

25 April 2020

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To whom it may concern

BY EMAIL

The economics of coal and steel, as relating to the proposal for an extension to the
at Land to the West of Bradley
Surface Mine Leadgate Consett in the DM/19/03567/MIN, DM/19/03569/VOCMW

I have been asked to offer my expert opinion on the above planning application for an

sustainable economy. I hold a Ph.D. in economics from the University of London and I
am currently Professor of Resources and Environmental Policy at University College
London. I am Director of the UCL Institute for Sustainable Resources. Until May 2019 I
was also Deputy Director of the UK Energy Research Centre. My areas of expertise
include energy-environment-economy (E3) interactions and environmental policy,

claim implicitly relies on there being decreases in production overseas such that the total amount of coal produced globally remains the same.

While this assumption is not spelled out, Banks has elsewhere explicitly explained the basis for their position that they need not assess the GHG emissions from the end use of coal from their mines. For instance, in a submission to Secretary of State for Housing, Communities and Local Government, Robert Jenrick of 26 April 2019¹, Banks stated:

operating sites in the north east, including Bradley, they would inevitably have to look to meet their need for coal from alternative sources. As highlighted below, the most likely alternative source these customers will look to is from imports. The GHG emissions arising from therefore a substitute for emissions which would occur in any event (emphasis added)

The claim that

This claim is again contrary to basic economic theory. There is no reason why the demand for steel, cement and bricks would not be responsive to the price of the inputs to their production. Cheaper coking coal will, in the absence of policy incentives, result in more steel being produced through the traditional blast furnace method, and discourage investment in alternatives, even though, as I discuss below, such alternatives exist. Likewise, additional industrial coal will incentivise high-carbon cement production and discourage the development and deployment of lower-CO₂ alternatives. Thus additional industrial coal production is almost certain to result in additional carbon emissions. And, contrary to the extraordinary assertion above, these emissions

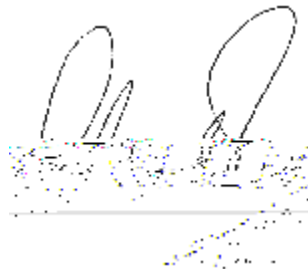
Although the processes are different, many of the same arguments apply to cement production, which is also a highly energy-intensive process. As with steel, increasing coal extraction is also likely to depress investment in alternative methods of cement production and discourage a switch to low-carbon fuels to meet the energy requirements of the cement industry.

As the UK progresses toward its statutory target of net zero emissions by 2050, UK steel and cement production will be required to shift to the low-carbon alternatives described above. From the arguments above it is clear that the coal produced by the West Bradley extension is likely both to increase emissions and to hamper the development and deployment of low-carbon technologies in this industry, thereby supporting the continuance of high-carbon steel and cement production and contributing to dangerous climate change.

Conclusion

I conclude that the claims made by Banks, that the combustion of coal from the West Bradley mine extension would not result in additional carbon emissions, are entirely unfounded. On the contrary, I would expect the mine extension to result in considerable additional carbon emissions.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Paul Ekins', is positioned above a horizontal line. Below the line, there is a decorative graphic consisting of a series of small, multi-colored dots (red, blue, green, yellow) arranged in a pattern that resembles a stylized signature or a digital watermark.

Professor Paul Ekins OBE
Professor of Resources and Environmental Policy
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