*35th International Electric Vehicle Symposium and Exhibition (EVS35)*
*Oslo, Norway, June 11-15, 2022*

# The Drive Electric Campaign: accelerating a zero-emission road transportation future

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**Summary**

Today's combustion-based transportation system damages the climate and our health, which is not only costly for our communities but also inequitable. The Drive Electric Campaign believes that a better future levering the. transformative power of philanthropic investments. Our Campaign's unique structure spans over 100 global partners, including NGOs, foundations, and coalitions, and we work closely with governments and businesses around the world. The next five years are key and here we explain how the campaigns works with a strong focus on public policy, business engagement and people-powered coalitions.

*Keywords: BEV, communication, finance, market development, policy*

## 1 An Audacious Campaign

Today, transportation accounts for almost 20% of climate pollution and contributes significantly to respiratory illness, loss of life and unnecessary suffering worldwide. Unless further action is taken, the International Energy Agency projects nearly 90% of on-road vehicles will still have polluting tailpipes in 2050[1].

Despite the great progress we are making on electrification of road transportation, barriers to a clean transportation future remain. As we progress towards our goals, the opposition has intensified their efforts, spread misinformation and lobbied against strong policy solutions. The world's most powerful industry, oil and gas, continues to spend billions per year to protect the status quo.

But there is hope. Drive Electric is the name of a global campaign to end the polluting tailpipe and accelerate the transition to 100% clean electric transportation across all modes — including cars, vans, buses, two- and three-wheelers, and trucks — in time to save the climate. We are a coalition of climate foundations, research institutions, and civil society organizations, powered by philanthropy. Via Drive Electric, the organizations that uncovered Dieselgate, supported the first zero-emission truck mandate in California, and increased the ambition of electrification in the EU's Fit for 55 Package, have come together to secure a zero-emissions transportation future 10 to 20 years faster than forecasts predict.

Our strategy includes:

- Advancing smart government policies, including incentives and regulations that grow the electric vehicle (EV) market. Drive Electric supports research, advocacy and technical assistance to secure government commitments and enable policies toward a 100% electric transportation future.
- Engaging business leaders, including vehicle manufacturers, fleets, and investors to increase the production and sale of EVs, driving more available and affordable products. Our campaign is already supporting over 300 companies globally to go all-electric.
- Mobilizing diverse people-powered coalitions representing health, environment, labor, consumers, business, and frontline communities, coming together to demand a cleaner transportation future. Coalitions supported by Drive Electric have helped secure dozens of smart government policies and business actions that are accelerating adoption of electric transportation including medium and heavy-duty freight, school buses, cars, and more.

From 2021 onwards, we are mobilizing for a five-year push that will leverage past progress and our global campaign infrastructure. If successful, our campaign will deliver enormous benefits for health, climate, and the economy, with a massive return on philanthropic investment. Together, we will prevent over 160 billion tons of cumulative climate pollution. This translates to one ton of climate pollution avoided for every penny invested, in addition to massive benefits for human health.

Drive Electric will achieve its goals by securing the necessary government policies and business commitments to ensure we reach the tipping point in the next five years when EVs will durably outcompete combustion vehicles on cost, convenience, and performance. As shown in Figure 1, this will enable 100% sales of clean EV for buses as well as two- and three-wheelers (by 2030), passenger vehicles (by 2035), and freight trucks (by 2040).

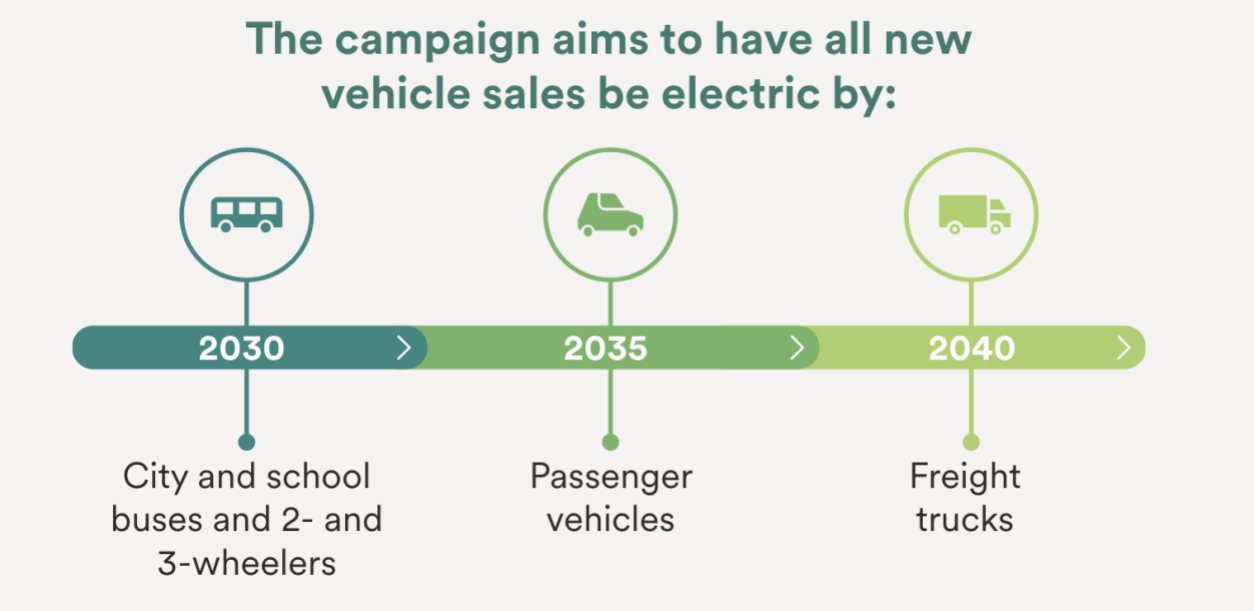


Figure 1. The Campaign goal is to have all new bus and 2/3-wheeler sales electric by 2030, passenger cars by 2035, and freight trucks by 2040.

## 2 The Tipping Point

Transportation currently accounts for 14 to 21% of global greenhouse gas (GHG) emissions. It is the number-one emitting sector in the US and Europe, and is rapidly rising everywhere else, with the largest contribution coming from road vehicles[2]. Forecasts from the International Energy Agency (IEA), Bloomberg New Energy

Finance (BNEF), and others predict that without further action, between 70 to 90% of vehicles on the road in 2050 will still have polluting engines that burn fossil fuels. If we do not take more drastic action soon, we will not meet our climate goals, leading to unnecessary suffering, especially for the people least able to adapt. We cannot afford to let this happen. The time to act is now.

A tipping point is in reach. We are facing the decisive decade to accelerate the shift from combustion to electric vehicles.

Electric vehicles of all types, including cars, trucks, vans, buses, and two- and three-wheelers, have emerged as a globally scalable solution to replace polluting combustion-powered vehicles. Because of their much higher efficiency and lack of combustion, they provide immediate benefits for health and for the climate that will only increase as the world shifts to more renewable energy. The tipping point where EVs outcompete polluting combustion vehicles is within reach because:

- **Batteries are nearing cost-competitiveness with combustion engines**. Dramatic progress in battery technology has made this transition possible faster than most experts imagined just a few years ago. Technical and economic studies now show the average cost of an electric vehicle could reach parity with polluting vehicles within the next five to seven years, with lower total cost of ownership even sooner[3]. Reaching these outcomes, however, requires continued market expansion, which will lower costs through economies of scale and greater competition, leading to innovations in design and manufacturing.
- **Recent wins supported by this campaign are providing needed momentum and creating a race-to-the-top for governments.** Europe, China, and several key US and Indian states recently established new regulations and incentives that are driving hundreds of billions of dollars in private investment into the development and sale of new electric passenger vehicles and trucks. These policies also support the development and rollout of infrastructure that make EVs more practical and attractive.
- **Progress in key regions can speed global uptake.** The global nature of vehicle manufacturing and supply chains means that this industry responds to global policy and market signals, especially within major markets. Working within and across the key global markets accounting for the majority of vehicle demand simultaneously can catalyze the tipping point and a global transition of a multi-trillion dollar industry in a relatively short period of time.
- **Significant health and economic benefits bring new allies.** People are motivated by the prospects of cleaner air, cost savings and new jobs. Combatting unhealthy air pollution garners wide public support, including from those disproportionately affected (young, elderly, people of color and communities living near polluted highways, ports, and distribution centers). Manufacturing of electric vehicles, components and charging infrastructure creates local jobs for communities. It also encourages utilities, which increasingly see the value of electric vehicles for their businesses, to invest in infrastructure and become allies for supporting policies. Money that was once spent on oil (often imported) can be invested instead in local infrastructure and businesses.

# 3 Barriers to Success

But the tipping point is not inevitable. Electric vehicles still make up less than 1% of the global vehicle fleet. In most markets, they are less available and more expensive than combustion vehicles. This leads most automakers and dealers to continue to prioritize polluting vehicles. The remaining market barriers, unless addressed now, will stall, or delay this transition until it's too late. These barriers include:

- **Growing and active opposition from competitive incumbent interests.** Opposition from interests that profit from oil, gas and combustion vehicles have successfully blocked or reversed policies and public investments supporting EVs;11 lobbied for exorbitant EV 'fees' that make them more expensive to own12; and supported misinformation campaigns that sow seeds of doubt, confusing policymakers, businesses, and consumers[4].

- **The need for continued cost reductions to deliver affordability and profitability.** Without fiscal or regulatory incentives, the current higher up-front cost of EVs limits demand from consumers, fleets, and businesses.
- **Lack of adequate commitment and action.** Many governments haven't made it a priority to enact key policies. Major incumbent vehicle manufacturers have so far failed to sufficiently invest in scaled EV production and sales. Business fleets haven't prioritized the purchase of EVs. Together, this keeps the market from advancing at the speed needed to meet climate goals.
- **Limited consumer awareness and adoption.** Beyond early adopters, consumers aren't always making the switch — often due to lack of EV availability in their markets, lack of reliable charging infrastructure, and misunderstanding or confusion on the benefits of EVs.

Only a concerted, coordinated global effort can overcome such opposition and address the remaining barriers to scaling EV adoption at the pace the climate crisis requires.

The next five years are a crucial window of opportunity to shift out of business as usual. Drive Electric partners are accelerating the transition to all electric vehicles for all types of road transportation, all around the world (see Figure 2). We are tracking progress toward critical tipping points, building momentum in public and private sectors to reach 100% zero-emission road transportation by 2050.


Figure 2. Our progress on the road to 100% electric road transportation

## 4 How the Work Gets Done

Because the market for vehicles is global, and the end of polluting vehicles must be universal to deliver the needed benefits, Drive Electric is a truly global campaign. Our initial focus has been four core markets — the United States, European Union, China, and India — which collectively represent over 70% of global production and new vehicle demand. This is also where the campaign has existing partner networks and access to business and government decision makers.

At the same time, we know this is not enough. Since 2022, we complement this regional work with support for global platforms and partners that are efficiently transferring and scaling best practices to the rest of the world, including Latin America, Africa, Southeast Asia, and beyond. By focusing on securing policies and commitments within the key markets and providing opportunities and platforms for broader participation, in the next five years, Drive Electric will help shape the forces that drive global markets and supply chains, setting in motion a global transformation.

### 4.1 Advance smart government policies that grow the EV market

National, state and city government policies are driving billions of dollars in private sector investment, growing consumer demand and turning governments at the forefront of EV adoption into leaders of the transportation revolution. Drive Electric supports smart policies through targeted research into the harms of pollution and benefits of EVs; engagement with government policymakers and advocacy to increase ambition; and technical assistance on effective policy design.

### 4.2 Engage business leaders to embrace EVs

Businesses are major suppliers and consumers of vehicles, so our campaign works with leading vehicle manufacturers to increase the supply of vehicles; with companies to electrify their fleets and help their employees and customers go electric by installing charging at their offices; and with utilities and investors to finance the deployment of infrastructure and EV production.

### 4.3 Mobilize diverse people-powered coalitions to demand a zero-emission future

Because people everywhere in the world are affected by vehicle pollution and climate impacts, everyone has a role to play in creating a cleaner future. Drive Electric mobilizes people to push for smart government policies and bolder business actions that accelerate the adoption of EVs and push back on fossil fuel interests that profit from the polluting status quo. To do this, we support diverse civil society organizations and coalitions representing health, environment, labor, consumers, business, and frontline communities affected by vehicle pollution.

## 5 New Frontiers

Over the past year, the Campaign has taken on new issues that stretch our capacity and broaden our tent. This ability to take on new issues, expand scope where appropriate, and adapt to political and market shifts, is central to Drive Electric's future growth strategy. Here we present two examples of new areas of work that have recently emerged as key to the success of this global campaign to end the polluting tailpipe.

### 5.1 Electrification of Transportation in Emerging and Developing Countries

As mentioned above, Drive Electric coordinates its work within and across the largest and fastest-growing markets globally to overcome key barriers to wide-scale EV adoption, these include the United States, the European Union, China, and India. However, to have an effective global strategy we need to reach beyond these four key markets. Many of our partners already work in the Global South, but we know there is more we can do and gaps that need to be filled. We are also motivated by a desire to ensure that developing economies are not left behind and that our Campaign contributes to a fair and equitable transition to decarbonize mobility for all. For these reasons, since 2022, DEC has developed a strategy to engage the Global South and an opportunity fund for specific actions by electrification advocates in developing countries.

To avoid lock-in on ICE technology in the next decades leapfrogging in technology is essential. The longer electrification is delayed the harder the shift to e-mobility will be, for this reason, our strategy seeks to reinforce the urgency of making smart decisions now that avoid locking in fossil fuels and related infrastructure. In Global South markets the sales of fossil fueled vehicles are set to continue long after the Global North (and countries with specific policies) ban their sale. This provides the industry a market to continue producing inefficient and climate negative vehicles of all kinds, allowing them to continue to make money off polluting vehicles. Moreover, the life of cars in Global South countries is longer, with a large secondhand market. This lock in should and can be avoided if financing and political will are deployed in support of e-mobility.

This Campaign seeks to assist this transition by supporting several partners working in the Global South. Our work seeks to activate financial resources to support the ZEV transition in-country, translating announcements into actual finance and funding flowing to projects and programs. Our partners work with decision makers to

develop tailored e-mobility strategies, plans, and regulations that support indigenous manufacturing and job creation, linking e-mobility to sustainable industrial development. We empower citizen voices that seek to stand up to the misinformation campaigns of incumbent fossil fuel interests, enabling greater representation in government decision-making. As the major economies of the world move to phase out fossil fueled vehicles, DEC is committed to ensuring that the rest of the world is not left behind.

### 5.2 Battery Sustainability

In this decisive decade of climate action, we can maximize the benefits of the energy and transportation transition. Fossil fueled vehicles are built from mined minerals with harmful supply chains and run-on oil extracted all over the world with human rights, ecological, and climate-altering impacts. The mined materials used in battery powered EVs also have an ecological and social footprint of their own, in large part due to the impacts of mining the lithium, nickel, cobalt, and other minerals used in EV batteries. Mining contributes to environmental harm, freshwater depletion, mine-waste dumping, and human rights violations in many parts of the world.

We must urgently end our addiction to oil – and at the same time, we must ensure the transition to low-carbon energy sources is done right. Unlike internal combustion engine vehicles, which must be continuously filled with oil, we have an opportunity to get the transition to batteries right in one go by sourcing a sustainable battery. Shifting to low-carbon transportation offers the opportunity to transition to a more sustainable minerals economy – a chance to change irresponsible mining practices while at the same time fostering greater dependence on recycling and recirculation that can offset demand for newly mined minerals.

Drive Electric's work supports responsible minerals sourcing that centers human rights and the environment, supporting verification systems and multistakeholder standards development organizations, such as the Initiative for Responsible Mining Assurance (IRMA). Our partners push for policies that advance best practices in material retrieval, mandate minimum recycling, require recycled content in new batteries and invest in domestic recycling capacity and circularity. The Campaign empowers advocates that work across labor, environmental justice, and conservation movements to co-create a policy pathway for job training and creation in forthcoming industries such as battery recycling.

As we move from oil to electric transportation, we can further improve the sustainability of the transition while reducing supply chain impacts for renewable energy and transportation. Doing this right will require an alliance between climate, environmental justice, and human rights advocates – together, through a coordinated campaign, we can do this.

## 6 Conclusion

The power of Drive Electric is the ability to align on shared global campaign outcomes, direct collective ambition and adapt the strategy to each region based on local conditions and politics. Bringing together local knowledge with the campaign's global reach gives us the ability to advance smart policies and business action in one region, and then quickly scale it to others. In addition to funding, Drive Electric plays a central, coordinating role that facilitates, leverages, and amplifies partners' efforts through activities and tactics that will be further expanded in the coming years and contribute to our overall strategies.

No single strategy can deliver the systems-level change we need. Where Drive Electric has supported these strategies in concert, governments and companies are increasing their ambition, policy support and investments, leading governments, and business leaders to repeatedly set more aggressive goals and targets. This collective ambition escalation increasingly aligned with Drive Electric goals is a key driver of progress. As a result, the demand for EVs in these markets is accelerating significantly faster than in the rest of the world. And yet, we need to move even faster.

## Acknowledgments

The Drive Electric Campaign would not exist without our dedicated, expert, and engaged partners and funders.

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## Authors

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