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February 28, 2020

Georgetown Climate Center
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Submitted electronically to the Transportation & Climate Initiative of the Northeast and Mid-Atlantic States at https://www.transportationandclimate.org.

RE: Comments on the Draft Memorandum of Understanding of the Transportation and Climate Initiative

PBF Holding Company LLC, a subsidiary of PBF Energy Inc. ("PBF"), respectfully submits these comments in response to the draft Memorandum of Understanding ("MOU") regarding the Transportation & Climate Initiative ("TCI"), as proposed by the Georgetown Climate Center ("GCC").

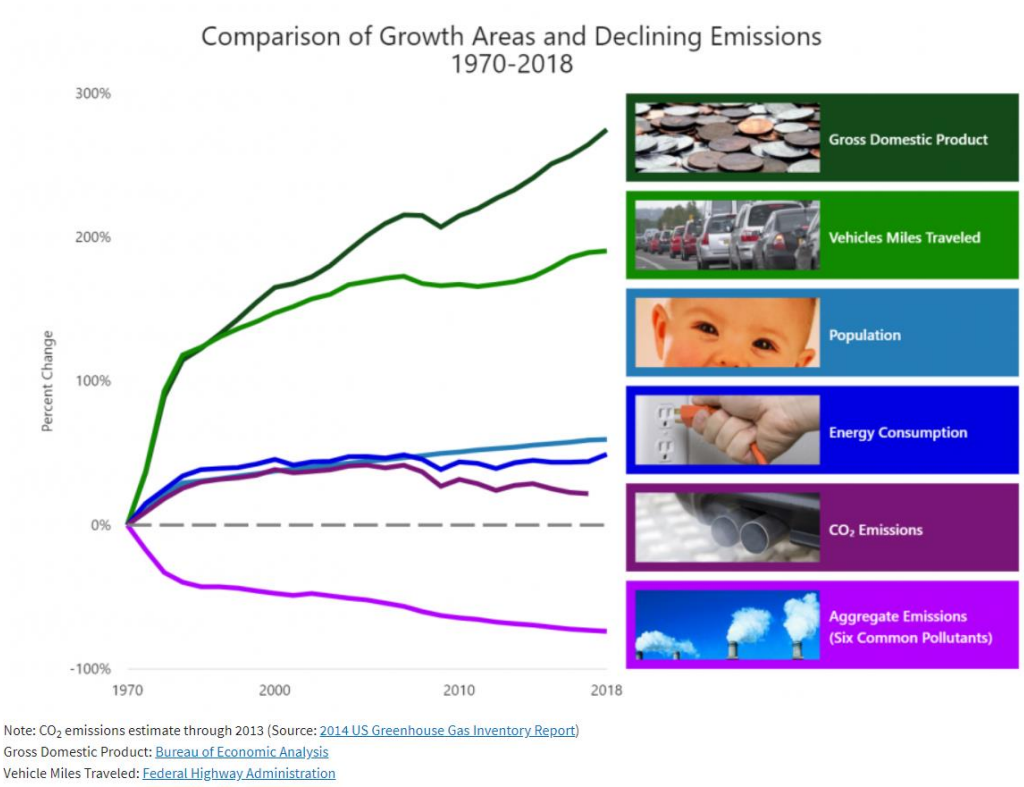
PBF is one of the largest independent petroleum refiners and suppliers of unbranded transportation fuels, heating oil, petrochemical feedstocks, lubricants and other petroleum products in the United States. The company currently owns and operates six domestic oil refineries in five states – Delaware, New Jersey, Ohio, Louisiana and California - and related assets with a combined processing capacity of approximately 1,000,000 barrels per day. PBF employs more than 3,000 people nationally. As one of the largest U.S. merchant refiners - with the most East Coast refining capacity – a poorly crafted cap-and-trade program for transportation fuels could have a significant, negative impact on PBF, transportation fuel consumers and refinery workers.

More specifically, the Transportation & Climate Initiative (TCI) threatens to become a backdoor, open-ended and regressive gasoline tax that will come at a significant cost, with little to no benefit for East Coast consumers and its economy. It could also essentially tax the poor to subsidize electric vehicles for the highest income earners. Any transportation policy seeking to institute additional greenhouse gas (GHG) regulations needs to recognize the fact that petroleum fuels and products make modern life possible and are already subject to extensive federal GHG controls. Additionally, policies must recognize that no other transportation fuel provides more energy per physical unit as cost effectively as oil. As a result, we should explore ways to use petroleum fuels as efficiently as possible, rather than forcing more expensive alternatives in a manner that could create unintended consequences. Finally, any additional emission reductions policies should protect Northeast and Mid-Atlantic manufacturing jobs.

I. The TCI's own analysis suggests the program is likely to impose a significant cost on consumers, with little environmental benefit.

A. A core problem with proposals like TCI is their ignorance of extensive federal emission regulations for the transportation sector.

Recent debates over reducing transportation sector emissions begin with the same flaw: they all assume there are no existing regulations driving emissions down in the transportation sector. U.S. Environmental Protection Agency (EPA) data shows that since 1970, all transportation sector emissions have decreased, despite significant increases in population, vehicle miles traveled (VMT) and Gross Domestic Product (GDP):[1]



Source: Environmental Protection Agency

Several trends have contributed to such reductions, including federal regulations such as the combined National Highway Traffic Safety Administration (NHTSA) and EPA GHG tailpipe and Corporate Average Fuel Economy (CAFE) regulations. Federal and state gasoline taxes – which are carbon taxes – combined to add about 50 cents per gallon of gasoline and nearly 56 cents per gallon of diesel fuel to prices at the pump on average.[2] Additionally, the federal

[1] U.S. Environmental Protection Agency. *History of Reducing Air Pollution from Transportation in the United States.* Available at: https://www.epa.gov/transportation-air-pollution-and-climate-change/accomplishments-and-success-air-pollution-transportation

[2] U.S. Energy Information Administration (EIA). Frequently Asked Questions. *How much tax do we pay on a gallon of gasoline and on a gallon of diesel fuel?* July 1, 2019. Available at: https://www.eia.gov/tools/faqs/faq.php?id=10&t=10

Renewable Fuel Standard (RFS) contains GHG requirements for compliant biofuel. While these regulations create their own challenges that Congress and the Administration need to address,[3] they are in part why the U.S. Energy Information Administration (EIA) projects continued decreases in gasoline consumption for the foreseeable future. As the agency's latest Annual Energy Outlook notes, "Increases in fuel economy standards drive the decrease in U.S. motor gasoline consumption, which declines by 19% through 2050."[4] EIA adds, "Motor gasoline and distillate fuel oil's combined share of total transportation energy consumption decreases from 84% in 2018 to 74% in 2050."[5] Policymakers need to first acknowledge the continued decreases in transportation sector demand and, thus, emissions that will occur given the existing regulatory environment when considering the extent and necessity of new, additional transportation sector GHG controls.

B. TCI's own economic modeling projects that the brunt of GHG emission reductions sought will occur regardless of any new regulations.

The details of TCI's own economic analysis reveal that the brunt of reductions sought through any of the group's modeled scenarios will occur without any new regulations. The TCI "base case" (e.g. status quo) projects a 19 percent reduction in GHG emissions from the transportation sector between 2022 and 2032. Despite this reality, the initiative suggests imposing a cap-and-trade system for the Northeast and Mid-Atlantic fuel supply that seeks to reduce emissions by 20, 22 or 25 percent in the same period. TCI's analysis concludes this incremental one to six percent reduction beyond the base case will *cost between 5 and 17 cents per gallon, or $1.4 to $5.6 billion dollars, in the first year of the program alone*. These costs escalate each year of the program, potentially reaching over 35 cents per gallon in 2032 for the 25 percent reduction scenario. Such costs are extremely high for very little environmental benefit.

II. Assumptions in the TCI modeling could *significantly underestimate* the program's cost, which will benefit wealthier individuals at the expense of lower income families.

A. The TCI modeling results rely on overly optimistic assumptions on electric vehicle supply.

The proposal suggests an overly optimistic view of the potential for electric vehicle penetration. Specifically, TCI's modeling assumes nearly 30 percent of all new vehicles sold in 2030 are electric vehicles. The U.S. Energy Information Administration (EIA) and various auto industry estimates indicate that under very aggressive adoption scenarios, electric vehicles will represent only 5 to 10 percent of new vehicles sold in that year.[6] If consumer acceptance of electric vehicles is more reflective of EIA and auto industry estimates, rather than the GCC estimates, TCI allowance prices would be significantly more expensive than GCC's modeling indicates.

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[3] For example, many environmental organizations feel the conventional biofuel mandated in the RFS has had the unintended consequences of increasing GHG emissions above what would have occurred without the fuels' use. Additionally, declining gasoline consumption raises questions about how highway programs should be funded in the future.

[4] EIA. *Annual Energy Outlook 2020.* January 29, 2020. Available at: https://www.eia.gov/outlooks/aeo/

[5] Id.

[6] Id.

B. TCI's focus seems to be on subsidizing vehicle electrification. As such, it risks subsidizing wealthier Americans at the expense of lower-income workers and families.

TCI's modeling focused on a scenario where the largest portion of investment from program revenue ends up subsidizing vehicle electrification. History of such subsidization shows that it benefits wealthier citizens at the expense of poorer ones. A recent study found, "79 percent of electric vehicle plug-in tax credits were claimed by households with adjusted gross incomes of greater than $100,000 per year."[7] While prices have come down, the median price for an electric vehicle last year was over $55,000, or about $20,000 more than the median price for all vehicles.[8] These realities highlight why the president of the Vermont AFL-CIO had the following to say about the TCI proposal:

> *Any scheme which seeks to price working people out of driving a gas-powered vehicle (without having a comprehensive public transit system an affordable electric cars readily available first) will not result in workers driving less. Rather, such moves will do nothing more than take dollars out of the pockets of working people; money which we desperately need while living in a society which does not guarantee livable wages, public health care, and affordable housing.*[9]

III. A poorly structured transportation fuels cap-and-trade program in the Northeast could put more manufacturing jobs at risk.

The draft MOU proposes to set the point of compliance at the bulk fuel terminal level. However, in a region where fuel can move from a single terminal across multiple state lines, the lack of clarity on the covered entities in the draft Memorandum of Understanding is troublesome. Although the GCC draft seems to recommend other points of regulation, there is a high degree of uncertainty. A poorly crafted system that disadvantages East Coast merchant refiners would only exacerbate the manufacturing jobs losses the region has already experienced, while increasing its reliance on imported fuel.

The federal RFS serves as an important example of a poorly crafted fuel regulation. The program places the point of obligation with refiners, regardless of their biofuel blending capabilities. However, it only allows compliance credits to become available for use when biofuel is blended into gasoline and diesel. As a result, the program advantages integrated oil companies that have the capability to blend more fuel than then refine over merchant refiners that cannot control how much biofuel is blended into the gasoline they manufacture. This structure, combined with overly aggressive volume mandates, sent RFS compliance credits – called Renewable Identification Numbers or RINS – skyrocketing just a few years ago. Runaway RIN costs was a

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[7] Wingarden, Wayne. *Government Electric Car Subsidies Are 'Costly Subsidies for the Rich', Finds New Study*. Pacific Research Institute. February 12, 2018. Available at: https://www.pacificresearch.org/government-electric-car-subsidies-are-costly-subsidies-for-the-rich-finds-new-study/

[8] Cohen, Michael J. *The Median Electric Car in the U.S. is Getting Cheaper.* Quartz. August 27, 2019. Available at: https://qz.com/1695602/the-average-electric-vehicle-is-getting-cheaper-in-the-us/

[9] Van Deusen, David. *TCI is no friend of the worker*. Vtdigger.com. December 29, 2019. Available at: https://vtdigger.org/2019/12/29/david-van-deusen-tci-is-no-friend-of-the-worker/

key contributor to the bankruptcy of Philadelphia Energy Solutions (PES) in Philadelphia. Press reports also indicate uncertainty over RIN costs prevented companies from seeking to reopen the site as a refinery after it closed in the aftermath of a recent accident.[10]

Policymakers should be particularly concerned about any program that could disadvantage merchant refiners given how the existing economic environment is impacting American fuel manufacturers. East Coast refiners have been facing significant headwinds for some years now. As an article about the PES closure noted:

> *While the U.S. economy has been growing steadily for several years, oil refining employment has slipped as automation and the shuttering of plants has bit into the industry. Refining jobs are down by nearly 8% nationwide since 2009, according to BLS figures.*[11]

Reuters also recently noted that 5 percent of domestic refining capacity is up for sale, with limited buyer interest. Concern over RFS costs was cited as a significant obstacle.[12] EIA data notes that the volume of fuel PES previously supplied to the region was made up via foreign imports in aftermath of the facility's closure. Additionally, domestic refiners have come under significant strain due to the global demand slowdown associated with concerns over the coronavirus.[13] GCC should seek to avoid program structures that would further threaten East Coast manufacturing jobs and regionally produced fuel supplies.

IV. Policymakers should consider the potential unintended consequences of trying to unnaturally force massive amounts of electric vehicles on consumers. They should also recognize the economic and environmental benefits of petroleum transportation fuels.

A. Mass vehicle electrification could result in higher criteria pollutant emissions, without reducing GH emissions.

Much of the current debate assumes electric vehicles (EVs) are more environmentally friendly than internal combustion engine. However, a growing body of evidence indicates this may not be the case. Many studies indicate data showing net environmental benefits from EVs often fails to accurately account for the electricity source powering the vehicles or the GHG emissions associated with their manufacturing. As one commentator noted before the Delaware Public Service Commission last year, "When all of these factors are considered carbon dioxide lifetime emissions savings may range between minus 3.2 and plus 3.8 tons, or an average of

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[10] Resnick-Ault, Jessica, and Sanicola, Laura. "U.S. refinery sales hit the brakes, with 5% of capacity on block." Reuters. January 10, 2020. Available at: https://www.reuters.com/article/us-usa-oil-refiner-sales-idUSKBN1Z90GN

[11] Kearney, Laila, and Kelly, Stephanie. "Laid-off Philadelphia refinery workers struggle with shrinking sector." Reuters. January 22, 2020. Available at: https://www.reuters.com/article/us-pes-bankruptcy-workers-idUSKBN1ZL2DA

[12] Resnick-Ault and Sanicola. "U.S. refinery sales hit the brakes…." Reuters. January 10, 2020.

[13] Kloza, Tom. "EIA Report: Refiners Responding to Demand Slump." Oil Price Information Service (OPIS). January 29, 2020.

essentially zero savings."[14] These comments also note EV expansion could easily result in increased criteria pollutant emissions.

B. Mass vehicle electrification raises other natural resource supply and humanitarian issues.

Electric vehicles need significant quantities of cobalt, over half the global supply of which is located in the Democratic Republic of Congo and mined using child labor.[15] Policymakers should address the sustainability and humanitarian issues associated with cobalt supply before promoting overly aggressive EV targets. They should also assess the cost impacts on other consumer goods relying on cobalt, like cell phones, if significant quantities of the resource are reallocated to EV battery production. In addition to cobalt, EVs require relatively large amounts of lithium. One study that explores meeting Europe's carbon reduction goals through mass EV penetration notes that, "The majority of lithium and cobalt is located in a few countries which is a potential risk for prices and security of supply."[16] This study indicates lithium needed if EVs were used to meet simply Europe's carbon reduction goals would dwarf existing production levels of the resource. Ensuring security of lithium supply will be critical in any plan relying on massive vehicle electrification.

C. The GCC and policymakers need to recognize that petroleum products make modern life possible and are the most efficient forms of transportation fuel.

The cleanest, most reliable and most affordable transportation fuels will continue to come from petroleum based gasoline and diesel for the foreseeable future. No other form of energy carries the same bang for the buck and managing future emission will necessitate continuing to use petroleum based fuels more efficiently; particularly since affordable energy is essential to continued economic growth and prosperity. In discussing the benefits of petroleum fuels over other sources, EIA notes:

> *Energy density and the cost, weight, and size of onboard energy storage are important characteristics of fuels for transportation. Fuels that require large, heavy, or expensive storage can reduce the space available to convey people and freight, weigh down a vehicle (making it operate less efficiently), or make it too costly to operate, even after taking account of cheaper fuels. Compared to gasoline and diesel, other options may have more energy per unit weight, but none have more energy per unit volume.*[17]

Domestic refiners are making the cleanest transportation fuels in the world at costs affordable for Americans across the economic spectrum. Americans also continue to use these fuels more efficiently in a manner that ensures continued health and affluence, while advancing

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[14] Stevenson, David. CRI Rebuttal Comments on (DE) PSC Dockett 19-0377. October 23, 2019

[15] Nikolewski, Rob. "Electric vehicles' future relies on cobalt. It's often mined by children and is soaring in price." The Los Angeles Times. February 22, 2018. Available at: https://www.latimes.com/business/la-fi-electric-car-cobalt-battery-20180222-story.html

[16] Powell, Nick, et. al. "Impact Analysis of Mass EV Adoption and Low Carbon Intensity Fuels Scenarios – Summary Report." Ricardo. August 24, 2018. Available at: https://www.fuelseurope.eu/wp-content/uploads/Summary-Report-Mass-EV-and-Low-Carbon-Fuels-Scenarios-1.pdf

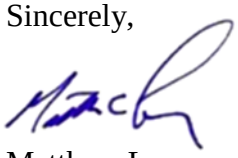
[17] EIA. "Today In Energy." February 14, 2013. Available at: https://www.eia.gov/todayinenergy/detail.php?id=9991

potential for upward economic mobility. Policymakers must recognize this reality before imposing significant new costs on consumers that threaten the region's jobs, economy and general welfare.

V. Conclusion

The draft MOU excludes any detail on significant issues that will dictate the true impact of the proposed program. At its core, the TCI proposal is a backdoor gasoline and diesel tax, with revenue going primarily to initiatives aimed at vehicle electrification, rather than traditional infrastructure. Many of the states in the proposed TCI region recently went through their own gasoline tax debates, each of which resulted in different outcomes and each of which focused on whether differing proposals would create competitive advantages or disadvantages compared to neighboring states. How allowances are allocated amongst market participants in different states, or among the states themselves, and how each state decides to spend revenue from the TCI program will generate similar debates. PBF hopes the next version of the MOU includes more clarity to allow for a better assessment of the program's full impact. In the meantime, we encourage GCC and policymakers to spend significant time assessing the previously mentioned issues. We also urge all stakeholders to recognize that continued prosperity of the Northeast and Mid-Atlantic economy will depend on abundant, affordable and reliable transportation fuels.

Sincerely,



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