



# PARTNERS FOR A ZERO EMISSION VEHICLE FUTURE POSITION

## TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE

Commercial goods movement is the fastest growing sector of transportation, and heavy-duty **zero-emission vehicles (ZEVs) are its future**. The ZEV shift is happening in tandem with a wider energy transition that includes greater renewable electricity generation – requiring a modernized, resilient, and robust electric grid as a result.

### The Grid We Have Today is Not the Grid We Need Tomorrow

The grid is already struggling in places to meet today's power needs and is insufficient to meet future demand.

- California, southwestern states, and Texas are already struggling to supply power during heatwaves and extreme weather events. As extreme weather events become more prevalent, the struggle to meet peak energy demand will grow.
- To meet the clean energy demands, U.S. grid capacity **must grow 60 percent by 2030<sup>1</sup>** and triple by 2050.
- Given that most of these capital projects have a 10+ year timeline, a century's worth of work will need to be completed in less than a decade to meet aggressive full electrification goals.

### Going Gigawatt-Scale Needs Billions of Dollars

Governments at the federal and state levels have set steep ZEV goals with short timelines, which will require significant investment to achieve.



#### **20 MILLION EVs WILL ADD APPROX. 60–95TWH<sup>2</sup>**

of annual electricity demand nationwide, and increase peak load by up to 20GW, requiring 12–18GW of renewable generation capacity.



#### **APPROXIMATELY \$15–\$25 BILLION<sup>3</sup>**

must be spent on transmission and distribution upgrades by 2030 to prepare for the influx of EVs.



### Building a Smarter, More Resilient Grid

Integrating renewable energy sources and creating a distributed grid, which will power tomorrow's ZEV vehicles and fleets, is a central component of the wider energy transition—and a critical challenge that we must meet if we are to achieve our clean energy goals.

**We must future-proof the grid.** This includes physical measures such as weatherizing grids for more extreme weather events – such as a deep freeze in Texas – as well as technological upgrades such as smart grids that can manage the power flow efficiently and reliably.

**We must prioritize large-scale investment.** Although annual transmission system spending by utilities reached **\$40 billion in 2019<sup>4</sup>**, regulatory action from the Federal Energy Regulatory Commission is required to enable utilities to invest in large-scale projects. Utilities currently lack the incentives and risk tolerance to invest in regional projects that will create tomorrow's grid, focusing instead on small-scale, local projects that simply maintain the status quo.

**We need to focus on high-priority grid segments.** While investment across national grids is paramount, the greatest need lies in high-traffic, high-volume grid sections like ports and warehouse districts that can deliver power where its most needed and would also ensure downstream grid stability.

The **Partners for a Zero Emission Vehicle Future** believe ZEVs are the future of commercial transport. **We support efforts to build a cleaner, more sustainable future through policy that will ensure confidence among fleets and unite economic and environmental benefits around the country.**

## We believe:

- **ZEVs are the future of commercial transport**, and all stakeholders must help create a sustainable marketplace for ZEV adoption.
- **The best approach going forward is through coordinated and collaborative federal and state policy**, built on a foundation of enhanced national vehicle standards.
- This national approach **must address critical hurdles to nationwide commercial ZEV deployment** such as the **build-out of necessary and reliable charging infrastructure**; it also needs to encourage the deployment of ZEVs across the transportation and logistics supply chain through vehicle purchase incentives.
- **California's state regulations are not well-suited as a one-size-fits-all solution**. Each state is unique – with differences in fleet makeup, grid conditions, resources, staffing availability, and local utility support.
- Regional or state initiatives should help deploy ZEVs where they can best address local air quality concerns and encourage market success to maintain jobs and economic resilience.
- **Working together, we can achieve the end goal of zero-emission, commercial truck fleets.**

## Learn more and get involved

Visit us online at [www.pzevf.org](http://www.pzevf.org) to learn more about our coalition and efforts.

To stay updated about additional information and opportunities to make a difference, sign up on our website or email us directly at [info@pzevf.org](mailto:info@pzevf.org).



<sup>1</sup> [DOE Launches New Initiative From President Biden's Bipartisan Infrastructure Law To Modernize National Grid](#)

<sup>2</sup> [Brattle Group - Electric Power Sector Investments of \\$75-125 Billion Needed to Support 20 Million EVs by 2030](#)

- Represents 1,600 GWh of electricity from 20 million EVs across transportation classes on the roads by 2030

<sup>3</sup> [Brattle Group - Electric Power Sector Investments of \\$75-125 Billion Needed to Support 20 Million EVs by 2030](#)

- Based on the addition of 20 million EVs across transportation classes by 2030 on the roads by 2030

<sup>4</sup> [Utilities continue to increase spending on the electric transmission system](#)