



March 29, 2019

The Honorable Rod Phillips
Minister of the Environment, Conservation and Parks
Ferguson Block 11th Floor, 77 Wellesley St W,
Toronto, ON M7A 2T5

Re: Increasing Renewable Content in Fuels

Thank you for this continued opportunity to provide comments in strong support of Ontario's efforts to address climate change through expanded biofuel blending, specifically the provincial move to 15 percent renewable content in gasoline as soon as 2025.

Growth Energy is the world's largest association of biofuels and supporters representing 100 ethanol plants and 83 associate members who serve North America's need for renewable fuel.

The U.S. Grains Council works in more than fifty countries and the European Union to develop new markets for U.S. barley, corn, grain sorghum and related products, including ethanol and distiller's dried grains with solubles. Corn, ethanol, and its co-products are all global commodities.

We appreciate the ministry taking our previous comments of March 2017, January 2018, and January 2019 (attached) into account and strongly support the proposal to increase the renewable content of gasoline to 15 percent by 2025. As we noted in our earlier comments, increasing ethanol concentrations in fuel presents tremendous benefits to the public in the form of lower GHG emissions, lower levels of other pollutants, improved fuel properties (cleaner and cooler burning), and economic benefits to Canada's critical agricultural economy.

For decades now, North American farmers and ethanol producers have continued to benefit from tariff-free borders. With an existing North American supply chain, Ontario can rest assured that the increase in demand from a move to 15 percent ethanol will be met by this vibrant marketplace. Collectively, the North American industry is poised to assist Ontario attain its ambitious climate goals and to support this ambitious provincial move.

To further bolster Ontario's move to 15 percent ethanol, we wish to provide some brief additional information on the approval and use of 15 percent ethanol in the United States. For two years, the Department of Energy's Oak Ridge National Laboratory performed extensive study and analysis of midlevel ethanol blends including E15 on engine emission systems. In fact, Oak Ridge ran 86 vehicles for 6.5 million miles before concluding that "...ethanol blends

did not affect emissions changes over time differently than aging with ethanol-free gasoline” and that the use of ethanol blends resulted in reductions in carbon monoxide and non-methane hydrocarbons.¹ On the basis of this extensive testing, the United States Environmental Protection Agency approved the use of E15 for all 2001 and newer passenger vehicles – more than 91 percent of the light-duty vehicles on the road today. Additionally, the leading automobile manufacturers began approving and warranting their vehicles for use with E15 starting with General Motors in 2012, Ford in 2013, and others soon thereafter resulting in 196 million vehicles on the road today that can use E15 without warranty concerns.²

Americans have also now logged more than 7 billion consumer miles on E15 with no reports whatsoever of engine issues.³ In fact, in testimony before the U.S. Senate Environment and Public Works Committee, Mike Lorenz, Executive Vice President of Petroleum Supply for Sheetz (a U.S. fuel retailer with 580 locations), stated: “...after millions of E15 transactions by thousands of E15 customers purchasing millions of gallons of E15 and driving millions of miles on the fuel, one thing is clear – we have not had a single customer complaint. Our customers like this fuel. And now, they demand it”.⁴ It is clear that North American automobiles are already poised and ready for the continued expansion of E15.

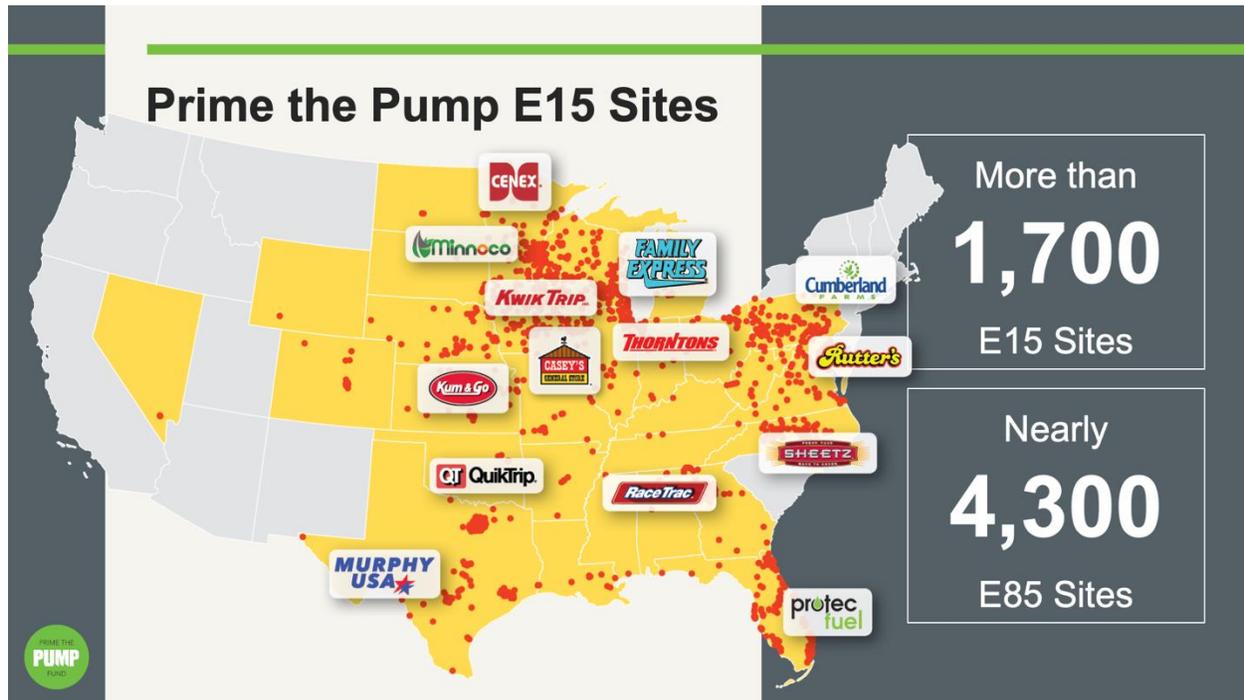
Since EPA’s approval of E15 in 2011, retail and wholesale adoption of E15 continues to grow. Today, there are more than 1700 high-volume fueling locations in 30 states and nearly 100 fuel terminals offering E15 to consumers and fuel retailers alike. As other provinces, states, and localities examine their own climate policies, we certainly expect the growth of E15 and other higher ethanol blends to continue – especially with E15 selling between 3 and 10 cents less per gallon than regular gasoline and a point higher in octane.

¹ West, Brian; Sluder, Scott et al: Oak Ridge National Laboratory, *Intermediate Ethanol Blends Catalyst Durability Study* February 2012: <https://info.ornl.gov/sites/publications/files/Pub31271.pdf>

² Darlington, To:; *Analysis of Ethanol-Compatible Fleet for Calendar Year 2019* August 2018: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0167-1292> (Attachment 15)

³ Growth Energy, Press Release, January 23, 2019: <https://growthenergy.org/2019/01/23/drivers-across-u-s-logged-7-billion-miles-on-e15/>

⁴ Lorenz, Mike, Testimony before the U.S. Senate Environment and Public Works Committee’s legislative hearing on S. 517, the Consumer Fuel and Retailer Choice Act, June 14, 2017: <https://www.epw.senate.gov/public/?cache/files/2/4/24b27dc4-3228-42c5-8610-d7532c27f587/EE647F9024622D076FA2CB8DB19B24E9.lorenz-testimony-06.14.2017.pdf>



There has been a great deal of work to examine the compatibility of retail infrastructure with higher ethanol blends, particularly regarding E15. For retail dispensers, the vast majority of dispensers are now approved for E15. Gilbarco and Wayne combined have more than 90 percent of the North American dispenser market. Wayne has approved all of its dispensers to carry E15 and since 2016, has begun to approve dispensers up to E25.⁵ Similarly, Gilbarco has approved all of its dispensers made since 2008 for use with E15.⁶

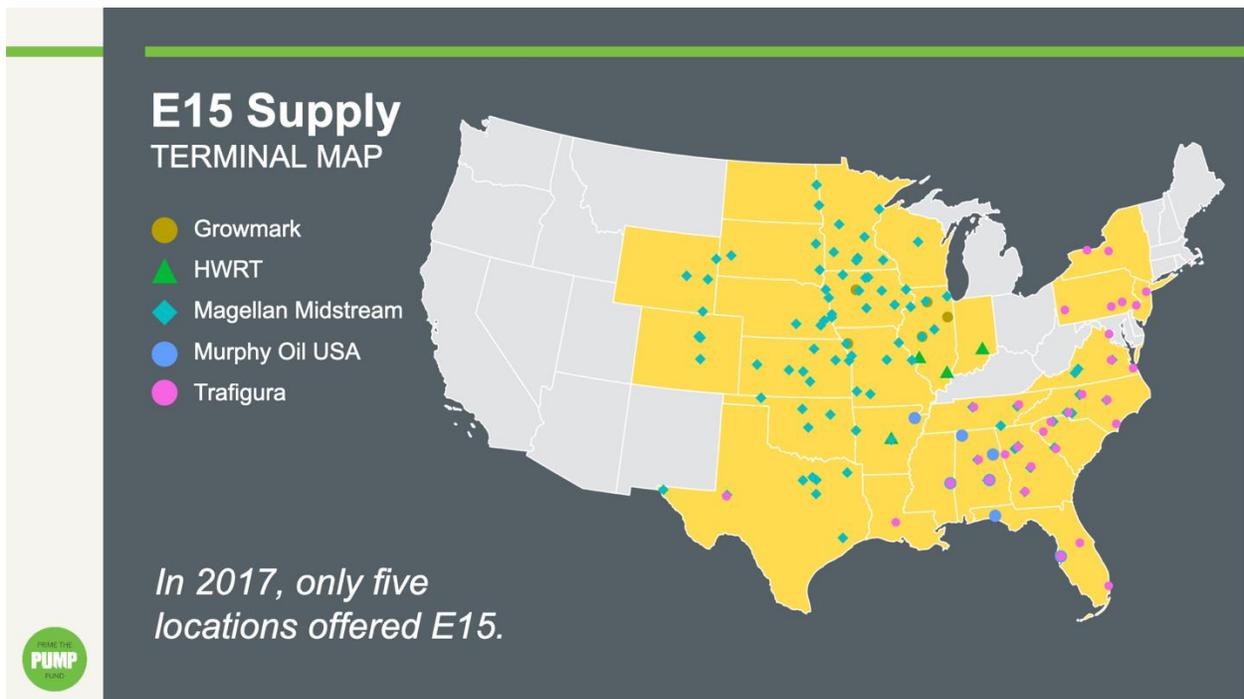
Likewise, virtually all underground storage tanks manufactured in the last 29 years are compatible up to 100 percent ethanol and certainly approved for midlevel ethanol blends such as E15.⁷ This practice of manufacturing fiberglass tanks compatible with up to 100% ethanol dates back to the 1980s; major oil companies required underground storage tanks to be Underwriters

⁵ Wayne Fueling Systems: “Wayne Standardizes Offering for All North American Retail Fuel Dispensers to E25”, Aug. 30, 2016. <https://wayne.com/en/press-releases/2016-08-30-wayne-standardizes-offering-for-all-north-american-retail-fuel-dispensers-to-e25/>

⁶⁶ Convenience Store News: “Gilbarco Expands Dispenser Warranty to E15”; March 2010; <https://csnews.com/gilbarco-expands-dispenser-warranty-e15>

⁷ Moriarty, Kristi, Yanowitz, Janet – National Renewable Energy Laboratory: “E15 and Infrastructure”; https://afdc.energy.gov/files/u/publication/e15_infrastructure.pdf

Laboratories (UL) listed for fuels with up to 100% ethanol.⁸ The Steel Tank Institute confirms that steel tanks are compatible with all ethanol blends.⁹ Importantly, UL standards now include various levels of ethanol concentration in the certification testing protocols. While UL certification and listing may not be a regulatory requirement, petroleum equipment manufacturers “simply prefer” to have UL listings for their products.¹⁰ With the growth of E15, we will see even more compatible equipment and offerings in the marketplace.



Recognizing the momentum on E15, Canada has already approved their own technical standards through the Canadian General Standards Board (CGSB). In July of 2018, the CGSB published their updated standard to accommodate ethanol blends up to and including E15.¹¹ Also, Canada’s Department of Natural Resources studied the deployment of midlevel ethanol blends in 2017 which found “evidence suggests that mid-level ethanol blends...offer an opportunity to improve Canada’s trade balance, enable the necessary improvements to gasoline internal

⁸ Fiberglass Underground Petroleum Storage Tanks and Piping 50+ Year History. Curran, S.D. Fiberglass Tank and Pipe Institute. October 1, 2015.

⁹ Steel Facts, Steel Tank Institute, Number 2, 2012.

¹⁰ Moriarty, K. et al. National Renewable Energy Laboratory: “E15 and Infrastructure”.

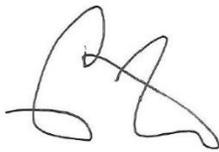
¹¹ Canadian General Standards Board (CGSB): “Oxygenated automotive gasoline containing ethanol (E1-E10 and E11-E15)”; July 2018: http://publications.gc.ca/collections/collection_2018/ongc-cgsb/P29-003-511-2016-2-eng.pdf

combustion engine efficiency by raising octane levels, and to reduce life-cycle GHG emissions in accordance with Canada's commitments under the International Paris Accord.”¹²

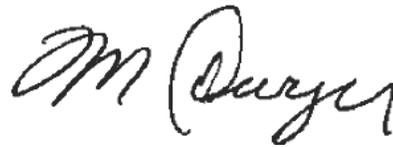
In sum, the Proposal substantially advances Ontario's goals of reducing the carbon intensity of its gasoline supply through greater ethanol blending. The Proposal is achievable and promises real GHG benefits, while still supporting consumer choice and ensuring compliance flexibility and transparency for regulated parties.

Growth Energy and the USGC commend the Ministry's efforts thus far regarding the Proposal and appreciate this opportunity for stakeholder engagement. We look forward to the Proposal's implementation.

Sincerely,



Craig Willis
Senior Vice President, Global Markets
Growth Energy



Michael Dwyer
Chief Economist
U.S. Grains Council

Attachments

¹² Natural Resources Canada: “Deployment of Mid-Level Ethanol Blends”; October 2017:
<https://www.nrcan.gc.ca/energy/transportation/alternative-fuels/resources/21268>