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## Exclusive: Dirty cost of keeping the Government's net zero strategy alive revealed

Plan to hit green targets relies on burning the equivalent of the New Forest every five months, Telegraph analysis shows

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17 June 2022 • 9:50am



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The [Government's plan to reach net zero](#) relies on burning the equivalent of the New Forest every five months, The Telegraph can reveal.

[Ministers plan](#) to use technology to remove carbon from the atmosphere in order to compensate for sectors such as aviation, agriculture and heavy industry, and [meet their 2050 climate targets](#).

[The proposals](#) rely largely on capturing the smoke from power plants, which burn wood to create electricity, and piping it under the North Sea using a system known as bioenergy with carbon capture and storage (Beccs).

Because [these biomass plants](#) are considered to be carbon neutral, largely because the trees they burn will be replanted, any of the emissions that are captured and stored are counted as negative.

To create enough emissions so that the removal can [balance the books](#) and [reach net zero](#), the power plants will need to burn the equivalent of 120 million trees a year, an analysis of government modelling by The Telegraph has found.

It came just days after [the food strategy](#) promised to use huge swathes of the countryside to grow crops, with scientists warning that there is not enough land to deliver on all the competing pledges.

### 'A castle built on sand'

Concerns were raised over how the technology will work at scale and whether [burning wood for electricity](#) is a genuine renewable energy source.

The European Academies' Science Advisory Council (Easac), the association of national academies across Europe including the Royal Society, has called on policymakers to ["suspend expectations"](#) that they can use Beccs to [reach net zero](#).

Its analysis found "that there are substantial risks of it failing to achieve net removals at all" or that the removals will not happen quickly enough to meet climate targets.

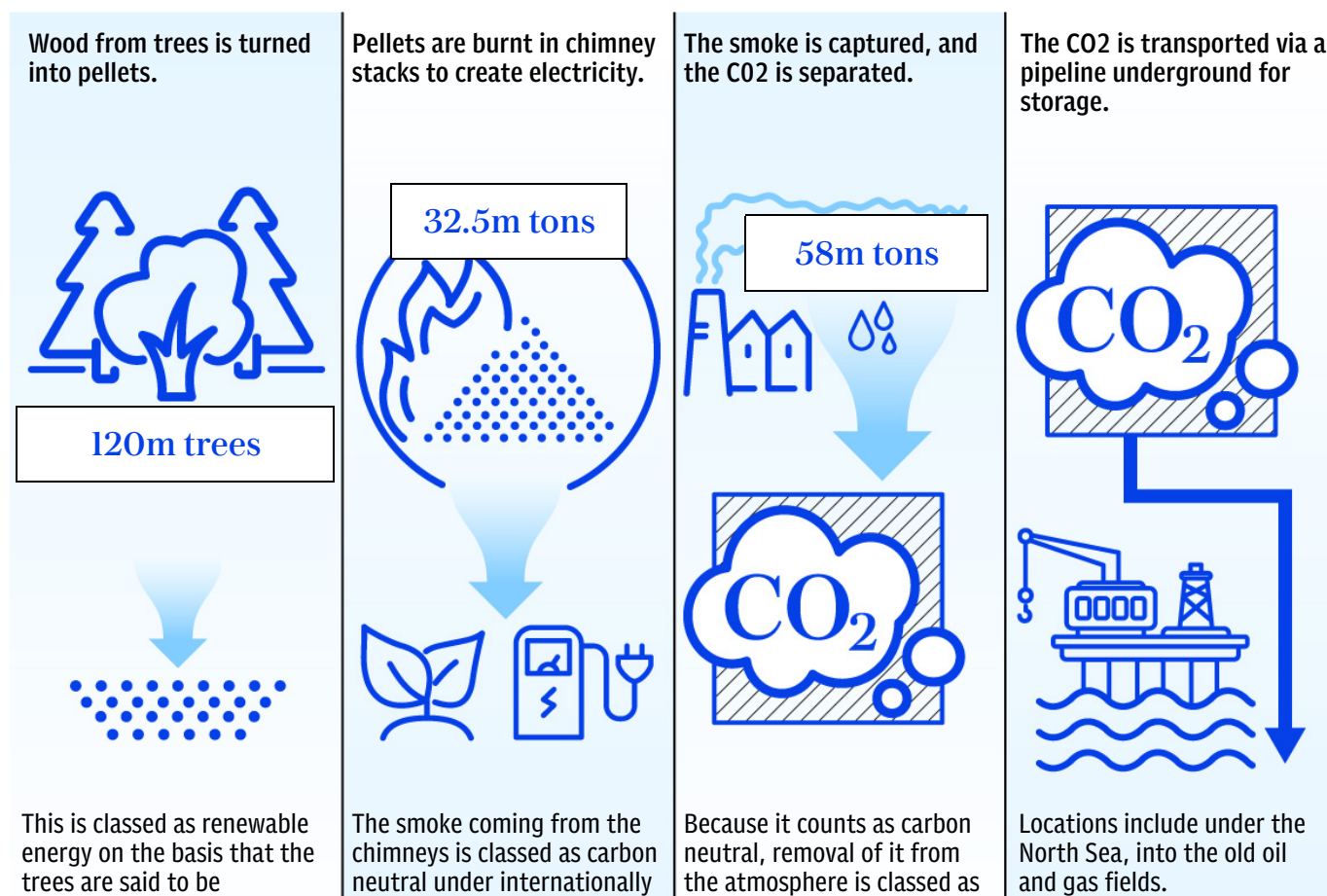
Dr Michael Norton, the environment programme director at Easac, told The Telegraph

that belief in Beccs is based on “flawed assumptions”, adding: “Our conclusion is that it is a bit of a castle built on sand.”

The Department for Business, Energy and Industrial Strategy (Beis) said that the plans are not final, and it is looking at other waste products that can be used as biomass and other carbon capture technologies.

### How net zero targets could be met

**Under Net Zero plans, 58 million tons of carbon dioxide equivalent would need to come out of the power station chimneys so that it can be captured in order to create negative emissions. To create this much carbon, 32,534,939 tonnes of wood pellets would need to be burned, the equivalent of around 119,834,572 trees.**



Biomass is a renewable energy under international carbon accounting rules and is seen as sustainable on the basis that the trees grow back.

However, some of the world's leading scientists warned that if trees are replanted, the system creates a “carbon debt” that will take decades, if not a century, to pay back.

While classed as carbon neutral, Drax, the UK's largest biomass station, is also the

single biggest emitter of carbon dioxide, having burnt the equivalent of 27 million trees last year.

Drax received £891 million in green subsidies from consumer bills in 2021 and according to energy think tank Ember is expected to receive more than £31 billion over the next 25 years for its development of Beccs.

Drax disputes the Ember calculations, saying they are based on “outdated assumptions”.

The industry, [including Drax](#), said that all [its wood pellets](#) come from sustainable sources and they are made not of whole trees but the offcuts from other industries.

An investigation by The Telegraph last year raised questions over the sustainability of the wood used and the impact on biodiversity.

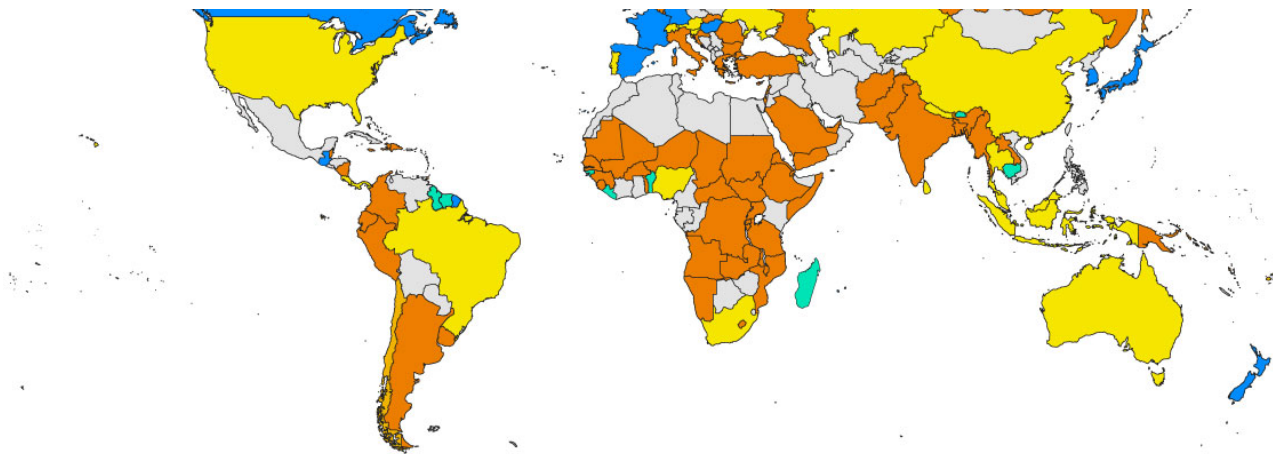
In the wake of that investigation, [more than 50 MPs wrote](#) to Kwasi Kwarteng, the Energy Secretary, demanding that he end the “scandal” of [burning wood for electricity](#).

Mr Kwarteng has so far refused to meet MPs, and it can now be revealed that the Government has been quietly planning to expand the industry to create more than four times the current emissions.









SOURCE: CLIMATE ACTION TRACKER, NET ZERO TRACKER

A Beis spokesman said that they “do not recognise this characterisation” of the number of trees being burnt.

“We need to generate more home-grown power in Britain and sustainable biomass is widely considered a renewable, low carbon energy source,” they said.

The spokesman pointed out that materials other than wood are currently being considered to create biomass, adding that “no decision” has been taken on the final reliance on Beccs and they are also looking at other greenhouse gas removal technology.

The scenario in which Beccs removes about two thirds of the residual emissions is the only one proposed in the 368-page net zero strategy.

Benedict McAleenan, an adviser to The Association for Renewable Energy and Clean Technology, said that the science behind Beccs was backed by world-leading climate scientists at the UN’s Intergovernmental Panel on Climate Change (IPCC).

He said: “Bioenergy is not driving forestry activity. It is using what would effectively waste material from the forestry sector. Sustainability has to be front and centre, it always has been.

“The IPCC has said that carbon dioxide removal technologies are necessary to limit global warming and Beccs is one of the biggest of all of these.”

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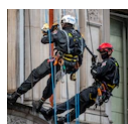
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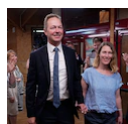
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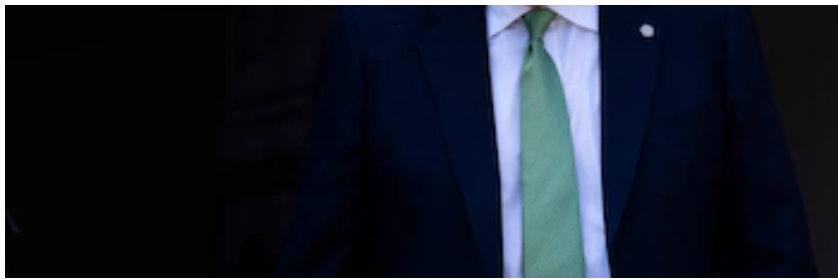
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