

Shell Renewable Diesel



Make the switch from conventional diesel to Shell Renewable Diesel and cut CO₂e emissions by **up to 85%** compared to regular diesel



NOW AVAILABLE IN BRITISH COLUMBIA

YOUR DROP-IN SOLUTION

At Shell, we understand that our customers will need a mosaic of energy services and solutions for years to come. Renewable Diesel can play a valuable role in reducing carbon dioxide (CO₂) emissions today, and is particularly important in sectors that are harder to decarbonize, such as **mining, heavy industry and commercial road transport.**

100%

Shell Renewable Diesel contains 100% renewable diesel sourced from renewable feedstocks like used cooking oil

85%



Shell Renewable Diesel offers a CO₂e emissions reduction of 85% compared to conventional diesel¹

¹ Lifecycle greenhouse gas emission reductions are compared to fossil diesel with the BC LCFS 2022 default value for carbon intensity of 94.76 gCO₂e/MJ. The carbon intensity for the Shell Renewable Diesel and biodiesel was based on current supply and calculated using data from GHGenius.



WHY CHOOSE SHELL RENEWABLE DIESEL

Shell has over 30 years of experience working with biofuels. We have our own biofuels research teams, which work in collaboration with leading biotechnology companies and academic institutions. Shell actively manages and measures product quality through a globally consistent set of standards and policies, and applies a rigorous program of quality testing throughout our supply chain.

When it comes to making the transition to Shell Renewable Diesel, we are here for you:

- Experienced customer support
- Strong relationships with engine manufacturers
- Skilled technical teams worldwide
- Leading industry experience, with several trials across a range of sectors

BETTER FOR YOUR BUSINESS



Direct Drop-In Fuel



Shell Renewable Diesel can be used in existing heavy-duty and light duty diesel engines without the need for engine modifications, new infrastructure or vehicle investment. It can also be mixed with standard diesel fuel.

Stable In Storage



Shell Renewable Diesel has excellent storage stability. Shell Renewable Diesel shows a low propensity to microbial growth due to its superior water shedding ability, paraffinic nature, which enables the drop-out of free water suspended in the fuel and little time for microbes to grow at the suspended water-fuel interface.

Clean Burning



Diesel combustion emits a variety of emissions, including Nitrogen Oxides (NO_x) and Particulate Matter (PM). Since Shell Renewable Diesel is essentially free from the unsaturated molecules present in conventional fuels, it combusts more completely, producing fewer local emissions and less particulate matter.

Ignition Performance



The cetane number of a fuel is a measure of combustion quality. In particular, it relates to the ignition delay of the combustion process, which is the time taken between the start of fuel injection and the start of combustion. The higher the number, the shorter the ignition delay. Shell Renewable Diesel, with its high cetane number has a shorter ignition delay compared to conventional diesel.

Keeping Noise Down



Noise pollution is a critical concern for companies and consumers, particularly in urban areas. Shell Renewable Diesel can lead to a reduction of engine noise by up to 4 decibels thanks to the higher cetane number which leads to a more uniform combustion, which is a key advantage for vehicles in cities where noise is regulated, or for operations outside daytime working hours.

ANSWERING YOUR QUESTIONS



What is Renewable Diesel?

Renewable Diesel or Hydrogenation-Derived Renewable Diesel (HDRD) is produced by hydrotreating oil-based renewable materials, comprising increasingly from waste and residue fat fractions from the food industry.

How does using organic biomass lower emissions compared to traditional fossil fuels?

Burning fossil fuels releases carbon that has been locked up in the ground for millions of years, while burning biomass emits carbon that is part of the biogenic carbon cycle. In other words, fossil fuel use increases the total amount of carbon in the biosphere-atmosphere system while bioenergy systems operate within this system; biomass combustion returns to the atmosphere the carbon that was absorbed as the feedstock was formed. Although there are often fossil greenhouse gas emissions associated with land use, transportation and processing biomass feedstocks to finished fuels, the net effect over the life cycle of a biofuel, considers less CO_{2e} accumulates in the atmosphere compared to using conventional fossil-based fuels.

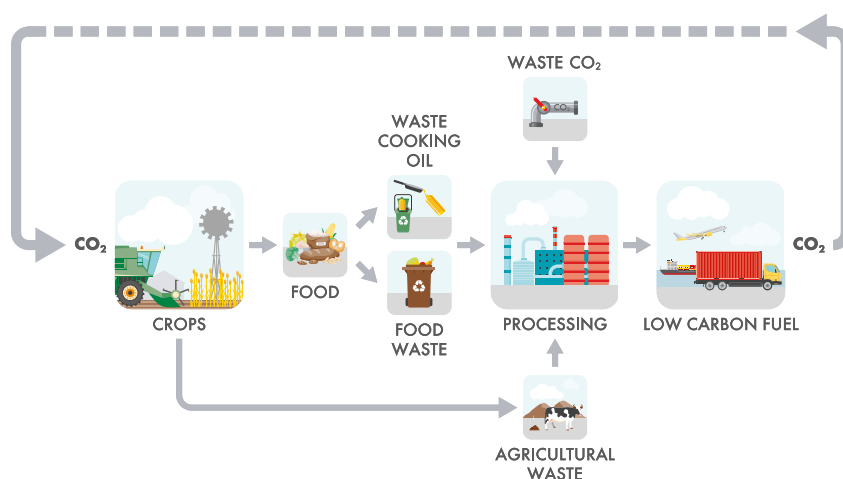
Is Shell Renewable Diesel covered under my manufacturer's warranty?

Most equipment manufacturers (OEMs) have approved the use of Renewable Diesel in their latest engines. Please check your owner's manual for more information or contact your local Shell representative.

What is the difference between Renewable Diesel and biodiesel?

From a chemical perspective, Biodiesel or FAME (Fatty Acid Methyl Ester) is an ester whereas Renewable Diesel consists virtually of only paraffinic molecules. Even though both are made from organic biomasses, the production process are significantly different and produce final products with distinct properties.

Example of a short-term carbon cycle



Example of a long-term carbon cycle



Find out how Shell Renewable Diesel could work for your business by contacting your local Shell representative:

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