EVs2Scale 2030™

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PROGRAM OVERVIEW

EPRI's EVs2Scale initiative is a three-year commitment focused on leveraging industry scale to galvanize and align critical market stakeholders as electric vehicles (EVs) are deployed at scale to achieve 2030 goals.

PROGRAM GOALS:

Ensure utilities (and utility oversight bodies) are in lockstep with vehicle manufacturers, fleet operators, charging providers and consumers to build confidence in achieving 2030 goals.

Streamline the systems and processes needed to support the pace of activity and investment required to meet large-scale electrification by 2030.

Develop the needed tools and technologies required to enable and sustain EVs at scale and capture the grid benefits of this large and flexible load

KEY PROGRAM BENEFITS INCLUDE:

- **Validated data and best practices** to share with utilities and utility oversight bodies to describe grid needs for EVs at scale and be better equipped to execute planning for wide-scale electrification with critical stakeholders.
- **Better customer support** for EV drivers, fleet operators, and underserved communities enabled by programs developed using the initiative's research and knowledge.

EPRI will leverage its industry partnerships to mobilize utilities, car and truck manufacturers, fleet operators, and charging providers, and coordinate with federal agencies and labs to support the rapid deployment of millions of electric vehicles – while minimizing grid impacts and enabling critical grid benefits.

PROGRAM DELIVERABLES INCLUDE:

- A 50-State Roadmap that lays out the year-over-year actions and investments required to meet EV loads, grid impacts, utility leadtimes, workforce, and costs through 2030
- Quarterly Utility-OEM-Fleet convenings
- An assessment of the existing utility regulatory/oversight framework and options for achieving 2030 electrification goals
- A national electric transportation equity blueprint
- A national electric transportation workforce development blueprint
- A consumer marketing research database of EV and non-EV drivers
- An Approved (Vetted) Product List for EVSE compliance with industry standards and NEVI guidance
- A reliability benchmarking analysis and streamlined industry standards to address EV and EVSE interoperability
- A secure online data exchange platform that improves transparency in EV charging planning to inform grid investments and accelerate grid interconnects
- A charging innovation and affordability whitepaper
- A managed charging at scale roadmap
- A roadmap for NEHC/NEVI collaboration
- Best practices for planning resilience/evacuation of EVs at scale during power outages

THE EVs2Scale2030™ INITIATIVE FEATURES THREE KEY PILLARS:

1

Coalitions and Roadmaps:
The outcomes from this pillar frame the 2030 challenge by creating a definitive and multi-stakeholder 50-state roadmap that lays out year-over-year industry/government-driven vehicle electrification goals, charging infrastructure and grid needs, utility lead times, workforce requirements, and costs.

2

Structural System Reforms:
This pillar will identify and/or create the systems and processes needed to support the pace of activity and investment required to meet large-scale electrification by 2030. Topics include grid interconnection, charger maintenance and reliability, affordability, equity, workforce development, and regulations.

3

Unifying Tools and Pilots:
This work delivers a set of tools and pilots critical to meeting and sustaining large-scale electrification objectives, and includes establishing a secure data exchange platform to allow utilities to better plan and invest in grid upgrades, driving the National Electric Highway Coalition (NEHC) project to implementation (with EEI), and validating best practices for EV resilience and evacuations at scale during widespread power outages.

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