



ELECTRIC ERA

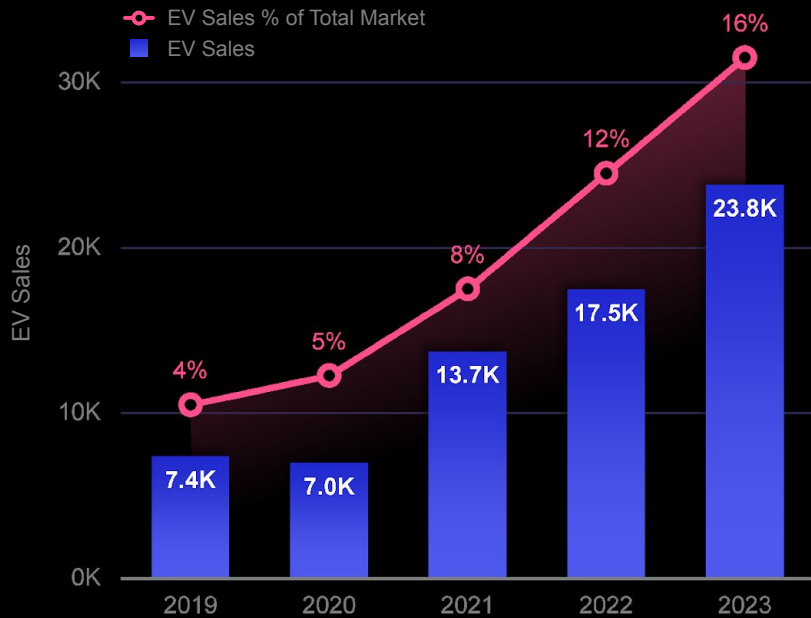
***THE FUTURE OF CAR REFILL
FOR THE NEXT GENERATION
OF DRIVERS***

krowe@electriceratechnologies.com

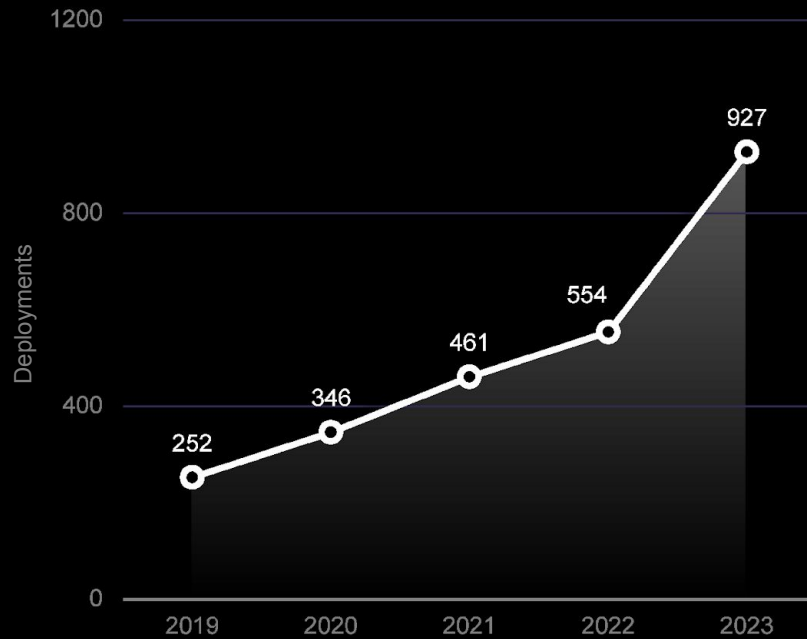
©2024 Electric Era Technologies Inc

EV Market & DCFCs in Oregon

EV Sales and EV Share of Total Market¹



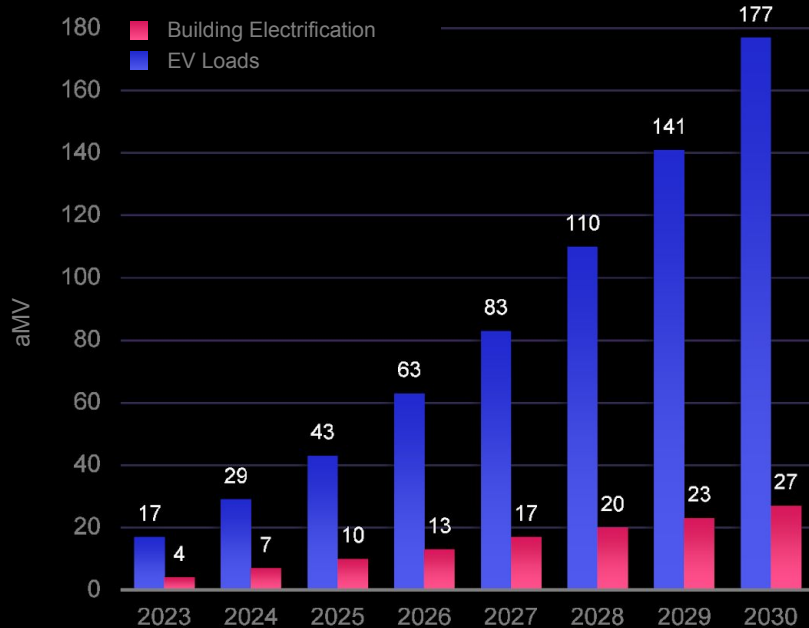
DCFC Deployments¹



¹ Atlas EV Hub, February 2024

EV Adoption = Increasing Grid Demand

Portland General Electric's forecasted energy use growth



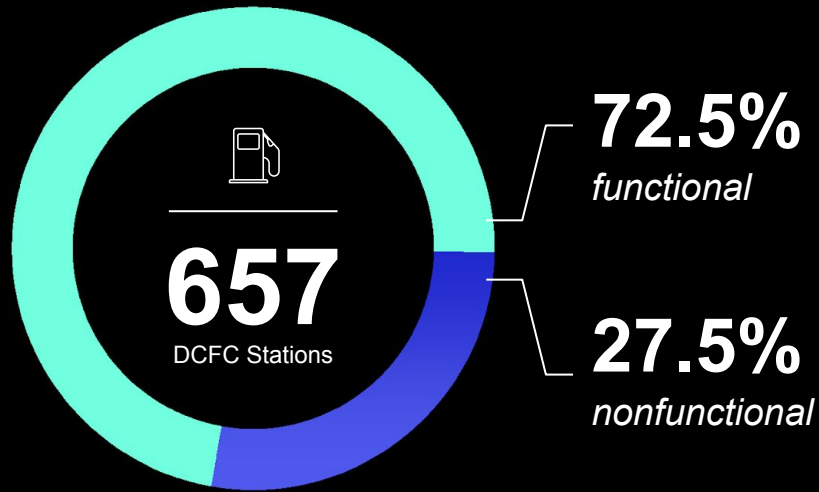
Oregon Department of Energy 2023 Biennial Zero Emission Vehicle Report:

- When demand is high across multiple utilities, the market value for additional resources spikes.
- If utilities consistently need to pay high market prices to meet load, the costs may be passed on to utility customers through annual electricity rate increases called power cost adjustments.
- EV load peaks at roughly the same time of day as grid-wide peak load, largely driven by light-duty charging.

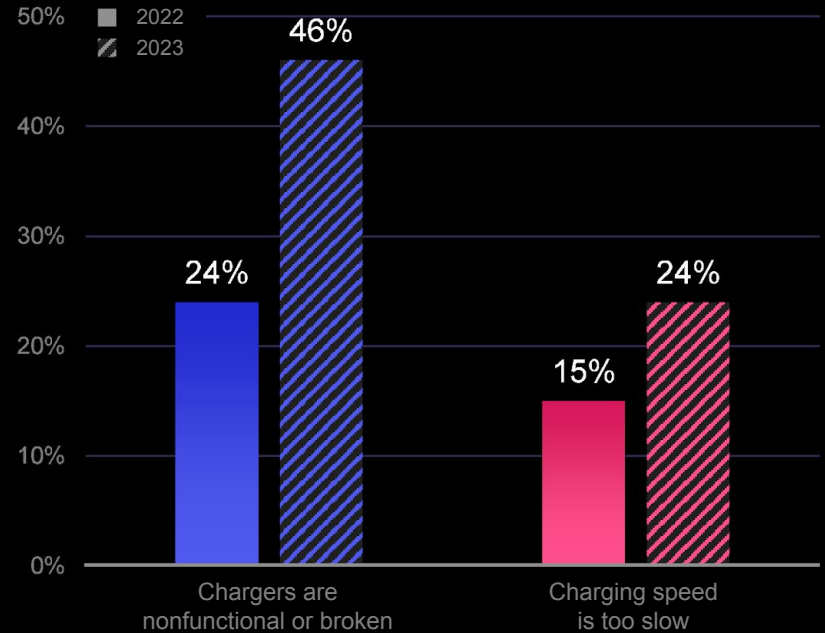
Reliability has plagued DCFC industry

Unacceptable reliability¹...

Findings from a 2022 UC Berkley study¹ that looked at 657 DCFC stations in the Bay Area:



... that is only getting worse²



¹ Rempel, D. (2022). Reliability of Open Public Electric Vehicle Direct Current Fast Chargers.

² Plug In America. (2023, May 2). 2023 EV Driver Survey



OUR GOAL:

Make EV fast chargers ubiquitous by making them affordable and accessible for all.

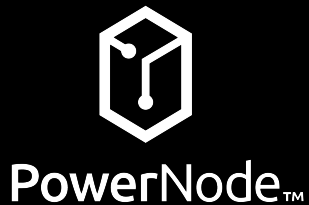
Founded by a team of aerospace engineers from SpaceX.

Based in Seattle.

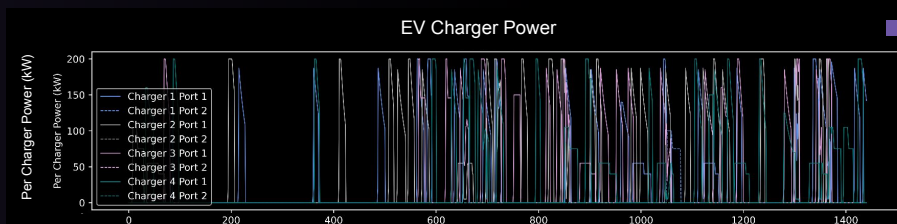
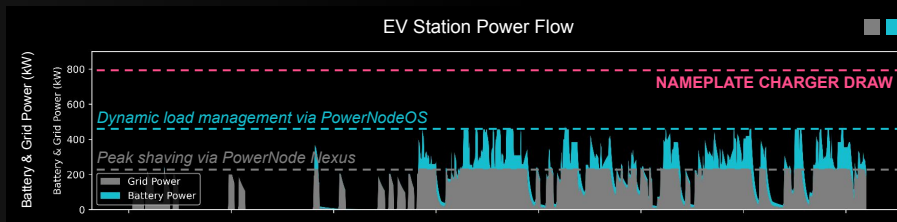
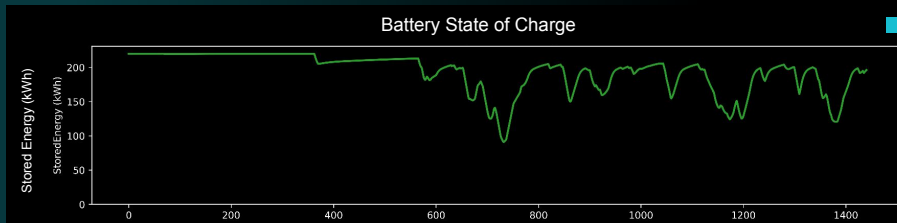
Patented PowerNode charging system:

- ✓ INDUSTRY-LEADING RELIABILITY
- ✓ AUTONOMOUS LOAD MANAGEMENT
- ✓ FASTER INSTALLATION TIMES

Our Patented Above the Grid Technology



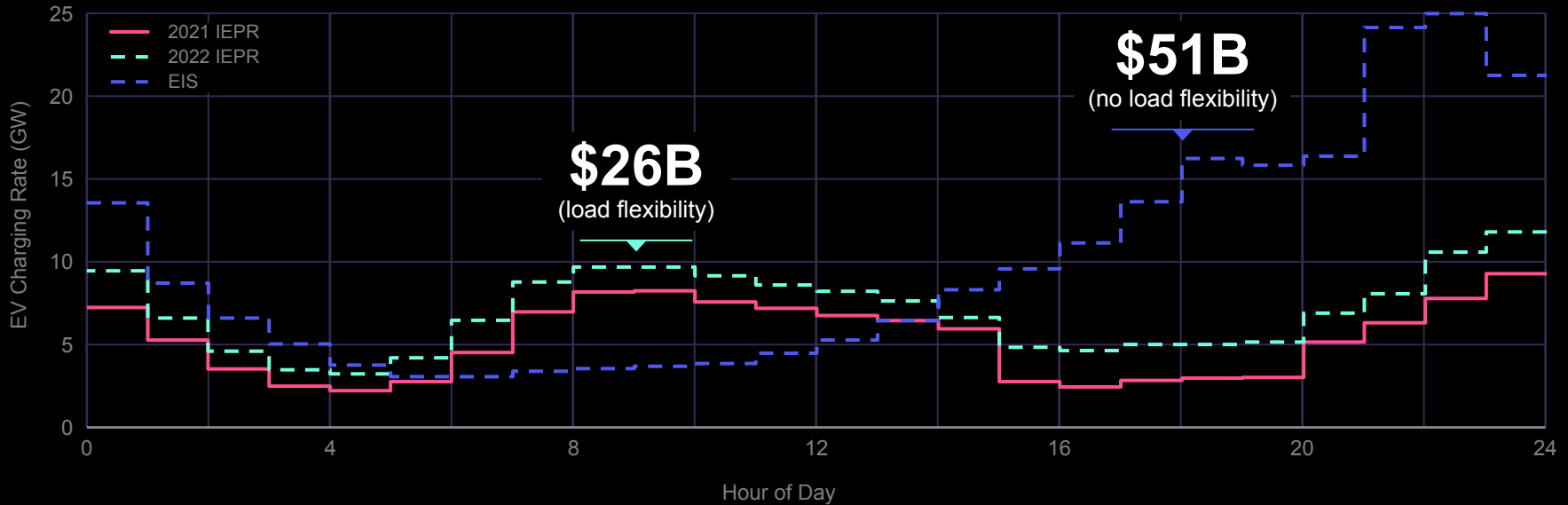
DAILY STATION POWER FLOW



Load flexibility

California Energy Commission's 2035 Grid Upgrade Forecast¹

2035 charging load profile and associated distribution upgrade costs



¹ CalAdvocates Distribution Grid Electrification Model Study and Report

PowerNode at Plaid Pantry in Portland



REDUCED TIME TO
MARKET FROM 18 TO

5 months

AVOIDED EXPENSIVE GRID &
TRANSFORMER UPGRADES

25kW

OF GRID POWER

>150kW

OF DCFC POWER

99.5%

UPTIME

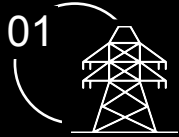
DEMAND CHARGES REDUCED BY

\$93k

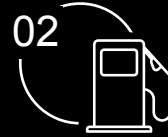


Summary

Issues to keep an eye on



Grid demand from
EV adoption



Charger
reliability



ODOT
Programs

1. National Electric Vehicle Infrastructure (NEVI)

\$52 MILLION OVER 5 YEARS

2. Electric Vehicle Charger Reliability and Accessibility Accelerator (RAA)

\$10 MILLION IN 2024 AWARD

THANK YOU!