

Clean Energy is Powering the U.S.

Alex Thompson, Communications Associate • Mar. 20, 2024

The United States made historic strides in the clean energy sector last year. The Business Council for Sustainable Energy (BCSE) and Bloomberg New Energy Finance's <u>Sustainable Energy in America 2024</u> <u>Factbook</u> highlights a record-breaking year. In 2023, renewables were responsible for 23 percent of the country's total power generation, most of which came from utility-scale wind and solar projects. Meanwhile, energy storage continues to grow at a blistering pace, albeit at different scales across the country. As more investment flows into the industry, we've already seen the beginnings of what will be another year of significant growth.

Solar and storage are the rising stars in the energy sector. According to American Clean Power's <u>annual</u> <u>report</u>, nearly 50% more solar capacity came online in 2023 than in 2022. What's driving the growth? Thanks to policies such as the Inflation Reduction Act (IRA), clean energy saw a record-shattering \$303.3 billion in financing; the BCSE factbook lists it as a 60 percent increase compared to 2022. Energy storage also had a big year. Around 7.5 GW of battery storage was installed across the country in 2023. It was a whopping 86 percent increase in cumulative storage capacity - nearly doubling the nation's entire capacity in a single year.

Beyond new capacity installations, new investments continue to spur growth in clean energy manufacturing. As a result of the IRA, 104 new clean energy manufacturing facilities have been announced, representing \$123 billion of investment. Michigan leads the Midwest in the clean energy manufacturing sector with \$10.9 billion of new investment announced in 2023.

Solar and storage are only part of the equation, though. The report repeatedly mentions how transmission-related issues are holding the industry back. New transmission can maximize the value of low-cost, renewable energy. Across the seven Independent System Operators (ISOs) in the U.S., there are over 1,100 GW of projects waiting in the "queue" as they undergo interconnection studies. AES's Interconnection Scorecard ranks the Midwest Independent System Operator (MISO) at a C- for the efficiency of its generator interconnection process. But, it's not all bad news. MISO's Long Range Transmission Planning (LRTP) is an important step in ensuring the reliability of our energy grid. The four-stage plan that to ease congestion and open corridors for projects stuck in the queue to come online. Earlier this month, MISO announced the second stage of the plan, known as Tranche 2. It may not be a silver bullet, but it's a step in the right direction. There's a clear need to shorten the wait time in the interconnection queue, which is why CGA is working with a variety of stakeholders in MISO's footprint to identify clear action steps toward efficient, cost-effective reforms.

The last ten years have been nothing short of transformative for renewables. In 2014, there were 70,000 MW of online solar, storage, and wind energy in the United States. Today, that number has nearly quadrupled, growing to 264,000 MW (over 50,000 MW comes from <u>CGA's nine-state footprint</u>). Clean energy has solidified its place in electricity generation by pouring billions of dollars into the U.S. economy and providing clean, affordable, reliable energy for consumers and businesses. The future is bright, and it's being powered by renewable energy.

Other Resources:

Energy Storage Blog

Transmission Factsheet

Solar Factsheets