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Our decade to decarbonize

Arch Rao | SPAN Founder & CEC



Over the last decade of building products and businesses that address climate change, I've seen two significant trends emerge across the consumer energy landscape in the U.S. First, our adoption of electric vehicles was accelerated by the build-out of charging infrastructure which was essential to making the transition from gasoline to battery propelled transportation successfully. Second, the demand for distributed energy and resiliency grew thanks to falling prices of solar panels and the increased number of power outages. Despite this ongoing commodification of distributed energy resources (DERs), we are still below 2% of U.S. homes powered by renewables and only a fraction of homes with all-electric appliances because of the limitations of the traditional electric panel.

This highlights the need for and the opportunity to invest in modernizing our electric grid, starting at the edge. With the traditional electric panel, our homes are not ready to adopt solar, batteries, electric vehicle charging and electric appliances, which can collectively displace over 40% of emissions originating from everyday choices we make. This is the decade to electrify the built environment, especially our homes, so that every time we cook, take a shower, or heat our living spaces we are not inadvertently fueling our fossil dependence.

At SPAN, we reinvented the electric panel to make every home clean and empower each one of us to be champions o the climate movement. Today, we're launching our next-generation smart electric panel to further accelerate the deployment of clean energy technology and drive decarbonization.

Why the electric panel?

The electric panel has been with us for generations—for almost a hundred years it has been a constant in the built world. It has always done two things reasonably well—it distributes power to different parts of a home and the breakers inside it protect circuits from becoming a fire hazard. Unfortunately for us, its evolution has not kept pace with the rest of the house. It remains an analog device bearing no resemblance to the appliances we use every day. Worse still, it offers no information or control despite being connected to every single thing we power.

Incidentally, the panel is also where you connect solar systems, batteries, electric vehicles, induction cooktops, heat pumps, and more. Often you need to upgrade or replace your existing panel(s) just to add that marginal appliance and it still needs an array of add-on components to measure, control, or automate them — often leading to a tangled mess of wall-mounted conduit and wires. It doesn't take a leap in imagination to recognize that the humble, old panel is desperately ready for an overhaul.

Introducing the new SPAN Panel

The smaller, sleeker new SPAN Panel is much more than an electrical distribution box. It's purpose-built for the connected, resilient, and all-electric home. It monitors the health of your home and the grid to seamlessly transition between power from the grid and your on-site solar or batteries.

The new SPAN Panel offers visibility and control over every circuit and major appliance in your home and allows you to



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The new SPAN Panel offers visibility and control over every circuit and major appliance in your home and allows you to decide how you power what and when—especially when you are enduring unexpected power outages. It informs you when a water heater or an air conditioner might fail and, more importantly, gives you the option to replace it with an electric appliance without needing to revamp your entire electrical system.

Above all else, it is your first step towards a truly carbon-free home.

Versatile and persistent

Building transformative products and an impactful company is a pursuit that takes on the order of a decade to accomplish. Since 2018, we have been designing, developing, and deploying the SPAN Smart Panel. We are on a mission to deliver impact at the gigaton scale of CO2 avoidance. This means we are committed to building products that not only set new standards for home electrification but can be used in every single home.

The new SPAN Panel is versatile. It's built for indoor or outdoor installs. It's designed to blend into any room in you house. It's capable of powering every circuit or appliance, big and small.

The new SPAN Panel is persistent. It's always connected and gives you the ability to control your home from anywhere. It's software improves with time with over-the-air updates. It allows you to modernize and upgrade your home without the cost of upsizing your utility service.

Together, we decarbonize

We envision a future where every home is electric and technologies like solar, batteries, and EV charging are commonplace. Our goal is to enable this transition by dramatically simplifying the adoption of clean energy solutions, many of which exist today. This is our decade to decarbonize—join us on our mission.

