Researching Best National Practices in EV Charging

By: Sam Nutile

IEA Global EV Outlook 2024

Global EV Outlook combines
 historical data and projections to
 2035, covering EV uptake, charging
 infrastructure, battery usage,
 financial trends, and policy
 developments within markets







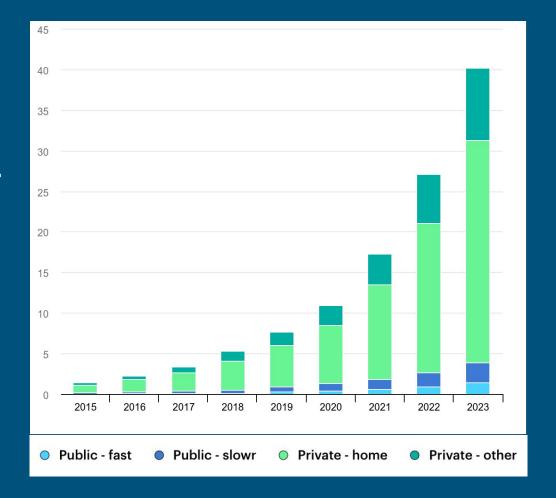
Global EV Outlook 2024

Moving towards increased affordability



Global Trends in EV Charging

- Private Chargers Outnumber
 Public Chargers: Nearly ten
 private chargers exist for
 every public one globally
- Home Charging Benefits:
 Convenient, cost-effective,
 and aligns well with off-peak
 electricity rates



Source: IEA Global EV Outlook 2024

Policies to Promote Residential Charging

- Building Codes and Standards: Require new homes to be EV-ready
 - o EU has committed to reducing energy use in their multi dwelling residences
- Financial Incentives: Tax credits and rebates for charger installations
 - UK government offers up to 350 pounds for the installation of residential EV chargers
- Right-to-Charge Laws: Enable tenants and condo owners to install chargers

Examples



- Hong Kong: EV-charging at Home Subsidy Scheme (<u>EHSS</u>) promotes the installation of EV chargers, aims to facilitate home-based charging for EV owners
- France: The <u>ADVENIR</u> program provides financial support for the installation of private EV chargers, aims to install thousands of new chargers, including those in residential areas
- Sweden: The government offers grants to private individuals for the installation of chargers for electric vehicles, encouraging the growth of home charging infrastructure

How Can the US Improve

- Uniform Building Codes: There's a need for national building codes that ensure consistency and readiness to handle EV vehicles across all states
- Awareness and Accessibility: Increasing public awareness about incentives and simplifying the application processes can encourage more homeowners to install chargers
- Support for Multi Dwelling Units: Special attention is required to address the challenges of installing chargers in multi-family residences, making sure all residents have access to at-home chargers

Thank You!!