



Bioenergy: The Fake Renewable Energy Burning through the World's Forests

Suggested Action

Bioenergy often means burning trees in UK power stations - it harms nature and forests, and makes climate change worse by releasing huge amounts of carbon dioxide (CO₂). We need to end subsidies for burning trees & for MPs to say NO to new subsidies for tree-burning in power stations like Drax.

As my MP, I am writing to ask you to make a commitment to forests, wildlife, communities and the climate by calling on the Government not to grant these new tree-burning subsidies. Please write to Secretary of State for Energy Security and Net Zero, Ed Miliband, to ask him to end all subsidies for burning wood in UK power stations like Drax in Yorkshire and Lynemouth in Northumberland.

What is bioenergy?

Bioenergy means using organic material like wastes, crops, or wood to create heat, electricity, fuels for transport like ethanol or hydrogen. This briefing focuses on using bioenergy - trees - in power stations to generate electricity. The UK uses around 8 million tonnes of wood per year in power stations for electricity.

Is burning wood good for the climate?

No - burning wood from forests releases CO₂ immediately. It can take decades for forests to recover the lost carbon storage and absorption. Hundreds of [scientists](#) have been pointing this out for some time. But the UK counts biomass burning as a carbon neutral form of electricity. However, biomass is at least as dirty as coal under timeframes necessary to meet our climate commitments.

Is burning wood good for nature?

No - each year, the UK burns more imported trees than it can produce in biomass power stations to generate electricity. The wood imported to the UK for bioenergy comes from Natura 2000 forests in Estonia, forests in a Global Biodiversity Hotspot in the US southeast, and the nature-rich forests of the Boreal in Canada.

Is burning wood good for communities?

No - repeated investigations have found that wood pellet production [harms the health](#) of communities, particularly in the Southern US. Wood pellet production sites are [twice as likely](#) to be located in environmental justice communities. [Pollution](#) emitted from pellet production has been linked to causing respiratory and pulmonary health impacts.

How expensive is bioenergy?

Very - bioenergy is one of the few technologies that increases energy bills. The Government gives millions of pounds a year in subsidies to biomass companies such as Drax to import and burn wood to create electricity - [£617 million in 2022](#). This is paid for by levies on people's energy bills. New subsidies for biomass – proposed by the previous Government - would cost as much as [£4 billion by 2035](#).

Does burning trees increase Britain's energy security?

No - the bioenergy industry itself says it is worried about the future price and supply of biomass. Burning biomass leaves our energy system hooked on expensive imports of foreign fuel instead of developing affordable, secure British energy.

Are there alternatives?

Yes - biomass accounts for nearly one-third of what the UK Government calls 'green' energy. But researchers from Oxford University have found the [UK could more than power itself with a combination of wind, solar, and battery storage](#). We don't need to burn the world's forests just to keep the lights on.

What is Bioenergy with Carbon Capture and Storage (BECCS)?

BECCS is the idea that we could burn biomass such as wood to generate electricity, capture most of the carbon dioxide emitted and store it underground, so that it never gets released into the atmosphere.

What do scientists think about Biomass and BECCS?

Bad - the [European Academies Scientific Advisory Council](#) and [over 500 scientists](#) have said the negative impacts on the climate of burning wood may persist for decades to centuries. Burning biomass emits CO₂, just like coal; even if new trees are planted to replace those burnt, they can take decades to grow and reabsorb the CO₂. It also does not acknowledge the greenhouse gases emitted when the trees are cut down, converted into wood pellets or transported to the power station - often thousands of miles by ship; meaning [BECCS would not provide the so-called "negative emissions"](#) that many claim and would instead increase CO₂ in the atmosphere for decades¹.

How much does the government subsidise biomass?

£13 billion - up until most subsidies are due to end in 2027, UK energy bill payers will spend [£13 billion in direct support](#) to large biomass power plants (including £10bn at Drax alone).

What are the current proposals to extend subsidies?

£4 billion in subsidies by 2035 - the previous UK Government was [consulting](#) on extending subsidies for bioenergy after 2027 to give industry time to develop carbon capture technology (BECCS). Extending these subsidies and building (completely speculative) carbon capture technology would be expensive and cost [£4 billion by 2035](#). The bioenergy industry has asked for this extension to develop BECCS technology; analysis by [Ember](#) shows a single bioenergy carbon capture project would cost £43 billion in subsidies over its lifetime. This is around £1.7 billion per year - £60 for each of the UK's 28 million households.

How did experts respond to the Government consultation?

In response to the consultation, the previous Government heard concerns about extending subsidies from

- [Over 160 scientists](#)
- [30 UK and US environmental and health groups](#)
- [23 Canadian environmental groups](#)
- [30 MPs](#)

Cut Carbon Not Forests (CCNF) is a coalition of UK, US, and Canadian environmental organisations seeking to stop forests around the world from being burnt for energy and to eliminate renewable energy subsidies for biomass which are given under false assumptions.