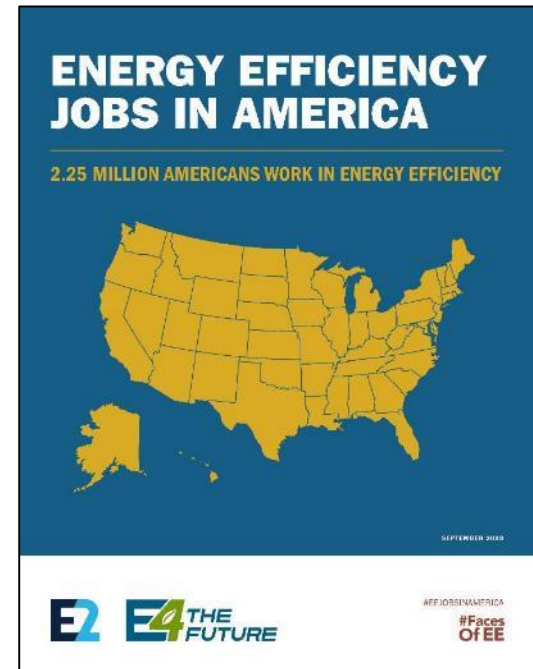




*Energy efficiency:
America's
Job-creation
powerhouse*



Telling the EE Jobs Story

Pat Stanton, Director of Policy
October 25, 2018

*EE industry = a distributed, diverse,
difficult to describe workforce.*



**I work in finance,
overseeing
funds for the
program.**

Carolyn Peoples, Mobile
Community Action, Inc.,
Chickasaw, AL

Energy efficiency:
America's
Job-creation
powerhouse



**I develop
software [for]
weatherization
assistance
programs.**

Jason McDaniel,
CLEAResult, Gallatin, TN

Energy efficiency:
America's
Job-creation
powerhouse



**I manage community
education programs
and advocate for
EE and healthy
homes.**

Alison Steele,
Conservation Consultants Inc.,
Pittsburgh, PA

Energy efficiency:
America's
Job-creation
powerhouse



Infographics make complex data more accessible

ENERGY EFFICIENCY JOBS IN AMERICA¹

2.25 MILLION AMERICANS WORK IN ENERGY EFFICIENCY



More than 1 out of every 6
US construction workers spend
50% or more of their time on
Energy Efficiency (18%)

In Michigan,
EE Jobs
Comprise:

16%

of All
Construction Jobs

20%

of All
Energy Sector Jobs

Telling the EE Jobs Story

#1: Make information accessible and engaging

#2: Respond to specific questions by digging deeper and providing customized answers

National Summary = 4 Pages

ENERGY EFFICIENCY JOBS IN AMERICA[®] 2.25 MILLION AMERICANS WORK IN ENERGY EFFICIENCY

ENERGY EFFICIENCY—AMERICA'S JOB POWERHOUSE

Across every time zone, state, county, and even zip code, energy efficiency solutions are creating new economic opportunities. Whether it's new efficient technologies spawning brand-new companies or established businesses expanding, America's job growth is being powered by energy efficiency.

Energy efficiency added the most new jobs in 2017 of the entire energy sector. Its workers now outnumber elementary and middle school teachers and are nearly double those in U.S. law enforcement. In fact, there are now as many energy efficiency workers as there are waitstaff in U.S. bars and restaurants.

A BIGGER PICTURE

This report focuses solely on the energy sector of the economy. Jobs in retail trade, vehicle efficiency-related work, and the 4.2 million jobs related to efficient manufacturing processes are excluded from these numbers.

IN PERSPECTIVE

No. 1 Energy efficiency is the fastest-growing jobs sector in energy, earning the title of the new-energy industry's job growth king in 2017.

11% of energy efficiency is held by women, up from 10% in 2016.

315,578 manufacturing jobs in energy efficiency, an increase of nearly 10% in 2017 alone.

2X Energy efficiency employs twice as many workers in the U.S. as all 5 utility sectors combined.

PRESENTED BY



AMERICAN OVERSIGHT
AMERICAN OVERSIGHT
AMERICAN OVERSIGHT

U.S. ENERGY
LAW CENTER

TOP 10 STATES FOR ENERGY EFFICIENCY JOBS

RANK	STATE	TOTAL	ENERGY SECTOR	MANUFACTURING	RESIDENTIAL	OTHER
1	California	228,455	89,011	189,228	28,927	39,589
2	Illinois	154,426	56,203	63,214	29,115	14,154
3	New York	111,428	36,189	62,000	13,996	12,999
4	Florida	112,629	20,157	66,814	21,767	8,289
5	Arizona	88,976	12,418	78,819	7,449	11,782
6	Massachusetts	87,506	13,637	58,558	20,611	8,501
7	Michigan	87,002	14,009	41,292	18,043	18,558
8	North Carolina	86,059	12,228	34,706	18,881	11,244
9	Ohio	77,048	16,487	31,244	19,776	4,859
10	Virginia	76,921	13,504	36,282	20,568	10,223

ENERGY EFFICIENCY NOW EMPLOYS MORE WORKERS THAN THE FOSSIL FUEL INDUSTRY IN 40 STATES AND THE DISTRICT OF COLUMBIA



* SOURCE: ENERGY EFFICIENCY JOBS IN AMERICA, 2017

JOBS IN AMERICA

#EEJOBSINAMERICA

Thousands of jobs for Americans across all states and counties.

Key policies (which historically enjoy robust bipartisan support) include:

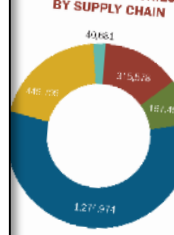
- Federal incentives to create jobs and analyze and build green infrastructure
- Residential building tax credits
- Energy Star and Weatherization Assistance Programs
- Quality ENERGY STAR brand

Energy efficiency plays a vital role in driving America's energy economy.

Standards with consistent funding, such as the Energy Efficiency and Conservation Block Grants (EECBGs), are essential. PACE programs, which allow for revenue protection, decoupling performance rates and payment of energy efficiency as a service.

JOBS—WHERE ARE THEY?

ACROSS INDUSTRIES BY SUPPLY CHAIN



Manufacturing - 14%
Sales & Distribution - 7%
Construction & Repairs - 57%
Professional Services - 20%
Other - 2%

ACROSS TECHNOLOGIES BY SECTOR



ENERGY STAR Appliances & Efficient Lighting - 28%
HVAC - 49%
Building Materials & Insulation - 16%
Other - 13%

AMERICA

#EEJOBSINAMERICA

ENERGY = MORE CONSTRUCTION JOBS



80% of energy efficiency construction businesses say employees spend a majority of time on energy efficiency—an increase from last year (74%).

Energy efficiency businesses are growing.

9% growth in jobs in 2018.

and the job growth is expected across all major industries.

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96,051 JOBS

(Heating Ventilation & Air Conditioning)

5.6% growth rate

Heating, Ventilation & Air Conditioning of commercial buildings is growing faster than standard efficiency, includes showup a heating and cooling technologies.

More than a third of America's legal professions, including lawyers, court clerks, judges, and paralegals.

More than all athletes, coaches, umpires, and referees, scouts, and other sports officials combined.

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289,622 JOBS

Vital Energy Efficiency Services

208,000 jobs in construction and manufacturing.

Includes energy audits, building certifications, and software services.

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7

OHIO

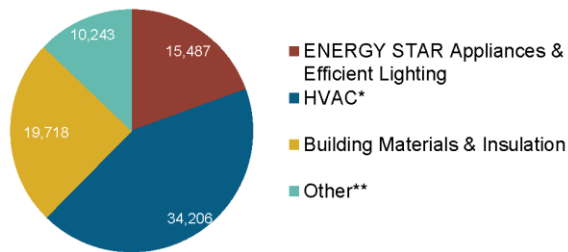
Energy Efficiency Jobs in America

79,653
Total Jobs

What are EE Jobs?

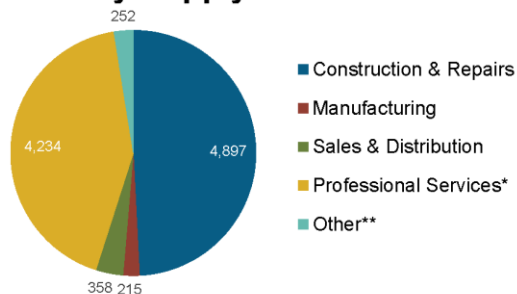
Delivery of goods and services that lower energy use by improving technologies, appliances, buildings, and energy systems.

Jobs by Sector



*Heating, Ventilation, Air Conditioning of higher than standard efficiency/renewable heating & cooling
**Other such as energy audits, building certifications, and software services

Firms by Supply Chain



*Professional services includes finance/accounting, architecture, engineering, R&D, etc.
**Other such as maintenance, and business and nonprofit organizations

In Ohio,
EE Jobs
Comprise:

20%
of All
Construction Jobs

24%
of All
Energy Sector Jobs

10%
of Ohio residents
employed in EE are
Veterans

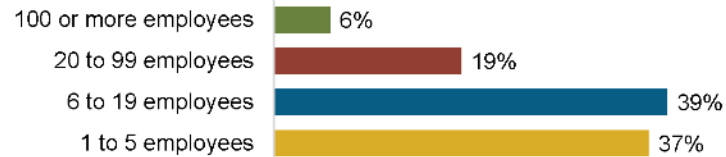
Presented by:



Good for the Economy.
Good for the Environment.

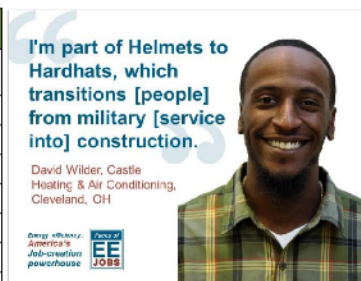
9,957 Energy Efficiency Businesses

Firm Size



Where are EE Jobs?

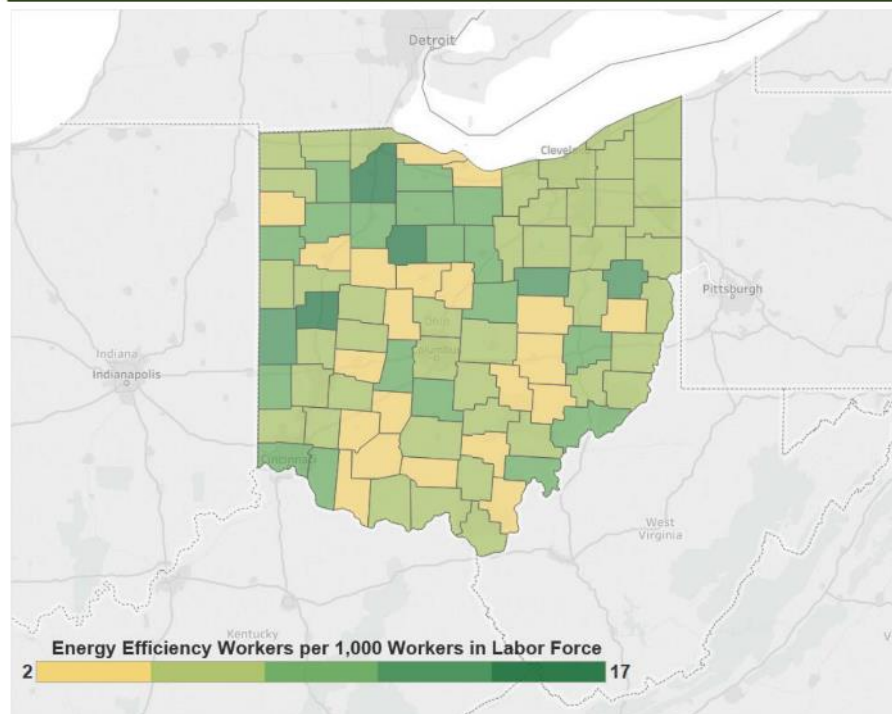
Congressional		Metropolitan Areas	
District	Jobs	Area	Jobs
1	8,539	Akron	5,566
2	2,986	Canton-Massillon	2,673
3	7,487	Cincinnati-Middletown	11,442
4	8,070	Cleveland-Elyria-Mentor	15,866
5	5,723	Columbus	12,747
6	5,449	Dayton	5,692
7	6,524	Huntington-Ashland	212
8	3,575	Lima	750
9	3,449	Mansfield	1,042
10	4,059	Parkersburg-Marietta-Vienna	457
11	9,711	Sandusky	468
12	2,620	Springfield	759
13	4,292	Toledo	4,974
14	3,990	Weirton-Steubenville	274
15	1,750	Wheeling	355
16	1,430	Youngstown-Warren-Boardman	3,036
		Rural	13,340



State Upper House			
District	Jobs	District	Jobs
1	3,171	18	4,762
2	4,085	19	1,883
3	6,084	20	2,048
4	2,639	21	4,805
5	3,793	22	3,439
6	1,803	23	2,434
7	4,698	24	2,809
8	2,206	25	222
9	828	26	1,351
10	2,449	27	2,200
11	1,297	28	1,697
12	1,571	29	1,909
13	2,483	30	1,705
14	1,563	31	1,476
15	719	32	1,705
16	1,885	33	2,354
17	1,581		

State Lower House					
District	Jobs	District	Jobs	District	Jobs
1	997	39	1,883	77	533
2	1,387	40	1,288	78	973
3	1,407	41	1,137	79	426
4	897	42	409	80	667
5	941	43	391	81	773
6	3,633	44	1,732	82	462
7	785	45	284	83	1,021
8	639	46	773	84	861
9	506	47	631	85	178
10	2,664	48	1,065	86	337
11	142	49	480	87	516
12	-	50	142	88	595
13	471	51	817	89	648
14	657	52	667	90	595
15	80	53	115	91	613
16	915	54	737	92	213
17	3,392	55	1,176	93	417
18	861	56	355	94	681
19	1,822	57	690	95	659
20	657	58	1,767	96	444
21	2,347	59	417	97	275
22	71	60	1,654	98	515
23	187	61	293	99	444
24	140	62	266		
25	-	63	746		
26	-	64	293		
27	3,695	65	480		
28	1,599	66	488		
29	1,220	67	1,261		
30	249	68	568		
31	588	69	258		
32	133	70	160		
33	107	71	817		
34	2,182	72	668		
35	719	73	675		
36	1,156	74	560		
37	1,286	75	364		
38	1,083	76	684		

Energy Efficiency Jobs by County



E4TheFuture is dedicated to bringing clean, efficient energy home for every American and promotes energy solutions to advance climate protection and economic fairness. Visit www.E4TheFuture.org



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. Visit www.e2.org



BW Research Partnership is a full-service, economic and workforce research consulting firm with offices in Carlsbad, California and Wrentham, Massachusetts. It is the nation's leading provider of accurate, comprehensive energy and clean energy research studies. Visit www.bwresearch.com

Data Source: Unless otherwise stated, all data are from the 2018 U.S. Energy and Employment Report, May 2018, by NASEO and EFI (see pages 15-17 for methodology details). This methodology -- adopted by the U.S. Dept. of Energy for its 2017 U.S. Energy and Employment Report, approved by the Office of Management and Budget and grounded on data collected by the Bureau of Labor Statistics -- provides the broadly accepted best accounting of all U.S. energy workers.

Faces of EE – Social Media

“It stimulates [our]
local, regional
& national
economy.”

Derrick Blue,
Coastal Bay Properties,
Plant City, FL

Energy efficiency:
America's
Job-creation
powerhouse




“I manage
commercial &
industrial EE and
green building
programs.”

Erin Zayko, Lockheed
Martin Energy, San
Antonio, TX


Energy efficiency:
America's
Job-creation
powerhouse



Faces of EE Printable Collateral




SUPPORT YOUR LOCAL ENERGY EFFICIENCY INDUSTRY




I'm part of Helmets to Hardhats, which transitions [people] from military [service into] construction.

David Wilcox, Castle Heating & Air Conditioning, Cleveland, OH



I track efficiency regulations that impact air conditioning.

Jennifer Butsch, Emerson, Piqua, OH



Ohio's energy efficiency industry is thriving. Let's keep it that way.

Nearly 80,000 people work in Ohio's growing energy-efficiency sector. Energy efficiency jobs:

- are woven throughout Ohio's economy, from manufacturing to professional services to engineering
- include a range of professions; forty-three are shown here

From design and construction to weatherization work, Ohio's energy efficiency workforce matters.

Energy efficiency improves quality of life. It:

- creates jobs
- grows the economy
- saves Ohioans money on their energy bills, helping balance family budgets

Please support policies and programs that will help keep Ohio's energy efficiency workforce strong.

Faces of EE is an educational initiative led by E4TheFuture, a nonprofit organization dedicated to bringing clean energy home for all Americans.

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Introducing a few of the ~80,000 Ohio energy efficiency pros

@FacesOfEE

James Lewis, Honeywell Smart Grid Solutions, Cincinnati, OH



Greg Smith, Miami Valley CAP, Dayton, OH



Greg Phares, Sheet Metal Workers Local 33 Training Center, North Olmsted, OH



Aaron Raber, Spray Foam Solutions, Inc., Woodstock, OH



I [help] our sales team deliver value to customers [with] air sealing & insulation.

Adrienne Green, Owens Corning, Toledo, OH



Tom DeHouan, Corp. for Ohio Appalachian Development, Hubert, OH



Leonard Javet, Cleveland Housing Network, North Olmsted, OH



Joyce B. Cooper, Corporation for Ohio Appalachian Development, Chillicothe, OH



Don Wicks, OHN Housing Partners, Cleveland, OH



I have been an instructor at [my] facility for 12 years.

Paul Zubo, Sheet Metal Workers Local 33 Training Center, Brunswick Hills, OH



Stephane Green, Miami Valley CAP, Dayton, OH



Jerome Emaline, Cleveland House Network, Blythe, OH



Jack Laverdy, Columbus Gas of Ohio, Columbus, OH



W. Kim von Amack, Honeywell Smart Energy, Dublin, OH



Kevin Leucome, Franklin Energy, Cincinnati, OH



Adrian Andrews, Columbus Gas of Ohio, Lewisville, OH



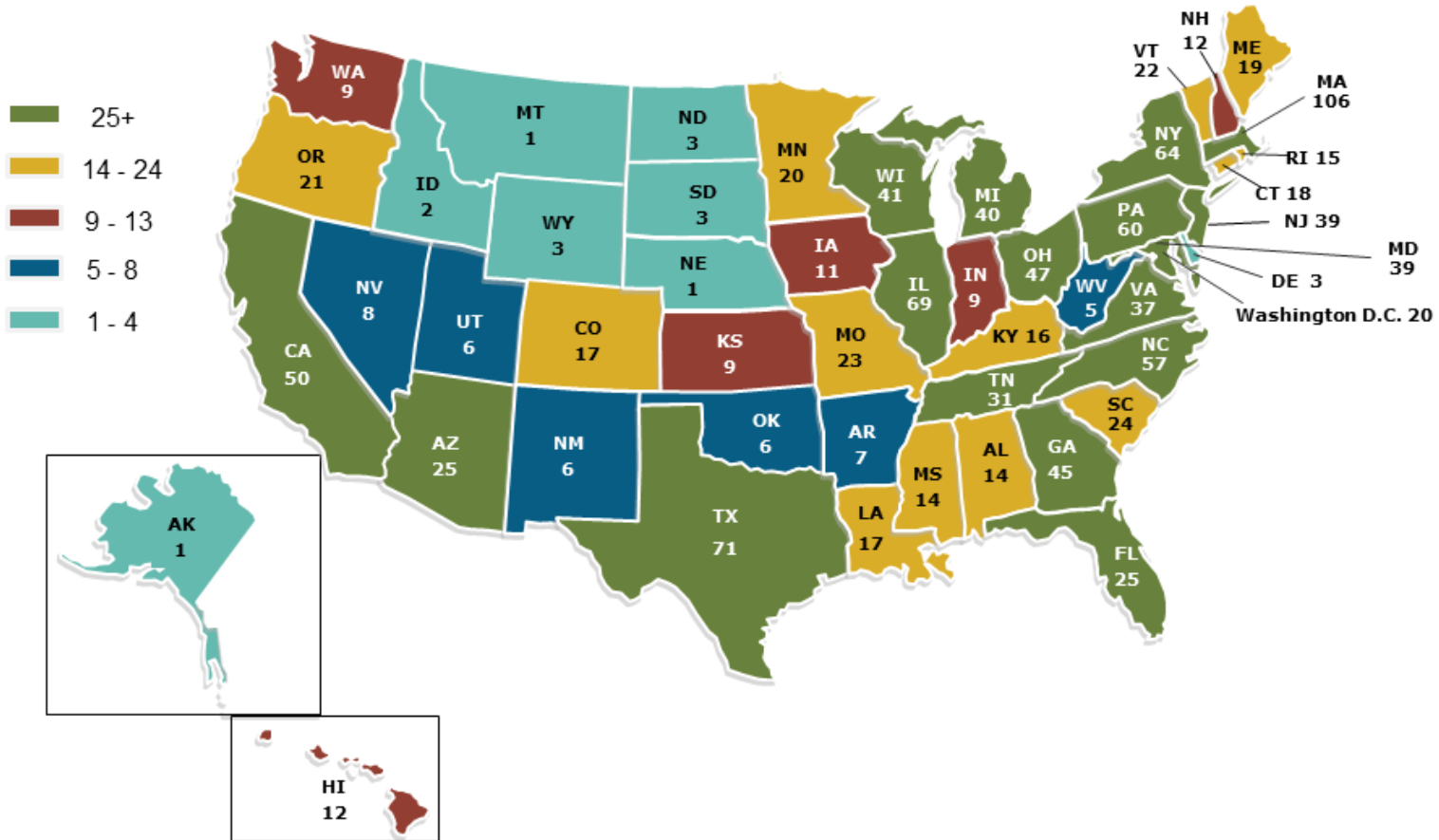
Al Rediano, Acuda Prograde Systems, Cuyahoga Falls, OH



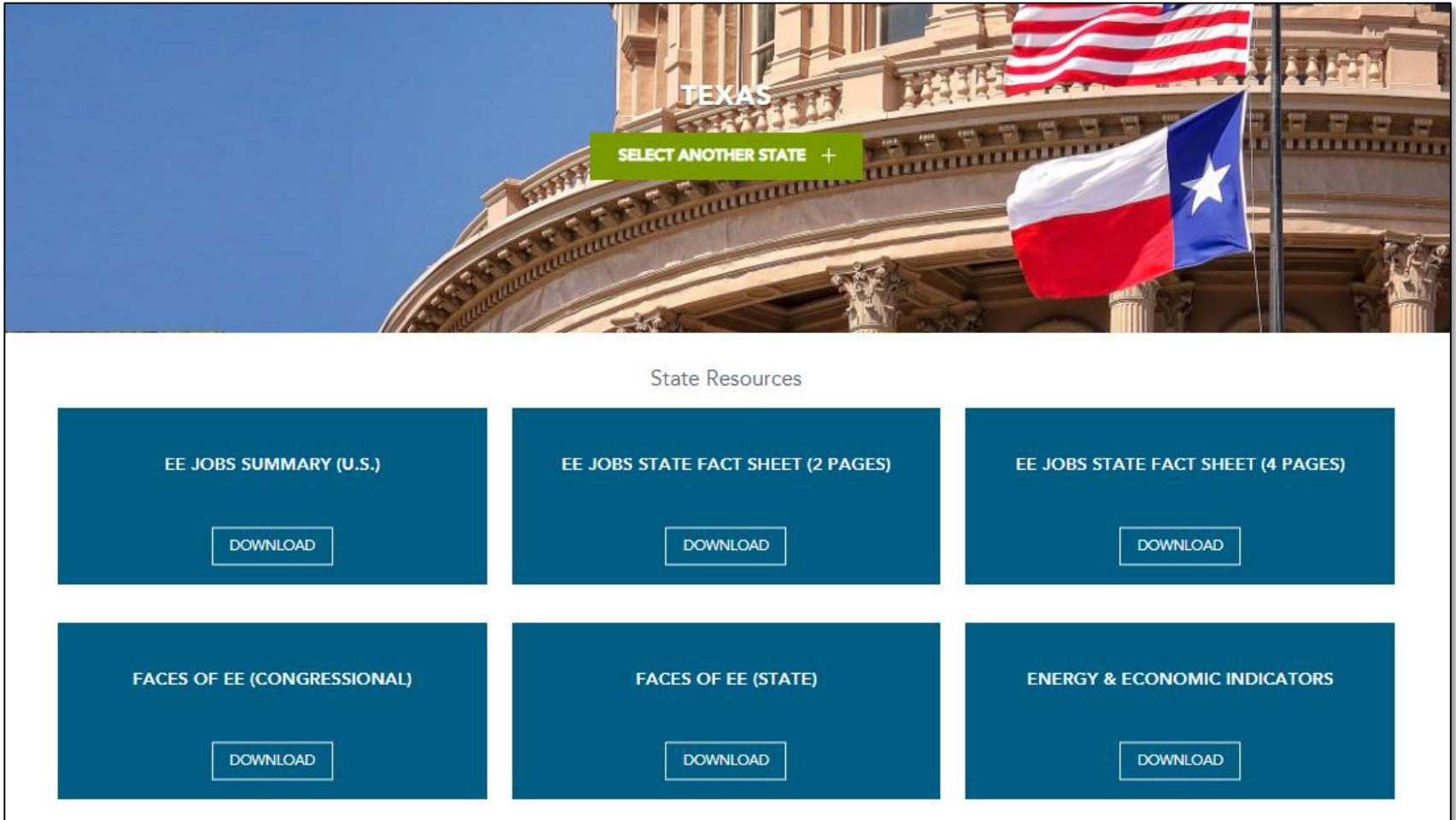
Todd Alekashy, Sheet Metal Workers Local 33 Training Center, Cleveland, OH



Faces of EE
~1,200+ Total Participants



State Resources E4TheFuture.org



The screenshot shows the 'State Resources' section of the E4TheFuture.org website. At the top, there is a header image of the Texas State Capitol building with the Texas state flag and the U.S. flag. Overlaid on the image is the word 'TEXAS' and a green button that says 'SELECT ANOTHER STATE +'. Below the image, the text 'State Resources' is centered. There are six blue rectangular buttons arranged in a 2x3 grid, each with a title and a 'DOWNLOAD' button.

State Resources

EE JOBS SUMMARY (U.S.) DOWNLOAD	EE JOBS STATE FACT SHEET (2 PAGES) DOWNLOAD	EE JOBS STATE FACT SHEET (4 PAGES) DOWNLOAD
FACES OF EE (CONGRESSIONAL) DOWNLOAD	FACES OF EE (STATE) DOWNLOAD	ENERGY & ECONOMIC INDICATORS DOWNLOAD

Questions? Want more details?



Contacts and Resources



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Director of Policy
(508) 740-2836
pstanton@e4thefuture.org



Audrey Bragg
Senior Policy Analyst
(970) 580-4556
abragg@e4thefuture.org

- *Energy Efficiency Jobs in America:* <http://bit.ly/2NhMit>
- *Faces of EE:* www.E4TheFuture.org/Faces-of-EE
- *#EEDay2018:* <http://energyefficiencyday.org>
- *Access Resources:* <http://bit.ly/2QN5loH>