



AMPLY Power, Inc. www.amplypower.com
335 E. Middlefield Rd, Mountain View, CA 94043

April 3, 2022

The Honorable Faith Winter
Chair, Senate Transportation and Energy Committee
Colorado General Assembly
200 E. Colfax Avenue
Denver, CO 80203

Re: Comments of AMPLY Power on SB22-193 (Fenberg), Concerning Measures to Improve Air Quality in the State – Electrifying School Buses Grant Program

Dear Senator Winter:

AMPLY Power, Inc. (“AMPLY”) is pleased to support the Electric School Bus Grant Program proposed in SB 22-193, which would allow school districts or charter schools to apply to the Department of Public Health and the Environment for grant funding to help finance the purchase and maintenance of electric-powered school buses, the conversion to electric-powered school buses, charging infrastructure and electrical upgrades necessary to support charging infrastructure. The proposed grant program better positions Colorado to provide safe and healthy school transportation for more communities statewide, unlocking greater air quality benefits, emissions reductions, and savings for schools sooner. AMPLY respectfully asks for your “AYE” vote on SB 22-193 and offers the following recommendations on the proposed Electric School Bus Grant Program.

I. Fund Electric Vehicle Charging Infrastructure for Clean School Bus Projects

School districts and school bus operators face a number of challenges such as infrastructure build-out and navigating utility tariffs for fuel costs when trying to adopt EV solutions for their communities. In a 2018 survey by Greenbiz and UPS, fleet operators cited high cost and complex infrastructure as main deterrents in expanding their electric truck and bus pilots to full deployment. These essential medium-and heavy-duty fleets of last resort primarily use in-depot charging. However, the U.S. Department of Transportation’s \$5 billion National Electric Vehicle Formula Program and \$2.5 billion competitive grant program are restricted to public charging infrastructure projects sited along federally designated alternative fueling corridors. Electric school bus fleets could scale more quickly if they had access to federal dollars to meet their in-depot charging needs. That is why it is critical that Colorado’s Transportation Electrification programs include funding for EV charging infrastructure for school bus fleets.

The infrastructure deployment timeline is not decreasing so investment in infrastructure should precede vehicle financing. This is especially true at a time when perceived infrastructure cost may be preventing fleets from moving forward with electrification. This challenge can be directly addressed with various managed charging solutions, such as AMPLY’s, which can lower both upfront and ongoing costs for infrastructure and charging. AMPLY Power’s Charging-as-a-



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Service solution gives school bus fleet operators, including school districts and contractors, predictable energy rates, optimizing charging and prioritizing lowest-cost energy. For school bus contractors and school districts, AMPLY is also demonstrating a vehicle-to-grid (“V2G”) solution to increase resiliency and further reduce energy costs at their site. Working with our partners to balance energy demand and supply, AMPLY’s work for our customers ensures they will be able to scale their electrification efforts.

II. Allow School Bus Contractors to Qualify for School Bus Electrification Grants and Loans

Contractors can deploy electric school buses at much higher rates and volumes than school districts. They also operate in most regions and cities impacted by poor air quality. In 2018, the top three school bus contractors deployed nearly 80,000 school buses and transported nearly five million students.

III. Fund Repowers

Repower rebates for school bus electrification are currently available in New York. Repowers are also less costly than full bus conversions (\$350,000 for a zero-emission bus versus \$125,000 for a repower) and could potentially accelerate school bus conversions because they require fewer components and therefore less reliance on unpredictable supply chains. Aside from waiting on federal funding to become available for zero-emission school buses, EV production across the industry has struggled due to supply chain issues, especially when it comes to microchips.

IV. Connections to the Electric Grid, including Electric Distribution Upgrades, and Alignment with Electric Distribution Interconnection Processes

Making the process of connecting to the grid simpler and more transparent for school bus fleet electrification is also essential if we are to meet Colorado’s EV deployment goals. The National EV Summit principles call for “electric utilities, regulators, charging providers, and stakeholders to work together to accelerate transportation electrification in a way that supports the electric grid and benefits all utility customers.” Uncertain timing and application process for utility service upgrades are delaying and discouraging EV infrastructure installation. Modification to the current utility processes can help to streamline EV charging interconnection and ensure chargers are installed at the rate needed to meet the state’s EV adoption and GHG reduction goals.

Electric fleet operators continue to report delays with utility EV charging infrastructure interconnections and service upgrade requests due to unforeseen requirements and costs. Specifically, fleet operators report that they have to have their EV deployment very firm in order to execute a contract, leaving very little flexibility or incentive to get more EVs after the initial contract. To that end, AMPLY supports the establishment of a quarterly data reporting



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requirement for utilities on their grid interconnection and service upgrade processes for EVSE, with the goal of streamlining and accelerating these processes.

AMPLY is a comprehensive charging and energy management provider for electric vehicle fleets focused on reducing costs and environmental impact. We offer a proven, scalable ecosystem of cloud-based software, onsite hardware, and customer-centric service to simplify charging operations for fleets operating trucks, buses, vans, and light-duty vehicles.

The time is now to electrify Colorado's school bus fleets faster to ensure children across the state can breathe easier without any more delay. For these reasons, AMPLY supports SB22-193's proposed Electric School Bus Grant program.

Respectfully submitted,

/s/Heidi Sickler

Heidi Sickler
Director of Policy
AMPLY Power



Board of County Commissioners

April 4, 2022

Chair Winter
Members of the Senate Transportation & Energy Committee

Dear Chair Winter and Committee Members:

I write today on behalf of the Boulder County Commissioners to express Boulder County's strong support for SB 22-193, Air Quality Improvement Investments, sponsored by Senators Fenberg and Gonzales. I respectfully ask for your YES vote on the bill when it is heard by the Transportation & Energy Committee on Tuesday, April 5, 2022.

Boulder County's support for SB 193 stems from the county's commitment to improving air quality and climate outcomes for all Coloradans. The climate crisis is upon us and Colorado is reeling from the devastating Marshall Fire added to other recent disasters. And residents along the Front Range also must contend with the adverse health impacts from high ozone concentrations for much of the summer. Unfortunately, disproportionately impacted communities in Colorado bear the brunt of the climate crisis and poor air quality.

SB 193 will help achieve our goals through the establishment of the clean air grant program to support voluntary projects that would reduce air emissions from industrial and manufacturing operations. The transportation sector is one of the largest sources of greenhouse gas emissions in Colorado and ozone producing emissions along the Front Range and therefore, Boulder County supports the development of grant programs for community access to electric bicycles, diesel truck emissions, and electrifying school buses.

Boulder County also supports the revision to authorize the Air Quality Control Commission to submit State Implementation Plan (SIP) changes or additions to the Environmental Protection Agency Administrator as a provisional submission, pending possible legislative action. This change will simply streamline the SIP process and will better align Colorado with both the Clean Air Act which does not require legislative reviews of SIPs and the vast majority of other states in the country that do not follow this practice.

Lastly, it is our strong hope that the General Assembly and Polis Administration will see SB 193 as the down payment on strong, substantive action to drive near-term emissions reductions to address the dire ozone situation along the Front Range and the looming imperative of meeting Colorado's 2030 greenhouse gas emissions reduction goals. Meeting Colorado's 2030 goals will be difficult, and we likely will not meet the next Clean Air Act mandated deadline for improved ozone conditions, the latter of which will bring even more federal oversight to that process.

Matt Jones *County Commissioner* **Claire Levy** *County Commissioner* **Marta Loachamin** *County Commissioner*

Boulder County Courthouse • 1325 Pearl Street • Boulder, Colorado 80302 • Tel: 303.441.3500 • Fax: 303.441.4525
Mailing Address: P.O. Box 471 • Boulder, CO 80306 • www.BoulderCounty.org • commissioners@bouldercounty.org

I would like to thank Senators Fenberg and Gonzales for bringing SB 193 forward, and again, on behalf of the Boulder County Commissioners, respectfully ask for your YES vote on the bill.

Sincerely,

A handwritten signature in blue ink that reads "Cindy Copeland". The signature is written in a cursive style with a long, sweeping tail on the final letter.

Cindy Copeland
Air & Climate Policy Advisor
Boulder County Commissioners' Office

March 23, 2022

Dear Honorable Members of the Colorado State Senate
& Colorado State House of Representatives,

We are writing to share our strong support for the deployment of electric school buses in Colorado.

Oil provides 90% of the energy for Colorado's transportation system, posing threats to our economy, national security, climate, and public health. The transition to electric school buses is an essential part of Colorado's transition to a clean, secure energy future. Governor Jared Polis is proposing a bold initiative to accelerate Colorado school districts' replacement of dirty diesel buses with clean electric school buses. The Electric School Bus Pilot Program would provide critical support to school bus fleet operators to complete this transition in the next five to six years.

More than 4,000 diesel school buses hit Colorado's roads each day, exposing approximately 300,000 students to air pollution levels up to 12 times higher than ambient levels. Diesel exhaust from school buses contains known carcinogens and is linked to impaired lung development, asthma, and cancer. It even has cognitive impacts that harm students' ability to succeed in the classroom. Children from communities of color rely more heavily on buses for transportation to school and are thus exposed to higher levels of diesel emissions, making school bus pollution a serious equity issue. Electric school buses produce zero tailpipe emissions, offering a safe, healthy, quiet ride for all students and bus drivers. Electric school buses can also help support the transition to a cleaner electric grid by serving as storage for renewable energy.

The proposed legislation would establish a new program and allow for as much as \$150 million to support the purchase and lease of electric school buses. This funding will help school districts overcome the upfront cost barriers associated with the transition to a cleaner, more sustainable student transportation solution. As more schools switch to electric buses, increased demand will help drive down upfront purchase costs within the next several years. And new federal funding for electric school buses is available from the U.S. EPA's Clean School Bus Program through the Infrastructure Investment and Jobs Act. Dedicated state funding for electric school buses would serve to leverage these federal resources here in Colorado.

We believe Governor Polis's plan to lead the charge in school bus electrification is extremely important for Colorado, and we strongly urge you and your colleagues to enact this proposal.

Sincerely,

[AMPLY Power](#)

Heidi Sickler, Director of Policy
Laura Groessel, Customer Relationship Manager

[Highland Electric Fleets](#)

Matt Stanberry, Managing Director
Niko Poulos, Regional Business Manager

[Nuvve Corp](#)

Jacqueline Piero, VP of Policy
Pamela Caro, Director of Sales
Rawah Algaouni, Sales Manager

[Proterra](#)

Jarrett Stoltzfus, Director of Government Relations and Public Policy

American Lung Association

Nick Torres, Advocacy Director- Colorado

Arapahoe Basin

Sha Miklas, Sr., Manager of Guest Services & Sustainability

Blue Bird Corporation

Albert Burleigh, Executive Director, EV Sales
Neil Taylor, EV Development Manager

Brytemove Energy

Jamie Farnham, Regional Sales Director

Bus-2-Grid Initiative

Tim Farquer, Administrative Lead

Clean Energy Economy for the Region (CLEER)

Stefan Johnson, Program Manager

Colorado Sierra Club

Sarah Clark, Lead Organizer

Colorado State University

Heather Jackson, Senior Instructor

Colorado-West Equipment, Inc

Jeffrey Koza, Vice President

Conservation Colorado

Beatriz Soto, Director Protégée
Jenny Gaeng, Transportation Manager

CoPIRG

Alexandra Simon, Advocate

Denver Public Schools

LeeAnn Kittle, Director of Sustainability

DPS Students for Climate Action

Caroline Brown, Student
Amelia Fernández, Student
Layla Jurow, Student
Mariah Rosensweig, Student

[The Lion Electric Co.](#)

Orville Thomas, Director of Government Affairs

Drive Clean Colorado

Matt Lerman, Regional Director
Kristi Mladenovic, Business Director

Durango Board of Education

Erika Brown, School Board Vice President
Andrea Parmenter, School Board Member

E-Squared Energy Advisors

Tim Grosse, CEO
Susan Nedell, Mountain West Advocate

Eco Madres-Colorado Chapter

Shaina Oliver, State Coordinator

Electrification Coalition

Ben Prochazka, Executive Director

Endera

Bill Williams, EVP Business Development

EV Alliance LLC & EV Energy Group

Gary King, CEO

Generation180

Kristen Keim, Program Manager-Solar for All Schools

Green Latinos

Juan Roberto Madrid, Clean Transportation & Energy Advocate

Healthy Air and Water Colorado

Megan Kemp

Jefferson County School Board

Mary Parker, School Board Director

La Plata Electric Association

Dominic May, Energy Resource Architect

The Lake County Public Library

Lanna Gonzales, Materials and Marketing
Supervisor

Matthew Baumgartner, Young Adult Services
Coordinator

Becky Ison, Children's Services Coordinator

Larimer County Board of Commissioner

Kristin Stephens, Commissioner

Lightning eMotors

Tim Reeser, CEO

Mi Familia Vota

Katara Burrola, Environmental Justice Organizer

Microgrid Labs

Namit Singh, COO

Moms Clean Air Force-Colorado Chapter

Laurie Anderson, Field Organizer

Motiv Power System

Gary Schmidt, Senior VP

Terry Dell, VP of Marketing

Andrew Gibbs, National Account Manager

Jaimin Thakor, National Account Manager

Jamey Prock, National Account Sales

Brittani Rudick, Sales Support & Incentives
Associate

Mountain Mamas

Jen Clanahan, Colorado State Director

Odell Brewing Company

K. Scott Dorsch, Brewer

Renewables Now-Loveland

Dave Mills, Member

San Miguel County

Sheamus Croke, Recovery Coordinator

Southwest Energy Efficiency Project

Travis Madsen, Transportation Program
Director

Spirit of the Sun

Shannon Francis, Executive Director

Steamboat Springs School District

Casey Unga, Director of Transportation

Sustainable Action Consulting PBC

Robert Harrington, President/CEO

The Nature Connection

Ben Graves, Director of Partnerships and
Development

Thompson School District

Melissa Carroll, Resource Energy Manager

Timber Rock Energy

Christopher Lohmann, VP of Partnerships

Town of Breckenridge

Teddy Wilkinson, Sustainability Administrator

Town of Estes Park

Christy Crosser, Grant Specialist

United Power

Joel Danforth, Energy Programs & New Business
Director

Vote Solar

Rick Gilliam, Senior Regulatory Director

Western Resource Advocates

Aaron Kressig, Transportation Electrification
Manager

Womxn from the Mountain

Renée Millard Chacon, Co Founder/ Executive
Director

Citizen Advocates

Lacey Allor
Jeffrey Boyce, AP Environmental Science
Teacher
Julia Davila
Emma Dudley
Lily Emmanuel
Ellie Goldstein
David Hampton

Priya Hecox
Mark Houdashelt
Skyler Potocek
Howard Roney, Retired Air Force Captain,
Teacher, and School Bus Driver
Christine Schraeder, Electrical Engineer
Marley Seifert
Philip Tucker

CC:

Governor Jared Polis
Lt. Governor Dianne Primavera
Sen. Stephen Fenberg, President of the Senate
Sen. Dominick Moreno, Senate Majority Leader
Sen. Chris Holbert, Senate Minority Leader
Rep. Alec Garnett, Speaker of the House
Rep. Daneya Esgar, House Majority Leader
Rep. Hugh McKean, House Minority Leader

April 5, 2022

Written Testimony of the Electrification Coalition
Colorado SB-193

Dear Chair Winter, and Honorable Members of the Committee,

[The Electrification Coalition](#) is writing in support of Senate Bill 193, the Air Quality Investment package, that includes \$65 million for electric school buses. The Electrification Coalition (EC) is a nationally recognized non-partisan, non-profit organization that is focused on achieving the mass adoption of EVs through a combination of stakeholder engagement, technical support, direct implementation, and policy support to facilitate the deployment of EVs on a mass scale in order to combat the national security, economic, and public health impacts associated with the nation's dependence on oil. The Electrification Coalition is working to help states, including Colorado, in this transition.

Transportation is the largest source of [greenhouse gas \(GHG\) emissions in Colorado](#). More than 4,000 diesel school buses hit Colorado's roads each day, exposing approximately 300,000 students to air pollution levels up to 12 times higher than ambient levels. Diesel exhaust from school buses contains known carcinogens and is linked to impaired lung development, asthma, and cancer. It even has cognitive impacts that harm students' ability to succeed in the classroom.

Electric school buses on the other hand, produce zero tailpipe emissions, offering a safe, healthy, quiet ride for students and bus drivers. They can also help support the shift to a cleaner electric grid by serving as storage for renewable energy. The proposed legislation would allow for as much as \$65 million to support the purchase and lease of electric school buses and help school districts and school bus contractors overcome the upfront cost barriers associated with the transition to a cleaner, more sustainable student transportation solution. As more school's switch to electric buses, increased demand will help drive down upfront purchase costs within the next several years. And new federal funding for electric school buses is available from the U.S. EPA's Clean School Bus Program through the Infrastructure Investment and Jobs Act.

Funding for school bus electrification will not only launch Colorado into a leadership position as the state transitions to an equitable and just transportation electrification future, but Colorado will also be positioning itself for economic development opportunities with this leadership. These opportunities equate to new jobs in the fields of EV manufacturing, batteries, energy management, storage and software technologies and the services needed in vehicle-grid integration.

School bus electrification will improve health and academic outcomes for young people, reduce greenhouse gas emissions, and expand the green economy. These benefits are especially important for high-pollution corridors, and Black, Hispanic, and low-income households, which are disproportionately exposed to health risks from transportation pollution. As you shape the budgetary commitments to fulfill this goal, it is critical that this legislation includes a bold approach to school bus electrification that is comprehensive, has sufficient resources allocated and is equity-first. We support this investment to position Colorado as a national leader in the electrification of its school bus fleet.



1111 19th Street NW, Suite 406
Washington, DC, 20036

www.ElectrificationCoalition.org

Included with this testimony is a letter of support, signed by dozens of Colorado state level voices, that have joined with global vehicle manufacturing leaders and others calling on the legislature to provide funding in the assistance to transition from diesel to electric school buses. The letter was the result of a late January virtual roundtable discussion on the wide-ranging benefits of electric school buses and Colorado's window of opportunity to accelerate deployment. The investment would provide significant public health, climate and energy security benefits for communities and the state. The Electrification Coalition delivered a letter to Colorado General Assembly members on March 23, 2022, signed by 53 individuals, representing 76 businesses, nonprofits and other entities.

Thank you for the opportunity to submit these comments in support of SB193.

We look forward to working with you to enable Colorado to be a leader in transportation electrification. For further information, please contact Celia Kosinski at ckosinski@electrificationcoalition.org

Sincerely,

Ben Prochazka

Benjamin Prochazka
Executive Director



Support of SB 22-193 - Air Quality Improvement InvestmentsPATRICIA to:
committees.lcs.ga@state.co.us 04/05/2022 12:23 PM

I am submitting written testimony in support of SB-22-193.

I am Patricia Anne Califana; and my address is 1904 14th Ave., Greeley, CO 80631.

In particular the measure to will include \$65m for electric school buses in Colorado will have several positive results.

1. It will help reduce air pollution.
2. Electronic vehicles are less expensive to run. For example it takes a car \$15 to go 100 miles on a gas powered vehicle and \$5. to go the same distance in an electronic vehicle. The similar savings would work for our school buses, thus reducing our buget for fuel for our automobiles.
3. Electronic vehicles require less maintenance, another savings.

This measure will have several long range positive effects for Colorado.

Thank you,

Patricia Anne Califana



The Denver
Foundation

April 5, 2022

SB22-193: Air Quality Improvement Investments

Dear members of the Senate Transportation and Energy Committee,

On behalf of The Denver Foundation, we are writing to respectfully request that you vote yes on SB22-193, sponsored by President Stephen Fenberg, Senator Julie Gonzales, and Representative Alex Valdez.

The Denver Foundation is a community foundation with a long-standing history of funding nonprofit organizations working to address environmental, climate, and transportation issues. Metro Denver. We believe environmental justice begins with targeted policy efforts and investments in under-resourced communities. We also believe that accessible and affordable transportation options are a core function of a thriving society.

The clean air grant program is a historic opportunity to invest in programs to address sources of greenhouse gas emissions. This proposal builds off the state's roadmap to reduce emissions by supporting transportation, building efficiency, housing, land use, air quality monitoring, regulation, incentives, and programs. Programmatic allocations the grant program include:

- Energy efficiency projects;
- Renewable Energy projects;
- Transportation electrification;
- Industrial process changes that reduce emissions

These, among the other proposed voluntary projects eligible for grant funding, will further collective efforts to improve the air quality across the state of Colorado. We respectfully request that you vote "yes" on SB22-193 and maintain the funding levels proposed in the bill.

The Denver Foundation appreciates the efforts of Sen. Gonzales, Sen. Hinrichsen, Rep. Boesenecker, and Rep. Lindsay, and respectfully requests a yes vote on SB22-160.

Javier Alberto Soto
President and CEO

Dace West
Chief Impact Officer

Naomi Amaha
Director of Policy and Gov. Affairs