

Our suite of **Diesel Products** 



# Keeping your business moving forward.

People say you need the right tool for the right job. And we couldn't agree more. It's why we offer more than one diesel product to help you meet your operational and environmental goals.

### **Conventional Diesel**

Our ultra low-sulphur diesel (ULSD) is here to keep your business running all year long. In fact, we offer seasonal blends so your engine performs at its best – no matter the temperature. Produced from a rigorous refining process with a fossil fuel base, our ultra low-sulphur diesel is a high-quality fuel. It helps maintain the engine's lifespan and prevent deposit buildup.

### Biodiesel Blends / Fatty Acid Methyl Ester (FAME)

Our biodiesel is made from renewable feedstocks that go through a chemical process called transesterification. From there, the biodiesel – also known as FAME – is mixed with conventional diesel at varying concentrations. Our most common blend contains 5% biodiesel (called B5), but we do offer up to a 20% biodiesel blend (B20) in some areas.



1. Feedstock: Crude Oils Made with fossil fuel. 2. Produced through a Refining Process

All feedstocks then go through a traditional refining process.

3. Result: Diesel

A high-quality diesel fuel you've come to know and depend upon.



1. Feedstock: Renewable Materials

Made with renewable feedstocks, like virgin seed oils, tallow, used cooking oil, etc.



### 2. Produced through a Chemical Process

FAME is produced through a chemical process called transesterification, which yields different characteristics and properties from conventional diesel.



#### 3. Result: Biodiesel

FAME should be blended with conventional petroleum diesel before it's considered a finished product for use in your equipment. Biodiesel blends may reduce greenhouse gas (GHG) emissions up to 20%<sup>1</sup> compared to conventional diesel.

## Petro-Canada EcoDiesel™

Petro-Canada EcoDiesel is made with hydrotreated renewable diesel (HRD). It is a premium, drop-in fuel that reduces GHG emissions up to 80%<sup>2</sup>, as compared to conventional diesel. It allows you to support your environmental goals, while maintaining performance.



1. Feedstock: Renewable Materials

Made with renewable feedstocks, like virgin seed oils, tallow, used cooking oil, etc.

#### 2. Produced through a Refining Process

Feedstocks then go through traditional refining processes, including hydrotreating, isomerization and distillation, which convert them into a highquality fuel with characteristics similar to diesel fuel.



#### 3. Result: HRD

The end result is a premiumquality fuel that reduces GHG emissions by up to 80%<sup>2</sup> compared to conventional diesel.

### A portfolio of diesel products to meet your business needs.

Compare diesel characteristics below.

| Diesel                         | Carbon<br>Intensity<br>(g CO <sub>2</sub> e/<br>MJ) <sup>3</sup> | Cetane<br>Number | Flash<br>Point (°C) | Aromatics<br>(Vol %)                | Low-<br>Temperature<br>Operability  | Stability   | Equipment<br>Preparation                                | Diesel<br>Specifications   | Environmental<br>Impact<br>Score <sup>8</sup> |
|--------------------------------|--|------------------|---------------------|-------------------------------------|---|---|---|--|---|
| Ultra<br>Low-Sulphur<br>Diesel | 94.76 g<br>CO₂e/MJ⁴  | min. 40          | min<br>40°C         | 14 – 30,<br>can be as<br>high as 43 | Suitable for<br>year-round<br>use   | Stable  | No<br>equipment<br>preparation<br>required <sup>7</sup> | Meets<br>Canadian General<br>Standards Board<br>(CAN/CGSB) 3.517   | •   |
| Biodiesel<br>Blend<br>(B5)     | 89 – 92 g<br>CO <sub>2</sub> e/MJ <sup>1</sup>                   | min. 40          | min<br>40°C         | 13 – 28,<br>can be as<br>high as 41 | All OEMs<br>approve<br>B5 blends for<br>year-round<br>use                                 | Low stability;<br>best not to<br>keep product<br>sitting for<br>longer than<br>3 months | Equipment<br>preparation<br>required <sup>7</sup>       | Meets diesel fuel<br>containing biodiesel<br>specifications:<br>Canadian General<br>Standards Board<br>(CAN/CGSB)<br>3.520 (B1-B5)                             | ••  |
| Biodiesel<br>Blend<br>(B20)    | 72 – 83 g<br>CO <sub>2</sub> e/MJ <sup>1</sup>                   | ~>4]             | min<br>40°C         | 11 – 24,<br>can be as<br>high as 34 | Seasonal<br>limitations;<br>Suitable for<br>use down<br>to -15°C                          | Low stability;<br>best not to<br>keep product<br>sitting for<br>longer than<br>3 months | Equipment<br>preparation<br>required <sup>7</sup>       | Meets diesel fuel<br>containing biodiesel<br>specifications:<br>Canadian General<br>Standards Board<br>(CAN/CGSB)<br>3.522 (B6-B20)                            | ••  |
| Petro-Canada<br>EcoDiesel      | 10 – 30 g<br>CO <sub>2</sub> e/MJ <sup>5</sup>                   | ~>70             | 56–84°C             | (~0)                                | Suitable for<br>use down<br>to -20°C<br>winter and<br>down to -6°C<br>summer <sup>6</sup> | Stable  | No<br>equipment<br>preparation<br>required <sup>7</sup> | Meets diesel<br>specifications:<br>American Society for<br>Testing and Materials<br>(ASTM) D975 and<br>Canadian General<br>Standards Board<br>(CAN/CGSB) 3.517 |   |

Contact your account representative to discuss which diesel product is best for your business and region.



- $^{\rm 1}$  This was calculated based on historical Suncor FAME supply data and BC LCFS default value for carbon intensity.
- <sup>2</sup> Lifecycle greenhouse gas emission reductions are compared to fossil diesel with the BC LCFS default value for carbon intensity. The carbon intensity for the Petro-Canada EcoDiesel is based on a fluctuating feedstock blend of renewable materials and calculated with GHGenius. Please consult your sales representative to review the needs of your organization and discuss GHG emissions reduction implications.
- $^3$  Carbon intensity is the measure of the equivalent amount of CO<sub>2</sub> (GHG) emitted in the fuel's total lifecycle. The lower the carbon intensity number, the lower the GHG emissions. The lower the carbon intensity, the greater the number of green leaves.
- <sup>4</sup> This CI value refers to unblended ULSD only. Source: British Columbia Renewable and Low Carbon Fuel Requirements Regulation (BC LCFS).
- <sup>5</sup> Based on Suncor HRD suppliers.
- <sup>6</sup> We procure different temperature specifications to accommodate different seasons. Please consult with your account manager to determine when the fuel is suitable for use within your geography. The above information is provided without warranty or representation of any kind. All product provided is warranted only to meet specifications in sales documentation provided by Petro-Canada, which includes meeting national fuel specifications and regulatory specifications. All other warranties are expressly disclaimed, including, without limitation, fitness for any particular purpose.
- <sup>7</sup> Seasonal change-out is required. Please consult your Petro-Canada sales representative to discuss the use and maintenance practices for your region.
- <sup>8</sup> Environmental impact score is measured by carbon intensity. Carbon intensity is the measure of the equivalent amount of CO<sub>2</sub> (GHG) emitted in the fuel's total lifecycle. The lower the carbon intensity number, the lower the GHG emissions.





Get in touch with us today to find out how we can help fuel your success. Please reach out to your Petro-Canada rep or email us at ssrings@suncor.com.

You can also visit petro-canada.ca/business