



Contracting giant BAM has committed to running all of its UK construction machinery on recycled cooking oil, contributing to its goal of reducing carbon emissions from its activities. Hydrotreated vegetable oil (HVO) is an advanced renewable fuel derived from waste products.

In 2020 BAM consumed 7.1 million litres of red diesel – around 70% of the company's total direct carbon footprint. HVO, which currently costs around 15% more than red diesel, reduces net CO2 emissions by as much as 90%.

The fuel will be supplied via a UK-wide contract with Bury-based Crown Oil and will help to support BAM's broader strategy of making use of sustainable innovations to reduce the CO2 emissions related to its work. Other measures include the phasing out of diesel generators and increasing use of alternative solutions such as photovoltaic cells to generate power at sites, the rollout of electric vehicles to all levels of the employee fleet and the increasing use of low-carbon materials such as low-cement concrete in the design, construction and management of net-zero buildings.

While HVO is considered an important stepping stone to a net-zero carbon position, the ultimate goal is to eliminate all internal combustion engines and opt for electric alternatives powered by batteries or hydrogen fuel cells. BAM is working closely with machinery manufacturers to accelerate the deployment of electric equipment that will help power its sites more cleanly and sustainably.

Sarah Jolliffe, carbon reduction lead at BAM Nuttall, said: "HVO fuel has been available for several years, but it is only in the past 12-18 months that the fuel has been approved by plant and engine manufacturers for use in their equipment.

"HVO differs from gas oil, diesel and petrol as it isn't derived from crude oil – the main cause of greenhouse gases, including carbon dioxide. HVO is made through the hydrotreatment of

pre-existing bio-waste products such as used cooking oil, waste plant and organic matter.

“Many of the projects we deliver and clients we support aim to decarbonise public transport or protect people from the effects of climate change. But the engineering solutions and construction operations have a high carbon impact. We want to reduce carbon throughout the whole lifecycle of a project, from the way the site operates through to the materials used in construction, and the way assets are operated, maintained and dismantled.”

BAM is also collaborating with its supply chain partners to encourage further use of low-carbon fuels and diesel alternatives in its supply chain.