









12/12/19

To the Members of the California Air Resources Board,

As major businesses, healthcare systems, and employers in California, we write to express our strong support for an ambitious Advanced Clean Truck (ACT) regulation. We commend the Air Resources Board for developing the first electric truck rule in the nation. This Rule will be a model for the country to follow and will be essential for accelerating the cost-effective deployment of electric medium- and heavy-duty vehicles. Despite the fact that California met its 2020 greenhouse gas (GHG) emissions reduction target early, transportation emissions continue to rise. Reducing emissions from transportation will be crucial for meeting the state's 40% by 2030 and 80% by 2050 GHG targets. As such, we urge you to increase the vehicle sales requirements such that the Rule results in 15% of all trucks on the road in California are zero emission vehicles by 2030.

The ACT rule is an essential climate and clean air policy. Transportation is responsible for over 50% of California's GHG emissions (including petroleum refineries and oil production emissions). Heavy-duty trucks, which are mostly diesel-fueled, are responsible for 8.4% of total GHG emissions, are the largest source of smog-forming oxides of nitrogen (NOx) in California, and emit nearly 40% of the state's diesel particulate matter. Diesel particulate matter alone is responsible for about 70% of air toxin-related cancer risk. These burdens disproportionately impact the communities that live closest to freight hubs and transportation corridors. By accelerating electrification of trucks, the ACT rule will reduce the transportation sector's considerable climate and public health impacts--within California and beyond.

Climate change poses a significant risk to our long-term economic success, impacts the health and livelihood of the communities in which we live and operate, and disrupts the value chains on which we rely. Because of these risks, we have set targets to reduce our own GHG emissions. Nearly half of all Fortune 500 companies have set targets to reduce emissions and/or invest in clean technologies. Health systems have also committed to increasing climate resilience and reducing GHGs. However, we cannot fully address the risks or realize the value of tackling climate change without a robust market for clean transportation solutions and strong carbon reduction policies that send clear, long-term economic signals.

For major companies and institutions, transportation is both a significant cost center and a major contributor to our carbon footprint--within our own operations as well as in our up and downstream value chains. In the years ahead, zero emission trucks will be critical to the sustainability of our businesses as well as to the trucking industry. As a technology-forcing program, the ACT rule will address some of the primary challenges we face when considering fleet electrification, including: (1) limited EV model availability, especially in the medium- and heavy-duty sector; and (2) lack of control

https://www.greenhospitals.net/climate-challenge-participants/#US

<sup>&</sup>lt;sup>1</sup> California Air Resources Board. California Greenhouse Gas Emissions for 2000 to 2017. https://www3.arb.ca.gov/cc/inventory/pubs/reports/2000\_2016/ghg\_inventory\_trends\_00-16.pdf

<sup>&</sup>lt;sup>2</sup> GreenCar Congress. August 14, 2019. California 2017 GHG inventory shows 1.2% total drop from 2016; transportation sector emissions up 1%. <a href="https://www.greencarcongress.com/2019/08/20190814-calighg.html">https://www.greencarcongress.com/2019/08/20190814-calighg.html</a>

<sup>&</sup>lt;sup>3</sup> Ceres. April 15, 2017. Power Forward 3.0: How the largest U.S. companies are capturing business value while addressing climate change. <a href="https://www.ceres.org/resources/reports/power-forward-3">https://www.ceres.org/resources/reports/power-forward-3</a>

Global Green and Healthy Hospitals. Health Care Climate Challenge Participants.

over leased, rented and/or up/downstream transportation. This rule will push manufacturers to increase model availability to meet the needs of fleets and encourage economies of scale that will help bring down costs. We see reducing GHGs and costs from transportation as an economic and public health imperative. However, we often have limited ability to: (1) access electric options when buying or leasing fleet vehicles; or (2) encourage our value chain to take advantage of fleet electrification. This rule will help transform the market, something we cannot do on our own.

While the current proposed rule is a step in the right direction, we have a vanishing window in which to avoid the worst impacts of climate change. Given the current climate imperative and the growing demand from businesses for more EV model availability, we strongly encourage you to set more ambitious targets than currently proposed. Specifically, increase the annual and final percentage sales goals such that 15% of trucks on the road in California will be zero emission by 2030. In the current proposal, the sales goals are not sufficiently high enough to shift the sector at the pace and scale needed to meet the climate challenge.

There are significant economic, public health, and GHG reduction benefits from a more ambitious ACT Rule. A stronger Rule is feasible and could be met largely through sales of electric trucks that are currently or will soon be cheaper than non-electric alternatives. Automakers are already working to fill gaps in the medium/heavy-duty market to meet diverse fleet needs. Multiple cost of ownership analyses, including CARB's, have found that a variety of electric trucks are already creating cost savings or would be by the time the Rule goes into effect in 2024. Ambitious sales requirements for these vehicles will feed commercial demand and improve the business case for electric trucks, allowing automakers and companies to capture savings from economies of scale.

We urge you to strengthen the Rule to result in 15% of trucks on the road in California being zero emission by 2030. Increasing the ambition of the ACT will send a clear market signal across value chains. This Rule will allow companies and institutions like us to plan for long-term investments in clean vehicles. Increased access to cost-effective electric trucks will allow us to meet our climate and financial goals while giving our communities the significant health benefits of cleaner air.

Thank you for your time and consideration.

Sincerely,

Ben & Jerry's
California Health Care Climate Alliance
Dignity Health
Nature's Path
Seventh Generation

<sup>&</sup>lt;sup>5</sup> Energy Technologies Area. September 2019. Working Paper 005: Long-haul battery electric trucks are technically feasible and economically compelling. <a href="https://eta.lbl.gov/publications/working-paper-005-long-haul-battery">https://eta.lbl.gov/publications/working-paper-005-long-haul-battery</a> International Council on Clean Transportation. September, 2017. Transitioning to Zero-Emission Heavy-Duty Freight Vehicles. <a href="https://theicct.org/sites/default/files/publications/Zero-emission-freight-trucks-ICCT-white-paper-26092017">https://theicct.org/sites/default/files/publications/Zero-emission-freight-trucks-ICCT-white-paper-26092017</a> vF.pdf. Research and Markets. February 2019. TCO Analysis and Case for Electric Trucks in North America, 2017 - 2030. <a href="https://www.researchandmarkets.com/research/j5433r/north-america?w=4">https://www.researchandmarkets.com/research/j5433r/north-america?w=4</a>.

To the Members of the California Air Resources Board.

We are investors with over \$237 billion in assets under management and advisement. We believe that addressing climate change and reducing greenhouse gases (GHGs) is essential to safeguarding our investments. We write today to express our support for a more ambitious Advanced Clean Truck (ACT) rule as an essential climate policy. The sales goals of the current proposed ACT rule are not sufficiently high enough to shift the sector at the pace and scale needed to meet the climate challenge. As such, we urge you to increase the annual and final vehicle sales requirements such that the rule results in 15% of all trucks on the road in California being zero emission by 2030.

As investors with significant exposure to companies across all sectors, we strongly believe that bold action on climate is fundamental to enabling a stable and productive economy. The transportation sector is the largest emitting sector in the United States, responsible for 29% of GHGs in 2017. In California, transportation is responsible for over 50% of GHGs when counting upstream emissions from petroleum refining and oil production. We see an ambitious ACT rule that accelerates the deployment of medium and heavy-duty electric trucks as crucial for allowing corporations to mitigate the risks posed by climate change, secure competitive advantage, and respond to new opportunities for innovation and cost savings.

An ambitious ACT rule will be essential for meeting California's target of 80% GHG reductions by 2050 and will have global implications. The recent Intergovernmental Panel on Climate Change's Special Report calls for net zero GHG emissions by 2050 if we are to limit warming to below 1.5°C. The ACT rule will set a policy model for the country and will drive the decarbonization of the broader truck market by requiring the development of supply chains and economies of scale. Given the potential impact of this rule and the vanishing window for avoiding the worst impacts of climate change, we support a rule that maximizes sales of zero emission trucks that are already or will soon be more cost effective over the life of the vehicle.

An ambitious ACT rule will help mitigate the economic risks of climate change and position California, businesses in the state, and truck manufacturers to compete in a world that is shifting towards cleaner vehicles. A global policy shift is already well underway: China, the world's largest auto market, is planning to require that 60% of all autos sold in 2035 be new energy vehicles, a number of other countries and subnational actors have set similar sales goals or have plans to ban vehicles with traditional internal combustion engines (ICE) before mid-century. A stronger ACT rule is feasible and could be met largely through sales of the many electric trucks that are currently or will soon be more cost-effective than ICE alternatives.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup>EPA. 2017. Sources of Greenhouse Gas Emissions. <a href="https://www.epa.gov/qhgemissions/sources-greenhouse-gas-emissions">https://www.epa.gov/qhgemissions/sources-greenhouse-gas-emissions</a>

<sup>&</sup>lt;sup>2</sup> California Air Resources Board. California Greenhouse Gas Emissions for 2000 to 2017. https://www3.arb.ca.gov/cc/inventory/pubs/reports/2000\_2016/ghg\_inventory\_frends\_00-16.pdf

<sup>&</sup>lt;sup>3</sup>Energy Technologies Area. September 2019. Working Paper 005: Long-haul battery electric trucks are technically feasible and economically compelling. <a href="https://eta.lbl.gov/publications/working-paper-005-long-haul-battery">https://eta.lbl.gov/publications/working-paper-005-long-haul-battery</a> International Council on Clean Transportation. September, 2017. Transitioning to Zero-Emission Heavy-Duty Freight Vehicles. <a href="https://theicct.org/sites/default/files/publications/Zero-emission-freight-trucks-ICCT-white-paper-26092017">https://theicct.org/sites/default/files/publications/Zero-emission-freight-trucks-ICCT-white-paper-26092017</a> vF.pdf
Research and Markets. February 2019. TCO Analysis and Case for Electric Trucks in North America, 2017 - 2030. <a href="https://www.researchandmarkets.com/research/i5433r/north-america?w=4">https://www.researchandmarkets.com/research/i5433r/north-america?w=4</a>

Recognizing this, many corporations are already making significant investments in electric trucks and more have set ambitious goals around fleet electrification - from Amazon, FedEx and UPS to IKEA, PepsiCo and Anheuser-Busch InBev. Ambitious sales requirements will feed commercial demand and improve the business case for electric trucks, allowing truck manufacturers and companies to capture savings from economies of scale. Encouraging early adoption through sales requirements will put California fleets at an advantage. Leadership in electrification will be key to staying competitive in this new era. As the market-shifting impact of this rule spreads beyond California to other parts of the country, it will generate further GHG reductions and transportation cost savings that will help safeguard our domestic investments.

Increasing the ambition of the ACT to result in 15% of trucks on the road in California being zero emission by 2030 will send a clear, long-term market signal across value chains. We urge you to strengthen the rule and set a policy model for addressing climate risks and realizing the economic value of tackling the GHG emissions from medium- and heavy-duty vehicles.

Thank you for your time and consideration.

Sincerely,

As You Sow
Capricorn LLC
Domini Impact Investments LLC
Hannon Armstrong
Macroclimate LLC
New York State Comptroller
Seventh Generation Interfaith Coalition for Responsible Investment
Sisters of St. Dominic of Caldwell NJ
Trillium Asset Management