Matt Williams
Senior Forest Protection Advocate
Natural Resources Defense Council
92 West Malvern Road
Malvern
WR14 4NB
mwilliams@nrdc.org

The Rt Hon Grant Shapps MP Secretary of State Department of Energy Security and Net Zero 3 Whitehall Place London SW1A 2AW

Dear Secretary of State,

We welcome the publication of your Government's recent "Powering Up Britain" strategy to achieve net zero and energy security.

We are writing to urge you to use your Government's new Biomass Strategy to end government subsidies for burning forest wood, and not to award any new support or contracts to these power plants, even with the promise of carbon capture technology. Bioenergy production of this kind harms people, the environment, and the climate.

Burning trees harms people's health

UK bioenergy companies have been <u>fined millions of dollars</u> for breaching air pollution rules in the United States. The wood pellet mills that supply UK power plants are very often located in impoverished communities of colour.

Drax power station is one of the <u>top 5 sources of PM10 pollution</u> from the power sector in Europe. PM10 is associated with increased risk of asthma and pulmonary disease, as well as other diseases and health problems. A wood pellet plant owned by Drax and located in Gloster, Mississippi has <u>recently been found to have broken air pollution limits for a second time</u>.

Billions in bioenergy subsidies are increasing people's energy bills

Bioenergy is one of the <u>most expensive energy forms</u> (currently requiring over £100/MWh from a combination of electricity sales and subsidies, whereas wind and solar only need around £50/MWh). While wind and solar have decreased in cost significantly, the cost of bioenergy has stayed flat. This is because its main cost is the fuel it burns - wood pellets.

In most years, wind and solar help reduce people's energy bills. But bioenergy adds to them at a time when many have already been pushed into fuel poverty. On top of this, it doesn't even deliver the low carbon emissions that people are supposedly paying for.

Some bioenergy companies would be making a loss without the hundreds of millions they receive in subsidies every year. Drax alone was paid £800 million in government subsidies, despite being among the UK's biggest sources of carbon dioxide. This money would be better directed on much-needed home energy efficiency, helping people reduce their energy use, reducing overall UK emissions, and reducing household bills.

Your <u>Government's own analysis</u> shows that future bioenergy with carbon capture and storage would be even more expensive, as much as £179/MWh.

Bioenergy is a false climate solution

The assumption that burning wood is carbon neutral is false. It is very different than the genuinely low-carbon energy provided by wind, solar, or geothermal. Bioenergy power plants are some of the biggest sources of carbon dioxide in the UK. It is assumed that they can offset their emissions by regrowing the trees that are cut down. But this can take decades—time we don't have in the race to cut emissions and tackle climate change.

Scientific advisors to a major bioenergy company - Drax - have said that it should stop calling burning trees "carbon neutral", and should stop referring to this wood as "waste."

Carbon capture technology doesn't make bioenergy "carbon negative" because forests' absorption of carbon is reduced for <u>many years or decades</u> and this cannot be "captured" at the power plant. This means that the Government's net zero plans are based on flawed calculations. <u>Government plans</u> also suggest that power companies will be able to commit to using carbon capture technology, in order to receive billions of pounds of subsidies regardless of whether they actually do so. Billions of billpayers' money may be used for business-as-usual burning of trees.

An investigation into existing carbon capture projects found 17 bioenergy facilities with carbon capture worldwide. Even the most successful of these projects has only captured 11% of the carbon dioxide. In many cases a significant share of the power produced by the power station was used to capture the carbon. And 73% of the CO2 captured worldwide is injected into wells to increase production of oil and gas - the burning of these fossil fuels far outweighs the capture of the carbon. We note that Government is already exploring how Carbon Capture and Storage can contribute to enhanced oil recovery in the North Sea.

The world's nature is being put at risk

The wood that is burned by UK power stations comes from some of the world's most important forests. These range from legally protected forests in Estonia, home to the black stork and the goshawk, to the Global Biodiversity Hotspot of the Southeast United States, to the Boreal forest in Canada, home to the declining caribou.

Bioenergy undermines UK food and energy security

The UK bioenergy industry relies on imports of hundreds of millions of tonnes of wood pellets from other countries. The bioenergy industry itself says that its number one fear for

the future is the price and supply of this wood. This is the opposite of energy security. During his campaign in summer 2022, the Prime Minister pledged to achieve energy sovereignty for the UK.

Your Government outlines that more energy crops grown in the UK could be used in the future, however, efforts to increase the growth of energy crops for years, have seen little success. Even if scale up was successful, <u>food production would also have to make way for millions of hectares of energy crops</u>. Many times more land would be used than for onshore wind or solar. This could risk the UK's legal commitment to restoring and protecting nature and creating new habitat.

Recent analysis also suggests that rewarding farmers to store carbon is far cheaper (by billions of pounds) than spending money on engineered removals such as BECCS, still helps to achieve net zero goals, and is better for nature too.

It is time to end the burning of biomass

The world's forests play a critical role in protecting people from the impacts of climate change, store vast amounts of carbon, and support a huge array of wildlife. As climate change worsens, it is time to protect forests, not cut them down and burn them. The rollout of millions of hectares of energy crops could spell disaster for nature and for food security.

We urge you to use the Biomass Strategy to announce an end to all subsidies for burning wood from forests and of energy crops in power stations, whether with carbon capture technology or not.

We would welcome the opportunity to meet with you to discuss these issues.

Matt Williams

Senior Forest Protection Advocate, Natural Resources Defense Council

This letter is supported by the following organisations:





































