



# HVO Fuel for Transport



**Crown Oil**  
Fuels and Lubricants

# Reduce GHG emissions without disruption to your fleet

Did you know: Crown Oil runs our entire delivery fleet on HVO, helping to drive down emissions across the UK.

## Benefits of HVO

- Wide range of OEM approvals
- Drop-in alternative to diesel
- Superb performance and reliability
- Up to 90% lower net CO<sub>2</sub> emissions
- Clean combustion with significantly reduced PM and NO<sub>x</sub>
- Reduction in AdBlue consumption
- ISCC verified at import

We understand that reliable performance remains at the heart of your fleet operations. That's why we're proud to be one of the largest supplier of Hydrotreated Vegetable Oil (HVO) to transport companies across the UK.

Our advanced renewable fuel can reduce your fleet's net emissions whilst seamlessly integrating into your existing fleet with no issues in performance.

To speak to a HVO fuel expert, call 0330 123 1444.

## Simpsons Malt Case Study



We supplied a 140,000-litre steel bunded HVO storage tank to Simpsons Malt and in the weeks that followed, the company's 28-strong fleet based out of its Berwick-upon-Tweed headquarters – comprising 21 DAF trucks, six Scania trucks and one MAN truck – have gradually transitioned over to HVO, with additional haulage partners also using the fossil-free fuel for their malt deliveries with the company.

***"In the two months our wagons have been running on HVO, we have been very impressed with the performance, with no change in the miles per gallon of the vehicles, while refueling has also been made simple through our on-site HVO tank supplied and regularly restocked by Crown Oil."***

- David McCreath, Simpsons Malt Transport Manager.



Advanced  
renewable fuel  
100% renewable paraffinic fuel  
manufactured from  
sustainable products



Approved  
Endorsed by a wide range  
of OEMs and meets EN  
15940:2016  
and ASTM D975 specifications



Cuts GHG emissions

Reduces net CO<sub>2</sub> emissions  
by 90%, NO<sub>x</sub> emissions by  
up to 27% and PM emissions  
by  
up to 84%



Compatible  
Drop-in alternative to diesel  
compatible with existing  
fuelling infrastructures

# HVO FAQs

## What is HVO?

HVO, which stands for Hydrotreated Vegetable Oil, is a renewable diesel that reduces up to 90% of net CO<sub>2</sub> emissions and can be stored for up to 10 years. It's fully miscible with fossil diesel and is a direct replacement, providing an immediate stopgap to emission reduction.

Crown Oil is proud to be approved by the International Sustainability Carbon Certification. Crown HVO is also ISCC verified at import, with a fully validated and auditable supply chain. To provide full traceability of our product and the robustness of the GHG saving, we're also a member of the Renewable Fuels Assurance Scheme (RFAS), which means that you'll receive a quarterly certificate, helping to demonstrate the positive steps your business is taking.

## Is HVO a biodiesel?

Biodiesel, also known as FAME diesel, is a first-generation biofuel. HVO is a second-generation biofuel and is fundamentally different – it's free from FAME and does not suffer from the same reliability and cold weather performance issues. This means that it can be stored for up to 10 years compared to just 1 for regular diesel.

First-generation biodiesel, sometimes called FAME or UCOME (used cooking oil methyl ester), is produced by esterifying a natural oil or fat with methanol to produce biodiesel and glycerol. Once the glycerol is removed from the biodiesel, it's then added to all road transport diesel in order to meet the UK Government's Road Fuel Transport Obligation (RTFO).

To reduce the environmental impact of fossil fuels, the amount of first-generation biodiesel which is added to fuels is being increased year-on-year by governments. This is leading to a rise in issues with fuel storage and operational performance, including cold temperature flow and filter plugging.

HVO fuel fully meets the RTFO and can therefore be used as a 100% fuel with no addition of first-generation biodiesel, removing all the operational problems that can happen when using this type of fuel.

## How is HVO made?

HVO is made through a two-stage process known as hydrotreatment, where feedstocks are saturated with hydrogen at high temperatures (over 300°C), followed by isomerisation/cracking to give the end product the desired fuel qualities.

The highly controlled chemical process used to manufacture HVO ensures a consistent product that contains no esters or contamination; factors which can adversely affect the performance of the fuel both at the point of use or after extended storage. This means it does not react with water or oxygen or form sludge whilst in storage. HVO fuel is also resistant to attack by "diesel bug", allowing it to be stored for extended periods of time.

## Does HVO affect my fleet's warranties or insurance?

As an odourless, non-toxic, drop-in, fossil-free renewable diesel, HVO doesn't require any engine or fuelling infrastructure modifications. Most major OEMs have approved HVO's use across a wide range of applications, including but not limited to:



## How does fuel consumption compare to mineral diesel?

The consumption rate of Crown HVO is very similar, if not better than fossil diesel. This is mainly due to the fact that fossil diesel contains biodiesel FAME (unlike HVO). Therefore, the calorific value of this biodiesel element is lower than HVO.

## What is the specification of HVO?

Crown HVO meets EN15490 for paraffinic fuels and is approved for use by most major engine manufacturers. As an advanced renewable diesel fuel, HVO is derived from 100% certified sustainable raw materials. It's formulated from fossil-free and FAME-free sources and is certified by the International Sustainability and Carbon Certification (ISCC).

[Download the Crown HVO specification>>](#)

## Will switching to HVO result in increased services or repairs?

HVO is a higher performing and cleaner burning alternative to diesel. This generally results in our customers carrying out less frequent services or repairs. We suggest speaking with your service provider to confirm your model requirements.

## How can I store HVO to fuel my fleet?

We supply a range of storage tank solutions to safely store HVO, from barrels to IBCs to temporary onsite fuel stations & more.

**Get in touch to find out more about our storage solutions.**



**We're working hard to support our transport customers with their energy transition by rigorously researching and pioneering the use of sustainable alternatives, like HVO, as a drop-in alternative to fossil fuels. Whether you're looking to place an order or you want to learn more about the many benefits our renewable diesel can bring to your fleet – we're here to help!**



[crownoil.co.uk](http://crownoil.co.uk) | 0330 123 1444