

Rt Hon Robert Jenrick MP
Secretary of State for Housing, Communities and Local Government
c/o National Planning Casework Unit
5 St Philips Place
Colmore Row
Birmingham B3 2PW

15 October 2020

Dear Mr Jenrick

**West Cumbria Mining planning application: Woodhouse Colliery,
Whitehaven, Cumbria**

As independent experts with specialist knowledge in this area (listed at the end of this letter), we write to ask you to 'call in' this planning application for consideration and determination at national level.

On two occasions, in June and September 2020, we presented evidence to Cumbria County Council to express our deep concerns about this application. Both of these letters are attached as Annexes to this letter. In summary:

- The decision is in direct contradiction to the UK's legal obligations on climate change, namely the Climate Change Act and the Paris Agreement (see Annex 1).
- The decision is based on the assumption of the 'need' for coal for steelmaking. However there is strong evidence that the demand for metallurgical coal will reduce significantly over the coming decades, long before the proposed 2049 closure of the mine. (see Annex 2).

This planning application is of critical national importance and should be decided at national level.

Yours sincerely

Professor Paul Ekins OBE, *Director; Professor of Resources and Environmental Policy, UCL Institute for Sustainable Resources, University College London*

Dr. Pao-Yu Oei, *Head of Research Group CoalExit, Technische Universität Berlin*

Professor Michael Grubb, *Professor of Energy and Climate Change at University College London (Institute of Sustainable Resources & Energy Institute) and Hub Leader for Sustainability, ESRC Programme on Rebuilding Macroeconomics*

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Valentin Vogl, MSc, PhD student in steel industry transitions, Environmental and Energy Systems Studies, Lund University, Sweden

Professor Lars J. Nilsson, Professor of Environmental and Energy Systems, Lund University; IPCC lead author on industry in the 6th assessment report.

Dr Max Åhman, Associate Professor and Senior Lecturer, Environmental and Energy Systems Studies, Lund University

Professor Rebecca Willis, Professor in Practice, Lancaster Environment Centre.

Professor Mike Berners-Lee, Lancaster Environment Centre; director, Small World Consulting.

ANNEX 1

**Angela Jones
Minerals and Waste Planning
Cumbria County Council**

30 September 2020

Dear Ms Jones

West Cumbria Mining: Planning application (ref 4/17/9007)

Statement on the proposed 2049 end-date for this development

As independent experts with specialist knowledge in this area (listed at the end of this statement), we write to express our concern about your recommendation that the Planning Committee approve this proposal.

In particular, we do not agree that placing a condition on development, requiring the mine to cease operation in 2049, complies with the UK's legal obligations on climate change, namely the Climate Change Act and the Paris Agreement.

Climate change is driven by cumulative emissions of greenhouse gases, which stay in the atmosphere for decades or centuries. Correspondingly, a 2049 end-date is wholly inappropriate, for two reasons: first, it is in direct contradiction to the way that both the Climate Change Act and the Paris Agreement are designed; and second, it will hinder the ability of UK industry, particularly the steel industry, to innovate and decarbonise. We examine each of these below.

1. The UK's legal obligations on climate change: The Climate Change Act and the Paris Agreement

The Climate Change Act (2009, amended 2019) sets statutory limits on greenhouse gas (GHG) emissions from the UK economy, with an end goal of net-zero emissions by 2050. A crucial feature of the Act is the establishment of five-yearly 'carbon budgets', as advised by the Committee on Climate Change, and as agreed by Government and Parliament. These budgets are designed to establish a smooth trajectory for GHG reduction over the coming decades. In December this year, the Committee on Climate Change will publish its recommendation on the level of the Sixth Carbon Budget, covering the period 2033-2037. Budgets for the late 2030s and 2040s will be developed subsequently. In order to reach net-zero, each budget period will involve significant reductions in GHG emissions. Details of future budgets are not yet developed, but analysis by the Committee on Climate Change makes it clear that all sectors of the economy, including industry, will be expected to contribute to emissions reduction.¹

The 2050 date for net-zero is the end point in a process, not a sudden halt. Emissions in the years leading up to 2050 are just as significant. As GHGs

remain in the atmosphere for many years, it is the total, cumulative amount of GHGs that is of concern.

Under the Paris Agreement, the UK is legally obliged to work with other signatories to limit global average temperature rises to well below 2°C and pursue efforts to limit the temperature increase to 1.5°C. The February 2020 Court of Appeal Judgement on Heathrow Expansion explicitly recognised the Paris Agreement as Government policy. In order to limit global average temperature rises to 1.5°C, global emissions must peak by 2030 (sooner for the UK and other industrialised nations) and then decline rapidly after this date, according to the Intergovernmental Panel on Climate Change.²

Taking into account both the science of climate change, and the UK's legal obligations, therefore, it is clear that the 2049 end-date for the mine is a wholly inadequate proposal. Emissions in each and every one of the intervening years (ie from the opening of the mine until 2049) are just as important.

2. Emissions reduction from coal and steel

As described above, over the period to 2050, UK industry will need to continue to reduce emissions of GHGs. For steel, this will mean widespread use of technologies such as Electric Arc Furnaces (EAF) and Direct Reduced Iron (DRI) using natural gas; as well as adoption of new technologies such as hydrogen direct reduction (H-DRI). The Energy Transitions Commission states that “a complete decarbonisation of the steelmaking industry is achievable by mid-century”.³ However, it is also clear from the ETC report that this is not a foregone conclusion. An additional large-scale, low-cost, and stable supply of metallurgical coal in the UK is in our judgment highly likely to reduce the incentives for steel producers in the UK and EU to accelerate adoption of alternative low-carbon technologies.

In any event, however, it is not the case that the steelmaking industry will continue to use steady amounts of coal for the next thirty years, and then stop suddenly in 2050. The exact trajectory depends both on technological advances and climate legislation (such as a carbon price). However, it is expected that considerable progress will be made in the 2030s and 2040s, meaning that demand for metallurgical coal will decline rather than remaining steady.

Further, the demand for steel itself (and therefore coal) is likely to decline. For example, the Committee on Climate Change assumes a 30% reduction in steel use in UK under its scenario to achieve net-zero emissions.

For the reasons stated above, we consider that imposing a 2049 end-date on this development is both arbitrary and inadequate, and will hinder the UK's efforts to reduce GHG emissions. We would urge you to rethink your recommendation that this mine be approved.

Signatories:

Professor Paul Ekins OBE, Director; Professor of Resources and Environmental Policy, UCL Institute for Sustainable Resources, University College London

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ANNEX 2

Statement on the future need for coal in the steel industry

Submission to Cumbria County Council Development Control Committee, 12 June 2020

There is a [planning application \(ref 4/17/9007\)](#) currently before Cumbria County Council, for the development of an underground metallurgical coal mine.

The developers, West Cumbria Mining, state that coal from the mine will be needed for steelmaking throughout the fifty-year lifetime of the permission (i.e. until about 2070). West Cumbria Mining's planning statement says:

"Emerging technologies are capable of producing steel without metallurgical coal. However these technologies are in their infancy and, as Dr Bristow [the expert employed by West Cumbria Mining; [his statement is here](#)] explains, will not replace blast furnace steel production as the primary process for steel production for the foreseeable future, and indeed for the proposed life of the planning permission. Therefore, the production of steel in the quality and quantity that is likely to be required by society will require continued blast furnace production in Europe with the use metallurgical coal throughout the lifetime of the Proposed Development"

WCM Planning Statement p21, paragraph 4.2.11

West Cumbria Mining further state that if the planning application were refused (what they term the 'Do Nothing' Scenario) the same amount of coal would be used in existing or future steel works, so there are no additional greenhouse gas emissions caused by the use of the coal they intend to extract:

"in this case the use of the WCM coal produced by the Proposed Development would not, as assessed by AECOM [the consultants commissioned by WCM; their report is here] give rise to any additional environmental impacts above the existing baseline (of "Do Nothing") , because as explained in the AECOM Report (also evidenced elsewhere in the application documentation) it would simply be replacing coal that is already being used in existing steel works or else would otherwise be supplied from existing sources elsewhere for any future steel works. Based upon the evidence before it and upon the professional judgement of AECOM, the Proposed Development would not give rise to any additional effects as a result of its coal being burnt at steel plants. Any such effects would not be significant or materially different from the existing baseline should the proposed development not be granted planning permission" WCM Environmental Statement p5, paragraph 10 ii

As independent experts with specialist knowledge in this area (listed at the end of this statement), we do not agree with this position. In contrast, we state that:

1. Currently, 95% of primary steel is made in blast furnaces, using metallurgical (coking) coal⁴. Steelmaking is responsible for around 5-7% of global carbon emissions⁵.
2. Decarbonising the global economy, in line with the Paris Agreement to avoid dangerous climate change, will require a significant reduction in the amount of metallurgical coal used for steelmaking.
3. There are existing and emerging technologies which eliminate or reduce the need for coking coal. These include improving the process efficiency of blast furnace steel production; Direct Reduced Iron (DRI) using natural gas; recycling steel using Electric Arc Furnaces (EAF); and hydrogen direct reduction (H-DRI). Examples of innovation include Arcelor Mittal's Torero project, using biocoal to substitute for coal;⁶ and the Hybrit project, Sweden, using hydrogen in place of coal, which aims to produce fossil-free steel by 2026.⁷
4. The Energy Transitions Commission states that "a complete decarbonisation of the steelmaking industry is achievable by mid-century".⁸ Many steel companies have reduction targets – for example, Arcelor Mittal has pledged to reduce its emissions in Europe to zero by 2050. The Swedish company SSAB will cut emissions by 25% by 2025.
5. Given these developments, and the EU and UK's climate change commitments, we consider that the need for metallurgical coal in the European market will reduce very significantly in the next few decades, and will need to do so if the temperature targets in the Paris Agreement are to be met.

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¹ Net zero – The UK's contribution to stopping global warming, Committee on Climate Change, May 2019

² Intergovernmental Panel on Climate Change, 2018. Global Warming of 1.5°C. IPCC Special Report, 2018.

³ Energy Transitions Commission, July 2018, 'Reaching zero carbon emissions from steel', consultation paper

⁴ Energy Transitions Commission, July 2018, 'Reaching zero carbon emissions from steel', consultation paper

⁵ Energy Efficiency and CO₂ Reduction in the Iron and Steel Industry, European Commission, n.d.

https://setis.ec.europa.eu/system/files/Technology_Information_Sheet_Energy_Efficiency_and_CO2_Reduction_in_the_Iron_and_Steel_Industry.pdf

⁶ <http://www.torero.eu/>

⁷ <http://www.hybritdevelopment.com/>

⁸ Energy Transitions Commission, July 2018, 'Reaching zero carbon emissions from steel', consultation paper