



Renewable Diesel FAQs

Renewable diesel (HVO) offers hauliers an opportunity to start moving away from fossil fuels and reduce their carbon footprint.

What is Renewable Diesel?

Renewable Diesel, also known as HVO and HVO100, is a high-quality paraffinic diesel produced from renewable biomass sources, primarily waste and residue oils and fats such as used cooking oil. It is a fossil-free alternative to conventional fossil diesel and made from 100% renewable and sustainable resources. Renewable Diesel meets the BS EN 15940 fuel specification and is chemically very similar to conventional fossil diesel, which enables it to be used in its pure form or mixed with conventional diesel. No engine modifications are required, and a wide range of vehicle manufacturers have approved the usage in their engines. Renewable Diesel is an easy and efficient way to reduce carbon emissions.

The acronym HVO stands for Hydrotreated Vegetable Oil and dates to a time when vegetable oils were common feedstocks in production. The term HVO no longer accurately describes the origin of Renewable Diesel, but both terms are still used.

What are the benefits of using Renewable Diesel?

- From 100% renewable and sustainable feedstocks
- Up to 90% greenhouse gas emission savings
- Can be used in its pure form or mixed with conventional fossil diesel
- No engine modifications required²
- Excellent cold flow properties and shelf life
- Free from FAME, sulphur, aromatics and metals³
- Meets BS EN 15940

How 'green' is Renewable Diesel?

Renewable Diesel is produced from 100% renewable and sustainable biomass sources which enables Greenhouse Gas (GHG) emissions savings up to 90% compared to conventional fossil diesel. The exact GHG emission savings depend on which feedstocks were used in production, but thanks to Renewable Diesel primarily being produced from waste and residue feedstocks, the typical GHG emission savings are in the range 85-90%. In addition, Renewable Diesel can help reducing local tailpipe emissions.

Is Renewable Diesel the same as Biodiesel?

No, Renewable Diesel and biodiesel are two different fuels. Renewable Diesel is high-quality paraffinic diesel produced through a hydrotreatment process and has a chemical composition similar to conventional fossil diesel, allowing it to be used both in its pure form and mixed with fossil conventional diesel. No engine modifications are required⁴. Biodiesel, also known as Fatty Acid Methyl Ester (FAME), is a fuel produced through a transesterification process and has a different chemical composition to conventional fossil diesel. FAME can be mixed with fossil diesel up to 7%* without general engine modifications, higher concentrations may require a modification of the engine.



Do you have to make any modifications to your engine to use Renewable Diesel?

No, Renewable Diesel can be used in diesel engines without modifications⁵.

Renewable Diesel meets the BS EN 15940 specification which is approved by most vehicle original equipment manufacturers (OEM). An OEM approval means that Renewable Diesel can be used with no risk of voiding the warranty of the vehicle. If you're unsure whether Renewable Diesel BS EN 15940 is approved by your vehicle manufacturer, please consult them. Some vehicle handbooks are outdated and don't mention BS EN 15940, but it is likely that you can still use Renewable Diesel without any issues.

How is Renewable Diesel labelled at retail points?

Renewable Diesel is always labelled with "XTL" at retail points. This is a requirement according to EN 16942. In addition, pumps and nozzles are often marked with the fuel specification for Renewable Diesel, BS EN 15940.

Can you mix Renewable Diesel with conventional fossil diesel?

Yes, if you usually use conventional fossil diesel it is fine to top up with Renewable Diesel or vice versa. The fuels are interchangeable.

Where can you buy Renewable Diesel?

Renewable Diesel is not available as widely as conventional fossil diesel but the number of sites stocking it is growing. Please speak to your fuel card supplier for an up-to-date list of such locations.

¹²⁴⁵⁶ HVO is chemically similar to conventional fossil diesel BS EN 590 Diesel, meets BS EN 15940 and is approved by a wide range of vehicle manufacturers. Please check this for your vehicle, and if you are uncertain, please consult your vehicle manufacturer.

³ Traces allowed as per BS EN 15940.

