

Good for the Economy.
Good for the Environment.

Clean Jobs Midwest

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What is E2?

Good for the Economy. Good for the Environment.

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

Good for the Economy.
Good for the Environment.



What is E2?

RESEARCH & REPORTS

CLEAN JOBS MIDWEST

MIDWEST STATS STATE STATS WORKER PROFILES UPDATES RESOURCES ABOUT



Mapping Midwest Clean Energy Jobs

Learn more about clean energy employment in your state

MIDWEST STATS

COMMUNICATIONS

CLEAN CARS STANDARDS HELPED...

CREATE AMERICAN JOBS

LEARN MORE



THE HILL

Innovation leaders to Congress: Don't kill our future with cuts to research programs



POWERSOURCE

Clean energy jobs on the rise in Allegheny County

September 6, 2017 1:20 PM



Wendy Skibo, Owner, President and CEO of Hockaday Mechanical Services, Inc., gives a tour of their operations at their Metropolitan Street facility Wednesday.

By Daniel Moore / Pittsburgh Post-Gazette

The Wichita Eagle

Kansas ranks fourth in Midwest for new 'clean energy' jobs

Kansas added 2,100 clean energy jobs between 2011 and 2016, placing it fourth among 12 states according to a Clean Jobs Midwest report Thursday from the Environmental Enterprise, an E2 and the Clean Energy Trust, which said Kansas' "one-stop-shop" 1.5¢ solar rebate...

NEW YORK

What Quitting the Paris Climate Accord Will Do to the U.S., and the Planet

On Thursday, President Trump announced that the United States will pull out of the Paris Agreement on climate change. Judging from Trump's speech in the White House Rose Garden, we based this decision on false information, false logic, and a false understanding of what the agreement was supposed to accomplish. According to a senior White House official, the fact that it also disappointed European allies was "a secondary benefit."

ADVOCACY



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What I'll Cover

- Where the data comes from
- What is a Clean Energy Job?
- Where in the Midwest are the Clean Energy Jobs?
- Other important data about clean energy jobs
- The impact of the IRA

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734,753
CLEAN ENERGY JOBS IN THE MIDWEST

LEARN MORE AT CLEANJOBSMIDWEST.COM

**2023 CLEAN JOBS
MIDWEST**

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Data Source: United States Energy & Employment Report

2 main data sources:

- BLS Quarterly Census of Employment and Wages
 - Primary source for the QCEW is administrative data from state and unemployment insurance programs.
- USEER Survey

Taken together, the BLS and survey data provide the most comprehensive calculation of energy-related employment available.

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Tracking 5 Sectors



ENERGY EFFICIENCY

Manufacturing and installation of energy-efficient appliances, materials, and technologies



RENEWABLE ENERGY GENERATION

Wind, solar, geothermal, bioenergy, and low-impact hydro



CLEAN TRANSPORTATION

Electric, hybrid-electric, natural gas fuel cell, and hydrogen vehicles



GRID & STORAGE

Battery storage, grid modernization, and smart-grid technology

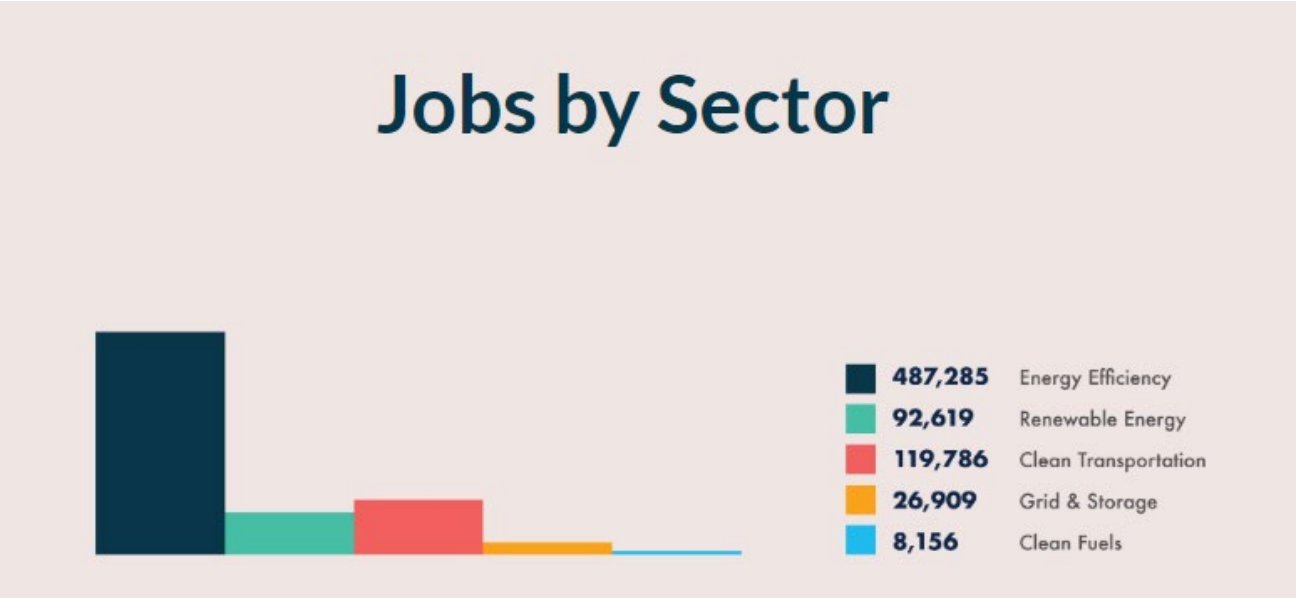


CLEAN FUELS

Advanced, low-carbon fuels made from agricultural waste, used cooking oil, algae, etc.

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Energy Efficiency

- 100,087 Energy STAR & Efficient Lighting
- 111,388 Traditional HVAC
- 117,453 High Efficiency HVAC & Renewable H&C
- 103,293 Advanced Materials
- 55,075 Other



Grid & Storage

- 14,979 Clean Storage
- 4,520 Smart Grid
- 3,529 Micro Grid
- 3,893 Other Grid Modernization



Clean Fuels

- 5,036 Other Ethanol/Non-Woody Biomass
- 3,129 Other Biofuels



Clean Transportation

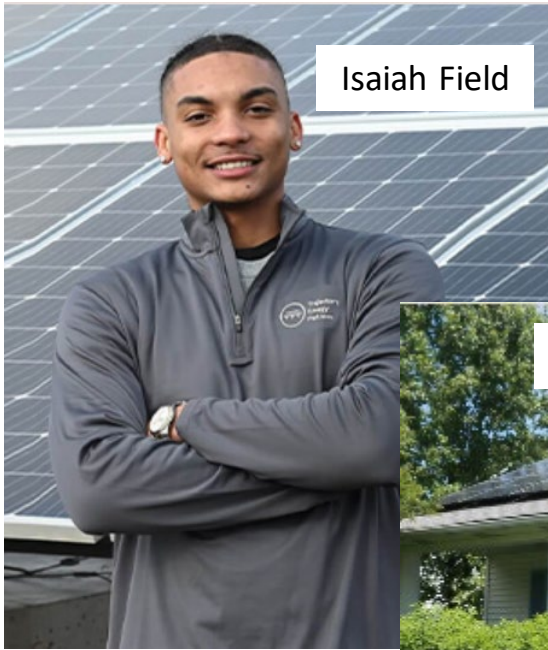
- 54,198 Hybrid Electric Vehicles
- 25,031 Plug-In Hybrid Vehicles
- 34,251 Electric Vehicles
- 6,304 Hydrogen and Fuel-Cell Vehicles



Renewable Energy Generation

- 42,345 Solar
- 39,030 Wind
- 1,418 Geothermal
- 7,777 Bioenergy/CHP
- 2,058 Low-Impact Hydroelectric

What is a Clean Energy Job?



Isaiah Field



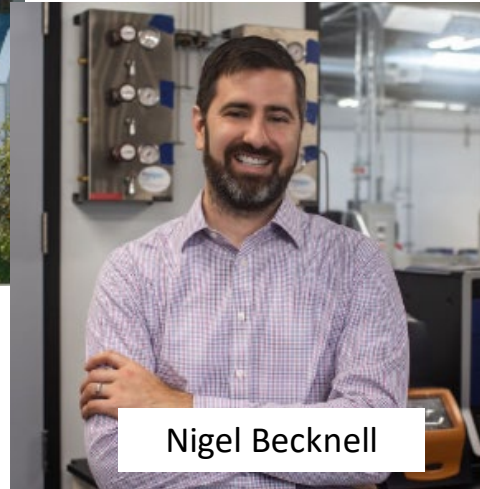
Austin George



Emma Hayali



Abraham LaMark



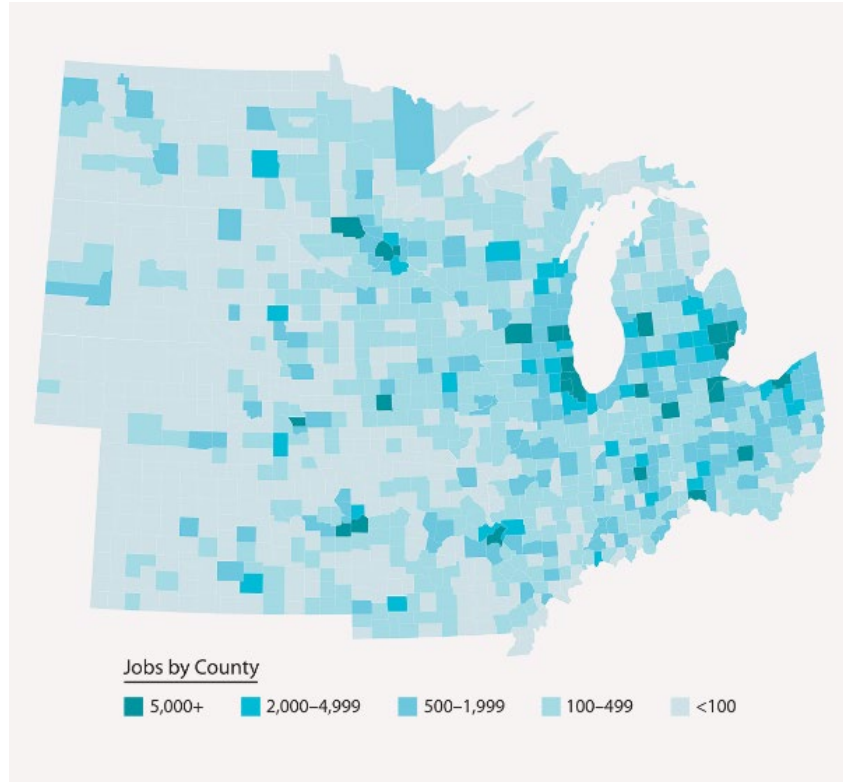
Nigel Becknell

Read more stories from the field at CleanJobsMidwest.com

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Clean Energy Jobs By State



State	Total Clean Energy Jobs
Michigan	123,983
Illinois	123,799
Ohio	114,395
Indiana	88,412
Wisconsin	71,489
Minnesota	59,708
Missouri	56,503
Iowa	31,288
Kansas	24,823
Nebraska	19,483
South Dakota	12,003
North Dakota	8,867



Other Key Findings

- 3 percent increase from 2021, growing 50% faster than the region's overall economy.
- 11.2% growth in clean vehicle sector
- Big cities like Chicago (85,415), Detroit (66,586), and Minneapolis (38,362) were some of the largest hubs. More than one in five — or more than 147,000 — jobs are in rural areas.
- 70 percent of the state's clean energy businesses employ fewer than 20 individuals



CLEAN JOBS, BETTER JOBS

An examination of clean energy job wages and benefits



	2019 Median Hourly Wages ^a	% Above or Below the National Median
U.S. TOTAL	\$19.14	-
CLEAN ENERGY INDUSTRIES OVERALL	\$23.89	25%
Renewable Energy Generation*	\$23.44	22%
Solar	\$24.48	28%
Wind	\$25.95	36%
Energy Efficiency	\$24.44	28%
ENERGY STAR Appliances	\$24.63	29%
Renewable Heating & Cooling	\$24.91	30%
Efficient Lighting	\$24.21	26%
Traditional & High-Efficiency HVAC	\$24.43	28%
Grid Modernization & Storage	\$25.07	31%
Grid Modernization	\$25.40	33%
Storage	\$24.82	30%
Clean Fuels (Advanced Biofuels)	\$19.55	2%
Clean Vehicles	\$22.20	16%

The IRA is Changing the Game



Tracking the impact of the IRA

Since IRA Passed

Announcements

251 New Projects

Where

40 States

Investing

\$ 108,697,700,000

Creating

90,998 Jobs

\$106.4 BILLION in total private capital investments
+ **\$11.3 BILLION** in annual investments during the operational life of projects

\$110.5 BILLION in labor income during construction phase
+ **\$8.4 BILLION** in labor income annually during the operational life of projects

\$155.5 BILLION added to U.S. GDP during construction phase
+ **\$13.1 BILLION** added to U.S. GDP annually during the operational life of projects

\$32.5 BILLION in tax revenue generated during construction phase
+ **\$2.9 BILLION** in tax revenue generated annually during the operational life of projects

303,500 JOBS each year for 5 years during construction phase
+ **99,600 JOBS** supported annually during the operational life of projects

Key Takeaways

- More than four times as many Midwesterners worked in clean energy than the number of lawyers, web developers, and real estate agents in the region combined.
- Clean energy jobs are poised for growth like never before.



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