### What if we could reduce air pollution, improve health and save money?

We can! Exhaust from cars and trucks pollutes our air and contributes to climate change. Dirty air from vehicles makes tens of thousands of Californians sick, and costs us billions in avoidable health costs. Dependence on oil means Californians have no place to turn when gas prices rise. Transitioning to cleaner and more efficient cars, trucks and buses will benefit every Californian.

## **Campaign Goals**

CHARG D AHEA

Our campaign aims to place one million light, medium, and heavy-duty electric vehicles on California's roads over the next 10 years and ensure that all Californians, especially lowerincome households in communities most impacted by air pollution, benefit from zero tailpipe emissions.

## **Targeting Pollution**

Four in ten Californians, more than in any other state, live close enough to a freeway or busy road that they may be at increased risk of asthma, cancer and other health hazards.<sup>1</sup> Nearly twice as many Californians die from traffic pollution as from motor vehicle accidents.<sup>2</sup>

Accelerating the replacement of gasoline cars and dirty diesel trucks and buses with zero emission vehicles is critical to cleaning up the air in communities historically exposed to a disproportionate share of pollution.

### Reducing the Cost of Filling Up

The average household spends \$2,756 on gasoline and motor oil annually, straining family budgets and hitting lower income households especially hard.<sup>5</sup> Between 2005 and 2010, the average per capita expenditure on transportation fuels doubled relative to the previous six years, as the price of a barrel of oil jumped.<sup>6</sup>

Unlike gasoline prices, which fluctuate with the global oil market, the price of electricity is stable because it comes from a diverse, largely domestic supply and is carefully regulated by the state's Public Utilities Commission. Driving on electricity in California is equivalent to paying only one dollar-per-gallon in a gasoline vehicle.<sup>8</sup> If the average American household were to drive on electricity, it would save over \$2,000 annually, reducing its fuel bill by more than two thirds.<sup>9</sup>



## How We'll Do It

The Charge Ahead California campaign promotes policies to necessary to achieve longterm air quality and climate goals and ensure Californians disproportionately impacted by air pollution benefit from cleaner vehicles. Current policies and incentives have given California a head-start, but transforming the market to benefit all Californians will take sustained, long-term commitment.

California can improve the Clean Vehicle Rebate Project (CVRP) and the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) to stimulate sales of zeroemission cars, trucks, and buses, drive economies of scale that reduce costs and eliminate incentives as we transition to a sustainable market.

We will also propose a package of policies to provide tangible benefits in disadvantaged communities that may include: 1) electric car sharing and the deployment of charging infrastructure in multi-unit dwellings; 2) increasing consumer access to electric vehicle financing options that can help families immediately realize lower combined monthly auto payment and fuel costs; 3) combining incentives for the scrapping of old clunkers with incentives for new or used electric-drive vehicles; and 4) providing vouchers for transit and electric car sharing as an alternative to vouchers for replacement vehicles.

Nearly twice as many Californians die from traffic pollution as from motor vehicle accidents.

## CONTACTS

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# harge Ahead California!

### Electric Vehicles Provide Environmental, Health and Economic Benefits to All Californians

### **Cleaning the Air and Fighting Climate Change**

To meet California's air quality and greenhouse gas goals, the state's transportation sector needs to be largely converted to zero emission vehicles.<sup>2</sup> In particular, to attain ozone standards required by federal law, NOx emissions in the South Coast Air Basin must be cut by 80 percent by 2023, and by almost 90 percent by 2032; this will require that virtually all light, medium, and heavy-duty vehicles in the region be zero emission.<sup>3</sup>

Accelerating this transition will yield tremendous benefits to all Californians. According to estimates by the American Lung Association, a 100 percent electric fleet in California running on electricity that is one-third renewable would avoid: \$13 billion in health, climate, and other societal damages annually, 10,000 asthma attacks every year and 275 tons of criteria pollutants every day.<sup>4</sup> Those benefits will only increase as California increases the share of its electricity generated from renewables.

### Economic Growth and 100.000 New Jobs

Californians spend \$70 billion on gasoline and diesel annually, \$40 billion of which leaves the state in payments to oil companies and foreign oil producing countries.<sup>7</sup> The use of electricity as a transportation fuel can help keep those dollars in the state, stimulating the economy and insulating family budgets from gas price spikes.

Powering California's cars, trucks and buses with electricity instead of oil would help grow the state's economy, creating up to 100,000 additional jobs by 2030.<sup>10</sup> Money saved at the pump by charging up on electricity stays California, creating 16 times more jobs than money spent on gasoline.<sup>11</sup> All households benefit because these potential jobs are spread across California's diverse economy, largely in sectors that cannot be out-sourced, with lower and middle-income households, those most in need of the additional income, standing to benefit the most.

The production and sale of electric cars, trucks, and buses also creates jobs in California, at companies such as EVI (Stockton), Boulder EV (Chatsworth), Complete Coach Works (Riverside), El Dorado National (Riverside), BYD (Lancaster), Altec (Dixon), Vision Industries (Long Beach), Transpower (Poway), Quantum (Lake Forest) and Tesla (Fremont).

> Money saved at the pump by charging up on electricity stays in California, creating 16 times more jobs than money spent on gasoline.

### California's Light, Medium, and Heavy-Duty Incentive Programs Work

Roughly a third of the nation's 140,000 electric cars have been purchased in California, thanks largely to the CVRP. Once the Chevrolet Volt became eligible for the CVRP rebate and HOV lane access, sales quadrupled. For commercial trucks and buses, HVIP rebates have changed the calculus for fleet managers, who generally require a three-year payback period before investing in more efficient vehicles. Incentives in other states that are not as well designed have failed to move the market; three-quarters of all of the nation's electric trucks have been deployed in California.

#### What We're Up Against

The oil industry is fighting hard against their requirements under Californian's clean energy and climate law (AB 32). Our campaign aims to put clean cars in the hands of everyday people and break Big Oil's monopoly on transportation fuels.

Transportation is the single largest source of greenhouse gas pollution in California, accounting for 38 percent of emissions. Polluter funds from AB 32, designated to reduce emissions, will be significant, but are currently at risk from oil industry-led attacks. A small fraction of those proceeds would be sufficient to fund the package of policies supported by Charge Ahead California.

<sup>4</sup> American Lung Association in California, <u>The Road to Clean Air</u>, Appendix B

Alternative Fuels Data Center, Per Capita Energy Expenditures by Sector.

Assuming EV efficiency of 0.35 kWh/mi, PG&E's off-peak EV rate of \$0.098/kWh, and a 28 mile-per-gallon conventional car.

<sup>&</sup>lt;sup>9</sup> Same assumptions as previous footnote compared to \$3.680/gallon gasoline (Energy Information Agency, <u>Retail Gasoline</u> nd Diesel Prices)





<sup>&</sup>lt;sup>1</sup> Tony Barboza, One-fifth of U.S. lives near roads with higher air pollution, study says, Los Angeles Times, October 2, 2013.

<sup>&</sup>lt;sup>2</sup> 5,726 annual premature deaths in California due to PM 2.5 and 209 from ozone (Fabio Caiazzo et al., Air pollution and early deaths in the United States, Atmospheric Environment, 2013) compared to 3,081 traffic fatalities (Selected Detail Within

Leading Causes Of Death By Sex And Race/Ethnic, California Department of Public Health.) <sup>2</sup> Vision for Clean Air: A Framework for Air Quality and Climate Planning, June 27, 2012.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Bureau of Labor Statistics, <u>Consumer Expenditure Survey, 2012. chargeahead.org</u>

<sup>&</sup>lt;sup>7</sup>NRDC, Low Carbon Fuel Standard: <u>Helping California Break Its Addiction to Oil</u>, December, 2012.