The BIDIRECTIONAL Act

Senator John Hickenlooper of Colorado

Advanced Energy Economy (AEE): “Bidirectional charging is key to making our grid more resilient, making our energy more affordable, and unlocking the full potential of electric vehicles. School buses are an ideal use case for this vehicle-to-grid technology, with predictable usage that closely matches grid needs and could save schools money. We strongly support states and utilities establishing permanent programs that utilize this technology and thank Senator Hickenlooper for his leadership on this issue.” - Ryan Gallentine, Director, Electrifying Transportation, Advanced Energy Economy

Blue Bird: “For nearly 100 years, Blue Bird Corporation has been recognized as a technology leader and innovator of school buses in North America. Today, the company is the proven clean student transportation leader with more than 700 electric school buses in operation. All Blue Bird electric buses come standard with groundbreaking vehicle- to-grid (V2G) capability. Blue Bird lauds the proposed bipartisan BIDIRECTIONAL Act to advance the deployment of electric school buses, as well as vehicle-to-grid (V2G), vehicle-to- building (V2B), and vehicle-to-everything (V2X) technologies. Deploying V2G-enabled school buses will promote grid resiliency, affordability, and sustainability nationwide.”

bp Pulse Fleet: "bp Pulse Fleet strongly supports Senator Hickenlooper's BIDIRECTIONAL Act. School buses represent an almost perfect use-case for V2G applications, and the BIDIRECTIONAL Act would help schools across the country take advantage of this market opportunity -- resulting in savings for school districts and a healthier electric grid."

Community Organization for Resource Efficiency (CORE): "The average school bus sits idle for 90 percent of its life. The BIDIRECTIONAL Act proposes to put this idle time to good use by transforming electric school buses into energy piggy banks, allowing utility companies to store and withdraw electricity as needed to smooth out the ebb and flow of our daily energy demands. This system also holds the promise of serving as a real-time science laboratory, inspiring school-aged children across the country to play an active role in reshaping our energy future. A smarter grid and smarter kids. The BIDIRECTIONAL Act is just another example of the productive and pragmatic vision we have come to expect from Senator Hickenlooper. As the CEO for the Community Office for Resource Efficiency, I give this bill my full endorsement.” - Dallas Blaney, CEO of CORE

Environmental Defense Fund (EDF): With the U.S. poised to deploy electric school buses across the country, there is an important opportunity to also have these buses bolster a more reliable energy grid. We applaud Sen. Hickenlooper for introducing the BIDIRECTIONAL Act, which will advance vehicle-to-grid technology, help maximize the economic and community

resilience benefits that electric school buses can offer, and help provide support for the nation's hard-pressed electricity system through two-directional electricity flows. – Elizabeth Gore, Senior Vice President, Political Affairs, Environmental Defense Fund

Electrification coalition: "Electric vehicles improve our national security, grid security, and climate resiliency, as they can serve as mobile power and storage units through vehicle-to-grid technology. The Electrification Coalition is pleased to support the BIDIRECTIONAL Act, which will create a dedicated program at the Department of Energy that will deploy electric school buses with bidirectional charging capabilities. The EC has long advocated for deploying more electric school buses due to the grid resiliency benefits they provide to communities, in addition to the clean air and carbon reduction benefits," said Ben Prochazka, Executive Director of the Electrification Coalition.

Environment America: "We can increasingly power our cars, buses, and buildings with clean, green, renewable energy, and not a moment too soon following yet another summer of heat waves, floods and fires made worse by climate change. Swapping out old, polluting diesel school buses for clean electric ones is a common-sense step school districts and cities can take right now that will make a big impact. The buses have no tailpipe emissions, can save money over time and can even help stabilize the electric system with vehicle-to-grid technology. Sen. Hickenlooper's BIDIRECTIONAL Act would help accelerate the shift to clean buses that also provide us with clean power. Let's roll!" - Lisa Frank, executive director of Environment America's Washington Legislative Office

Highland Electric: "We applaud Senator Hickenlooper and his team for their leadership on this important issue," said Matt Stanberry, Managing Director at Highland Electric Fleets, a leading provider of fleet electrification. "We are operating vehicle-to-grid enabled school buses in multiple communities today, and see a host of benefits to deploying these grid-scale assets more broadly since they enable all communities to enhance resiliency, increase renewable energy integration, and clean the air."

Lion Electric: "As the demand for electric vehicles, including all electric, zero-emission school buses grows, it is critical that legislators and industry leaders push toward vehicle-to-grid (V2G) technology standards and implementation," stated Nate Baguio, Senior Vice President of Commercial Development at Lion Electric. "This is one of the primary reasons we fully support Senator Hickenlooper's (CO) Bidirectional Act Bill that would facilitate how energy flows between electric school buses to the grid (V2G), to a building (V2B), or to everything in between (V2X)."

La Plata Electric Association (LPEA): "La Plata Electric Association is actively engaged with our school districts in V2G fleet electrification. The Bidirectional Act addresses key components

required to sustain and scale the natural partnership between utilities and school districts. Through structured collaboration with shared benefits funding for electric school bus fleets can be achieved in the long term. Establishing these partnerships based on mutual benefits will help our communities achieve a clean, healthy, and affordable means of transporting our children."

National Rural Electric Cooperative Association (NRECA): “As our nation works towards a future that depends on electricity to power the American economy, finding innovative ways to meet consumer and community needs is crucial. Electric school buses could be a key part of this transition if they’re able to provide backup power to the grid when not in use. We thank Sen. Hickenlooper for his leadership with this bill, which will help promote continued innovation in electric vehicle technology.” Louis Finkel, Senior Vice President, Government Relations, National Rural Electric Cooperative Association (NRECA)

Nuvve: “As the leader in vehicle-to-grid, or V2G, technology, Nuvve proudly supports Sen. Hickenlooper’s proposed BIDIRECTIONAL Act which will accelerate the deployment of infrastructure necessary to unlock the tremendous value electric vehicles (EVs) can provide to create a cleaner and more resilient power grid. The proposed program includes important incentives for school districts across the country to install bidirectional charging infrastructure as part of their school bus electrification planning—which is critical at this early stage of V2G market formation. Longer term, revisions to PURPA (Public Utility Regulatory Policies Act of 1978) will help establish frameworks to interconnect EVs as grid resources and provide compensation for the grid services EVs are well-suited to provide.” Gregory Poilasne, Co-Founder, Chairman & CEO, Nuvve Holding Corporation

Public Interest Research Group (PIRG): "Kids should be able to get to school without a daily dose of toxic pollution, but many kids today ride dirty diesel buses that can increase rates of childhood asthma. Electric school buses are clean, green and ready to roll, and thanks to the bipartisan infrastructure law, we're going to see even more of them on our streets soon. But the new buses aren't just public health heroes. If we equip them with vehicle-to-grid technology, they can also send clean power back onto the grid to use when we need it most. As we switch to electric buses, we should also expand the use of vehicle-to-grid technology." - Matt Casale, U.S. PIRG environment campaigns director

Xcel Energy: "We applaud Senator Hickenlooper’s leadership to encourage deployment of electric school buses. In combination with the right state policies, this bill presents a great opportunity to both improve the quality of air that our children breathe and help support the grid in a way that benefits all customers. We look forward to working closely with the school districts we serve to encourage the use of electric school buses and evaluate the safe, reliable and affordable integration of the buses’ vehicle-to-grid capabilities on our system.” - Frank Prager,

Senior Vice President of Strategy, Security and External Affairs and Chief Sustainability Officer, Xcel Energy

Chambers for Innovation and Clean Energy: "Chambers for Innovation and Clean Energy strongly supports the innovative concepts and policy represented in The BIDIRECTIONAL Act. As the nation seeks to address the opportunities and challenges of a fully electrified transportation sector, we must look to innovation to speed up the transition and ensure that we structure the transition in the most efficient and forward-thinking way possible. This legislation recognizes the benefits that electric school buses can bring to the grid, in reducing upfront capital expenditures of school systems, and accelerating the nation's transition to a clean energy electric grid." - Ryan Evans, executive director, Chambers for Innovation and Clean Energy

RM: "Electric vehicle-to-grid school buses provide an incredible opportunity to reduce costs for schools, stabilize the grid, improve the air quality for children on school buses, and combat climate change. This legislation will help scale this beneficial technology and support schools and communities looking to strengthen their grid and reduce their dependency on gasoline and diesel." - Clay Stranger, Managing Director of Carbon Free Mobility, RMI