



The Office of Arizona Governor Doug Ducey
 1700 W. Washington Street
 Phoenix, AZ 85007

June 15, 2020

RE: Leveraging the Transportation Electrification Industry for Arizona’s Economic & Public Health Gain

Dear Governor Ducey,

On behalf of the following organizations, we urge you to lead Arizona to an electric transportation future. **Accelerating the shift to electric transportation will significantly benefit Arizona’s economic recovery while also improving air quality and public health.**

Automakers have invested billions of dollars into this sector and remain committed to an electric transportation future.¹ Implementing strong policies that accelerate the transition to an electrified transportation sector will create thousands of additional technology and innovation jobs in our state, as Arizona is quickly becoming a hotspot for electric vehicle (EV) innovation and enterprise. As you are aware, companies such as Lucid Motors and Nikola Motors are now headquartered in Arizona, with the Lucid Motors manufacturing plant in Casa Grande expected to create approximately 4,800 direct and indirect jobs by 2029.² Furthermore, Waymo is conducting cutting edge research in the East Valley of Maricopa County on the future of autonomous vehicles. Implementing supportive policies to install EV charging infrastructure also has the potential to create thousands of shovel-ready jobs for Arizonans.

Arizonans could use additional dollars in their pockets; dollars that can also be invested back into local economies and the small businesses that have been severely impacted by the pandemic. On average, EVs save consumers and fleet operators about \$770 a year in fuel costs per vehicle.³ In addition to the fuel cost savings, these vehicles also have low maintenance costs. EVs are quickly becoming a win-win for consumers and businesses, even with the current low gas prices.⁴ Electric buses have been shown to save more than \$400,000 in fuel costs and \$125,000 in averted maintenance costs over the lifetime of the electric bus compared to a traditional diesel bus, making electric buses a win-win as well.⁵

An accelerated transition to an electric transportation future will help recover Arizona's economy and promote public health and improve the air that Arizonans breathe. Pollution from vehicle tailpipes is the single largest contributor to Arizona's air pollution.⁶ Early studies indicate that air pollution can be linked to increased respiratory and heart issues; for example, the Harvard T.H. Chan School of Public Health study showed that small increases in long-term particulate matter exposure are associated with increases in the COVID-19 death rate.⁷

¹ For example, recent investment and jobs announcements include: Volvo to build Charleston-area battery plant to power SC-made vehicles https://www.postandcourier.com/business/volvo-to-build-charleston-area-battery-plant-to-power-sc/article_c44113a4-33cd-11ea-a049-5f0cafb689af.html; GM investing \$3 billion to produce all-electric trucks <https://www.cnbc.com/2020/01/27/gm-investing-3-billion-to-produce-all-electric-trucks.html>; Rivian invests \$29.4 million in Normal facility https://www.pantagraph.com/news/local/rivian-invests-million-in-normal-facility/article_cd4f0392-e955-5f1d-86c2-ed2d0f24b086.html; Volkswagen invests at least \$800 million in Chattanooga to build EVs <https://www.timesfreepress.com/news/business/story/2019/oct/19/chattanooga-volkswagen-electric-vehicles/506026/>; GM partnered with LG Chem in a \$2.3 billion joint venture to manufacture batteries for PEVs <https://www.cnbc.com/2019/12/07/gm-lg-venture-adds-to-multibillion-dollar-partnerships-on-evs-avs.html>

² Lucid Motors, "Lucid Motors Marks Start of Construction at Arizona Electric Vehicle Factory Site", 2019. [Online]. Available: <https://lucidmotors.com/media-room/lucid-motors-marks-start-construction-arizona-electric-vehicle-factory-site>. [Accessed May 2020].

³ Union of Concerned Scientists, "Going from Pump to Plug: Adding Up the Savings from Electric Vehicles (EVs)", 2017. [Online]. Available: <https://www.ucsusa.org/resources/going-pump-plug>. [Accessed May 2020].

⁴ U.S. Department of Energy, "Saving on Fuel and Vehicle Costs". [Online]. Available: <https://www.energy.gov/eere/electricvehicles/saving-fuel-and-vehicle-costs>. [Accessed May 2020].

⁵ Arizona PIRG Education Fund, "Electric Buses in America Lessons from Cities Pioneering Clean Transportation", 2019. [Online]. Available: <https://arizonapirgedfund.org/sites/pirg/files/reports/Electric%20Buses%20Report%2010-19.pdf>. [Accessed May 2020].

⁶ Union of Concerned Scientists, "Cars, Trucks, Buses and Air Pollution Transportation is a major source of air pollution in the United States", 2018. [Online]. Available: <https://www.ucsusa.org/resources/cars-trucks-buses-and-air-pollution>. [Accessed May 2020].

⁷ Harvard TH Chan School of Public Health, "Air pollution linked with higher COVID-19 death rates", 2020. [Online]. Available: <https://www.hsph.harvard.edu/news/hsph-in-the-news/air-pollution-linked-with-higher-covid-19-death-rates/>. [Accessed May 2020].

Furthermore, people of color are being disproportionately impacted by COVID-19 and are most often those exposed to greater air pollution.⁸

In terms of the quality of the air Arizonans breathe, the American Lung Association “State of the Air 2020” report, released April 21, 2020, grades and ranks every county and city based on ozone and particle pollution monitoring data.⁹ This year, the study found that out of the 12 counties in Arizona with air pollution monitors, 11 counties scored a “C” or worse, representing nearly 7 million residents. The Phoenix-Mesa metropolitan area was ranked 7th worst in the nation for ozone and year-round particle pollution, while it ranked 10th worst for short-term particle pollution. Arizona can, and must, do better. Electric transportation technologies have no tailpipe pollution and, therefore, will greatly benefit the air Arizonans breathe. These compelling reasons indicate that now is the time to pursue an electric transportation future.

Therefore, we urge that the following policies be adopted in any recovery package to get Arizona back on track:

1. Lead by example in the transition to transportation electrification:

- a. Issue an Executive Order stating that purchases of new vehicles in state fleets must prioritize EVs. Through the Arizona Dept. of Administration, establish and encourage joint purchasing for other governmental entities such as municipalities and school districts.
- b. Issue an Executive Order stating purchases of new buses paid with state funding must prioritize electric technology.

2. Create shovel-ready jobs by accelerating EV infrastructure policies:

Enact a streamlined permitting process for public EV charging stations and accelerate job creation in the installation of EV charging stations.

3. Pave the way for easier consumer adoption of Light Duty EVs and Medium-Duty to Heavy-Duty electric fleets:

- a. Encourage the state agencies, cities and communities throughout Arizona to adopt EV readiness plans, which include light passenger vehicles, medium-duty and heavy-duty electric fleets, and school bus electrification transition plans, as well as coordinate with regional transportation plans and metropolitan planning organizations.
- b. Ensure that fair registration fees are enacted for EV and electrified freight drivers.

⁸ American Lung Association, “Disparities in the Impact of Air Pollution”, 2020. [Online]. Available: <https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities>. [Accessed May 2020].

⁹ American Lung Association, “State of the Air: Arizona”, 2020. [Online]. Available: <http://www.stateoftheair.org/city-rankings/states/arizona/>. [Accessed May 2020].

- c. Encourage collaborative program development for transportation electrification between the private sector, utilities supporting charging infrastructure incentives and state agency grant programs such as CMAQ and the Volkswagen Settlement Program that offer funding offsets for electrified vehicle purchases and support charging infrastructure.

We look forward to working with you on all matters related to transportation electrification. Please feel free to contact Katherine Stainken with Plug-In America (kstainken@pluginamerica.org), Diane E. Brown with the Arizona PIRG Education Fund (dbrown@arizonapirg.org), and/or Caryn Potter with the Southwest Energy Efficiency Project (cpotter@swenergy.org) with questions or to discuss the recommendations with yourself or a member of your staff.

Best regards,

Alliance for Transportation Electrification
Alliance of Nurses for Healthy Environments
American Lung Association
Arizona Asthma Coalition
Arizona Center for Law and the Public Interest
Arizona Interfaith Power and Light
Arizona PIRG (Arizona Public Interest Research Group) Education Fund
Arizona Public Health Association
Arizona Thoracic Society
CALSTART
Ceres
ChargePoint
Consumer Federation of America
Elders Climate Action - Arizona Chapter
Electric Auto Association, Phoenix Chapter
Energy Management
EVBox
EVGo
Physicians for Social Responsibility of Arizona
Plug In America
Prescott Electric Vehicle Association
Siemens
Sierra Club
Solar United Neighbors
Southwest Energy Efficiency Project
Tucson Electric Vehicle Association
UU Justice Committee
Vote Solar
Western Grid Group
Western Resource Advocates
Wildfire: Igniting Community Action to End Poverty in Arizona