



TO: Chair Jamie Long
Members of the House Climate and Energy Finance and Policy Committee

FROM: Dave Wager, Minnesota Propane Association

Date: April 5, 2022

RE: Opposition to Article 3, Section 5, and Article 7, Section 6
(HF3337, Omnibus Climate and Energy Bill)

The Minnesota Propane Association respectfully opposes the following language contained in HF3337:

Opposition to Article 3, Section 5:

- The language would provide a mechanism for local units of government to short-circuit the present system for amending and adopting the state building code. This language, often referred to as a “stretch code” would quickly create the possibility of banning certain energy sources from use in commercial construction, etc. This is what happened in California.
- This language would also allow government to deny consumer choice when owners are deciding the most appropriate fuel for their buildings. This bill will allow the government to choose winners and losers in the free market. In addition to the unfairness and counter productiveness of the anticipated mandates, they are also unwise. If you count all the carbon emissions related to the use of propane and grid electricity, the comparison will show that propane is much cleaner. This will remain true for a long time.

Opposition to Article 7, Section 6. (216B.1616 Electric School Bus Deployment Program):

- For years, many have extolled the virtues of going battery electric. But today as more vehicles are tested on real-world routes, electricity is not quite living up to its reputation. Put simply, as battery electric vehicles become more prevalent - especially in the medium-duty market - their shortcomings are, too.
- Consider that the ideal setting for battery electric medium-duty vehicles, including school buses, is still only 120 miles on a single charge, but that range is significantly reduced with payload, weather, and the use of cabin climate control. Add in a long duty-cycle or vehicles covering multiple shifts in a day with little time for recharging (up to five hours for a battery), and **electricity just doesn't work.**
- What does work though is propane autogas. It is a leading alternative fuel for many reasons, including engines with diesel-like performance, similar refueling times to gasoline and diesel, and the ability to drive more than 400 miles on a single fill. Propane school buses provide a lower carbon footprint than EV buses in Minnesota today.
- School buses with a fuel blend of propane and renewable Dimethyl Ether (DME) can enable a lower carbon footprint solution in every state except Vermont, which uses primarily hydroelectricity. This is compared to medium-duty vehicles, school buses that are charged using the electrical grid.
- The cost of a propane bus is approximately \$100,000 vs \$300,000 plus for an electric bus.
- There are approximately 18,500 school buses of all types in Minnesota. Imagine the cost to replace all of them with EV and the infrastructure cost on top of that. With propane buses, these extreme costs with negative climate returns are completely unnecessary.

- There is no single path to zero emissions that will work for all application types across all markets and duty cycles. Propane autogas can do its part today in the collective effort toward decarbonization. Using propane autogas today is an immediate solution toward reducing harmful emissions.
- Reports from climate groups around the world demonstrate the importance of implementing low-emissions energy sources as soon as possible, and they make clear that we don't have time to wait for a one-size-fits-all solution to decarbonization.
- As more school buses, transit and paratransit, food and beverage, delivery, and towing fleets are powered by propane autogas, the performance holds up. Fleet managers can be confident that, when put to the test, propane autogas is a solution that works.

Consider the following:

- Propane's low carbon intensity is why it is an approved clean alternative fuel under the Clean Air Act.
- Propane's carbon intensity is 80, but Minnesota's electricity is rated at 136.
- The Energy Star Program gives propane a site ratio of 1.01 compared to 2.80 for grid electricity. This means propane is almost three times more efficient than grid electricity.
- Propane produces 43% fewer greenhouse gas emissions than using an equivalent amount of electricity generated from the U.S. grid.
- Propane prevents deforestation by replacing solid fuels such as wood and coal.
- Propane is electric grid free - making it a valuable partner energy source for solar and wind when the sun doesn't shine, and the wind doesn't blow.
- The flexible form of propane storage makes it easy to install in any environment without disrupting sensitive habitat.
- A typical propane tank has a useful life of 40 plus years, is made from 85% recycled steel and is 100% recyclable after service. The brass fittings are made from a high percentage of recycled brass and are 100% recyclable.
- Propane fueled technologies produce fewer nitrogen oxide (NOx) and sulfur oxide (SOx) emissions than technologies fueled by electricity, gasoline, and diesel.
- Propane-fueled residential furnaces emit up to 50% NOx emissions and 82% fewer SOx emissions than electric furnaces.
- Renewable propane is in our country and available today. It is drop in ready and can be blended with traditional propane. It will lower our carbon intensity and full fuel cycle emissions even more. Renewable propane does not require us to rebuild or expand the grid, buy new appliances, or retrofit buildings to use a different energy source.
- In February 2021, based on a comparison of historical records, an estimated 4.7 million gallons of propane was sold for back-up to natural gas and electricity. That is the equivalent of heating approximately 6,300 homes in Minnesota **for a year.**

The practical direction is to adopt proven technology that delivers reduced CO2 emissions today while we increase renewable energy resources and build the grid of the future.

Electrification is often touted as the only solution to full decarbonization, overlooking how electricity is generated, stored, transmitted, and consumed. A single-energy mandate isn't sufficient or realistic and the truth is, propane and **renewable propane** can lead to immediate decarbonization of our energy sector. When you consider how electricity is generated and the total carbon footprint, propane offers a cleaner alternative than most other options.

Sources: US EPA, US EIA, Union of Concerned Scientists, MNPEPSC