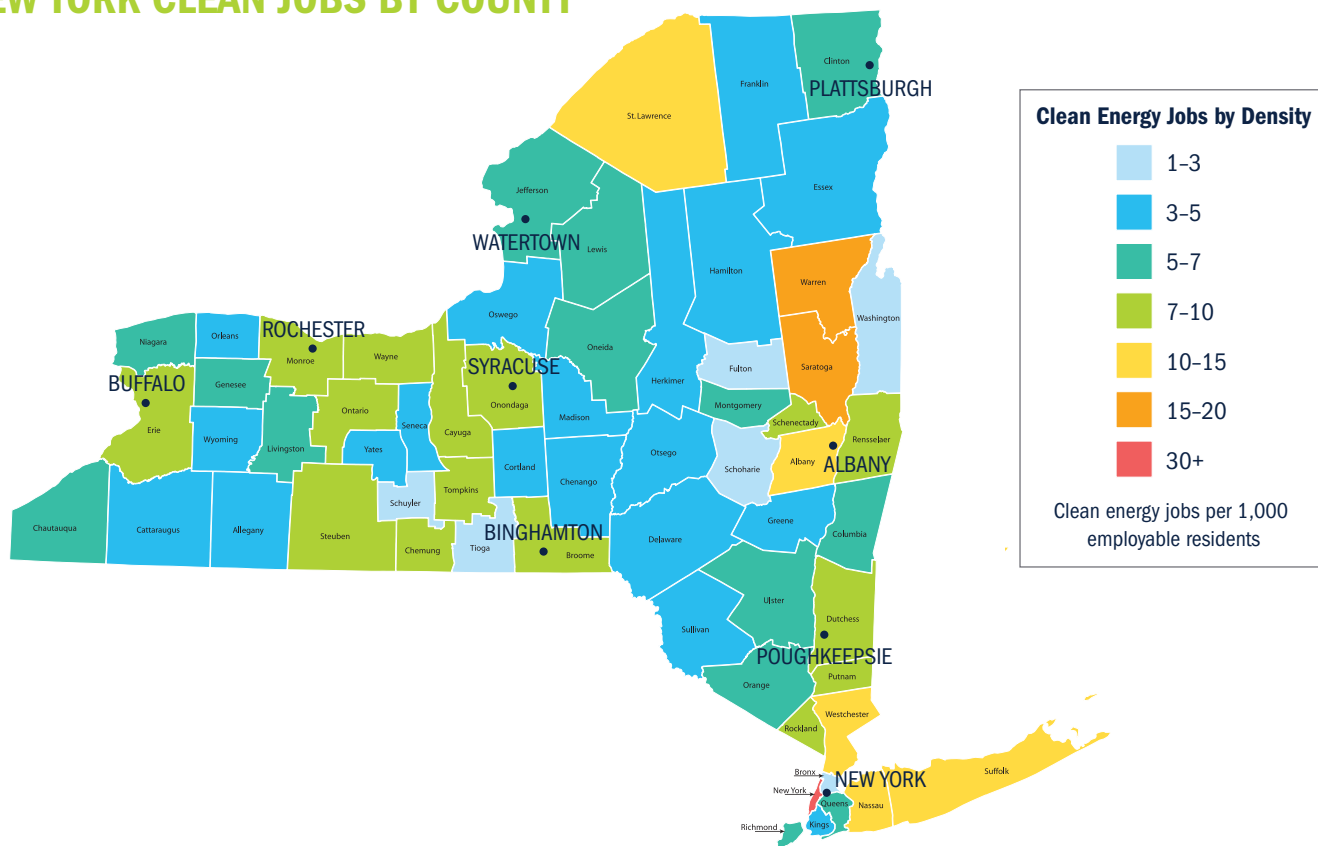


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CLEAN JOBS BREAKDOWN BY VALUE CHAIN



NEW YORK CLEAN JOBS BY COUNTY²



BEYOND THE BIG CITIES:
CLEAN ENERGY JOBS THROUGHOUT THE STATE



More than 1 out of every 7 New York clean energy jobs are in counties with populations under 300,000

20 JOBS PER 1,000 EMPLOYABLE RESIDENTS

Saratoga County has the 2nd highest clean energy jobs density with nearly 20 jobs per 1,000 employable residents—trailing only New York County (30.08)

9,500+

Over 9,500 clean energy jobs are in rural areas

TOP LAWMAKER DISTRICTS FOR CLEAN ENERGY JOBS

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

U.S. CONGRESSIONAL DISTRICT

| District | Clean Energy Jobs | Renewable Energy Jobs | Energy Efficiency Jobs |
|-------------------------|-------------------|-----------------------|------------------------|
| 1 (Rep. Zeldin) | 10,031 | 1,567 | 7,622 |
| 2 (Rep. King) | 5,310 | 641 | 4,203 |
| 3 (Rep. Suozzi) | 8,587 | 1,000 | 6,837 |
| 4 (Rep. Rice) | 6,645 | 770 | 5,288 |
| 5 (Rep. Meeks) | 2,015 | 211 | 1,624 |
| 6 (Rep. Meng) | 3,474 | 359 | 2,804 |
| 7 (Rep. Velázquez) | 9,409 | 1,003 | 7,584 |
| 8 (Rep. Jeffries) | 2,413 | 238 | 1,963 |
| 9 (Rep. Clarke) | 1,086 | 108 | 880 |
| 10 (Rep. Nadler) | 12,057 | 1,418 | 9,569 |
| 11 (Rep. Rose) | 2,805 | 283 | 2,266 |
| 12 (Rep. Maloney) | 12,857 | 1,658 | 10,090 |
| 13 (Rep. Espaillet) | 1,010 | 111 | 809 |
| 14 (Rep. Ocasio-Cortez) | 1,996 | 206 | 1,612 |
| 15 (Rep. Serrano) | 1,593 | 419 | 1,059 |
| 16 (Rep. Engel) | 4,217 | 413 | 3,450 |
| 17 (Rep. Lowey) | 8,285 | 1,342 | 6,257 |
| 18 (Rep. Maloney) | 6,402 | 686 | 5,140 |
| 19 (Rep. Delgado) | 6,117 | 718 | 4,864 |
| 20 (Rep. Tonko) | 6,569 | 854 | 5,153 |
| 21 (Rep. Stefanik) | 4,622 | 861 | 3,391 |
| 22 (Rep. Brindisi) | 4,639 | 441 | 3,784 |
| 23 (Rep. Reed) | 5,188 | 558 | 4,167 |
| 24 (Rep. Katko) | 6,040 | 648 | 4,861 |
| 25 (Rep. Morelle) | 5,352 | 480 | 4,389 |
| 26 (Rep. Higgins) | 6,332 | 884 | 4,923 |
| 27 (Rep. Collins) | 3,402 | 347 | 2,748 |

STATE SENATE DISTRICTS

| District | Clean Energy Jobs | District | Clean Energy Jobs | District | Clean Energy Jobs |
|-----------------------|-------------------|---------------------------|-------------------|-----------------------|-------------------|
| 1 (Sen. LaValle) | 4,338 | 22 (Sen. Gounardes) | 488 | 43 (Sen. Jordan) | 3,795 |
| 2 (Sen. Flanagan) | 6,360 | 23 (Sen. Savino) | 1,603 | 44 (Sen. Breslin) | 3,289 |
| 3 (Sen. Martinez) | 3,162 | 24 (Sen. Lanza) | 962 | 45 (Sen. Little) | 2,610 |
| 4 (Sen. Boyle) | 1,089 | 25 (Sen. Montgomery) | 1,029 | 46 (Sen. Amedore Jr.) | 1,891 |
| 5 (Sen. Gaughran) | 3,429 | 26 (Sen. Kavanagh) | 7,492 | 47 (Sen. Griffo) | 2,361 |
| 6 (Sen. Thomas) | 5,715 | 27 (Sen. Hoylman) | 17,205 | 48 (Sen. Ritchie) | 980 |
| 7 (Sen. Kaplan) | 2,624 | 28 (Sen. Krueger) | 1,366 | 49 (Sen. Tedisco) | 963 |
| 8 (Sen. Brooks) | 1,351 | 29 (Sen. Serrano) | 1,368 | 50 (Sen. Antonacci) | 4,605 |
| 9 (Sen. Kaminsky) | 1,247 | 30 (Sen. Benjamin) | 684 | 51 (Sen. Seward) | 2,118 |
| 10 (Sen. Sanders Jr.) | 1,617 | 31 (Sen. Jackson) | 402 | 52 (Sen. Akshar) | 1,756 |
| 11 (Sen. Liu) | 2,435 | 32 (Sen. Sepúlveda) | 1,375 | 53 (Sen. May) | 485 |
| 12 (Sen. Gianaris) | 3,134 | 33 (Sen. Rivera) | 201 | 54 (Sen. Helming) | 2,387 |
| 13 (Sen. Ramos) | 861 | 34 (Sen. Biaggi) | 1,261 | 55 (Sen. Funke) | 2,352 |
| 14 (Sen. Comrie) | 463 | 35 (Sen. Stewart-Cousins) | 4,865 | 56 (Sen. Robach) | 2,972 |
| 15 (Sen. Addabbo Jr.) | 394 | 36 (Sen. Bailey) | 317 | 57 (Sen. Young) | 2,199 |
| 16 (Sen. Stavisky) | 227 | 37 (Sen. Mayer) | 2,785 | 58 (Sen. O'Mara) | 1,252 |
| 17 (Sen. Felder) | 3,961 | 38 (Sen. Carlucci) | 2,946 | 59 (Sen. Gullivan) | 3,569 |
| 18 (Sen. Salazar) | 2,259 | 39 (Sen. Skoufis) | 2,718 | 60 (Sen. Jacobs) | 2,893 |
| 19 (Sen. Persaud) | 463 | 40 (Sen. Harckham) | 2,661 | 61 (Sen. Ranzenhofer) | 1,281 |
| 20 (Sen. Myrie) | 1,432 | 41 (Sen. Serino) | 2,304 | 62 (Sen. Ortt) | 1,441 |
| 21 (Sen. Parker) | <100 | 42 (Sen. Metzger) | 2,406 | 63 (Sen. Kennedy) | 256 |

CLEAN JOBS NEW YORK

STATE HOUSE DISTRICTS

| District | Clean Energy Jobs |
|-------------------------|-------------------|
| 1 (Asm. Thiele Jr.) | 2,535 |
| 2 (Asm. Palumbo) | 1,027 |
| 3 (Asm. DeStefano) | 1,144 |
| 4 (Asm. Englebright) | 834 |
| 5 (Asm. Smith) | 1,736 |
| 6 (Asm. Ramos) | 1,714 |
| 7 (Asm. Garbarino) | 1,353 |
| 8 (Asm. Fitzpatrick) | 1,260 |
| 9 (Asm. LiPetri) | 2,052 |
| 10 (Asm. Stern) | 2,713 |
| 11 (Asm. Jean-Pierre) | 164 |
| 12 (Asm. Raia) | <100 |
| 13 (Asm. Lavine) | 3,590 |
| 14 (Asm. McDonough) | 1,268 |
| 15 (Asm. Montesano) | 530 |
| 16 (Asm. D'Urso) | 2,857 |
| 17 (Asm. Mikulin) | 178 |
| 18 (Asm. Raynor) | 2,141 |
| 19 (Asm. Ra) | 304 |
| 20 (Asm. Miller) | 1,217 |
| 21 (Asm. Griffin) | 692 |
| 22 (Asm. Solages) | 118 |
| 23 (Asm. Pheffer Amato) | 703 |
| 24 (Asm. Weprin) | 1,116 |
| 25 (Asm. Rozic) | 946 |
| 26 (Asm. Braunstein) | 638 |
| 27 (Asm. Rosenthal) | 1,380 |
| 28 (Asm. Hevesi) | 651 |
| 29 (Asm. Hyndman) | 539 |
| 30 (Asm. Barnwell) | 2,146 |
| 31 (Asm. Titus) | <100 |
| 32 (Asm. Cook) | <100 |
| 33 (Asm. Vanel) | <100 |
| 34 (Asm. DenDekker) | 255 |
| 35 (Asm. Aubry) | <100 |
| 36 (Asm. Simotas) | 417 |
| 37 (Asm. Nolan) | <100 |
| 38 (Asm. Miller) | <100 |
| 39 (Asm. Cruz) | <100 |
| 40 (Asm. Kim) | <100 |
| 41 (Asm. Weinstein) | 1,904 |

| District | Clean Energy Jobs |
|-----------------------|-------------------|
| 42 (Asm. Bichotte) | 457 |
| 43 (Asm. Richardson) | 405 |
| 44 (Asm. Carroll) | 921 |
| 45 (Asm. Cymbrowitz) | 631 |
| 46 (Asm. Frontus) | 483 |
| 47 (Asm. Colton) | <100 |
| 48 (Asm. Eichenstein) | <100 |
| 49 (Asm. Abbate Jr.) | 257 |
| 50 (Asm. Lentol) | 1,275 |
| 51 (Asm. Ortiz) | 539 |
| 52 (Asm. Simon) | 1,326 |
| 53 (Asm. Davila) | 395 |
| 54 (Asm. Dilan) | 566 |
| 55 (Asm. Walker) | 126 |
| 56 (Asm. Wright) | <100 |
| 57 (Asm. Mosley) | <100 |
| 58 (Asm. Perry) | 303 |
| 59 (Asm. Williams) | <100 |
| 60 (Asm. Barron) | <100 |
| 61 (Asm. Fall) | 1,528 |
| 62 (Asm. Reilly) | 940 |
| 63 (Asm. Cusick) | <100 |
| 64 (Asm. Malliotakis) | <100 |
| 65 (Asm. Niou) | 6,957 |
| 66 (Asm. Glick) | 1,130 |
| 67 (Asm. Rosenthal) | 3,762 |
| 68 (Asm. Rodriguez) | 584 |
| 69 (Asm. O'Donnell) | <100 |
| 70 (Asm. Dickens) | 138 |
| 71 (Asm. Taylor) | 236 |
| 72 (Asm. De La Rosa) | <100 |
| 73 (Asm. Quart) | 8,951 |
| 74 (Asm. Epstein) | 771 |
| 75 (Asm. Gottfried) | 4,768 |
| 76 (Asm. Seawright) | <100 |
| 77 (Asm. Joyner) | 704 |
| 78 (Asm. Rivera) | 742 |
| 79 (Asm. Blake) | 230 |
| 80 (Asm. Fernandez) | 369 |
| 81 (Asm. Dinowitz) | 327 |
| 82 (Asm. Benedetto) | 189 |

| District | Clean Energy Jobs |
|-------------------------|-------------------|
| 83 (Asm. Heastie) | <100 |
| 84 (Asm. Arroyo) | 684 |
| 85 (Asm. Crespo) | 154 |
| 86 (Asm. Pichardo) | <100 |
| 87 (Asm. Reyes) | <100 |
| 88 (Asm. Paulin) | 2,665 |
| 89 (Asm. Pretlow) | 1,015 |
| 90 (Asm. Sayegh) | 479 |
| 91 (Asm. Otis) | 1,775 |
| 92 (Asm. Abinanti) | 2,176 |
| 93 (Asm. Buchwald) | 1,608 |
| 94 (Asm. Byrne) | 1,082 |
| 95 (Asm. Galef) | 417 |
| 96 (Asm. Zebrowski) | 2,639 |
| 97 (Asm. Jafee) | 311 |
| 98 (Asm. Brabenec) | 1,453 |
| 99 (Asm. Schmitt) | 1,383 |
| 100 (Asm. Gunther) | 662 |
| 101 (Asm. Miller) | 1,821 |
| 102 (Asm. Tague) | 1,449 |
| 103 (Asm. Cahill) | 1,446 |
| 104 (Asm. Jacobson) | 857 |
| 105 (Asm. Lalor) | 829 |
| 106 (Asm. Barrett) | 471 |
| 107 (Asm. Ashby) | 1,544 |
| 108 (Asm. McDonald III) | 1,657 |
| 109 (Asm. Fahy) | 1,183 |
| 110 (Asm. Steck) | 894 |
| 111 (Asm. Santabarbara) | 463 |
| 112 (Asm. Walsh) | 1,999 |
| 113 (Asm. Woerner) | 1,020 |
| 114 (Asm. Stec) | 901 |
| 115 (Asm. Jones) | 1,087 |
| 116 (Asm. Walczyk) | 794 |
| 117 (Asm. Blankenbush) | 725 |
| 118 (Asm. Smullen) | 356 |
| 119 (Asm. Buttenschon) | 171 |
| 120 (Asm. Barclay) | 817 |
| 121 (Asm. Salka) | 647 |
| 122 (Asm. Crouch) | 1,593 |
| 123 (Asm. Lupardo) | 266 |

CLEAN JOBS NEW YORK

STATE HOUSE DISTRICTS CONTINUED

| District | Clean Energy Jobs |
|-----------------------|-------------------|
| 124 (Asm. Friend) | 855 |
| 125 (Asm. Lifton) | 1,110 |
| 126 (Asm. Finch) | 1,073 |
| 127 (Asm. Stirpe) | 1,327 |
| 128 (Asm. Hunter) | 1,897 |
| 129 (Asm. Magnarelli) | 133 |
| 130 (Asm. Manktelow) | 1,520 |
| 131 (Asm. Kolb) | 1,491 |
| 132 (Asm. Palmesano) | 718 |

| District | Clean Energy Jobs |
|---------------------------|-------------------|
| 133 (Asm. Byrnes) | 1,285 |
| 134 (Asm. Lawrence) | 1,480 |
| 135 (Asm. Johns) | 267 |
| 136 (Asm. Romeo) | 750 |
| 137 (Asm. Gantt) | 1,328 |
| 138 (Asm. Bronson) | <100 |
| 139 (Asm. Hawley) | 616 |
| 140 (Asm. Schimminger) | 1,100 |
| 141 (Asm. Peoples-Stokes) | 2,222 |

| District | Clean Energy Jobs |
|----------------------|-------------------|
| 142 (Asm. Burke) | 1,222 |
| 143 (Asm. Wallace) | 1,719 |
| 144 (Asm. Norris) | 791 |
| 145 (Asm. Morinello) | 591 |
| 146 (Asm. McMahon) | 275 |
| 147 (Asm. DiPietro) | 749 |
| 148 (Asm. Giglio) | 688 |
| 149 (Asm. Ryan) | 137 |
| 150 (Asm. Goodell) | 942 |

ENDNOTES

- 1 Unless otherwise stated, all data is from the 2018 U.S. Energy & Employment Report (USEER) released in May 2018 by the National Association of State Energy Officials and the Energy Futures Initiative. Visit www.usenergyjobs.org to download USEER and see pages 15-17 for methodology questions. This fact sheet differs from previous reports released by E2 in New York as the methodology has been adjusted to more accurately count the number of clean energy workers in the state. For more questions regarding methodology, visit www.e2.org/cleanjobsamerica/FAQ.
- 2 County population data based on 2017 estimates from the U.S. Census Bureau accessible at <https://factfinder.census.gov>.



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.