

FAG for HVO

Hydrotreated Vegetable Oil



FREQUENTLY ASKED QUESTIONS for HVO

HVO (Hydrotreated Vegetable Oil) renewable fuel is gaining significant attention as a sustainable alternative to traditional fossil fuels. HVO stands out for its ability to significantly reduce greenhouse gas emissions while providing similar performance characteristics to conventional diesel. As the push for cleaner energy solutions intensifies, understanding the intricacies of HVO renewable fuel becomes crucial. This FAQ aims to address common questions about HVO, offering insights into its production, benefits and potential impact on the environment and energy landscape.

What is HVO, and what is the difference between Biodiesel?

- HVO/renewable diesel **is not** biodiesel. They are very different products, although both are made from organic biomasses. HVO has lower emissions and is cleaner burning than traditional biodiesel. It also has better cold-weather and storage properties than biodiesel.
- Renewable diesel is a fuel that is chemically identical to fossil diesel, making it a viable substitution for fossil diesel, with no blending required.
- It is produced from 100% renewable and sustainable raw materials.
- Renewable diesel is Ultra Low Sulfur Diesel (ULSD) a direct drop-in fuel replacement that meets ASTM D975 and EN 15940 standards.

What are the benefits of using HVO?

- Reportable Scope 1 fossil-based greenhouse gas (GHG) Emissions are zero.
- Renewable diesel emits up to **90% less GHG emissions** compared to fossil diesel over the lifecycle.
- Carbon emissions derived from a biological (renewable) source are considered carbon neutral.
- Can be used up to 100% rate or blended with fossil diesel.
- Premium quality, high cetane, colorless, odorless, cleaner burning and very stable.
- More efficient and complete combustion, with reduced build-up inside the engine.
- No degradation from water absorption or microbial growth during handling and storage.
- Fast, affordable way to achieve climate goals.



What are the emissions and performance on PowerSecure engines? Diesel vs. renewable?

• Engine emissions from HVO are very similar to that of petroleum diesel. Even with the results from the studies in the Summary of Industrial Research section, the reductions of criteria pollutants (NOx, CO, VOC, PM) are not guaranteed.

Is there any penalty for using HVO on PowerSecure engines?

• No, this is a direct fuel replacement for standard diesel. PowerSecure engines are fully equipped to transition to renewable fuels.

Can PowerSecure provide HVO? What is the supply network and footprint map?

• Yes, PowerSecure can provide HVO. We have fuel supply partners that can supply PowerSecure with fuel across our footprint.

What is the price difference between HVO and diesel?

• Without state tax incentives for HVO, there is a slight premium in the cost of HVO versus diesel.

Can you use HVO in a PowerSecure generator that currently uses diesel? Do any modifications need to be made?

• No modifications to existing equipment are needed. HVO is a direct drop-in fuel replacement.

Does PowerSecure intend to use HVO in their company assets?

- Our Distributed Infrastructure Campus microgrid is powered with 100% HVO.
- The energy sector is rapidly evolving, driven by customer preferences, technology advancements, commodity prices, energy security and resiliency efforts, and environmental, social and governance initiatives.
- With evolution comes opportunity and PowerSecure, with its customercentric business model, is poised to provide continued value to our customers and communities in this evolving landscape.
- PowerSecure is pursuing an "all of the above" energy strategy.
- We are lowering carbon emissions in ways that make technical and economic sense.