

e-Mission Control

A MOMENTUM COMPANY

October 2022 Issue

Channel Partner Spotlight



WAVE: Contactless Charging in All Conditions

It's a 110°F day in northern Los Angeles County and an electric bus pulls up to a charger. Instead of getting out of the bus, the driver places the bus in neutral, sets the brake, and kneels the bus. In 15 minutes, despite the heat, the bus will get an additional 20-25 miles of range. How is the bus charging? Through a flat WAVE charger embedded in the roadway.

WAVE chargers are inductive, meaning they require no physical connection. Current sent through the pavement-embedded charging pad induces a magnetic field, which induces an electrical current in a receiver plate mounted on the bottom of the bus.

That power is then sent to the onboard battery. The WAVE charger is unaffected by snow, ice, moisture, and heat and is nearly indestructible. Free of moving parts, connectors, or cables, there is nothing to break or be impacted by weather. WAVE is e-Mission Control's latest channel partner.

The Antelope Valley Transit Authority (AVTA), which operates the largest battery-electric bus fleet in the United States, powers the majority of their vehicles through WAVE. In 41 months between January 2019 and June 2022, just through using WAVE wireless charging, the AVTA saved 14,583,763 lbs CO₂ through 613,795 gallons of diesel fuel saved.

WAVE's high-power systems are ideal for powering electric vehicles for mass transit, warehouse and distribution centers, shuttle services, and seaports. For more information on WAVE, go to their [website](#). For an introduction to the WAVE team, please reach out to our OEM Partnership Manager, [Conner Whaley](#).



Leap: Electricity Consumption Management to Balance the Grid

Managing demand response on behalf of energy consumers in California

Energy emergencies happen in California. On August 14 and 15, 2020, the California Independent System Operator (CAISO) instituted [rotating electricity outages](#) in the midst of a widespread extreme heat wave. This is an example of a worst-case outcome of electrical grid strain that Leap, e-Mission Control's latest channel partner, addresses. Leap works with "demand response" or adjustment to the demand on the electrical grid. This is especially important as a growing number of electrical vehicles and equipment demand power as they charge from the grid.

Demand response and other grid services programs pay energy consumers to turn vehicles, equipment, and lights off when demand is high to reduce strain on the grid. Even without seasonal spikes in power demand, 5:00 PM every day sees a huge spike in electricity demand as people come home from work, plug in their EVs, and turn on

their air conditioners and ovens. Demand response can be done manually (unplug some cars, turn off some lights) or automatically through technologies like charge management systems (CMS), which will shift vehicle charging away from peak times.

Demand response management helps keep “peaker plants” (plants that run when there is high demand) turned off. This is important since peaker plants are very expensive to run and emit particulates and greenhouse gases such as nitrogen oxides.

Leap’s platform makes it easy for providers of smart energy technologies to generate revenue by supplying flexible support to the electric grid. These smart energy technologies may include batteries, electric vehicle chargers, smart thermostats, HVAC systems, industrial facilities, and other flexible assets.

For more information on Leap, visit their [website](#) or if you would like an introduction to the Leap team, please reach out to our OEM Partnership Manager, [Conner Whaley](#).

Blog Highlights



How Renewable Energy Certificates Support the Generation of Clean Fuels

If you live in the United States, part of your electrical power comes from fossil fuels and part from renewable sources. Renewable Energy Certificates (RECs) help identify and track clean power sources and support the renewable energy market. If RECs did not exist, it would be difficult to know if you're using renewable electricity. Learn more on our latest blog, [How Renewable Energy Certificates Support the Generation of Clean Fuels](#).

Funding Opportunities Highlights

In September of 2022, the California Air Resources Board (CARB) announced new rounds of funding to be added to various existing programs such as:

- [California HVIP](#)
- [CORE](#)
- [The Heavy-Duty Vehicle Air Quality Loan Program](#)

In total, CARB is planning to allocate \$2,228.64 million in heavy-duty and off-road equipment investments by the end of 2022. In addition, the Charge! Program by the [Bay Area Air Quality Management District](#) plans to reopen mid-November with \$5 million being made available for qualifying EV charging station projects.

NEW! Funding Page

We've created a more user friendly page to highlight green funding opportunities in California, Oregon and Washington as well as federal grants and tax incentives. Many grants that have already expired this year will reopen in 2023. Remember to bookmark the page if you are interested in funding for infrastructure, equipment, charging stations and other electrification programs.

More Funding Opportunities



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