



Plant Oil Powered Diesel Fuel Systems, Inc.
P.O. Box 6397
Santa Fe, New Mexico 87502

August 22, 2016

Martin Lundstedt
President & CEO,
Volvo Group
SE-405 08 Gothenburg, Sweden

Re: The Emperor's New Clothes

Dear Mr. Lundstedt:

I write to thank Volvo Group for helping to illuminate the nakedness of the U.S. Government's global warming-mitigation policy regarding heavy duty engine emissions and to invite Volvo to partner with Plant Oil Powered (POP) Diesel in introducing to the international market a new truck engine equipped to run on 100 percent jatropha plant oil, offering the lowest possible net life cycle greenhouse gas ("GHG") emissions and superior engine performance than petroleum diesel fuel at lower cost.

Volvo's comments to the public record of the Medium- and Heavy-Duty ("Truck") GHG Emissions and Fuel Efficiency Standards, announced by the White House on August 16, 2016, rightly imply that these Standards enshrine the continued use of petroleum-based fossil fuels. These Standards are meant to fulfill the promise of the Clean Air Act to slow and reduce global warming, but they fail altogether to tackle this problem. In Volvo's words, the Standards "clear[ly] create[] a disincentive to develop vehicles to utilize [lower carbon alternative] fuels unless they provide lower tailpipe GHG emissions, regardless of the well-to-wheel life cycle emissions." As you and I agree, well-to-wheel, or net life cycle, GHG emissions are the only true measure of a combustion fuel's global warming impact.

The Standards' accounting for only tailpipe GHG emissions penalizes new truck engines equipped to run on 100 percent vegetable oil from eligibility for the Standards' GHG-reducing regulatory credits, due to the fact that pure plant hydrocarbon oil happens to emit more carbon dioxide from the tailpipe than does mineral or petroleum hydrocarbon oil.

Yet pure plant oil has singularly low net life cycle GHG emissions in comparison with petroleum and highly processed plant oil-derivatives such as biodiesel, as studies done by the National Renewable Energy Laboratory and for the U.S. Environmental Protection Agency demonstrate. The European Union recently found that processing plant oil into biodiesel results in a fuel with 1.3 to 3 times the net life cycle GHG emissions of petroleum diesel fuel. As a result, the EU is abandoning all set-asides and credits for biodiesel and non-ester renewable diesel (hydro-processed esters and fatty acids, or HEFAs). Biodiesel typically runs in a blend that is 80 percent to 95 percent petroleum, versus plant oil's supplying a POP Diesel-equipped engine at 100 percent concentration. It is a travesty that the Standards penalize pure plant oil-enabled engines, while rewarding biodiesel and HEFAs blended in subordination to petroleum.

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As you know, electric engines do not produce the torque necessary to power heavy duty engines and natural gas causes a diesel engine to run hot and dry, thus shortening its life span. In contrast, as POP Diesel explained to your Chief Engineer in a meeting in Washington, D.C., pure jatropha plant oil runs a POP Diesel-equipped engine more quietly and smoothly, making less racket and prolonging the engine's life. At a 50 cent-per-gallon discount below the price of petroleum diesel fuel and running at 100 percent concentration in a POP Diesel-equipped engine, this fuel deserves to be available to American truckers.

As I recently presented to a Congressional Forum, a supply of jatropha plant oil equal to all the petroleum diesel fuel consumed in the United States is feasible coming from West Africa alone, along with food crops to feed 1.5 billion people. You may view my 14-minute remarks, with diagrams, at: <https://www.youtube.com/watch?v=zaU39XqMKOI&feature=youtu.be&t=29m23s> .

Volvo (or any other truck engine manufacturer) is invited to partner with POP Diesel in developing a new engine ready to run on beneficial, pure jatropha plant oil fuel, a supply of which POP Diesel will assure this engine's owners. If the U.S. Government persists in sticking its head in the ground when it comes to crucial global warming policies,¹ we can always sell these products in foreign countries who welcome, rather than discourage, them, and it will remain too bad that American leadership and participation is lacking on this score.

Thank you for your consideration and for Volvo's honest revelation about the indecency of the U.S. Government's Truck GHG Emissions and Fuel Efficiency Standards.

Sincerely yours,

/ s /

Claude D. Convisser,
President, CEO & General Counsel*

cc: U.S. Senators Tom Udall & Martin Heinrich
U.S. Transportation Secretary Anthony Foxx
U.S. EPA Administrator Gina McCarthy
www.popdiesel.com/news.php

*licensed and in good standing in NM, VA, DC & NY; active status and corporate law office in VA alone

¹As I am sure you are aware, the U.S. Government's Truck Fuel Efficiency Standards (contrary to statutory law) do not even promote fuel efficiency, which the dictionary defines as "energy input to a machine per unit of work done." See, e.g., The American Heritage College Dictionary 446 (Houghton Mifflin Co., 4th ed. 2002). Instead of the rate of energy consumed in calories or joules, these Standards gauge **fuel** consumption, which they calculate by carbon dioxide emitting the tailpipe, a measure, as stated above, that favors petroleum over plant oil. Any particular diesel engine consumes the same amount of **energy** regardless of the kind of fuel that is supplying it, because compression ignition commands the quantity of fuel necessary to satisfy the work and energy demanded by the operator's throttle control. If these Standards measured true fuel efficiency, because a diesel engine runs on plant oil at the same rate of fuel-supplied energy as on petroleum, the Standards would not penalize the engine for operating on plant oil. The Government's claim that these Standards are fuel-neutral is false: they promote engines that consume petroleum, at the expense of a 100 percent renewable fuel like jatropha plant oil.