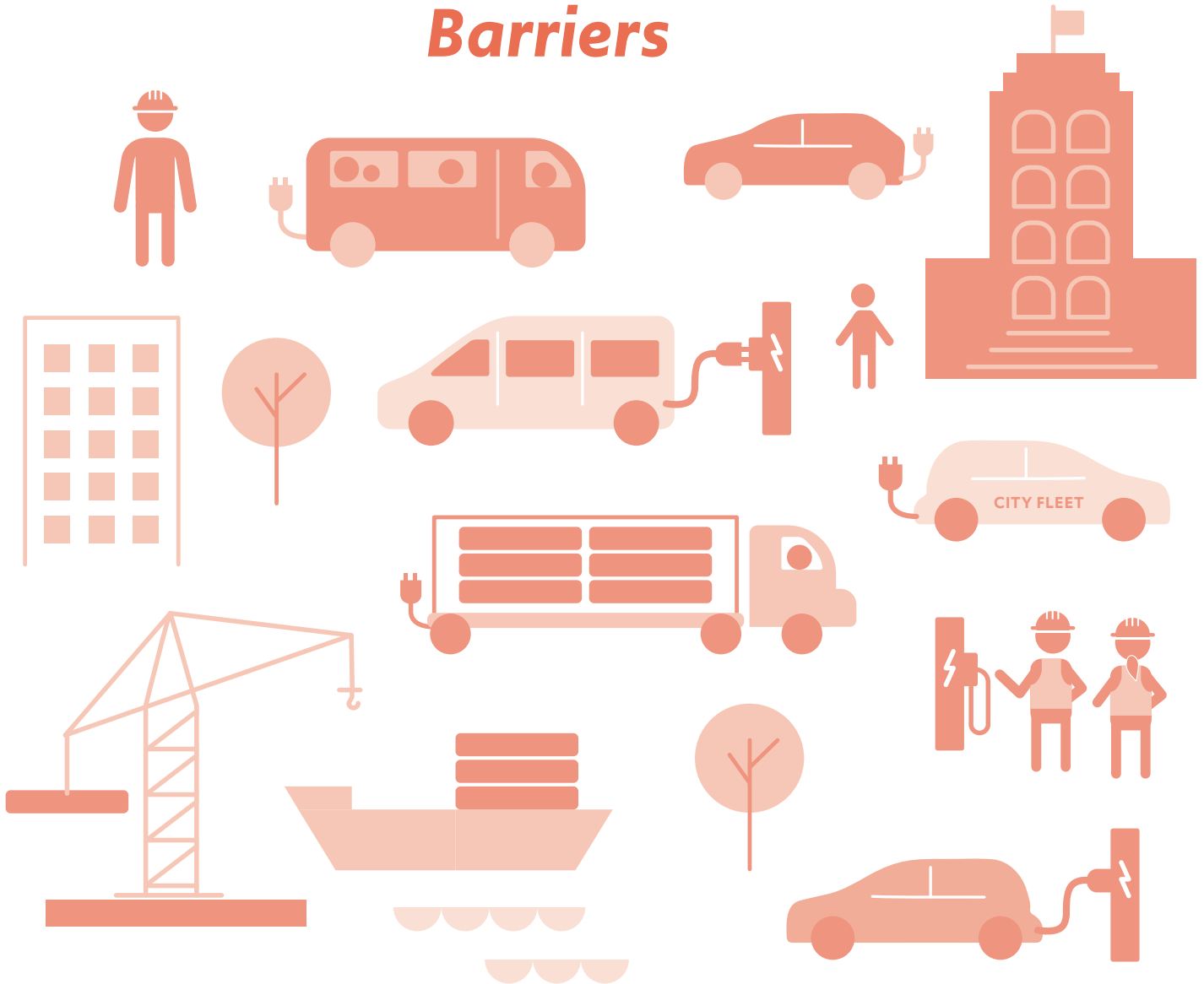


Policy Brief:

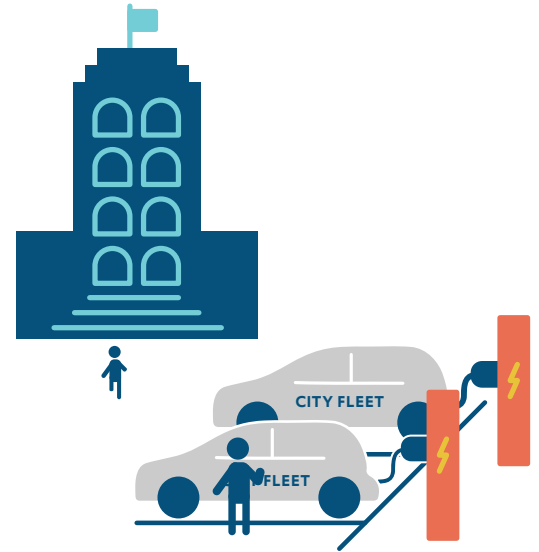
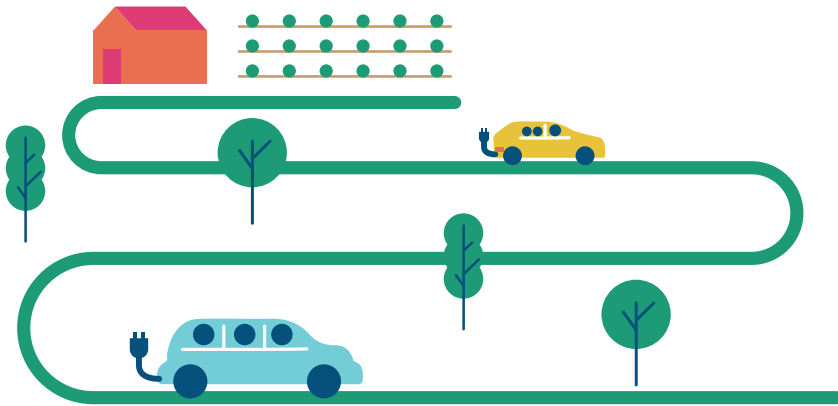
Electrifying Transportation Barriers



**THE Climate +
Clean Energy
EQUITY
FUND**

There are some major roadblocks that exist when creating equitable transportation electrification policies. These range from funding issues to how decisions about transportation policies have been made so far. Transportation electrification policies so far have narrowly focused on personal electric vehicles without addressing the issues around access for all people. In order to overcome these barriers while also addressing the current systemic injustices that exist in our transportation system, new transportation electrification solutions must be explored. Here we provide key frameworks to consider when crafting equitable electric transportation policies.

Major challenges to crafting equitable transportation electrification policies



Why is the current conversation focused primarily on EVs?

Who can access EVs?

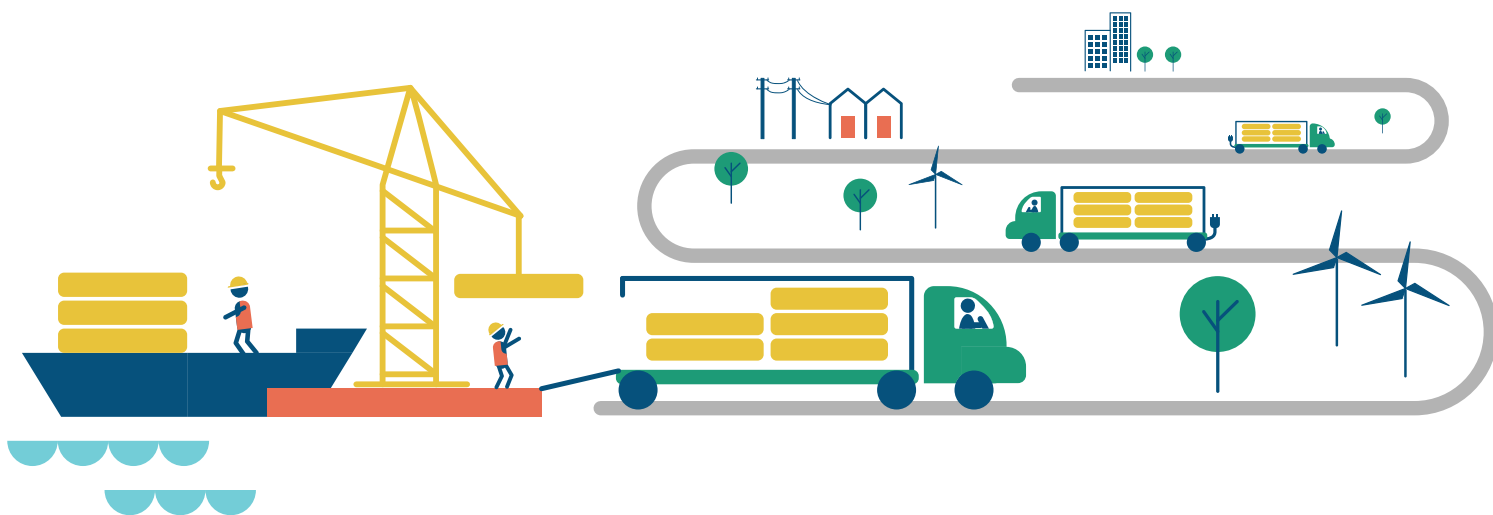
- In the electric transportation policy world, there is a large focus on the issue of personal EV's that can ignore the important, and broader, conversation around the need for more mass transit options as well as more significant shifts in land-use planning so lives are not so car dependent.
- EV's still lack a sufficient range to meet most needs in rural communities, though research and development for longer-range EV's is occurring on a regular basis. **Rural areas would need a massive investment in infrastructure or other, innovative transportation solutions.**
- There is a lack of EV education and outreach among low-income communities and communities of color; EV's are still perceived (and are to a large extent), a vehicle for the wealthy.

Who fronts the bill?

Where does the burden fall?

- Rather than simply ensuring new EV programs have financial support to make EV's affordable for low and middle income people, **many advocates and policy-makers have focused on boosting the market for expensive EV's**, under the notion that this will create a secondary market through used vehicles for low-income consumers.

- **Financial assistance programs have also generally not been sufficient** to cover a wide enough range of costs to make it accessible for low-income people. The ones that do exist have had mixed success; they can require multiple steps that are a barrier from people accessing the rebates.
- **Smaller cities**, particularly ones that have predominately low-income populations, also do not have the resources to necessarily switch over their entire fleet of vehicles, and requiring them to do so could create a financial burden that drains resources for other, needed services.
- Often EV infrastructure is **not placed in accessible or frequented locations for low-income communities and communities of color.**
- Natural Gas powered vehicles, also called "near-zero emission vehicles", are often promoted as part of an electrification framework. It is particularly pushed as an alternative in environmental justice communities, because natural gas does have fewer particulate matter emissions that result in poor air quality and can harm health. However, natural gas is not a renewable resource and has significant climate impacts. **Investing in natural gas vehicles now locks people and cities into several decades of natural gas infrastructure, instead of "leap frogging" over natural gas straight to electric.**



Where is transportation funding going? How are decisions around transportation being made?

- Many policymakers focus on financial incentives for companies and consumers to switch to EV's, in place of regulations or mandates, to bolster the EV market. While these are needed, **clear regulations and mandates on transitioning to zero emission vehicles are needed to drive the transition at the needed rate.** This is particularly true in goods movement, where many policy approaches rely on creating grants and funding to electrify trucks instead of requiring their electrification.
- **There are often limits on how transportation funding can be used;** many times, revenue raised from the sale of gas can only go to road maintenance. In addition, this creates a structurally unsound source of revenue, because as fuel efficiency increases, gas consumption and thus revenue decline. In addition, federal transportation funding is heavily skewed towards road construction and maintenance, instead of public transportation investments.
- Decisions about transportation are often made in a silo from climate change policies and land-use decisions, which are often controlled at a local level. **This can make aligning transportation policy with climate policy difficult.**
- When considering freight electrification needs, electric trucks that can drive the long distances that much of the goods movement in the U.S. depends upon have yet to be developed. **Rapid research and development is needed to expand the options for long-haul electric trucks.**

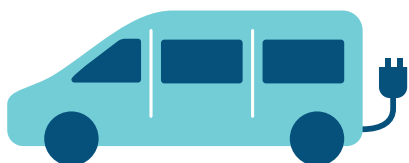
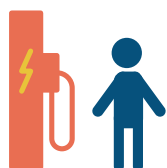
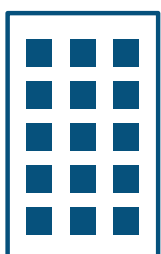
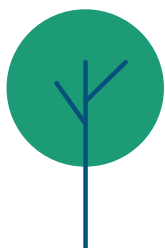
Volkswagen Settlement An opening

From 2009 - 2016, Volkswagen knowingly installed computer systems that allowed diesel cars to run emission controls during testing, but not during regular operation. In 2014, an independent research study revealed that the **emissions from Volkswagen cars were 15 – 40 times above the U.S. EPA compliance level, particularly releasing high quantities of NOx.**

In the face of a federal lawsuit by the Environmental Protection Agency, Volkswagen agreed to settle by spending up to \$14.7 billion to remediate the excess NOx emissions, the majority of which is going to vehicle buyback and modification programs. To mitigate environmental damages from violating the Clean Air Act, the settlement requires VW to invest \$2.9 billion in an independently administered environmental mitigation trust, which will fund projects to reduce diesel emissions.

States have been allocated a portion of the trust, based on the number of affected vehicles in their jurisdiction. There are only broad rules for how states can spend the money, and 22 states have filed their plans for how they will spend the money thus far. Of the \$258 million represented by these plans, \$134 million is being invested in electric infrastructure or vehicles, but \$108 million is going into fossil-fuel equipment. **Some states are being proactive in using the money to ensure a transition to electric;** New Jersey and Virginia are investing more than \$25 million each in the electrification of heavy-duty garbage trucks, school buses, and port and airport vehicles, as well as in EV charging equipment. **The development and implementation of the plans is an important opportunity to get more funding into environmental justice communities and transportation electrification more broadly.**

Key frameworks to consider when crafting equitable electric transportation policies



Increasing the amount of electrified transportation vehicle and transportation options:

Our transportation systems are woefully behind in transitioning to all electric. In order to make serious progress on reducing GHG emissions from transportation, **the number of EV's on the road must increase rapidly**. We must increase the quantity of electrified transportation options, electric public vehicle fleets, electric public transit, and ensure our vast system of trucks moving goods across the country is also electrified.

Making electrified transportation affordable and accessible:

Clean transportation options are not yet affordable for the vast majority of working Americans. **Policies must proactively work to create affordable, clean transportation options, and ensure accessibility to all people in both urban and rural areas**. This includes policies that make EV's affordable for individual consumers, local governments that have few resources, and freight companies to support their process of electrification, as well as exploring other important transportation options, such as car and ridesharing.

Ensuring adequate and accessible infrastructure:

Electrified transportation requires a vast infrastructure of charging stations that are located in **accessible places** for low-income communities and communities of color. Electric infrastructure must also meet the needs of electrifying public fleets, public transit and freight companies.