



## **Clarification on the Use of Biofuels in Non-Road Mobile Machinery (NRMM)**

### **Construction Plant-hire Association**

Established in 1945 we are the largest trade association for plant-hire companies in the UK, representing circa 1900 businesses, from independent owner-operators to the biggest national firms.

While we do not hold any expertise in international trade remedies or anti-dumping practices, we aim to support the Trade Remedies Authority (TRA) investigation by outlining key distinctions between HVO and Biodiesel relevant to the off-road equipment sector. We trust and respect any decision reached by the TRA in this investigation.

### **Distinctions Between HVO and Biodiesel**

The terminology surrounding biofuels, specifically biodiesel and Hydrotreated Vegetable Oil (HVO), are often used interchangeably. However, there are important differences in their usage in Non-Road Mobile Machinery (NRMM) due to their regulatory specifications and performance properties.

HVO is able to meet the EN15940 paraffinic diesel specification, which forms the basis for manufacturers allowing its use as a "drop-in" fuel in the vast majority of NRMM engines. While use of HVO may necessitate more frequent oil filter changes, it does not typically require engine modifications or invalidate warranties. It is increasingly being used to decarbonise construction machinery where other low-carbon alternatives are not commercially viable, however uptake is still relatively low at around 1% of total fuel used in the UK, according to Renewable Transport Fuel Obligation (RTFO) data. HVO is generally seen as a short-term option to decarbonise construction equipment, but our view is that it will likely have a long-term role to play in this difficult-to-decarbonise sector.

In contrast, biodiesel generally does not meet EN15940 standards and is instead covered by EN14214 quality specifications due to differences in chemical, physical and performance properties. Most manufacturers restrict the use of biodiesel blends above

B7 (standard white diesel) in off-road engines, invalidating warranties if higher blends are used. Where higher blends are permitted, enhanced fuel management is usually required due to concerns risks of filter blockages, fuel gelling in low temperatures, and potential damage to fuel system components. Although machinery and fuel systems can be modified to accommodate higher biodiesel blends, such modifications cost several thousand pounds per machine and may compromise manufacturer warranties.

Only a very limited number of manufacturers support specific engine models that can operate on B20, and permitted use of B100 is exceedingly rare. While filtration and additives can improve biodiesel performance, they do not elevate the fuel to EN15940 standards, so they do not resolve issues related to manufacturer approval.

It is also noted that, to the best of our current knowledge, there is no domestic production of HVO in the UK, whereas biodiesel is produced domestically.