



Increasing Biodiesel Use in Transportation Fleets

Overview

The Federal Government has a cost-effective opportunity to reduce GHGs and other forms of pollution by incenting the use of biodiesel as a replacement fuel for diesel. They can do this through a blender's credit or rebate system for those who purchase high blends of biodiesel.

Background

Biodiesel is a fuel processed from biological matter and blended with diesel for use in diesel engines. Blends are usually in the range of 5 to 50% ("B5" to "B50"). Pure biodiesel (B100) is generally 92% less carbon intensive than regular diesel. There are also significant co-benefits of biodiesel, including a major reduction in criteria air contaminants, especially smog precursors. As a climate change solution, biodiesel is broadly supported by both environmental organizations and farmers' organizations.

Fleet owners – ranging from municipalities like York Region, Waterloo, Guelph, Kingston, and Ottawa, to corporate fleets like Loblaw's, Labatt's and Robert Transport – use biodiesel because of its superior environmental performance. The State of Minnesota mandates B20 biodiesel. However, another green fuel, "renewable diesel" is often the choice preferred by large fuel providers aiming to comply with green fuel mandates, because biodiesel blends must be adjusted in severely cold weather, such as in northern Canada winters. While both fuels are undoubtedly cleaner than regular diesel, biodiesel is still roughly 2.5 times cleaner than renewable diesel. Moreover, biodiesel uses feedstock primarily from North America, whereas renewable diesel more often uses imported palm oil as its main source.

Proposal

What stands in the way of a rapid scale-up in biodiesel uptake is the price gap between biodiesel and regular diesel. Currently, this price gap is roughly 3 cents per litre for a B20 biodiesel blend (roughly 15 cents for B100). Eliminating this delta would expand biodiesel from a relatively small segment of the economy that is willing to pay the price premium for the social license of using a cleaner fuel, to a broader market of those willing to adopt low-carbon fuel provided it doesn't cost significantly more. It will also encourage those using a low biodiesel blend to switch to a higher blend.

The Federal Government should put in place a blender's credit or rebate of 15 cents per B100 litre, to eliminate the price gap between diesel and biodiesel. The credit should be limited to those using a high blend of biodiesel (above B10), to avoid funding those who are already using a low blend of biodiesel, or not doing much more than complying with federal or provincial

mandates. Limiting the application of the credit to non-primary suppliers¹ will also help ensure this.

Based on calculations provided by Golder & Associates, the GHG benefits of this program would come at a cost of approximately \$25 per tonne. There are few initiatives in this part of the transportation sector that can achieve reductions at this cost, and this does not take into account the significant co-benefits, such as the economic co-benefits of deriving much of the feedstock from domestic sources closer to where the fuel is being used.

For More Information:

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¹ “Primary supplier” is defined in the regulation as “anyone who produces or imports” the fuel. Generally, these suppliers do not go beyond federal and provincial mandate levels. Non-primary suppliers do not have a compliance obligation under these mandates, although a small portion of primary suppliers’ requirements under the mandates are met through a credits market that non-primary suppliers participate in.