

COVID-19 IMPACTS ON CLEAN ENERGY JOBS & WORKERS

Your attention to protection of public health, our communities and workers has been an essential top priority. While we hope the entire economy is able to make a swift recovery, we wanted to highlight specific damage to the clean energy economy, which we know best, and what that will mean for the roughly 3.4 million Americans who work in a sector whose jobs are in [serious peril due to the economic downturn](#) caused by COVID-19.

Technology Specific Issues

Energy Efficiency - [Energy efficiency efforts are shutting down due to COVID-19, threatening jobs and savings \(Utility Dive\)](#)

- Energy efficiency workers install efficiency upgrades like tighter windows and insulation, construction workers building new efficient homes and the folks who design and manufacture energy efficient products—including ENERGY STAR appliances and equipment. In fact, 1.3 million of the jobs – almost half – are in the construction industry.
- A recent [report](#) showed energy efficiency now supports at least 2.38 million U.S. jobs--and last year represented the majority of new jobs in the energy sector, but these jobs are now in jeopardy amid the COVID-19 pandemic, [with layoffs already hitting hard](#).

Energy Storage - ['Devastating.' 62% of energy storage firms hit with delays \(E&E\)](#)

- Energy storage is the catch-all term for batteries and other technologies that store energy for later use. Employing over 60,000 people, it is a fast-growing part of the energy landscape, delivering half a gigawatt of storage to the United States last year and [projected](#) to reach more than 7 GW by 2025.
- Almost two-thirds of energy storage businesses are seeing delays related to the new coronavirus, which could lead to an "immediate and potentially devastating" impact, [according to a trade group survey](#).

Electric Vehicles - [Electric vehicle sales slated for big drop \(Axios\)](#)

- Analysts such as Morgan Stanley predicted auto sales across the board [down over 30% this year](#).
- EV production and its supply chain face a particular challenge in this environment. As an emerging part of the vehicle market, the adverse impact on the electric transportation will be magnified, with significant implications for the supply chain, workforce, and competitiveness with overseas manufacturers who have more support from their governments.
- The EV industry now boasts over 200,000 American jobs, but was already facing a phased down EV incentive and the Trump Administration rollback of fuel economy and greenhouse gas emissions standards. The EV sector and the thousands of jobs it supports could witness irreversible, long-term damage.

Solar Energy - [U.S. Solar Workforce Could Be Halved By Virus, Group Says \(Bloomberg\)](#)

- Early estimates from Bloomberg New Energy Finance and Roth Capital Partners suggest that the solar industry could suffer losses between 16% and 30% of volume this year and that some sectors, including the residential sector that employs tens of thousands of Americans, could see as much as 50% reduction in jobs. If that happens, the industry could lose roughly 38,000 to 120,000 jobs compared to the 250,000 employed in solar in 2019. These losses would all be attributed to COVID-19. Prior to this crisis, the solar workforce was expected to grow to 294,000 this year.

Wind Energy - ['A crisis unlike anything the market has ever seen' \(E&E\)](#)

- The impact of COVID-19 on the wind industry [will be significant](#)—an estimated 25 GW of wind projects are at risk, representing \$35 billion in investment; the potential loss of over \$8 billion to rural communities in the form of state and local tax payments and land-lease payments to private landowners; and the loss of over 35,000 jobs, including wind turbine technicians, construction workers, and factory workers.

Industry Wide Issues

Layoffs & Furloughs

Clean energy jobs are often construction jobs. To enforce social distancing, governors of a growing number of states have issued executive orders that prohibit construction, even for construction where social distancing and no-contact job site procedures can be observed. This has had an immediate and direct impact on companies' ability to retain construction workers. While companies hope to quickly rehire workers once normal operations resume, the crisis could cause major disruptions to project pipelines and availability of tax equity financing, rendering tax credits unusable.

Permitting & Inspection Delays and Project Development Disruptions

For small-scale clean energy developers, the closure and reduced staffing of local governments and building departments has stopped or delayed permit processing and inspections, slowing down or cancelling construction. Some jurisdictions such as New York City have ceased all permit processing, which could lead to additional delays once construction resumes. Large-scale clean energy projects are subject to project development milestones for permitting, environmental reviews, state and federal incentives, financing and interconnection to the electric grid. Project developers must satisfy various milestone deadlines in order to move projects forward. COVID-related impacts have delayed and disrupted developers' ability to meet these deadlines, threatening projects and jobs.

Supply Chain Disruptions

Supply chain disruptions are delaying construction timetables and undermining the ability of wind, solar and hydropower developers to qualify for time-sensitive tax credits and meet other project development milestones. COVID-19 disruptions are impacting equipment manufacturers, which have shut down factories or reduced production, as well as international shipping and logistics companies.

Lack of Tax Equity Liability = Inability to Use Tax Incentives

In order to utilize federal and state tax credits for clean energy installations, many project developers use tax equity investors (e.g. banks) to convert their credit value into cash. As a result of the massive financial losses from COVID-19, tax equity investors will have significantly lower tax liabilities and tax equity investment will diminish, preventing the ability of clean energy companies to utilize their tax credits, upending project economics and clean energy deployment. In addition, other incentives where taxpayers generally claim tax credits themselves will be less effective if the firms and individuals engaging in the incentivized activity have less (or no) tax liability.

Reduced Demand

During this public health crisis, U.S. households are more reluctant to open their doors to complete energy efficiency upgrades or install energy equipment, such as solar energy system or an electric vehicle charger. In addition to affecting the jobs of installers, this development also affects factory workers upstream, who manufacture energy-saving and clean energy products, jeopardizing even more jobs. A new [report](#) shows energy efficiency now supports at least 2.38 million U.S. jobs, roughly half of which are in the construction industry, and the solar industry supports 250,000 jobs.

Signed:

Advanced Energy Economy (AEE)
American Council on Renewable Energy (ACORE)
American Wind Energy Association (AWEA)
Business Council for Sustainable Energy (BCSE)
Business Network for Offshore Wind
Electric Drive Transportation Association
Energy Storage Association (ESA)
Environmental Defense Fund (EDF)
Environmental Law & Policy Center
E2 (Environmental Entrepreneurs)

Environmental Working Group (EWG)
EV Drive Coalition
League of Conservation Voters (LCV)
National Audubon Society
National Wildlife Federation (NWF)
Natural Resources Defense Council (NRDC)
Sierra Club
Solar Energy Industries Association (SEIA)
Sunrun
Union of Concerned Scientists (UCS)