IS THIS REALLY SUSTAINABLE GREEN ENERGY.

Data Centres contribute significantly to global greenhouse gas emissions, and there is growing interest in using hydrotreated vegetable oil (HVO) as a biofuel alternative for backup generators to reduce this environmental impact. HVO is what ARK have stated they are using to run their generators at Spring Park as part of their 'Green Credentials'. However, the sustainability of biofuels like HVO is complex due to various physical, environmental, social, and economic factors.

An industry whistle blower told the BBC in 2025 that that HVO is not always produced from waste materials, like used cooking oil, but increasingly from Virgin palm oil. Data then analysed by the BBC and shared with the Dept of Transport casts further doubt that one of the key ingredients in HVO, a material called 'palm sludge waste', is actually being used in production. Evidence clearly shows that Europe alone appears to have used more of this waste in HVO and other biofuels in 2023 than it is thought possible for the **entire world** to even produce. Data analysed by the BBC, which was based on well-established UN and industry statistics, suggests the world can only produce one million tonnes of palm sludge waste in any one year. This mis- match further suggests non waste oils such as virgin palm oil are being used to meet the huge growth demand for 'Green' biofuels. There are no paper trails to prove the fraud that is happening, but the figures tell a clear story and numbers don't lie. Unfortunately, there is no supervision or certification verification in Indonesia, Malaysia and China, which are three of the main sources of the raw ingredients claimed to be the waste material used for HVO production, so the fraud continues. China doesn't even allow any inspections in from the outside world.

Just the UK's consumption of HVO rocketed from 8 million litres in 2019, to 699 million litres in 2024. This is according to provisional, government figures. Although it is recognised that HVO significantly cuts UK's emissions they are still 'burnt' as fuel and consequently the exhaust still pollutes the atmosphere. Emissions sent into our local atmosphere still causes air pollution and therefore cause respiratory problems, cardiovascular health issues and cognitive decline. For example, for every 1,000 litres of HVO burned 0.195 tonnes of C02 is still produced. Nitrogen Oxide (Nox) and Carbon Monoxide (CO) is also vented into the atmosphere. Research has produced different results regarding NOx emissions for HVO, ranging from significant reductions of 27% (compared to ordinary diesel) to no change at all, depending on the type of generators and calibration of engines. Carbon Monoxide is reduced by 24%. Ozone and other particulate matter are reduced by 30%, so HVO exhaust is not 'clean' and is still a leading contributor to health problems. This should be a critical concern where generators are deployed close to where people live and work. The current data centres at Spring Park are already close to people's homes and the prevailing wind blows directly onto the Ministry of Defence work force at Basil Hill. The Data Centre about to be built on the old Stephens Plastic site is closer again and if the massive Data Centre was to be built on the Donkey Field, then generator exhaust plumes would be only 50 meters away from the homes on Westwells Road.

So, how green are Data Centres using HVO? A resident from Wadswick Green has been tracking emissions for a couple of months. He states that a normal air quality track should be within 375 CO2 to 420 CO2, (country air quality) but he is regularly monitoring levels that accelerate over 2000+. He also often sees fine gas /carbon particle emission plumes and haze passing his apartment when the current generators fire up and they are a lot further away than the additional 22 units proposed for the Donkey Field. (Please see photos at the end of the article. Several others have been taken throughout the last couple of years).

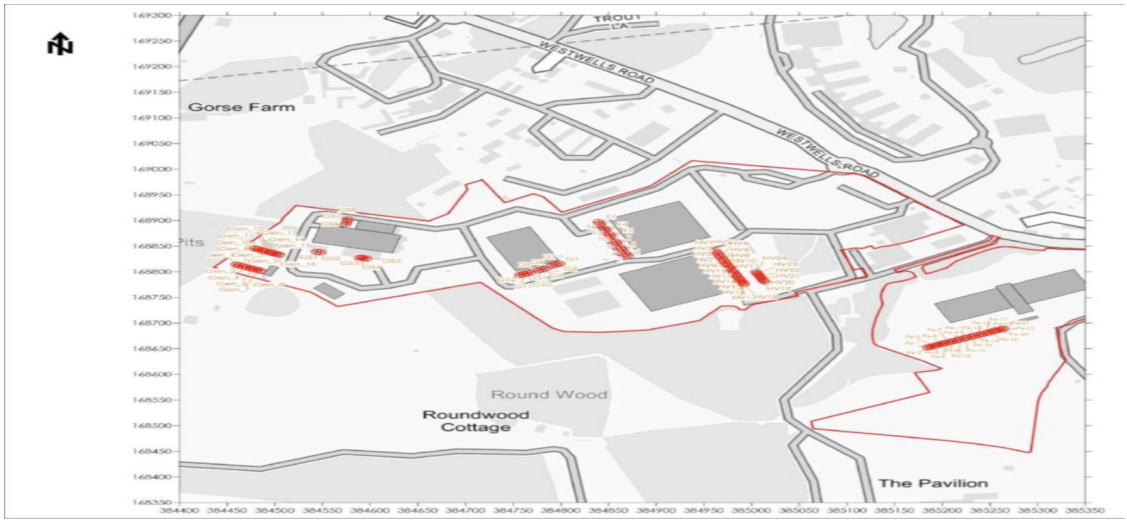
Data Centres' Carbon Footprint: Data Centres and data transmission networks were responsible for nearly 1% of energy-related greenhouse gas emissions in 2020, producing around 330 million metric tons of CO2, with emissions potentially increasing due to the growth in Data Centre numbers since 2020. The BBC report of

2025 above, considers that palm oil has no place in sustainable energy systems. Any solution that continues to emit harmful pollutants should not be considered fit for purpose.

World-Wide Food Security Concerns: The production of biofuels often diverts crops such as corn and soybeans from food supply, leading already to higher food prices and reduced availability. This particularly affects countries facing food insecurity. It also raises ethical concerns about prioritizing fuel production over food production. (Similar concerns are also over the prioritization of Water.)

Environmental and resource impacts: Large-scale biofuel cultivation leads to deforestation, loss of biodiversity, soil degradation, and increased water usage. Substantial water being required for crop production, straining local resources and ecosystems. Additionally, biofuel production demands significant energy inputs, sometimes undermining its efficiency and sustainability. This is bad news for our planet as Virgin palm oil is linked to increased tropical deforestation, which only adds to climate change and continues to threaten endangered species like Orang-Utans.

Social and logistical challenges: Biofuel expansion can cause land grabbing and displacement of local communities. The current scale of HVO production is insufficient to meet the growing demand from Data Centres, making it a temporary rather than permanent solution. It seems that to get planning permissions Data Centres have to go along with the pretence that they are using waste materials as fuel, but are they really and are they as green as they are trying to make out? What fuel will they burn when HVO supplies dwindle away and all the claims of zero emissions come to nothing?



The diagram above shows in RED the current and proposed locations of the HVO fuelled generators associated with Spring Park. If approved it will be one of the largest groups of such generators in the whole of the UK. Yes right here on our doorstep. ARK's own planning documents admit that running the generators will result in atmospheric pollution. The theoretical effect of the pollution on our local environment has been estimated at a number of key points and the results are clearly tabulated. They have computer modelled the theoretical effect of exhaust pollution and 'the computer says' it won't be too bad except on occasion when the wind blows the wrong way! However, it also makes clear in the modelling report that the underlying assumption is that the local area is flat and there are no gradients! I para phrase ***"4.10.1 Inclusion of terrain data is recommended within the computer model (but] Google Earth indicated the surrounding topography is reasonably flat. As such, terrain data was not included within the model."***

This is fundamentally unsound as anybody who lives locally knows the area is anything but flat especially around Neston Heights and the area leading up to Wadswick Green whose residents sadly will be looking directly down into the exhausts of the bungalow sized generators. So, apparently, Dr Google says the earth around here is 'flat'! Really! I guess it was too much trouble for the computer nerds writing the report to actually come out to Westwells and have a look at the Donkey Field site, or even wonder why the MOD site is called Basil **Hill**?

Neston and Westwells Action Group (NWAG)

If you haven't already objected to the proposed build on the Donkey Field then please support those of us who have. Please go onto the Wiltshire Council Planning web page. Look up PL/2024/05527 Land South of Westwells Road, Neston SN13 9GB. Click on COMMENTS and scroll down and follow the instructions. It really doesn't take long to leave your objection.

Alternatively, you can write to Adam Madge, Principal Planning Officer, Wiltshire Council, Bythesea Road, Trowbridge BA14 8JN. THANK YOU!