

ENVIRONMENT + ENERGY LEADER AWARDS 2020



A LETTER FROM THE CONTENT DIRECTOR

Dear Reader,

I'm always inspired by the creativity and ingenuity from sustainability professionals in how they navigate the unexpected environmental and energy management challenges they face every day — and this year, more so than ever. Beginning in the early part of 2020, it turned out we were all facing unexpected challenges. By March, when covid-19 was declared a pandemic, our world felt like it was turned upside down. We, like you, struggled to understand how our employees, our business partners, and ourselves would move forward in terms of both our professional and our personal lives.

At Environment + Energy Leader, we needed to decide how we were going to celebrate our award winners when we could no longer hold an in-person event. We had to shift our plans, conceptualize something totally new, and implement it quickly. Ultimately, we decided to host an online Awards Summit on July 21, 2020. The archived video presentations will be available afterward on [our website here](#).

With these shifts in thinking, I began to consider how the new world situation relates to the people actively working in sustainability and energy management. People like you — people who tune in for educational webcasts, attend conferences, or download reports like this to look for inspiration — are the people who are able to shift their thinking at a moment's notice. You know how to pivot, accept new realities, change direction, and make new plans without panicking. In fact, you do it all the time.

And that's what makes the world of energy, sustainability, and environmental management such an exciting world to be living in. You're making a difference in terms of things like reducing waste, improving supply chain sustainability, cutting energy costs, reducing emissions, and so much more. And you're doing it right now, even though the world is facing so many other challenges.

Before you read on, I'd like to point out that judging for this year's Environment + Energy Leader Awards began during the start of the pandemic. We had dozens of experts lined up as judges, but learned that some had been furloughed while others had family members who fell ill. Because of these and other difficulties related to the virus, many were understandably unable to participate. But, in an enormous show of generosity, the rest of the judges volunteered extra time to ensure that every entry received appropriate evaluation. So when I say "thank you" to this year's judges, I mean it whole-heartedly. This program couldn't happen without them. Please check out the judging panel on page 100, and remember that they went above and beyond this year.

Now sit back, discover the judges and winners in the report that follows, and enjoy. And know that, whether you're featured in these pages or not, you're the reason the world is seeing such sustainability and energy management success. No matter what industry challenges you face, you can rise to the occasion — and do so brilliantly. I'm honored to be in such outstanding company.

Best Wishes,
Jen

Jennifer Hermes
Content Director
Environment + Energy Leader



Judges' Choice:

Pearl Homes

Pearl Homes

Ameresco

United States Marine Corps Recruit Depot
Comprehensive Energy Resiliency Project

Arbor Day Foundation

Exelon's Energy-Saving Trees Program

CPower Energy Management

Advanced Microgrid Design for Indoor
Agriculture Pioneer

Digital Realty

Digital Realty Global Water Strategy

Eastman

Carbon Renewal Technology

EcoEnergy Insights

Digital Transformation of the Facility
Management of a Manufacturing Plant

Enel X

Enel X Solar plus Storage plus EV Charging
Project at the University of Massachusetts Boston

EnergyLink

Oxford Vista Energy Redevelopment Project

Fetzer Vineyards

Leveraging the Internet of Things and Big Data
to Stay Steps Ahead of Water Waste

Intelex

Implementation of Intelex ACTS for PDC Energy

Johnson Controls

Infosys

Lockheed Martin

RMS Troy Energy Star

Lockheed Martin

Moorestown Steam Decentralization

MilliporeSigma

Dozn 2.0: A Quantitative Green Chemistry
Evaluator

NextEra Energy Resources

Iron Mountain Solar

PowerSecure

Butler Farms Microgrid

Resolute Forest Products

Bio-Products Derived from Wood to Advance
North American Bio-Economy

Saudi Aramco

Global-Scale Groundwater Conservation

Schneider Electric

College of Southern Nevada Saves Energy
with Schneider Electric

Schneider Electric

Schneider Electric and the City of Sierra Vista

Schneider Electric

Schneider Electric and Stockton, California

Terrapure Environmental

Lead-Acid Battery Recycling

Trane Commercial

Ford Motor Company Data Center Chiller
Plant Project

Underwriters Laboratories

Characterizing and Assessing Particle and
Chemical Emissions from 3D Printers



SCHNEIDER ELECTRIC SCHNEIDER ELECTRIC AND STOCKTON, CALIFORNIA

Schneider Electric formed a partnership with the Stockton Unified School District in California to implement a new battery storage array within the school district. The battery storage should help the school district save nearly \$1.6 million in energy costs over a 10-year period while optimizing the usage of the district's existing solar assets, allowing solar energy to offset energy costs, according to Schneider Electric. The energy savings will be applied to progress other modernization efforts within the district, including replacing aging HVAC systems and additional district facility upgrades, the company said. Stockton is among the first districts in the state to deploy battery storage.

With peak rates as much as \$5 per KWh compared to as little as 23 cents per KWh for non-peak rates on average, the savings from using temporary battery power can quickly add up, Schneider Electric said. After working with the company, Stockton Unified School District found that it could optimize costs by bundling their existing solar arrays at two high schools with lithium-ion batteries. Two high schools in the district

received solar batteries at no cost under Prop 39 grant funding along with a \$600,000 rebate that covers the full cost of the batteries.

The 250-KW and 500-KW batteries will help to offset up to 60% of the school district's monthly bill by better harnessing and managing the renewable energy already being generated for the district, the company said. Stockton can use the money from its energy savings to redirect dollars back into the classroom, fund deferred maintenance needs, or potentially add new teaching positions, Schneider Electric noted.

Estimates in 2019 showed that only about 3% of California school districts used battery storage. However, as the costs continue to drop and peak demand rates keep climbing, more districts see potential in batteries. For example, the storage plus solar allows Stockton to avoid costly peak demand energy rates. The footprint of batteries is minimally invasive, making it easily integrated on the area campuses, Schneider Electric said.

[continued on next page >]



WHAT THE JUDGES SAID...



Stockton is leading the way in energy efficiency and sustainability for California school districts.”

Solar power and grid power regenerate batteries when demand is low through a real-time system that enables batteries to intelligently discharge and recharge. Batteries can work every day to help defray energy costs. Plus the cost of batteries continues dropping, enabling the project to scale as needed, the company added.

Stockton Unified School District had already completed many initial projects aimed at optimizing

energy savings and increasing sustainability, including installing onsite solar. Schneider Electric said that the addition of battery storage allowed the school district to maximize their use of onsite solar while providing additional savings opportunities. 🌱



ABOUT



Business Sector Media publishes Environment + Energy Leader and two major awards programs: the E+E 100 honoring professionals who drive our industry forward and the Product & Project Awards.

Since 2007, we have provided news, best practices, and research that influence environment, energy, and sustainability conversations — and powered decision-making.

Environment + Energy Leader offers a wide range of professional resources, including our website, newsletters, webinars, e-books, white papers, and conferences to help professionals tackle environment and energy management challenges, reducing costs, minimizing resource waste, and increasing efficiency.

For more information about sponsorship opportunities, please contact our sales team at 970-377-9505 x709 or email sarah@businesssectormedia.com.