



February 27, 2021

To: Department of Environmental Protection
Montgomery County, MD

From: Stephen Kaminski
Montgomery County Resident and
President and CEO, National Propane Gas Association

Cc: Marc Elrich
Montgomery County Executive

Re: Montgomery County Draft Climate Action Plan Sections B-1 and B-2

I write in opposition to proposed sections B-1 and B-2 of the draft climate action plan related to forced electrification. I am a Montgomery County resident (in the lovely Springfield neighborhood of Bethesda) and also have the pleasure of serving as President and CEO of the National Propane Gas Association, which represents the United States' propane community.

We are in agreement that accelerating decarbonization should be a priority for Montgomery County. B-1 and B-2 unfortunately will do just the opposite, because several assumptions underpinning these proposals are at best incomplete and at worst grossly inaccurate. Adoption of B-1 and B-2 will hurt the environment, place a hugely disproportionate share of energy costs on lower-income populations, and destroy energy reliability and resiliency.

I. Electricity and Emissions

Centralized electricity generation is incredibly inefficient and wasteful; energy is lost during each step of the delivery process (*i.e.*, power generation and distribution). If we look just at generation, for example, more than 60 percent of all energy is lost in the electric conversion process; in aggregate, our electric grid is only 37 percent efficient.¹ 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 U.S. grid.² 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.

¹ <https://www.eia.gov/todayinenergy/detail.php?id=44436>

² <https://portfoliomanager.energystar.gov/pdf/reference/Source%20Energy.pdf>

We urge you to “look behind the plug” of electricity. Utility-scale solar and wind generate a meager 2.6% of Maryland’s electricity, with coal playing a more prominent role.³ Accordingly, when you factor in the upstream emissions associated with electric power generation (*i.e.*, source energy), a home using propane for space heating and cooking in Maryland will produce fewer carbon dioxide (CO₂) emissions than an all-electric home using comparable appliances.⁴ So, by pursuing this electrification policy, you will actually be increasing the carbon footprint of some county residents—the very antithesis of your stated goal.

II. Propane is a Clean Fuel

Propane has a low-carbon content;⁵ it is nontoxic and will not contaminate land or water resources, as it vaporizes when exposed to air.⁶ For these reasons and more, propane is designated an approved clean, alternative fuel under the Clean Air Act Amendments of 1990 and the National Energy Policy Act of 1992. In fact, financial incentives exist in Maryland to entice consumers to use propane.⁷

Importantly, if you believe that the electricity sector of tomorrow will be cleaner (*e.g.*, the plan alludes to a 100% renewable grid, something as mentioned above Maryland is 97.4% away from achieving today), then you should believe the same for the propane industry. This includes more efficient and eco-friendly applications, such as direct-vent fireplaces and tankless water heaters, and the increased production and consumption of renewable propane, which is a by-product of renewable diesel production and can be derived from biomass, animal fats, and vegetable oils.⁸ The California Air Resources Board (CARB) recognizes that, when propane is derived from renewable sources, its carbon intensity score decreases significantly further.⁹ And work is being conducted on advancements in renewable propane blends to reach a carbon intensity of less than zero.

³ Maryland (15% coal):

<https://www.eia.gov/electricity/data/browser/#/topic/0?agg=2,0,1&fuel=vvvvu&geo=00000008&sec=008&linechart=ELEC.GEN.ALL-MD-98.A&columnchart=ELEC.GEN.ALL-MD-98.A&map=ELEC.GEN.ALL-MD-98.A&freq=A&start=2018&end=2019&ctype=linechart<ype=pin&rtype=s&rse=0&matype=0&pin=>

United States (23% coal): <https://www.eia.gov/tools/faqs/faq.php?id=427&t=3>

⁴ Carbon Management Information Center Source Energy and Emissions Analysis Tool (SEEAT), Version 9.0, Copyright 2021 Gas Technology Institute. <http://seeatcalcbeta.gastechnology.org/Account/login.aspx>.

⁵ <https://www.eia.gov/tools/faqs/faq.php?id=73&t=11>

⁶ https://afdc.energy.gov/fuels/propane_basics.html

⁷ https://afdc.energy.gov/laws/state_summary?state=MD

⁸ https://afdc.energy.gov/fuels/propane_production.html

⁹

https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/rpane_temp.pdf?_ga=2.217831764.355390530.1610306946-1390821278.1600954367

Setting carbon reduction goals is laudable, but dictating what energy sources of low, zero, or negative carbon sources are given years to achieve those goals—and which are not allowed the same runway for development—is simply not good policy.

III. Costs

It is unwise to assume that, just because somebody lives in Montgomery County, they are not sensitive to energy prices and the potential costs of this new mandate. In 2019, Maryland had the highest residential electricity prices in the South Atlantic Census Division.¹⁰ And as reported by the Department of Energy, the price of propane was 53 percent less expensive, per million Btu of energy, than electricity last year.¹¹

Households of limited means spend a greater share of their income paying for energy compared to those who are more affluent.¹² As a result, they are especially sensitive to any policy that could increase this already heavy energy burden. Widespread electrification, which this proposal would advance, will impact the variability and shape of the electric load.¹³ Given this, utilities must dedicate more time and effort to address these challenges. This could further impact retail electric rates. To actually achieve economic prosperity—as this plan purports to do—we should be increasing energy options for consumers and businesses, not restricting them.

And of course, if you prevent residents from choosing propane for their energy needs, you are also hurting propane marketers, suppliers, and equipment manufacturers across the Old Line State. This would be regrettable as these 100 companies are mostly small, family-owned businesses.

IV. Reliability and Resilience

Forced electrification threatens energy reliability and resilience. Propane is repeatedly called on to rescue the electric grid because propane is completely portable. It doesn't need electric transmission lines or natural gas lines to be put to work because it can be trucked anywhere at any time, including in the very worst conditions. Examples in just the past year of propane's importance to reliability and resiliency of the energy ecosystem include during the worst hurricane season on record and during this month's arctic blast event in the South. Not to mention that propane was called on to heat pop-up Covid testing tents last March and April and has allowed Montgomery County restaurants to heat outdoor seating throughout the pandemic.

¹⁰ https://www.eia.gov/electricity/annual/html/epa_02_10.html

¹¹ <https://www.govinfo.gov/content/pkg/FR-2020-08-14/pdf/2020-17803.pdf>

¹² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4819257/>

¹³ <https://www.nrel.gov/docs/fy17osti/68214.pdf>

But as a practical matter, propane companies cannot survive just to be there in case of emergency. So enactment of policies such as B-1 and B-2 will eventually have the downstream effect of eliminating a vital energy source needed the most during the worst of emergencies.

I urge you to consider these facts and the U.S. Federal Government and objective third party citations, rather than get “caught up” in the all-electric buzz. I believe that all-electric proponents mean well—to decarbonize the planet while ensuring energy equity through affordability—but don’t fully understand that banning propane will not achieve their objectives and in fact will hinder their achievement. I share your goals, but forcing electrification is not the solution.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stephen Kaminski', with a long horizontal stroke extending to the right.

Stephen Kaminski
Bethesda, MD
President and CEO, National Propane Gas Association

