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Policy sequencing for electric vehicle charging deployment

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Executive Summary

The global transition to electric vehicles, vital for climate goals and sustainable transport, hinges on effective charging infrastructure. Governments have a critical role to play in formulating optimal charging infrastructure policies, especially in the early stages of battery electric vehicle (BEV) adoption when their leadership is essential for kick-starting the market and promoting its proper functioning. This paper proposes a strategic, phased approach to charging infrastructure development. Market development is paramount for policy sequencing, yet vehicle-specific strategies are also crucial, from battery swapping for two- and three-wheelers to corridor charging for trucks. Equity is also important, and supporting it requires policies intentionally designed for diverse BEV users to ensure a just and inclusive transition across all segments of society.

Keywords: electric vehicles, AC & DC charging technology, standardization, smart grid integration and grid management, social equity

1 Introduction

Battery electric vehicles (BEVs) are pivotal for quickly decarbonizing transportation and achieving sustainable transportation solutions. Realizing the full benefits of this transition, including greenhouse gas emissions reduction and green industrial growth, hinges on establishing robust and accessible charging infrastructure. Prior research by the Zero Emission Vehicles Transition Council (ZEVTC) emphasized the necessity of timely and well-sequenced policies for effective charging infrastructure deployment and a just transition [1]. This paper addresses this critical policy challenge by examining global charging infrastructure policies and proposing a tailored policy architecture for road transport. The analysis spans diverse transport modes, including two- and three-wheelers, passenger cars, and heavy-duty vehicles (HDVs), and considers market development phases and distinct BEV user groups. Recognizing governments' indispensable role in planning and implementing charging infrastructure, this paper offers actionable insights for policymakers to promote infrastructure network planning that matches BEV uptake, facilitates stakeholder coordination, addresses underserved areas, and promotes equitable access.

Based on our literature review of global charging infrastructure policies, this paper categorizes market development phases for BEVs into three stages: early market, developing market, and scaling market. This classification framework draws inspiration from Everett Rogers' technology adoption cycle in Diffusion of Innovations [2]. The early market phase mirrors the innovators stage and is characterized by initial technology introduction and limited uptake. The developing market parallels the early market phase, and there is increasing interest and infrastructure growth. Finally, the scaling market encompasses the stages beyond the "chasm," where there is a move towards mainstream adoption. Countries like China and Norway are currently the scaling market for passenger cars and vans. The European Union is in the developing market stage, progressing towards scaling, and the United States, India, Chile, and South Africa are in earlier stages of development. While conceptually aligned with the technology adoption cycle, this market development phase framework offers greater flexibility for policy analysis, particularly as it focuses on market evolution in terms of BEV sales share progression, rather than on overall stock penetration. A more detailed description of the characteristics of each market phase is in the subsequent section on policy sequencing.

Despite their varied applications and operational contexts, two- and three-wheelers, passenger cars and vans, and buses and trucks share similar charging policy needs as electric mobility gains traction. This paper will show that while the specific implementation of policies will necessitate tailoring to each transport mode's unique requirements, the overarching policy *areas*—including addressing initial investment hurdles, ensuring interoperability and user convenience, and managing the integration of charging with the energy system—remain consistent across vehicle types during each market development phase. Whether confronting range anxiety for passenger car adoption or minimizing downtime for commercial truck operations, the core policy responses often fall within these broad categories. Understanding these common policy needs is crucial for creating efficient and effective charging ecosystems across the road transport sector.

Furthermore, effective charging infrastructure policy must move beyond a vehicle-centric approach and consider the diverse needs of different electric vehicle user groups. These groups can be systematically categorized by population characteristics (urban vs. rural), housing situations (renters vs. owners, apartments vs. houses), fleet type (private vs. company cars, small and medium-sized enterprises vs. large enterprises), and recharging technology preferences. Recognizing these diverse user profiles is paramount, as policies designed for one group may not adequately serve another. A truly comprehensive charging infrastructure strategy that promotes a just and inclusive transition to electric mobility needs to be intentionally user-centric and address the specific challenges and opportunities presented by each user segment.

The policies presented in this paper were carefully selected from pioneering countries globally and offer actionable insights. This structured, phase-by-phase approach is designed to equip policymakers, key stakeholders (including automotive and truck manufacturers, charge point operators, and electricity utilities), and practitioners with the tools to effectively navigate the complex transition towards electric road transport. Ultimately, this framework seeks to foster enhanced collaboration, facilitate knowledge sharing, and promote the design of robust and impactful policy interventions.

2 Sequencing of government policies by market development phase

As showcased in ZEVTC’s earlier briefing paper, which underscored the complexity of charging infrastructure deployment, strategic government intervention is necessary, especially in early market development phases. Once there is an understanding of a country’s specific context, particularly its current level of BEV uptake, the timing of policies and programs becomes crucial. For instance, the optimal policy approach in a market with a BEV share of 2% of new registrations will drastically differ from one in a market where BEVs already constitute 60% of new registrations.

After an extensive literature review of global charging infrastructure policies for two- and three-wheelers, passenger cars and vans, and trucks and buses, we found three or four key policy topics per segment and market development stage. While the exact content of the policies differs, we also found many similarities in the topics.

In an early market, there is minimal BEV market share and public charging options are scarce. In a developing market, BEV adoption increases steadily, charging networks expand in urban areas and key corridors, there is increased private sector involvement, more diverse charging options (i.e. destination and fast charging), and growing consumer interest. Finally, in a scaling market, BEVs represent a significant share of new vehicle sales, charging infrastructure is expanding, and market dynamics are largely driven by consumer demand and competition with reduced reliance on direct subsidies. This stage is marked by reliable and widespread charging options, competitive BEV pricing, and high consumer acceptance. Government intervention is most crucial during the transition from a developing to a scaling market, and to ensure the market remains in the scaling phase after this shift. This transition requires shifting focus from early technology enthusiasts to the broader mass market. These policy topics, transport modes, and market phases are listed in Table 1.

Table 1: List of charging infrastructure policies per transport mode and market development stage

Market phase	**Two- and three-wheelers**	**Passenger cars and vans**	**Trucks and buses**

Early	• Funding
	• Standards and interoperability
	• Alternative charging solutions such as battery swapping
		• Funding
		• Standards and interoperability
		  ○ Hardware (including plug standards and smart charging capability)
		  ○ Software
		• Power sector integration
		  ○ Breaking silos
		  ○ Ensuring upfront planning
		  ○ Streamlining permitting from the utility side
		  ○ Smart charging standard
		• Data sharing
			• Funding
			  ○ Public and private charging
			  ○ Innovative charging systems
			• Standards for high-power charging
			• Alternative charging solutions such as wireless in-road charging
			• Power sector integration

Developing	• Subsidy program
	• Battery-as-a-Service
		• Self-sustaining funding program
		• Charging installation targets
		• User-friendliness: Reliability and fair pricing
		• Tender process and planning-oriented development
			• Charging installation targets
			  ○ Public freight corridors
			  ○ Private depot
			• Alternative charging solutions such as battery swapping
			• User-friendliness: reliability and booking system

Scaling		• Equitable deployment of public charging infrastructure • Workforce transition • Competition analysis and transparency • Grid-friendly solutions such as bi-directional charging	• Equity in charging electric school buses • Grid-friendly solutions

As shown in the table, government intervention occurs in all market phases and across all transport modes, though the focus shifts. In an early market, governments can kick-start the market by providing funding, establishing foundational standards, and fostering cross-sector collaboration. The developing phase requires governments to drive mass-market adoption by setting charging infrastructure deployment targets, potentially using tenders, and fostering user-friendly, reliable, transparent, and fairly priced charging through regulation. Lastly, in the scaling phase, the government's role is to promote equitable and healthy market operations by implementing equity programs, supporting workforce transitions, and monitoring market competition.

2.1 Early market

Establishing charging infrastructure standards for both hardware and software is paramount during the early phase to foster a cohesive market from the outset. In India, NITI Aayog's battery-swapping policy exemplifies this, as it focuses on technical standards for batteries and swapping stations to facilitate seamless operation across different providers [3]. Mandating smart charging early on could also proactively encourage grid-friendly solutions. Reflecting this proactive approach to grid management, the UK's Smart Charge Point Regulation mandates specific smart charging applications, including pre-configured charging schedules for home and workplace chargers [4].

As the early phase progresses, interoperability policies become vital to foster recharge options for all BEV types, whether they are using public or private charging infrastructure. To support international interoperability and seamless cross-border trade, the European Union and United States have jointly committed to developing a shared charging standard for HDVs, the Megawatt Charging System (MCS) [5]. The MCS standard, already endorsed by global standards bodies like IEC and ISO, aims for compatibility in both physical connectors and communication protocols. Similarly, China's Chaoji-1 standard demonstrates the strategic use of standardization in early markets because it establishes a high-power charging system specifically designed to accelerate the electrification of HDVs [6].

Government funding programs are typically needed in the early stages, to bridge the gap until market self-sufficiency is achieved. These incentives can take various forms. Some are direct financial subsidies for charging infrastructure deployment (targeting charge point operators) and for the recharging process, such as free or subsidized public charging (targeting consumers); others are funding for alternative charging solutions such as battery swapping and wireless charging, and there are also non-financial incentives like preferential parking. Canada's ZEVIP program exemplifies a diversified approach by offering distinct funding schemes tailored for public spaces, workplaces, residential buildings, fleets, and indigenous communities [7]. However, as the BEV market develops, governments generally aim to transition to self-sustaining funding programs for long-term financial viability. In France, the Advenir program offers a model for this transition; it leverages the Energy Savings Certificate system to channel funds from energy suppliers into charging infrastructure deployment and thus reduce the financial burden on the government [8].

Furthermore, grid integration is a critical consideration across all transport modes, but especially for energy-intensive HDVs. California's EnergIIZE program exemplifies a strategic approach to HDV grid integration by incentivizing charging infrastructure and investing in corridor charging strategies to support electric trucks [9]. Early engagement and adaptation within the energy sector, starting as early as possible, are essential due to the time required for grid upgrades and process adjustments. As an example, the United States created the Joint Office of Energy and Transport in 2021 [10]. This proactive grid integration approach paves the way for innovative solutions like bi-directional charging to be implemented by the scaling phase.

2.2 Developing market

Setting legally binding public and private charging infrastructure deployment targets is crucial for supporting widespread charging development on par with BEV uptake. The European Union's Alternative Fuel Infrastructure Regulation (AFIR) provides a comprehensive example of such target setting for public charging deployment [11]. For passenger cars and vans, AFIR sets both fleet-based and distance-based targets. Fleet-based targets require each EU member state to deliver a minimum total power output of public charging capacity relative to the number of electric vehicles registered. Distance-based targets mandate the installation of fast-charging pools every 60 km along major EU transport corridors (TEN-T network), with increasing minimum power output over time. Additionally, the AFIR establishes binding targets for HDV charging infrastructure along the core TEN-T road network. The requirements progressively tighten, culminating in full coverage by 2030, defined as fast charging stations with at least 350 kW installed every 60 km along the core network and every 100 km along the comprehensive network. This phased approach and the specification of minimum power outputs for HDV charging stations provides a clear roadmap for infrastructure development.

Having chargers on the ground is an important first step, but maintaining the good functioning of the chargers is equally important. Reliability legislation, such as the Public Charge Point Regulations set in the United Kingdom in 2023, aims to ensure charger uptime and performance [12]. The UK regulation sets a high bar with a 99% uptime requirement for DC fast chargers (50 kW or above) and it is enforced through annual operator reporting through the standardized Open Charge Point Interface protocol with potential penalties for non-compliance.

In the developing market, governments can already have a good idea of all the stakeholders involved in charging infrastructure deployment and can set data-sharing standards. Indeed, data is key to properly planning for charging infrastructure and providing consumer-friendly charging solutions. The EU AFIR regulation addresses this by requiring operators to share both static and dynamic data with newly established National Access Points, to facilitate standardized data exchange across the European Union and improve user experience. Ultimately, the developing market phase necessitates policies that build a user-friendly, reliable, and data-driven charging network capable of supporting a rapidly growing BEV fleet.

2.3 Scaling market

As the BEV market transitions into the scaling phase, the primary policy focus evolves beyond simply deploying charging infrastructure. The government's role expands to maintaining the long-term sustainability, inclusivity, and healthy functioning of the charging ecosystem. In this mature stage, key policy priorities become guaranteeing equitable access to charging for all residents, managing the workforce transition in related industries, and fostering a competitive and transparent charging market. Addressing these broader societal and economic dimensions is essential for solidifying the gains made in BEV adoption and enabling a just transition for everyone.

One of the most critical aspects of this mature market is equity. In a scaling market, the focus shifts to prioritizing that benefits of electric mobility are accessible to all segments of society, preventing "charging deserts" in underserved communities, and guaranteeing equitable access for all users. Programs like California Senate Bill 1000 exemplify proactive approaches to equitable deployment [13]. This bill requires the California Energy Commission to assess charging infrastructure deployment across the state with metrics like drive time to the nearest fast charger and analyze the results against demographic and income data. The findings of such assessments can then directly inform investment decisions and guide that funding is targeted to bridge identified equity gaps. Similarly, the U.S. Environmental Protection Agency's Clean School Bus Program promotes equitable charging access in the United States by prioritizing funding for school districts in underserved communities [14]. This program provides rebates for purchasing and installing charging equipment because the cost of infrastructure can be a major barrier for these communities transitioning to electric fleets.

As the BEV market scales, facilitating a just workforce transition is equally important. The shift to electric mobility will impact traditional automotive and energy sector jobs and thus necessitate proactive measures to support workforce adaptation. The Electric Vehicle Infrastructure Training Program (EVITP) in the United States provides a valuable model for workforce transition by offering comprehensive, certified training programs for electricians to install and maintain electric vehicle charging equipment, and this directly addresses the skills gap in the growing electric vehicle sector [15]. Such national, certified programs, paired with incentives for companies to invest in regular workforce training and aligning university curriculums with the evolving needs of the electric mobility sector, are essential to facilitate a smooth and equitable transition.

Lastly, in a scaling market, governments play a crucial role in fostering healthy market competition and transparent pricing in the charging infrastructure industry. As the market grows, vigilance is needed to prevent market consolidation around a few dominant players that leads to unfair conditions for consumers.

Competition agencies, such those in the European Union, are increasingly monitoring the BEV charging market to identify and address potential anti-competitive practices, including abuse of local market power, market tipping, and vertical integration that limits market access [16]. The findings from these analyses can inform regulatory interventions to maintain a competitive landscape and uphold fair and transparent pricing for BEV charging.

3 Tailored policies for different transport modes

While overarching charging infrastructure policies provide a foundational framework, achieving effective BEV deployment requires tailored approaches that acknowledge the unique operational characteristics and needs of different vehicle segments. Two- and three-wheelers, passenger cars, and HDVs each have distinct charging requirements and usage patterns, and a one-size-fits-all policy strategy will not be sufficient to unlock the full potential of electric mobility for all vehicle segments. Therefore, specific interventions are necessary to optimize charging solutions for each transport mode.

For two- and three-wheelers, which are often used in dense urban environments and for commercial activities that operate on tight schedules like delivery services, battery swapping and battery-as-a-service (BaaS) emerge as particularly effective solutions. China's 13th Five-Year Plan supported battery swapping for its ability to offer significantly faster refueling times, a critical advantage for minimizing downtime in commercial operations [17]. Taipei, Taiwan, further demonstrates the success of this approach by incentivizing a dense network of battery swapping stations, strategically placed throughout urban and rural areas, coupled with parking benefits to promote electric scooter adoption [18]. In Rwanda, the BaaS model is actively fostered through supportive government policies, as exemplified by Ampersand's electric motorcycle taxi service [19]. This model lowers upfront costs for drivers and leverages solar power at battery-swapping stations; this is a sustainable and accessible approach tailored to the needs of this vehicle segment. These examples highlight that promoting battery swapping and BaaS can help accelerate the electrification of two- and three-wheelers.

Passenger cars need policies that prioritize convenience and accessibility of charging, particularly at homes and workplaces. While public charging networks are essential, most passenger car charging is expected to occur at private locations. France's national decree offers a model by enabling the utility Enedis to prefinance electrical upgrades in apartment buildings; the costs are recouped through a fixed price for electric vehicle owners installing chargers, and this facilitates charging at multi-unit dwellings [20]. The European Union's Energy Performance of Buildings Directive further promotes private charging by mandating pre-cabling in new residential buildings, requiring charging points, and emphasizing interoperability and smart charging features, including the "right to plug" [21]. These policies underscore the need to address barriers to private charging directly. For public charging, the National Electric Vehicle Infrastructure program in the United States mandates software interoperability across key areas like vehicle-to-charger communication and payment methods, to facilitate a seamless user experience [22]. Complementing these efforts are proactive grid planning and streamlined utility permitting, exemplified by the Netherlands' National Grid Congestion Action Programme, and such policies are critical to support the widespread deployment of charging infrastructure for passenger cars, both private and public [23]. Specifically, this program involves anticipatory grid planning that uses forecasts of future electricity demand to proactively identify and schedule necessary grid infrastructure upgrades. This shifts away from a reactive approach, helping grid capacity keep pace with the growing demand from electric vehicle charging. Finally, smart charging regulations like the United Kingdom's Smart Charge Point Regulation complement these efforts by optimizing charging times and grid integration, particularly in residential settings where vehicles are parked for extended periods.

Heavy-duty vehicles present distinct challenges due to their high energy demands, diverse operational patterns, and the critical need to minimize downtime for commercial viability. High-power charging standards are therefore essential for reducing charging times and accelerating HDV electrification. China's

ChaoJi-1 standard, which supports up to 900 kW, and the EU-US joint commitment to the Megawatt Charging System (MCS) demonstrate the global recognition of the need for standardized high-power charging solutions. Beyond plug-in charging, innovative technologies like wireless in-road charging, as piloted by the Antelope Valley Transit Authority in California, offer the potential for seamless charging during scheduled stops that maximizes vehicle uptime for transit operations [24]. Strategic charging strategies for regional electric truck fleets, exemplified by Sweden's REEL project, emphasize the importance of depot charging and opportunity charging coupled with sophisticated charging management systems and grid integration planning. Finally, zero-emission freight corridor development, as seen in the U.S. National Zero-Emission Freight Corridor Strategy and Germany's Power to the Road project, highlight the need for tailored infrastructure deployment to address the specific demands of the HDV sector and enable the decarbonization of freight transport [26, 27].

In conclusion, the policy examples presented underscore the necessity of tailoring charging infrastructure policies to the specific characteristics of each transport mode. From battery swapping and BaaS for two- and three-wheelers, to home and workplace charging enablers for passenger cars and high-power charging solutions and strategic corridor development for HDVs, targeted policy interventions are essential for unlocking the full potential of electric mobility across the road transport landscape.

4 Targeted policies for different BEV users

Our global policy review reveals that governments can play an active role in helping all potential electric vehicle users be effectively served. We categorize these diverse user groups based on four characteristics: population, housing, fleet type, and recharging technology preference, as detailed in Table 2. While the specific emphasis on each group will vary depending on the unique regional context, a comprehensive charging infrastructure strategy would consider all of these characteristics.

Table 2: Categories for different BEV users

Group type	Categories
Population type	Urban
	Rural
Housing type	Renters
	Owners
	House
	Apartment
Fleet type	Private car
	Company car – large enterprise
	Company car – small and medium-sized enterprise
Recharging technology	Wired stationary
	Battery swapping
	Wireless in-road

To effectively reach different *populations and housing types,* differentiated policy approaches are generally observed. In urban areas where apartment buildings are concentrated, prioritizing public overnight and destination charging solutions, or promoting private shared charging solutions, can address the charging needs of BEV users. Creating DC residential charging hubs can also address the challenges of high-density living. Conversely, rural areas typically see an emphasis on fast or ultra-fast on-road charging at fixed distances to enhance connectivity and mitigate range concerns. Furthermore, the differing circumstances of property owners versus renters are commonly addressed through policy measures that grant renters the right to install charging infrastructure; this is often accompanied by financial support mechanisms to facilitate implementation in apartment buildings.

Fleet types are also recognized as influential factors in the design of effective charging policies. Distinct driving patterns and user behaviors associated with personal vehicles and company cars require differentiated charging needs and locations. The prevalence of small urban trucks versus regional or long-haul distribution fleets similarly informs the selection of appropriate charger types, the strategic location of chargers, and the optimal funding and business models. In addition, the financial and spatial limitations potentially encountered by small and medium-sized enterprises in deploying on-premises charging infrastructure suggest that the Charging-as-a-Service business model may support fleet electrification in this segment.

Furthermore, the choice of *recharging technology* is a critical determinant in shaping tailored charging policies that effectively respond to the diverse needs of various fleet types. For example, bus systems in certain cities are using wireless in-road charging to maintain tight schedules, while battery swapping is often ideal for two- and three-wheelers, particularly in applications like delivery services.

Beyond user group considerations, *institutional structures s*hape policy implementation by influencing the legally permissible scope of policy interventions. Centralized government systems may facilitate streamlined policy development and implementation processes, while decentralized systems may require more localized and tailored policy approaches to achieve optimal effectiveness in charging infrastructure development and deployment.

5 Conclusion

The global transition to electric vehicles is essential for climate goals and sustainable transport, but deploying effective charging infrastructure is a multi-faceted policy challenge that requires careful planning and consideration of multiple interconnected factors. This paper provides a structured approach to policy sequencing that offers clear and actionable insights for navigating these complexities and accelerating the transition to electric mobility.

Effective charging infrastructure policy is guided by the stage of market development. Our comprehensive global review of policy interventions across diverse countries and transport modes indicates that the prevailing market phase—early, developing, or scaling—is the most critical determinant of policy priorities. While vehicle type and country-specific contexts require policy adaptations, the overarching policy framework benefits from dynamic sequencing to align with the evolving maturity of the electric vehicle market. In an early market, governments can kick-start activity by providing funding, establishing foundational standards, and fostering cross-sector collaboration. The developing phase requires governments to drive mass market adoption by setting charging infrastructure deployment targets, potentially using tenders, and promoting user-friendly, reliable, transparent, and fairly priced charging through regulation. Lastly, in the scaling phase, the government's role is to foster equitable and healthy market operations by implementing equity programs, supporting workforce transitions, and monitoring market competition. This phased approach help achieve that government interventions that are not only timely and relevant but also progressively targeted to address the most pressing challenges and opportunities at each stage. This maximizes the impact of public resources and fosters a sustainable trajectory for electric mobility.

Building upon this phased framework, this paper further underscores the need for vehicle-specific policy tailoring to effectively implement the framework's principles. While broad policy categories provide a common foundation, the diverse operational characteristics and charging requirements of two- and three-wheelers, passenger cars and vans, and HDVs need distinct policy instruments as we apply the phased approach. For instance, for two- and three-wheelers, implementing the phased approach in a market characterized by agility and commercial applications suggests prioritizing battery swapping and Battery-as-a-Service models. Policies therefore need to incentivize dense swapping networks and support innovative business models to align with the framework's objectives in this segment. Conversely, as passenger cars are predominantly charged at residences and workplaces, implementing the phased approach points to policies that facilitate private charging deployment. Finally, for HDVs, applying the phased approach to address their demanding energy needs and operational imperatives necessitates a focus on high-power charging standards, advanced grid planning and streamlined connections, and strategic corridor development. This differentiation of the phased approach facilitates targeted policy interventions to address the unique challenges and unlock the specific electrification potential of each transport segment, and this helps drive comprehensive decarbonization across the road transport sector.

Beyond market phases and vehicle types, this research highlights the paramount importance of a user-centric and equitable policy paradigm. Effective charging infrastructure strategies extend beyond technological and economic considerations to actively address the diverse needs and circumstances of all potential electric vehicle users. Categorizing users by population density (urban vs. rural), housing type (renter vs. owner, apartment vs. house), fleet type (private vs. company, small and medium-sized vs. large enterprise), and recharging technology preferences reveals a spectrum of distinct charging requirements and accessibility challenges. Policies are intentionally designed to overcome potential equity gaps, prevent the creation of "charging deserts" in underserved communities, and guarantee that the benefits of electric mobility are broadly distributed across all segments of society. This implies targeted programs, financial mechanisms, and regulatory frameworks that actively promote inclusive charging infrastructure deployment to support a just and equitable transition for all residents.

This proposed phased approach, coupled with vehicle-specific tailoring and a user-centric equity lens, provides a comprehensive framework for designing effective and future-proof policies. As BEV markets continue to evolve and mature, ongoing policy adaptation and innovation become essential for addressing emerging challenges and capitalizing on new opportunities. This includes continuous monitoring of market dynamics, technological advancements, and societal impacts, as well as fostering ongoing dialogue and collaboration among governments, industry stakeholders, and user communities.

Ultimately, the successful and widespread adoption of electric road transport hinges on the timely and strategic implementation of well-designed charging infrastructure policies. Adopting a phased, tailored, and equitable approach allows policymakers worldwide to accelerate the transition to a zero-emission transportation future that unlocks the full potential of BEVs to mitigate climate change, drive economic growth, and create a more sustainable and equitable transportation system for all. This proactive and strategic policy leadership is essential for realizing the transformative promise of electric mobility on a global scale.

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Presenter Biography

Irem Kok is a researcher on light-duty electric vehicles at the ICCT. Her research focuses on local and national policies driving electric vehicle adoption and charging infrastructure deployment. Her work supports two key initiatives: the Accelerating to Zero Coalition, a platform of over 200 signatories committed to transitioning to zero emission vehicles, and the Zero Emission Vehicle Transition Council, which tracks global progress towards zero-emission mobility. Irem holds a PhD in Geography and the Environment from the University of Oxford, where she worked as a researcher at the Sustainable Finance Programme.

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