



HVO Fuel for Data Centres



Crown Oil
Fuels and Lubricants

Reduce GHG emissions with a reliable, renewable diesel

We understand that reliable performance and supply is crucial for data centre operators. That's why we're proud to be one of the largest suppliers of Hydrotreated Vegetable Oil (HVO) to the sector across the UK.

We can support your switch to HVO, our fully sustainable drop-in diesel alternative. HVO is a much cleaner burning alternative to regular diesel that significantly cuts net CO₂ emissions as well as reducing notifiable NO_x and PM.

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

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 CO₂ emissions
- Clean combustion with significantly reduced PM and NO_x
- ISCC verified at import
- Up to 10 year storage lifespan

HVO FAQs

What is HVO?

HVO, which stands for Hydrotreated Vegetable Oil, is a renewable diesel that reduces up to 90% of net CO₂ 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.

How is HVO made?

Made through a 2-stage process known as hydrotreatment, 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 fuel's performance at both 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 up to 10 years compared to just 1 for regular diesel.

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?

HVO has been designed to combat the performance inadequacies of earlier biofuels. It's FAME-free, so eliminates microbial growth which causes sludge to block fuel lines and potentially leads to engine shutdown.

This anti-microbial quality allows it to have a storage life that is ten times longer than standard diesel and offers robust year-round performance in both high and low temperatures. It is also easier to maintain, free from aromatics, sulphur and metals, odourless and is completely biodegradable.

HVO also doesn't require any modification to existing infrastructure and can be used as a direct replacement for conventional diesel, eliminating the cost barriers which prevent users adopting other renewable fuels.

What is the specification of HVO?

Our 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 ISCC.

[Crown HVO specification>>](#)

How easy is it to switch to HVO?

We'll provide end-to-end project management for your transition, organising the uplift of your existing fuel, the cleaning and inspection of your fuel tank, and the delivery of your brand new HVO into your tank.

As a carbon neutral business we understand the challenges of decarbonising your operations, and can help you reach your net zero goals.

We're working hard to support our 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 data centre – we're here to help!

Kao Data Case Study

The first UK data centre to switch to HVO



We partnered with Kao Data to supply HVO to power its back-up generators at its Harlow campus in place of fossil diesel.

Switching to HVO fuel in its generators marks another huge step in its commitment to become a fully carbon neutral data centre operator by 2030. To begin, Kao Data has replaced 45,000 litres of diesel and then switch to using more than 750,000 litres of HVO when the campus is fully developed.

"This pioneering approach to replace our generator's diesel provision with HVO fuel, is a key step in the company's efforts to become net zero, and a further demonstration of our leadership in the international data centre sustainability field," said Gérard Thibault, Chief Technology Officer at Kao Data.

"This move effectively eliminates fossil fuels from our data centre operations, and helps us reduce Scope 3 emissions in our customers' supply chain, while delivering no degradation to the service they receive. Most importantly, it shows how our industry can take a simple and highly beneficial step forward for the good of the environment, ahead of COP26."



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 CO₂ emissions by 90%, NO_x emissions by up to 27% and PM emissions by up to 84%



Compatible

Drop-in alternative to diesel compatible with existing fuelling infrastructures



Reduces notifiable emissions



All-year-round performance



Approved drop-in alternative to diesel



Biodegradable & non-toxic

Discover more about HVO:

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