



Good for the Economy.
Good for the Environment.



COVID-19 AND THE CLEAN ENERGY ECONOMY

The economic impact of the COVID-19 crisis is hurting businesses, workers and industries from coast to coast. Among the hard-hit sectors is the clean energy sector, which employs more than 3.4 million Americans and is essential to our nation's transition to a clean economy. As lawmakers look to reinvigorate our economy and get America back to work, E2 surveyed some of its 8,000 members and supporters nationwide about how they're being impacted, and how public policy could help.

Emily Rice, The Energy Group Inc. COO, Iowa:

"Projects are getting delayed because we don't have access to buildings. This is impacting cashflow and we are potentially going to face layoffs. We are working to avoid that, and it will depend on the duration of this disruption."

"Capital investments will stall as businesses recover which is going to delay or indefinitely postpone energy-saving building improvements or construction. In our industry, folks will need access to zero-to-low interest financing, grants, and other funding avenues."

Michael Rucker, Scout Clean Energy CEO, Colorado:

"This week has been remarkable as I talk to banks and hear that they are in a panic situation that I haven't seen since 2008."

A very likely case is that the tax equity markets slow down to a halt again as the investors assess their tax appetites and cash positions for the 10 year [Production Tax Credit] (PTC) period. A return of the cash grant would allow projects to continue to monetize the credits if the banks scale back otherwise they are useless as an incentive."

Lloyd Kass, Lime Energy, VP of Policy and Business Development, New Jersey:

"Lime Energy is a national provider of commercial direct install energy efficiency programs for utilities, whereby we provide direct service to their small business and other small non-residential customers (e.g., schools, churches, community centers). We work for more than a dozen large US utilities and perform 30,000 small commercial retrofits per year. Our delivery model is 100% predicated on work onsite with small businesses and other commercial facilities, and our utility clients and small commercial customers pay us strictly based upon completed work resulting in energy savings achieved."

"Right now, nearly all our utility clients have directed us to stop all site work, grinding our entire business to a halt. And if the shutdown continues, we will be forced to furlough or layoff much of our workforce."

"We have 300 direct employees at Lime, two thirds of which are salespeople, energy auditors and field technicians and inspectors. The work our teams generate feeds an ecosystem of supply chain partners and skilled trade contractors who together dedicate a work force in excess of 5,000 skilled and unskilled laborers providing the material and installation services that get these projects done. No one has revenue generating work to do at the moment.

"When we are able to return to work, most of our customers will not have the upfront capital (less any utility rebates) to participate in energy efficiency. Block grants to the states, which can be allocated to utility programs, that pay the difference between the total project cost and the utility incentive (precedent for this during ARRA era) will facilitate a lot of work and a lot benefits to workers and small business customers.

"Also, funds for EE retrofits of K-12 schools and municipal buildings could be great."

Troy Van Beek, Ideal Energy Inc. CEO, Iowa:

"We have found ourselves hit pretty hard already by Covid19. We had spent over \$880K on materials from China that have been stuck overseas due to factory shutdowns and we are really feeling the pain. Without the panels, we cannot move on our sold projects.

"We were having our best year on record when this happened and now they are closing schools and we are losing staff due to self-quarantine. I suspect it is only going to get worse. We are having to make cutbacks to try to squeeze through."

Greg Smith, Energy Optimizers USA CEO, Ohio:

"We have terminated the employment of approximately 25% of our personnel. We have had over \$10,000,000 of projects halt moving forward (resulting in not employing approximately 150 people residing in the clean energy industry).

"We need rebates for LED lighting, high efficiency HVAC systems ... and increase the incentives for solar projects (not just tax incentives - possibly a Federal Renewable Energy Credit payment for the owner and/or installer). We also need incentives for solar projects to truly begin revamping the electrical power distribution system from the current heavy coal powered system. The distribution system is aging and a national security threat."

Nick Blitterswyk, UGE International CEO, New York:

"We mostly work in NY and NJ - i.e. now the global epicenter of the COVID-19 pandemic. This has meant that our projects are all stalled, which means our cash flows are significantly impacted. We are actively working to secure assistance through the SBA programs and are also hoping to take advantage of the NYC small business low interest loan product."

"Our biggest concern is the availability of tax equity this year; it's imperative to our business that tax equity be available (in order to monetize the ITC), and with taxable income expected to be down across the board this year we are expecting making projects pencil could very well be in jeopardy if a 1603-style cash grant is not brought back."

Dan Goldman, Clean Energy Ventures Co-Founder and Managing Partner, Massachusetts:

"We are a venture capital fund and expect to continue to make investments but will likely see reduced valuations and the need within our portfolio companies to raise more cash sooner because of slowing sales cycles."

"I think technology commercialization should be a critical. We need to make sure new technologies that move us to a decarbonized future, create significant jobs and provide local and regional economic stimulus are not disrupted. States and the Federal government need to help support these companies with no-interest loans, ability to support buying programs (states use a lot of electricity and can help the companies deploy technology), and support for keeping workers on staff (Germany is providing more than 50% to companies to support worker wages).

“What is needed most is a very simple process for loans and loan guarantees as well as worker support in this market. Co-investment would also be helpful, similar to the NYSERDA [[New York State Energy Research and Development Authority](#)] program initiated in NY.”

Eric Berman, E8 Angels President and Co-Chair, Washington state:

“The pandemic I think highlights the need for resiliency throughout the economy, and that includes basic infrastructure like the grid. “

“I think continued investment in vehicle electrification and grid modernization can be incredibly powerful from a resiliency perspective.”

Thomas King, Cross River Capital Managing Partner, New York:

“The single most effective policy of [prior stimulus under American Recovery and Reinvestment Act of 2009] (ARRA) for renewables was making tax credits refundable. Nothing else was close. It is simple, transparent, measurable, and definitely stimulative. Do this and maybe add to it for energy storage. This will get demand going and will help the small project as well as the large.”

Mary Solecki, AJW Inc. Partner, California:

“Sustainability investment funds are showing greater resilience, indicating that clean energy and sustainability continue to be worthwhile investments. California and the U.S. would be wise to steer the stimulus ship towards the beacon in the storm - cleaner, better energy.”

Rebecca Boudreaux, Ph.D., Oberon Fuels President, California:

“For us, it is all about working capital. With multiple sources of funding, some of it will inevitably dry up due to COVID19. Other projects will continue to move forward, but we need access to capital to continue paying salaries, buy equipment, and hire more people to join our team. If we maintain the momentum in our projects, including a plant expansion, we will initiate construction in just three months, creating much needed head-of-household jobs as plant operators and in construction.”

Mark Hall, Revalue.io Founder, California:

“Revalue.io is negatively impacted by the economic downturn. We had 5 residential retrofit projects that were supposed to begin this week but cannot due to the shutdown, as well as 1 warehouse project in West Oakland with the PG&E On-Bill Financing Program (\$113k).

“Our business is based on direct outreach to small/medium sized business(bldgs.), and residences that need building improvements but lack the staff, understanding or capital to carry them out themselves. During this economic downturn, our ability to reach our customers, initiate new contracts and service existing projects has been critically altered. We are also in the middle of a potential capital raise. Therefore, revenue projections are even more difficult as a technology startup company.

“Policymakers need to:

- *Provide working capital investment vehicles for contractors and project developers in high growth industries*
 - *Extend tax credits and develop new ones to encourage property owners to make improvements and support local workforce economic development (179D etc.)*
 - *Incentives to sign the [Green Bond Pledge](#)*
 - *Plenty of Workforce Development Funding via [ICMA Social Bond Principles](#)”*
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Jordan Ramer, EVConnect CEO, California:

"We are seeing a slowing sales cycle. We have initiated a hiring freeze and will likely need to reduce staff hours if this goes much longer. Projects are definitely slowing and it is increasingly] difficult to get projects started or moving forward because permits are harder to get and people are less likely to want to visit sites.

"We should increase, expand, and extend the investment tax credit for EV charging infrastructure, clean vehicle tax credits, and loans are good starts. Let's use this opportunity to make quicker transition to a clean economy.

"Provide incentives for all businesses to provide EV charging nationally. Invest in grid modernization that requires monitoring and management of newly deployed assets (EV charging). Incentivize people to buy used EVs."

Tyson Keever, SeQuential and Crimson Renewable Energy COO, Oregon, Washington, and California:

"We have laid off team members from our station. Our used cooking oil collection routes are running dry with each passing day and we are seeking a drought in available used cooking oil feedstock to feed our plants."

Whitney Painter, Buglet Solar Electric, Partner, Colorado:

"In terms of a stimulus bill... Incentives for grid modernization and ZEV are excellent as well--with an emphasis on zero emissions over low emissions. Time to move forward with all-electric vehicles!"

Energy efficiency executive, Oregon:

"The downturn is having a profound impact on our company. Between last week and this week, we saw a 52% decrease in the number of new clients calling and scheduling appointments. This trend will accelerate as the number of confirmed cases and deaths from Coronavirus continue to climb. We have also experienced project cancelations and our consultants are having a harder time signing people up for new projects. Things are slowing down severely.

"In response, all office staff have had their hours cut by 40% and are now participating in the [Oregon Work Share](#) program.

"The economic stimulus package can include the following in an economic stimulus package to help foster a clean economy as we recover as a nation:

- *Subsidies for homeowners to make energy efficiency improvements, such as installing insulation, efficient HVAC systems, and windows.*
 - *Low interest financing for home energy projects. People seemed to like the "on-bill" financing that was included in the Clean Energy Works Oregon program following the 2008 recession. They paid for their energy projects with low interest loans that were attached to their energy bills. The energy savings offset part of the cost of doing the work, and on-bill financing helped to make this easy for homeowners to understand.*
 - *Cash subsidies would be much better than tax credits."*
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Clean energy company CEO, New York:

"We are devastated by the coronavirus. Nothing we do is considered 'critical service' so installing energy efficiency and solar panels in California is completely shut down. We can't go into apartment units to do energy audits or efficiency upgrades in NYC. Even for our remote energy management and analysis services, our customers have other priorities than engaging with us right now. Collections are drying up because everyone is holding onto their cash rather than paying for our services. And customers are distracted to buy.

"We are facing substantial furloughs for staff and pay cuts for the ones who aren't furloughed."

Carbon technology company CEO, California:

“The current impact is on our ability to raise funds. We were in the middle of raising a Series A financing round and that timeline to close the round has been extended. If the downturn continues for longer than a few weeks, we will have to consider scaling down our hiring plan, placing our employees on reduced salaries and potentially laying off employees.

“Extending the R&D Tax credit for payroll taxes into the CA state payroll taxes would buy us more time to fundraise.

“Loan guarantees and low-cost financing for infrastructure projects would be super helpful to stimulate new projects that are being put on hold due to the economic uncertainty.”

Biofuel and low-carbon chemicals company CEO, Colorado:

“We are a development company that has to raise money to live and for projects. This downturn makes everything uncertain in the short run. It’s access to financing that is the biggest problem. This is all about buying time for businesses like ourselves for the markets to sort out.”

Clean energy investor, Washington, DC:

“ITC is great but if there is no tax appetite from companies in a recession then there should be an additional option such as the [1603 tax grant done in 2008-2012](#).

“You could even have this to support small business and allow that grant for projects under 10 MW, so commercial and industrial customers.”

Solar company CEO, Ohio:

“Tax credits are ok. But... most of the country's tax equity investors for solar, for example, are banks, and banks will be almost certainly reporting losses in 2020. Their appetite for the [Investment Tax Credit] (ITC) is going to decrease dramatically, and the cost of tax equity capital will increase. Same for 179D -- if a business doesn't owe any tax in 2020, they can't benefit from the deduction; they can carry it forward into future years but that makes it less valuable.”

SEE NEXT PAGE FOR SPECIFIC RECOMMENDATIONS

The power of stimulus specifically in the clean energy sector cannot be overstated.

We ask Congress to take the following critical actions to help:

- **Reinstate the [Section 1603](#) program that will deliver payments directly** to clean energy developers and suppliers in addition to of investment tax credits. This will result in an immediate and badly needed cash infusion for clean energy companies and get them back to work in the near term. This program should also be expanded to battery storage and energy efficiency projects by expanding the definition of “specified energy property” to include them.
- **Extend, Expand and Reform clean energy incentives that help deploy solar, wind, energy storage, offshore wind, energy efficiency and electric vehicles by enacting the following bills:**
 - H.R. 2096/S. 1142, “The Energy Storage Tax Incentive and Deployment Act of 2019”
 - H.R. 3961 and S. 2289, “The Renewable Energy Extension Act”
 - H.R. 4887/S. 1988, “The Offshore Wind Power Act”, and S. 1957/H.R. 3473, “The Incentivizing Offshore Wind Power Act”
 - H.R. 2256/S. 1094, “The Driving America Forward Act”
 - Extend the Production Tax Credit (PTC) for wind as included in the House Ways and Means Committee’s GREEN Act proposal
- **Resurrect the [Energy Efficiency and Conservation Block Grant](#) program** for states that can be used to immediately launch job-intensive renewable energy projects and energy efficiency programs for K-12 schools and municipal buildings. Previous clean energy related block grant programs created about 63,000 jobs and saved electricity users \$5.2 billion.
- **Expand the [Small Business Administration loan program](#)** to include specific opportunities for clean energy companies get access to funds for short-term payroll needs and to cover costs for materials investments for renewable and energy efficiency projects.
- **Create a national program to help utilities upgrade and modernize our nation’s aging electric grid**, which will both create new jobs and improve the resilience of our nation’s energy system.
- **Increase funding for clean energy job training** by funding community colleges and other educational institutions specifically to create training programs for displaced workers looking for new careers in clean energy.
- **Invest in clean cars and electric vehicle infrastructure** by building on legislation such as the [Clean Corridors Act of 2019](#) to immediately create jobs expanding the nation’s electric vehicle charging network, and consider a nationwide vehicle trade-in program to get cleaner, more efficient cars in production and to consumers.
- **Increase funding for programs such as the Department of Energy’s Loan Guarantee Program and the Advanced Research Projects Agency-Energy (ARPA-E)**, to immediately spur innovation and new opportunities as the economy recovers. Under ARPA-E, the federal government helped [jump-start 475 transformative clean-energy technologies that led to \\$1.25 billion in private-sector follow-on funding](#) and created tens of thousands of jobs.
- **Increase funding to at least \$1 billion for DOE’s Weatherization Assistance Program**, which provides funding for cost-saving energy efficiency upgrades for low-income households. The program has supported more than 8,000 jobs and provides weatherization services to 35,000 homes every year.
- **Increase funding for DOE’s clean energy demonstration programs**, including for large-scale energy storage, advanced renewable energy technologies, clean transportation solutions, clean industrial projects, and clean hydrogen and other zero-carbon fuels. DOE’s Office of Energy Efficiency and Renewable Energy, which houses most of the agency’s existing programs for these technologies, has been shown to provide \$33 of public benefit for every taxpayer dollar invested.
- **Expand funding for advanced construction of net-zero-carbon building retrofits for low-income homes.** DOE’s building technologies program has developed technology solutions to quickly retrofit existing buildings using prefabricated materials to reduce energy use and save people money. Large increases in investment in these programs, with direct subsidies to accelerate retrofits for low-income households, will expand on the millions of energy efficiency jobs, while reducing emissions and lowering costs.