# ec Diese



Fuelled with Purpose:

Introducing Petro-Canada EcoDiesel<sup>™</sup>



# The future of diesel is here

We understand Canadian businesses are under pressure to lower their greenhouse gas emissions.

We also know it's important for us to deliver reliable, easy-to-use fuel solutions to keep your business running, while helping you reduce your environmental impact.

Our new hydrotreated renewable diesel, Petro-Canada EcoDiesel™, is just one of the ways we're striking that balance. This is a drop-in fuel that helps reduce your carbon footprint immediately, without the additional cost of retrofitting your equipment or fleet.

# What is Petro-Canada EcoDiesel?

Petro-Canada EcoDiesel is made with hydrotreated renewable diesel (HRD). HRD is an alternative fuel produced from 100% renewable materials<sup>1</sup> that can include non-consumable food waste, like animal fats and vegetable oils.

It's produced through a refining process called hydrotreating. The process involves treating the renewable feedstock with hydrogen, under high temperatures and pressures, to upgrade renewable feedstock to diesel-fuel quality. The final product is a high-quality, low-carbon-intensity renewable diesel which has a comparable chemical composition to conventional diesel.

This premium-quality renewable diesel can be used undiluted in your diesel equipment, making the switch to Petro-Canada EcoDiesel simple.

# Our commitment

Now more than ever, we're committed to helping our customers move forward. We know moving toward a more sustainable future is important to our customers and the generations to come.

We're helping our customers lead the way and reduce greenhouse gas emissions. Because we're not only inspired by what lies ahead. We're inspired by working together to get there. After all, together is how we'll create a cleaner, brighter future.



# Why choose Petro-Canada EcoDiesel?

### **Reduce your fleet's emissions**

In addition to lower overall exhaust emissions, using Petro-Canada EcoDiesel can reduce Greenhouse Gas (GHG) emissions by up to 80%<sup>2</sup> compared to conventional diesel.

### Cleaner burning with a strong performance

Petro-Canada EcoDiesel is proven to offer the same high performance as conventional diesel, but with a higher cetane number. While conventional diesel has a minimum cetane of 40, Petro-Canada EcoDiesel has a minimum cetane of 70, which allows for a cleaner, smoother combustion and overall strong performance to meet the demands for today's fleets and equipment.

### The simplest switch

Petro-Canada EcoDiesel is a drop-in fuel, so you can effectively and immediately switch between conventional petroleum diesel and Petro-Canada EcoDiesel within the same fleet or equipment. Best of all, it can be seamlessly integrated into your current diesel engines without the associated costs of retrofitting or major equipment overhauls<sup>3</sup>.

A small decision making a big impact

Petro-Canada EcoDiesel is primarily sourced from lowcarbon-intensity (CI) feedstocks. Using Petro-Canada EcoDiesel helps to reduce landfill waste and the burning of fossil fuels, which is better for the environment when compared to traditional diesel.

# **Built for business**



### Backed by Petro-Canada™

With Petro-Canada EcoDiesel<sup>™</sup>, you can expect the same quality and reliability that you would from any of our offerings. We stand behind our products—and our supply chain—by providing ongoing support to ensure that your business is moving forward.

### Highly compatible

Petro-Canada EcoDiesel works with your existing storage and distribution infrastructure without any changes to equipment or facilities.



### **Cold-temperature operability**

Petro-Canada EcoDiesel offers improved low-temperature performance when compared to high-biodiesel fuel blends (i.e. B6+). It can be used year round in certain geographical regions<sup>4</sup> within Canada as it is suitable for use in temperatures down to -20°C<sup>5</sup>. In colder climates, Petro-Canada EcoDiesel can be provided seasonally to meet low-temperature operability needs. Contact your local Petro-Canada sales representative prior to use in your region to get advice on optimal use and maintenance practices.



Applications and specifications Petro-Canada EcoDiesel meets the industry standard specifications for diesel fuel including the American Society for Testing and Materials (ASTM) D975 and Canadian General Standards Board (CAN/CGSB) 3.517.

# A small change can make a big impact

If you used 1 million litres of Petro-Canada EcoDiesel instead of 1 million litres of conventional diesel fuel, you would save approximately 2,930 tonnes<sup>6</sup> of GHG emissions from entering the atmosphere. That's like taking hundreds of cars off the road – or planting thousands of trees – just by switching to an alternative fuel.

What is the impact of using 1 million litres of Petro-Canada EcoDiesel? (vs. conventional diesel) — approximately 2,930 tonnes of GHG emissions reduction, which is equivalent to:



# 8997

gasoline-powered passenger vehicles driven for one year

CARBON SEQUESTERED BY:

GHG EMISSIONS FROM:

48,831<sup>8</sup> tree seedlings grown for 10 years



CO, EMISSIONS FROM:

686°

homes' energy use for one year

### **Diesel fuel properties**

Property	Conventional Petroleum Diesel	Petro-Canada EcoDiesel
Carbon Intensity (g CO <sub>2</sub> /MJ)	94.76 <sup>10</sup>	10 - 30 <sup>11</sup>
Cetane Number	Min 40	Min 70

<sup>1</sup> Petro-Canada EcoDiesel may contain up to 1% of conventional diesel.

<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.

Seasonal change-out is required. Please consult your Petro-Canada account manager to discuss the use and maintenance

practices for your region.

- Currently available in the greater Vancouver area, interior British Columbia, and the greater Toronto area. Contact your sales representative prior to use to discuss best use and maintenance practices in your area.
- <sup>5</sup>We procure different temperature specifications to accommodate different seasons. Please consult with your Petro-Canada 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>6</sup> We calculate greenhouse gas emission reductions based on the average tonnes of CO<sub>2</sub> released per litre of Petro-Canada EcoDiesel versus conventional diesel. We used British Columbia's Low Carbon Fuel Standard (BC LCFS) approved data. Conventional diesel releases on average 0.003662 tonnes of CO<sub>2</sub> per litre burned, while Petro-Canada EcoDiesel releases 0.000733 tonnes of CO<sub>2</sub> for each litre consumed. Therefore, the overall greenhouse gas emission reduction with Petro-Canada EcoDiesel is 0.002930 tCO2/L, which equates to an 80% reduction.

- According to Natural Resources Canada, a gasoline-powered vehicle produces 3.26 metric tonnes CO<sub>2</sub>E per vehicle per year. For example, the use of 1 million litres of Petro-Canada EcoDiesel reduces emissions of CO<sub>2</sub> by about the same amount as 899 gasoline-powered vehicles. Note: According to the U.S. Environmental Protection Agency (EPA), "Passenger vehicles are defined as 2-axle 4-tire vehicles, including passenger cars, vans, pickup trucks, and sport/utility vehicles."
- <sup>8</sup> According to the U.S. Environmental Protection Agency (EPA), a mix of medium-growth coniferous and deciduous trees, planted in an urban setting and allowed to grow for 10 years, sequesters approximately 0.060 metric tonnes CO<sub>2</sub>E/tree. For example, the use of 1 million litres of Petro-Canada EcoDiesel reduces emissions of CO<sub>2</sub> by about the same amount of carbon sequestered by 48,831 trees over 10 years.
- <sup>9</sup> According to Natural Resources Canada, the amount of energy consumed by households/homes is a mix of electricity, natural gas, propane and fuel oil which calculates, based on statistics, to 4.27 metric tonnes CO<sub>2</sub>E/

home/year. For example, the use of 1 million litres of Petro-Canada EcoDiesel reduces emissions of CO<sub>2</sub> by about the same amount as the energy consumed by 686 households/homes. <sup>10</sup> This CI value refers to unblended ULSD only. Source: British Columbia Renewable and Low Carbon Fuel Requirements Regulation (BC LCFS).

<sup>11</sup> Based on Suncor HRD suppliers.



Interested in learning more about Petro-Canada EcoDiesel? Please reach out to your Petro-Canada representative.

You can also visit petro-canada.ca/EcoDiesel or email ssrings@suncor.com

