



www.apse.org.uk

Manufacture

- **1. Hydrogenation:** The feedstock, which can be vegetable oils, animal fats, or recycled cooking oils, undergoes a hydrogenation process. This involves reacting the feedstock with hydrogen in the presence of a catalyst.
- **2. Hydrotreatment:** The hydrogenation process removes impurities such as sulphur, nitrogen, and oxygen, as well as saturates double bonds in the hydrocarbon chains of the feedstock. This results in a cleaner and more stable fuel.

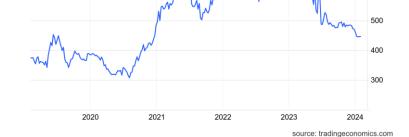
HVO Fuel - CnH2n+2

- Not fossil fuel based
- Chemically identical to Diesel (EN 15940)
- More stable than Biofuel as Oxygen removed
- HVO 7% less density than Diesel
- Different Density may need recalibration of pumps
- 90% fewer emissions than fossil diesel?
- Costs significantly more (£1.75 vs £1.45)
- HVO manufacturing capacity is limited.
- Uses 20% more energy to produce than fuel itself

New-Zero?

- Requires substantial agricultural land to grown feedstock
- Price of corn increased
- Demand diverts from world food
- Rainforest replaced





Recommendation

- Take the electric path for vans/cars
- Extend larger vehicle life where possible during transition
- RCV's can be refurbished for ¼ cost new
- Electric RCV's not currently effective outside urban core
- Use HVO on remaining transition vehicles only

NEW MUNICIPALISM

Delivering for local people and local economies

Contact details

Rob Bailey, Principal Advisor

Email: rbailey@apse.org.uk

Association for Public Service Excellence

3rd floor Trafford House Chester Road

Manchester M32 0RS

telephone: 0161 772 1810

INVESTOR IN PEOPLE



GB 11409





GB 11132