The Implications of Biofuel Expansion for Labour Rights, Trade Unions and International Solidarity

Pax Butchart, Biofuelwatch

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What are biofuels?

- Any liquid fuel made from organic matter. Currently, there are only really two types that are commercially viable at scale:
- Ethanol, fermented from the glucose in corn maize or sugarcane;
- Hydrotreated vegetable oil (HVO), made from vegetable oil such as palm, soy, or rapeseed, or tallows and lards from slaughterhouses.
- They can be blended with traditional petroleum, and some can also be dropped into combustion engines without infrastructure upgrades, for use in road transport, aviation and shipping.
- There have also been some moves to utilise them for home heating and electricity generation.



Why are biofuels popular with businesses and policymakers?

- Biofuels present a potential solution to the climate crisis since they are non-fossil derived, and crop feedstocks are believed to sequester carbon as they grow.
- Similarly, their ‘drop-in’ status and the fact that they are an industry-led response requiring similar processes and skills for refining, distribution and use, means they present as little disruption as possible to business as usual.



What are the environmental problems with biofuels? 1 - Land Use Change Emissions

- From this description you might assume that biofuels are a great tool for decarbonising our fuel and energy systems, but this is not the case due to an array of environmental issues caused by feedstock cultivation.
- The first of these is land use change. Logging and peat clearance routinely occur in order to enable industrial agriculture in major crop biofuel exporting regions. This leads to savannafication, high carbon emissions and extinctions. Peat fires can smoulder for decades underground, leaking CO2 into the environment



What are the environmental problems with biofuels? 2 – Biodiversity Loss

- Many of the habitats cleared away to make room for biofuel cultivation are some of the most varied and intact on earth, offering refuge to a wide array of often threatened species like orangutans, river dolphins, Sumatran rhinos, jaguars, turtles, harpy eagles and poison dart frogs.
- Their loss not only impoverishes human enjoyment of nature and the planet's heritage, but can cause entire ecosystems to collapse without a stable food web. This is particularly concerning because healthy ecosystems are essential to feed us, and because destabilised ones often emit far more carbon than those that are in balance.



What are the social problems with biofuels? 1 - Dispossession

- The institution of biofuel plantations on former healthy landscapes in Southeast Asia and South America very often accompanies the persecution, expulsion, and impoverishment of traditional rural and indigenous communities.
- People are pushed out of the lands they have occupied for generations, under threat of legal injunctions, state and corporate violence, toxin exposure or loss of subsistence.
- Those that stay struggle to maintain their livelihoods and traditional rituals and ceremonies, and face continued attacks and marginalisation.



What are the social problems with biofuels? 2 – Occupational Hazards

- Workers handling biofuels at refineries and distribution points are often exposed to hazards without existing regulation to protect them. Due to the high temperatures and flammable hydrogen involved in the refining process for HVO biofuels, there are threats of explosion and fire, as well as spillages.
- In the USA, where many biorefineries already exist, companies are able to circumvent safety procedures that were written specifically for petroleum processing, and instead use the less stringent chemical industry protocols. This laxness has led to several severe fires and at least one case of life changing injuries for a member of staff, who suffered third degree burns to 90% of his body.



What are the economic problems with biofuels?

- Biofuels rely on unstable supply chains and volatile markets. In the past year alone, several refineries in the UK have closed.
- Much of the feedstock is imported from abroad, whether so-called 'Palm Oil Mill Effluent' from Indonesia and Malaysia or used cooking oil from China. This undermines our energy security and leaves us vulnerable to shortages, geopolitical shocks and other crises that could destabilise supply chains.
- This would lead to businesses going under, workers facing redundancy, and potentially even transport grinding to a halt or electricity supplies fluctuating.

Trafigura-owned biodiesel plant to close in new blow to UK industry

Plan to shut Greenergy unit follows recent collapse of oil refinery in the same area



A Greenergy biodiesel plant © Greenergy

Save

Rachel Millard, **Peter Foster** and **Susannah Savage**

How might you encounter biofuels as a false solution in your workplace?

- Many unionised jobs may be at risk if the government handles the transition from fossil fuels poorly
- This is why biofuels are often presented as solutions for workers facing closures and redundancy. However, we know that this is actually designed to enrich businesses and protect their infrastructure and modes of operating, while exploiting workers and communities across the supply chain.
- It is important to resist narratives that claim to be about ‘protecting jobs’ but lack long-term vision for maintaining livelihoods, safety and justice into the future in the face of insecure supply and escalating climate impacts.
- There are also demands of solidarity on us towards people living abroad, whose bodies are subject to appalling violence to enable the operation of capitalism in Britain. They have common cause with trade unionists, environmentalists and anyone resisting inequality and power here at home, and we should honour their struggles as part and parcel of our own.



Case Study: Grangemouth

In April 2025, the Grangemouth oil refinery closed with the loss of 400 jobs. The local union branch called for it to be made into a SAF facility, but no plans were produced in time by government or industry and the layoffs went ahead.

The workforce has dispersed, creating economic hardship in the town. However, it is unlikely that a biorefinery would have or could improve the situation.

This is because HVO and HEFA refineries bring a whole host of problems, from unsafe working conditions to reliance in unstable import markets. Indeed, many have gone bankrupt in the UK in recent months, demonstrating a flimsy evidence base that they provide long-term job security. SAF supply is also simply not scalable to demand.

Turn Grangemouth into a SAF facility, union demands



Unite the union has written to energy secretary Ed Miliband demanding action on Grangemouth to turn it into a sustainable aviation fuel (SAF) plant.

In September, Grangemouth's owners Petroineos announced that it intended to close the only refinery in Scotland with the loss of over 400 directly employed jobs, in the second quarter of 2025.

In the letter to Ed Miliband, Unite general secretary Sharon Graham said: "A Labour government not putting together a serious plan for the future of the site and the thousands of jobs which depend on it, would be a huge dereliction of duty.

"How this government deals with the threatened closure at Grangemouth will be the key test of your commitment to a just transition for workers and communities, and to our future energy security."

Unite has produced a detailed plan which demonstrates how Grangemouth can relatively easily be initially converted into a SAF facility, before further developing into a full biofuels outlet.

The creation of a SAF facility is entirely in line with government policies. Unite's research has found that converting an existing refinery is 30 – 70% cheaper than building a new facility.

Unite's report also highlights serious concerns about Petroineos' lack of transparency and a lack of evidence from the company about the need to close the refinery. Unite's report further details how Petroineos has a conflict of interest. The company is half owned by PetroChina which is ramping up its own production of SAFs and would look to import them to the UK.

How can you oppose biofuel greenwash?

- You can call out biofuel conversion plans when you see them, and push back on the narrative that they present genuine environmental solutions or protect workers' jobs.
- Instead, you can pass motions in your union branch or trades council calling for real green solutions, including retraining funds and worker-led just transition planning.
- You can refuse to align your union with the interests of the political class and exploitative businesses, and instead stand in solidarity with social justice movements of all kinds from all over the world, including other unions and workers' movements.



What are better alternatives?

- For electricity – solar, wind, tidal, wave, hydro, geothermal
- For home heating – ground source heat pumps, air source heat pumps, electric boilers, insulation
- For road transport – electric cars, more public transport, shortened freight distances, remote options
- For aviation – demand reduction, electric short-haul aircraft, international rail, shortened freight distances, remote options
- For shipping – demand reduction, electric engines, wind-assisted propulsion, shortened freight distances, remote options

