



Winter 2023

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Greetings from ENERGY STAR

Dear ENERGY STAR Partners and Industry Colleagues,

As the new year begins we wanted to share our appreciation for your participation and engagement in our efforts to promote energy efficient EV charging. Thanks to your efforts, we're celebrating the following accomplishments in 2022:

- In the Spring, EPA held its first ENERGY STAR EV Charging Promotion Campaign, bringing tips on efficient EV charging to thousands of households nationwide – see what our participating partners had to share: [Electrify America](#), [SemaConnect](#), [AEP SWEPCO](#), and [Appalachian Power](#)
- Through coordination with federal agencies, ENERGY STAR requirements have been adopted into several program policies related to building out EVSE infrastructure.
- In addition to the steady increase of Level 1 and Level 2 chargers earning ENERGY STAR certification, the first ENERGY STAR DC Fast chargers were added to the qualified products list this Fall.
- EPA continues to engage with utilities and EV charging organizations across the country to increase awareness about the benefits of incorporating ENERGY STAR certified EV charging stations into their programs.

This newsletter provides a summary of these and other recent activities, and is a means to both update and thank our partners for their participation and engagement in our efforts.

As always, please reach out to us at any time, either via evse@energystar.gov or the contacts listed at the end of this newsletter

Sincerely,
Peter Banwell

Safe and Efficient Charging Nationwide

The federal government is actively promoting EV and EVSE adoption through the passage of two landmark pieces of legislation: the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA). The BIL created the Joint Office of Energy and Transportation to support and administer \$7.5 billion for zero-emission, convenient, accessible, equitable transportation infrastructure with a goal of 500,000 EV chargers by 2030.



The [draft Notice of Proposed Rulemaking](#), proposes minimum standards and requirements for projects constructing publicly accessible EV chargers, including the ENERGY STAR AC specification as a potential requirement for EVSE investments. The IRA extended and created EV and EVSE tax credits and allocated funding for new and existing fleet electrification programs.

In addition to the federal funding opportunities noted above, all Level 2 charging stations installed via [EPA's Clean School Bus Program](#) must be ENERGY STAR certified. With funding from the Bipartisan Infrastructure Law, EPA's new Clean School Bus Program provides \$5 billion over the next five years (FY 2022-2026) to replace existing school buses with zero-emission and low-emission models.

In the DC Fast Charging category, the [California Energy Commission's CALeVIP program](#) has proposed the following plans for incorporating efficiency requirements for DC Fast chargers.

Effective **July 1, 2023**, DC fast chargers must be ENERGY STAR certified and:

- Certified by Open Charge Alliance (OCA) for OCPP 1.6 or later.
 - At minimum, both a subset certificate and a security certificate will be required.
 - Certification for OCPP2.0 will be required by 2025.
- ISO-15118 "Hardware Ready" via self-attestation to the CEC, which includes support for the following
 - Powerline carrier (PLC) based high-level communication as specified in ISO 15118-3
 - Secure management and storage of keys and certificates.
 - Transport Layer Security (TLS) version 1.2; additional support for TLS 1.3 or subsequent versions is recommended to prepare for future updates to the ISO 15118 standard.
 - Remotely receiving updates to activate or enable ISO 15118 use cases.
 - Connecting to a back-end network.

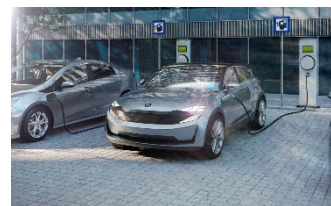
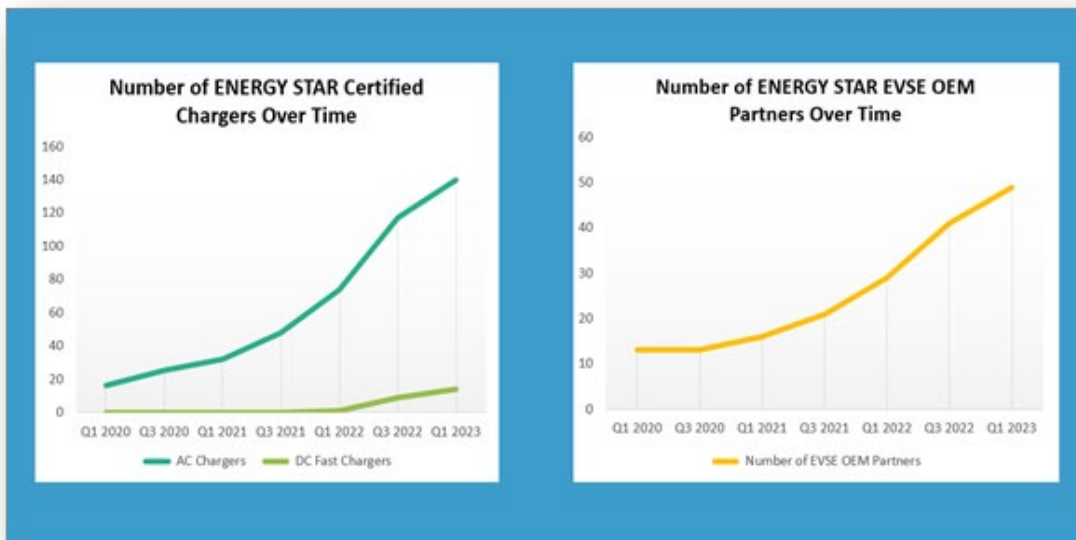
See [Equipment Requirements for the CALeVIP Golden Priority Project](#) for more details.

The Value of Partnership

In our last update, we shared that a growing number of utilities and states are demonstrating their commitment to energy efficiency by adopting ENERGY STAR as a requirement for their EV charging programs. EVSE manufacturers are responding to this new opportunity with a growing number of qualified models – highlighted in the graphs below. In the past year alone, the ENERGY STAR Qualified Products List grew to include:

- 26 new Level 2 manufacturers and;
- 3 DC Fast manufacturers (AddEnergie, PHIHONG, and StarCharge)

More certifications are expected in early 2023 – find the most up-to-date list of certified chargers on the [ENERGY STAR Product Finder](#).



Manufacturers Tips for Certifying Your DC Fast Charger

As noted above, recent federal legislation has jump-started demand for energy-efficient DC Fast chargers throughout the US, and EPA is aware of growing interest in referencing ENERGY STAR certification as part of procurement specifications. To facilitate market growth for efficient DC Fast chargers, EPA has the following full specification available: [ENERGY STAR EVSE Version 1.1 Program Requirements](#)

Key specification efficiency criteria summary below:

- Chargers 50 to 65 kW: Minimum active charging efficiency of 93%
- Chargers 65 to 350 kW: Must measure and report efficiency using EPA's test method.

**The specification offers additional power allowances during standby for products with a high-resolution display or a battery management system.*

If you currently have an exceptional product and would like it to be recognized for its energy efficiency, ENERGY STAR certification is the best way to stand out. The current ENERGY STAR DC EVSE [Qualified Products List](#) comprises 18 products.

Here is how it works:

1. Join us as an ENERGY STAR partner!

2. Work with an EPA-recognized Certification Body (CB)

Certification Bodies (CBs) can guide you through the testing and certification process. Intertek Testing Services N America has capacity now to test DC fast chargers (> 65kW) under the EVSE Version 1.1 specification, and additional third-party labs will become available soon. The labs currently recognized by EPA for fast charge testing include:

- Intertek Testing Services Shenzhen Ltd. Guangzhou Branch (up to 400kW)
- Intertek Testing Services NA, Inc. Plymouth Township (will be available mid 2023)
- UL – Northbrook, IL (up to 300kW available Jan 2023, up to 500kW by Q2 2023)
- UL – Taiwan (up to 300kW, available 2023)

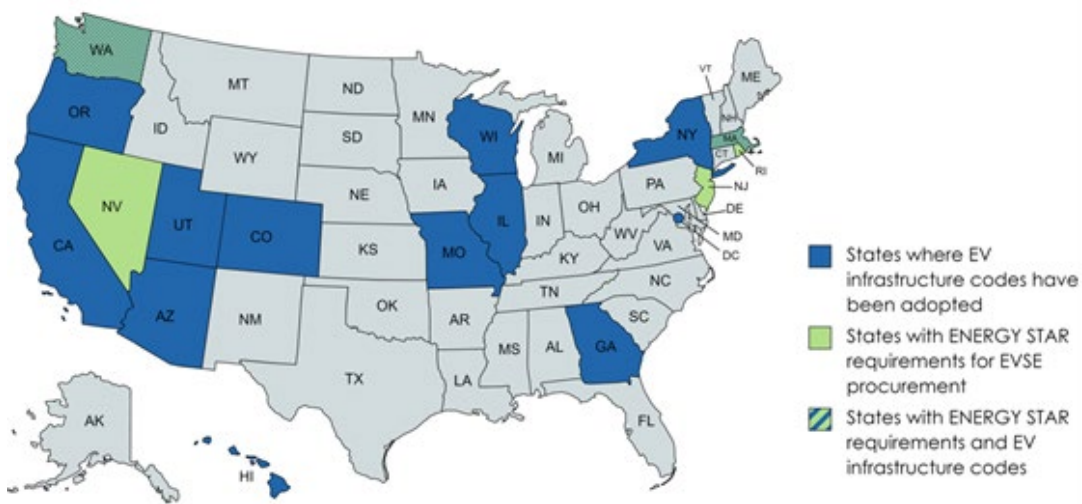
Note: If you wish to use your own lab for certification testing, that is also an available option. You may contact Intertek Testing Services N America, TUV SUD America, Inc., or UL Verification Services, Inc. to enroll your laboratory as a witnessed lab for ENERGY STAR testing. The CB will explain the enrollment process and applicable fees before conducting an initial site assessment. After enrollment, either your qualified lab personnel or CB personnel may conduct testing at your site.

3. **Get certified!**

Provide your CB with a test report indicating your product meets ENERGY STAR performance levels, the CB will determine whether it earns the ENERGY STAR label. After the CB uploads your product information to our website, it appears publicly the next day.

A Glimpse at EV Infrastructure Building Codes

A number of states have incorporated the ENERGY STAR Level 2 AC specification into their procurement requirements for EVSE. To date, five states have adopted the ENERGY STAR AC specification as a minimum requirement for EVSE sold, offered for sale or installed in their states: Massachusetts, Nevada, New Jersey, Rhode Island, and Washington (shaded light green in the map below). Concurrently, state and local governments have been expanding access to EV charging by integrating EV readiness into their building codes. The [Southwest Energy Efficiency Project \(SWEEP\)](#) tracks states and local governments that adopt EV ready parking requirements for buildings. According to SWEEP's database, 43 state and local governments have EV ready parking requirements in their building codes or local ordinances (as shown in the map below, blue or cross shading).



Partner Spotlight

Since 1992, ENERGY STAR and its partners have helped American families and businesses save 5 trillion kilowatt-hours of electricity, avoid more than \$500 billion in energy costs, and achieve 4 billion metric tons of greenhouse gas reductions. This impressive work could not have been possible without the dedication of our ENERGY STAR Partners.

This year, we would like to give special thanks to the EV charging partners that shared the benefits of their ENERGY STAR partnership via social media in April, as part of ENERGY STAR's Earth month celebration:





Contact List

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