

Clean Energy Spells J-O-B-S

Alex Thompson, Communications Associate • Nov. 15, 2023

When you think about "clean energy," what comes to mind? Most of us will think of solar arrays and wind farms. Maybe it conjures up images of electric vehicles whirring down the highway. We should also think about transmission lines and battery storage. Though these industries are less top-of-mind, they are integral to delivering the clean energy that is in great demand while keeping the lights on 24/7/365. But, something is still missing from this picture. What's the glue that holds it all together? **Workers.** The people who work to make it all happen. There's a lot to unpack - and much to be excited about - concerning clean energy job growth. So let's get to it.

What exactly do we mean when we say "clean energy" jobs? They are most commonly defined as any occupation that falls under these sectors:

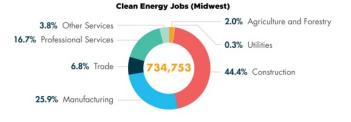


Current Clean Energy Job Trends

In the race for clean energy, energy efficiency takes home the "Most Clean Jobs" award, but there are some exciting trends in the other sectors. According to the latest <u>Clean Jobs Midwest report</u>, renewable energy continues to expand with solar leading the sector at 6% job growth across the region. And although they currently represent a smaller piece of the clean energy pie, emerging technologies in battery storage and transmission are expanding even faster at 7% and 12%, respectively.

With over 25,000 clean energy and transportation jobs added in the Midwest, the clean energy industry grew significantly faster than the region's overall economy. Leading the charge is Michigan, which added 5,000 new jobs and now sits atop the Midwest with nearly 124,000 total clean energy jobs. Illinois is right at their heels, though, with less than 200 clean energy jobs separating the two states. Considering renewable energy jobs exclusively, the tables turn and Illinois leads with 18,728 followed by Michigan with 12,202 jobs in the sector. Illinois also leads the Midwest with 5,167 jobs in the Grid and Storage sector.

According to the Bureau of Labor Statistics, wind turbine technicians are still the number one fastest growing occupation in the nation. Solar installers also rank high with a 22 percent growth rate expected in 2022-2032. But in addition to these obvious jobs, there are also construction workers and manufacturers - not just for the big



pieces we can see, but the roughly 8,000 parts that go into a turbine, for example; as well as transportation, engineers, accountants, operations people, banking, and legal services jobs to name a few.

Looking Ahead: The Inflation Reduction Act

While 2022 was a good year for clean energy jobs, what about the future? Thanks to the Inflation Reduction Act (IRA), it looks brighter than ever. The 2022 Clean Economy Works report shows the IRA is a clean energy jobs powerhouse. By providing tax credits and incentives, the IRA has already enabled 210 major clean energy projects that are expected to create over 400,000 jobs nationwide. Those effects are already being felt in the Midwest. Solar manufacturer Heliene announced that it will expand its US operations by investing approximately \$145 million into a new solar panel and cell factory in the Twin Cities area, in addition to the facility it already operates in Mountain Iron (population 2,859) in the northern part of the state. In Thomas Township, Michigan (population 11,931), Hemlock Semiconductor announced a \$375 million expansion of its current operations that will add 170 jobs and generate substantial local economic growth.

Expected Jobs Created by IRA (National)

Sector	Total Construction Phase Jobs (Annual jobs for 5 years)	Annual Operations Phase Jobs (Annual jobs for lifetime of projects)
Solar	35,054	12,139
Wind	7,046	5,933
EV	185,673	54,500
Electric T&D	5,565	2,035
Battery Storage	48,795	13,633
Clean Fuels	21,322	11,342
Total	303,455	99,584

Rural Economies Benefit from Clean Energy Jobs, too

One of the best things about a future where clean energy jobs are growing is the positive economic impact they provide - especially for rural communities. Not all clean energy jobs are found in cities. Across the Midwest, more than 1 in 5 clean energy jobs are in rural areas. That's more than 147,000 jobs. In addition to all of those jobs, clean energy projects can bring millions of tax dollars that go directly to counties, local townships, and school districts. One Michigan school district used its wind farm revenue to pay for new buses, additional classrooms and remodeling the stage without increasing taxes for local residents. The clear benefits of renewable projects present a win-win solution for communities and

developers.

If we look at clean energy jobs as an indicator of the clean energy transition, there is a lot to be optimistic about. With billions of dollars of investment funneling into clean energy, that translates to a tremendous amount of jobs and economic development for communities that host them. Now, the focus shifts to permitting and siting these new projects. Michigan's Legislature recently passed a landmark package of bills that will streamline the permitting of wind, solar, and energy storage projects in their state. Minnesota also passed permitting reform this year. In both cases, the state legislatures opened up pathways for local communities to reap the benefits of clean energy projects.

More clean energy projects mean more jobs. And, more jobs? Well, that's better for everyone.