



July 15, 2022

Joshua Grice
Department of Ecology
Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

Re: Rulemaking – Chapter 173-446 WAC, Climate Commitment Act Program

COMMENTS OF THE PACIFIC PROPANE GAS ASSOCIATION

On behalf of the Pacific Propane Gas Association (PPGA), which represents propane marketers, suppliers and equipment manufacturers across Washington State, we appreciate the opportunity to provide comment on the Department of Ecology’s proposed Chapter 173-446 cap-and-invest rule, which consistent with the Climate Commitment Act, is intended to help reduce greenhouse gas (GHG) emissions. Our members provide clean-burning and critical energy to residential, commercial and agricultural customers in the state. Washington’s propane industry generates more than \$658 million in economic activity annually.¹

General Comments

I. Clean American Energy

Propane can play an important role in Washington’s clean energy transition and future. It can help the state achieve many of its near- and long-term environmental and climate health goals. Propane burns cleanly, efficiently and has a low-carbon content.² As a less carbon intensive fuel, the state could achieve immediate GHG reductions in the thermal sector if more consumers simply replaced their antiquated fuel oil, kerosene or coal heating systems with efficient propane equipment. These emission reductions are harmonious with the underlying intentions of the Climate Commitment Act and, importantly, would be consumer-driven.³

Propane’s environmentally friendly attributes have long been recognized by the federal government and states around the country. It is nontoxic and vaporizes the moment it is released from a pressurized cylinder. As such, and unlike other energy sources, propane presents no threat to soil, surface water or ground water.⁴ This helps preserve and protect Washington’s critical

¹ https://www.npga.org/wp-content/uploads/2020/07/WASHINGTON_Propane-1-Page_2020-3.pdf

² https://www.eia.gov/environment/emissions/co2_vol_mass.php

³ <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.65.060>

⁴ https://afdc.energy.gov/fuels/propane_basics.html

land and water resources, including our environmentally sensitive waterways. In addition to protecting natural resources from contamination, propane can also prevent their destruction. For example, more than 107,000 households in our state still burn wood to keep warm.⁵ This, despite the fact that wood smoke contains high levels of particulate matter that can negatively affect our respiratory and cardiovascular systems and degrades local air quality.⁶ By comparison, propane's combustion produces virtually zero particulate matter.⁷ For residents living beyond the natural gas distribution system, using propane instead of firewood protects trees, which are natural carbon sinks, prevents deforestation and a reduction in woody habitat for plants and animals. This is beneficial from not only from a human health and air quality perspective, but an ecological one as well.

Earlier this year, the Governor signed legislation to reduce methane emissions from municipal solid waste landfills.⁸ It is smart to focus on these fugitive emissions because methane is an extremely potent GHG and its 20-year global warming potential (GWP) is 82 times more powerful than carbon dioxide; its 100-year GWP is 29 times more powerful.⁹ Propane, however, is a non-methane energy molecule. So, it is truly clean both before and after combustion.

II. Renewable Propane

Beyond conventional propane, the industry is also actively promoting the use of renewable propane as another means to reduce GHG emissions. Renewable propane is a by-product of renewable diesel production, and can be derived from a variety of sustainable sources, such as biomass, animal fats and vegetable oils.¹⁰ Renewable propane can safely be used in vehicle engines, including those certified to the California Air Resources Board's (CARB) ultra-low NOx standard.¹¹ And, in addition to retaining all of the same environmentally friendly attributes as traditional propane, it is less carbon intensive.¹² In California, renewable propane being used as a vehicle fuel has a carbon intensity score as low as 20.5, far less than other energy sources.¹³

Renewable propane is also an approved pathway for compliance under the federal Renewable Fuel Standard (RFS), a law that was enacted to reduce GHG emissions from vehicles.¹⁴ Beyond

⁵ <https://data.census.gov/cedsci/table?q=home%20heating%20fuel&g=0400000US53&tid=ACSDT5Y2020.B25040>

⁶ <https://dec.vermont.gov/air-quality/compliance/owb/health-and-environment>

⁷ https://www.epa.gov/sites/default/files/2020-09/documents/emission_factor_documentation_for_ap42_section_1.5_liquified_petroleum_gas.pdf

⁸ <https://lawfilesexternal.wa.gov/biennium/2021-22/Pdf/Bills/House%20Passed%20Legislature/1663-S2.PL.pdf?q=20220622062701>

⁹ <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials#Learn%20why>

¹⁰ https://afdc.energy.gov/fuels/propane_production.html

¹¹ <https://www.roushcleantech.com/roush-cleantech-launches-first-available-near-zero-emissions-engines-fueled-by-renewable-propane/>

¹² https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/b0189_summary.pdf

¹³ *Id.*

¹⁴ <https://www.epa.gov/renewable-fuel-standard-program/approved-pathways-renewable-fuel>

transportation, energy molecules produced from sustainable feedstocks, like renewable propane, can also drastically reduce GHG emissions from the buildings and thermal sectors as well.

III. Direct Use

Washingtonians have long relied on propane for space and water heating, fireplaces, cooking and clothes drying. And the direct use of propane is clean and efficient way to consume energy. It is important to remember that electricity, unlike propane, is a secondary energy source that must first be created. Grid electricity is extremely inefficient and energy is lost during each step of the production and delivery process. Although the majority of electricity produced in our state comes from hydropower, fossil fuels – coal, natural gas and petroleum – are the second most relied upon source for electric power generation.¹⁵ The efficiency of a typical natural gas plant is only 44 percent; the efficiency of a coal-fired power plant is a paltry 32 percent.^{16,17} Following power generation, additional energy is lost during the transmission and distribution of that electricity to an outlet for an end-use purpose.¹⁸ These inherent inefficiencies mean that more GHGs, as well as air pollutants, are released. For context, the federal government’s Energy Star Program gives propane a source-site ratio of 1.01, compared to 2.80 for electricity from the grid.¹⁹ This means it takes 2.80 units of electricity to produce and deliver one unit of energy to a home, compared to only 1.01 for propane. Propane is much more efficient at delivering energy than drawing electricity from the grid. Utilizing a full fuel-cycle analysis, it is clear that the direct use of propane is a clean and climate friendly way to consume energy. And notably, our industry continues to deploy cleaner and more efficient products, including tankless water heaters that use considerably less energy than traditional storage units, and micro cogeneration systems that produce electricity and useful thermal energy simultaneously to achieve maximum efficiency.

IV. Energy Reliability & Resilience

American propane production is at record levels.²⁰ As a result, clean and reliable domestic energy is readily available to consumers. Propane can easily and economically be transported multiple ways, including by pipeline, rail, ship and over-the-road vehicles. Electricity generated at power plants, in contrast, has only one transportation option: electric utility lines. Like all other states, Washington has its share of power outages and system failures. Using propane for energy intensive applications, such as space and water heater, reduces stress on the electric grid and helps it cope with peak demand.

¹⁵

<https://www.eia.gov/electricity/data/browser/#/topic/0?agg=2,0,1&fuel=vtvv&geo=000000000001&sec=008&linechart=ELEC.GEN.ALL-WA-98.A&columnchart=ELEC.GEN.ALL-WA-98.A&map=ELEC.GEN.ALL-WA-98.A&freq=A&start=2020&end=2021&ctype=linechart<ype=pin&rtype=s&maptype=0&rse=0&pin=>

¹⁶ <https://www.eia.gov/tools/faqs/faq.php?id=107&t=3>

¹⁷ https://www.eia.gov/electricity/annual/html/epa_08_01.html

¹⁸ <https://www.eia.gov/tools/faqs/faq.php?id=105&t=3>

¹⁹ <https://portfoliomanager.energystar.gov/pdf/reference/Source%20Energy.pdf>

²⁰ https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=M_EPLLPA_FPF_NUS_MBBL&f=M

While Washington relies heavily on hydroelectric power to generate electricity, it is important to remember that reduced precipitation and drought conditions can lower water levels in reservoirs and decrease the amount of energy these power plants can produce.²¹ When this occurs, grid operators have to secure power from other sources. And with drought conditions widespread across large swaths of the West, we are already seeing this process play out.²² Power production at the Hoover Dam, for example, is down by 33 percent this year and, according to the U.S. Bureau of Reclamation, is expected to decline further.²³ This is yet another example of the tremendous resilience value in energy diversity. In addition to electrons generated from cleaner sources, Washington also needs low-carbon and clean energy molecules, like propane, to increase energy reliability and the overall resilience of the energy sector.

Program Specific Comments

I. Clarification on Biofuels

Additional clarity is needed in the regulation on how covered fuel suppliers would manage the proposed requirement that biofuels must have a 40 percent lower GHG emissions based on a full life-cycle analysis than their petroleum counterparts to be exempt from obligation. There should be additional explanation on how emissions from biofuels are defined and excluded from an entity's covered emissions. It is unclear if the 40% requirement applies to the entire blend or just the renewable portion. The PPGA requests Ecology make clear the 40% requirement only applies to the renewable portion of the blended fuel.

The proposed rule should also adopt a standardized lifecycle CI score to ensure the CCA program and the Washington Clean Fuels Program requirements align. This will ensure parity between the programs and avoid burdensome reporting requirements. Ecology should also clarify that molecules of exempted fuels need not be tracked to specific end-users. This is crucial to maximizing regulated entities' use of biofuels to reduce their covered emissions. Clarification is needed as it could have a critical impact both current and future Washington biofuels.

II. Failure to Include Residential Heating Assistance Program

Section 47 of the Climate Commitment Act outlines legislative intent to establish policies to mitigate the cost burden of the program for consumers who use home heating fuels that are not electricity or natural gas.

NEW SECTION. Sec. 47. RESIDENTIAL HEATING ASSISTANCE PROGRAM.

²¹ <https://www.drought.gov/sectors/energy>

²² *Id.*

²³ <https://www.8newsnow.com/news/local-news/hoover-dam-power-production-down-33-official-says/>

- (1) The legislature intends by this section to establish policies to mitigate the cost burden of the program established by this act on consumers who use home heating fuels that are not electricity or natural gas.
- (2) The department, in collaboration with interested stakeholders, shall develop a proposal for assisting households that, for residential home heating, use fuels that are not electricity or natural gas. The proposal must give priority to assisting low-income households through weatherization, conservation and efficiency services, and bill assistance.
- (3) In the event the department, in collaboration with interested stakeholders, determines that the proposal developed pursuant to subsection (2) of this section requires legislative action, the department shall submit its recommendations for proposed legislation 30 to the appropriate committees of the legislature no later than September 15, 2022.

While the draft rule provides allowances at no cost for electric and natural gas utilities to protect low-income customers it fails to address this piece of the statute. There also appears to have been no effort to begin discussions on how this rule will impact low-income consumers of heating fuels that are not electricity or natural gas.

Of the propane consumed in Washington, 54 percent is used for residential purposes—home space heating, home water heating, cooking, etc. Based on experiences in California, propane prices increased 10-15 cents per gallon with the passage of cap-and-trade legislation. The rules failure to address this part of the law will mean higher bills to heat homes, heat water and cook for many low-income families who use propane for basic residential purposes.

With the start of this program imminent, Ecology should begin to work immediately on a proposal to protect these consumers from potential cost increases in home heating fuel.

III. Program Start and Stringency

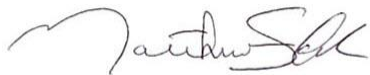
Covered entities, including the propane industry, are already making strides to reduce GHG emissions through new technologies and the introduction of renewable fuels. Washington's CCA should support those technologies in a way that is sustainable for state residents and businesses. The proposed 28% decline in the first compliance year (immediate 7% decline followed by 7% decline annually from 2024-2026) is a severe drop in emissions and inconsistent with similar programs in California and Oregon. California established annual cap reductions of under 2% in the 2010s and 3.4% for the 2020s. Oregon, which just finalized its Climate Protection Program, sets an annual cap decline of 3.8%. Without a more gradual timeline companies will face high compliance costs while still needing to focus on GHG reduction technologies. Ecology should lessen this burden to ensure companies have adequate resources to invest in GHG technologies outside the scope of the CCA.

IV. Carbon Emissions Reductions Account and the Climate Investment Account

Where possible funds raised by Washington's CCA should be used to fund projects in the sectors of the economy where the costs are paid. The current disbursement structure of the Carbon Emissions Reductions Account and Investment Account do not place enough emphasis on funding decarbonization products in the energy sector. Consumers need and demand the energy products produced by fuel suppliers. More effort should be made to assist making funds available to the energy sector to invest in GHG reduction technologies and growth in renewable fuels.

Thank you for allowing us to share our feedback. We look forward to continuing to work on this important rule making process.

Sincerely,

A handwritten signature in black ink that reads "Matthew Solak". The signature is written in a cursive style with a large initial "M" and "S".

Matthew Solak
Executive Director
Pacific Propane Gas Association
matt@kdafirm.com
Telephone: 844-585-4940