

# 3 MILLION CLEAN ENERGY JOBS IN AMERICA<sup>1</sup>

To continue creating tens of thousands of jobs for Americans in every state:

- Congress must include in our tax code the Production Tax Credit (PTC) for wind, the Investment Tax Credit (ITC) for solar, and tax credits supporting other renewable technologies and energy efficiency

- The Trump administration must stand with the U.S. business community by remaining in international climate accords

- States should strengthen renewable energy and energy efficiency standards

- Cities and local governments should cut energy waste in large existing buildings and encourage more renewable energy projects

## ENERGY EFFICIENCY

# 2.2 million jobs

**7%**

reported job growth in energy efficiency jobs

**6** out of **10**

energy efficiency employees work in construction

**290K**

manufacturing workers

### TOP 10 STATES FOR ENERGY EFFICIENCY JOBS:

- |            |            |
|------------|------------|
| 1. CA 301k | 6. IL 84k  |
| 2. TX 147k | 7. NC 81k  |
| 3. NY 111k | 8. MA 80k  |
| 4. FL 109k | 9. OH 79k  |
| 5. MI 87k  | 10. VA 76k |

### WHAT DO ENERGY EFFICIENCY WORKERS DO?

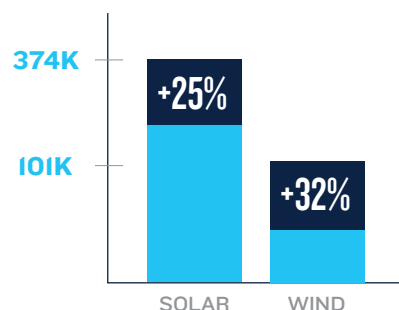
- Upgrade outdated heating, air conditioning and ventilation systems
- Upgrade outdated lighting systems with energy-saving LED lighting
- Manufacture and install ENERGY STAR-certified appliances, lighting, ceiling fans, commercial cooking equipment, refrigerators, residential boilers, clothes dryers, etc.
- Save money for businesses, homeowners, schools, states, municipalities, military

## SOLAR AND WIND

# 475,000 jobs

- Combined, solar (374k jobs) and wind (101k) are rapidly gaining on ALL fossil fuel electric power generation jobs from natural gas, coal, petroleum

- From 2015-2016, solar jobs grew 25 percent; wind jobs grew 32 percent



- 62 percent of added utility-scale electric capacity last year (16.3 GW) came from solar and wind

## CLEAN VEHICLES

# 259,000 jobs

- Hybrid EVs (112k)
- Plug-in hybrids (44k)
- EVs (42k)
- Natural gas vehicles (44k)
- Hydrogen & fuel cell vehicles (17k)

## OTHER CLEAN SECTORS

# 120,000 jobs

- Battery storage (48k)
- Ethanol/non-woody biomass incl. biodiesel (23k)
- Smart grid (20k)
- Micro-grid (15k)
- Low-impact hydro (9k)
- Geothermal (6k)



www.e2.org  
info@e2.org  
@e2org  
#CleanJobsAmerica

# IN RED AND BLUE STATES, CLEAN ENERGY WORKS

## A SAMPLING OF STATES

## NO. OF JOBS\*

	ENERGY EFFICIENCY	SOLAR	WIND
ME	8,084	770	1,234
PA*	62,431	4,670	2,467
OH*	78,764	8,350	819
MI*	87,987	5,898	4,559
IL*	83,987	5,325	8,321
TN*	50,451	5,085	142
CO*	29,756	8,027	7,124
CA	301,348	152,947	6,635

\*For more state data, please see these past E2 reports: Clean Jobs Pennsylvania, Clean Jobs Midwest, Clean Jobs Tennessee, Clean Jobs Colorado.

\*Does not include jobs in energy storage, smart grid or clean vehicles. Includes any job in energy efficiency, solar or wind in which workers spend at least a portion of their time.

## 40%

Amount of electricity Iowa will generate from wind by 2020<sup>2</sup>

## 16%

Amount of Texas' overall electric generating capacity that comes from wind. Texas has more wind-based electric generation capacity than any other state<sup>3</sup>

## No. 3

Rank of North Carolina among all states for installed solar capacity.<sup>4</sup> NC currently has more than 9,500 jobs in solar<sup>5</sup>

## AMERICANS OVERWHELMINGLY SUPPORT CLEAN ENERGY

**ACROSS POLITICAL SPECTRUM**, majorities support more clean energy

- 83% of conservative Republicans favor more solar farms<sup>6</sup>
- 73% of Americans prioritize alternative energy over oil, gas<sup>7</sup>
- 65% say wind, solar should be the more important priority for addressing our energy supply — not fossil fuels<sup>8</sup>

### WHY SUCH STRONG SUPPORT? GOOD JOBS.

- In 2016, one out of every 50 new jobs in U.S. was a solar job<sup>9</sup>
- Solar jobs growing 17x faster than all U.S. jobs<sup>10</sup>
- Median hourly wage for solar installers is \$26/hr<sup>11</sup>
- The fastest-growing job in America is a wind-turbine service technician<sup>12</sup>

## OUR MILITARY: A CLEAN ENERGY LEADER

**5X INCREASE** — By end of 2018, installed renewable energy capacity on DOD installations could quintuple to 2.1 GW.<sup>13</sup> This increases energy security, creates private-sector jobs in our military communities, and trains soldiers in clean energy technologies

“This is just the beginning of what we are going to be calling the next revolution in energy use by our national security establishment.”

— Vice Adm. Dennis McGinn, Former Assistant Secretary of Navy for Energy, Installations & Environment<sup>14</sup>

### GOOD JOBS FOR VETERANS<sup>15</sup>

Clean energy hires a greater percentage of veterans than most industries — including oil and gas



<sup>1</sup> Total includes clean energy and clean transportation jobs. All Page 1 data from: <https://energy.gov/downloads/2017-us-energy-and-employment-report>

<sup>2</sup> [https://www.energy.gov/sites/prod/files/WindVision\\_Report\\_final.pdf](https://www.energy.gov/sites/prod/files/WindVision_Report_final.pdf)

<sup>3</sup> <https://www.wsj.com/articles/which-state-is-a-big-renewable-energy-pioneer-texas-1472414098>

<sup>4</sup> <http://www.seia.org/state-solar-policy/north-carolina>

<sup>5</sup> <https://energy.gov/downloads/2017-us-energy-and-employment-report>

<sup>6</sup> <http://www.pewinternet.org/2016/10/04/public-opinion-on-renewables-and-other-energy-sources/>

<sup>7</sup> <http://www.gallup.com/poll/190268/prioritize-alternative-energy-oil-gas.aspx>

<sup>8</sup> [http://www.pewresearch.org/fact-tank/2017/01/23/two-thirds-of-americans-give-priority-to-](http://www.pewresearch.org/fact-tank/2017/01/23/two-thirds-of-americans-give-priority-to-developing-alternative-energy-over-fossil-fuels/)

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<sup>9</sup> <http://www.thesolarfoundation.org/national/>

<sup>10</sup> <http://www.thesolarfoundation.org/national/>

<sup>11</sup> <http://www.thesolarfoundation.org/national/>

<sup>12</sup> <https://www.bls.gov/news.release/pdf/ecopro.pdf>

<sup>13</sup> <http://www.pewtrusts.org/-/media/legacy/uploadedfiles/peg/publications/report/pewdodreport2013ks10020314pdf.pdf>

<sup>14</sup> <https://www.youtube.com/watch?v=4v3sLyNoeSs>

<sup>15</sup> <https://energy.gov/downloads/2017-us-energy-and-employment-report>

