

## Submission to Planning Inquiry for Woodhouse Colliery, Cumbria

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As independent academic experts with specialist knowledge on climate strategy and decarbonisation, we are writing to set out our position on the proposed Woodhouse Colliery development. In this statement we cover:

- 1) Our previous representations on this proposal;
- 2) The role of independent expertise in decision-making;
- 3) A summary of the grounds for our objection to the proposal, focussing on a) The implications of this mine for UK and global climate strategy; and b) decarbonisation of the steel industry.

### 1. Our previous representations on this proposal

Having become aware of the proposals for the mine in early 2019, we made representations in March and October 2019, stating that the proposed development was not compatible with UK climate objectives. In January 2020, we published a report, [The case against new coal mines in the UK](#), authored by us alongside two additional authors, Rosie Watson and Mike Elm; and published by Green Alliance.

We have also worked with other leading academics, including climate scientists and economists of high professional standing, to submit letters of objection to Cumbria County Council and to the Prime Minister, asking him to call in the application. [These letters are available here](#). In addition, we have been invited to provide independent expert commentary on the mine for a range of media including BBC local and national news, The Telegraph, The Guardian, The Independent, and foreign TV, radio and news websites, given the international attention on this issue.

In May 2020, as part of their resubmitted planning application, West Cumbria Mining (WCM) issued a [statement of response to the Green Alliance report](#), which was circulated to all relevant Councillors. We do not accept their account of our report, or the arguments put forward by WCM. In many cases, WCM made clear cut and indisputable factual errors. [We wrote to West Cumbria Mining and Cumbria County Council to highlight these concerns](#). In our response, we referred to independent evidence from academic and industry sources.

In summary, we had four serious concerns about their statement of response:

- **Expertise and evidence:** WCM questioned the expertise of the authors of the report despite their high professional standing and use of a wide range of evidence from industry and independent sources. In contrast, WCM claimed to have worked with other experts, yet they only named one: Dr Neil Bristow, and many statements made by WCM were not referenced. Dr Bristow may

have expertise in coal market issues but not on steel industry issues or climate strategy.

- **Misrepresenting our report:** WCM claimed inaccuracies in the Green Alliance report, including for example not recognising the difference between thermal coal and metallurgical coal (point 7), and not “accounting for the fact that emissions from steelmaking will... reduce in the future” (point 20). There are entire sections in the Green Alliance report discussing these issues that WCM claimed were not addressed.
- **Inaccurate summary of the UK’s climate change commitments:** WCM made a series of claims (e.g. points 13-19) about the legal responsibilities of the UK and individual companies on climate change matters. Many of these are wrong or misleading. An example of a misleading claim is that emissions occurring outside of the UK are not relevant, when in fact, under the terms of the Paris Agreement, such emissions are relevant and material.
- **Inaccurate summary of steel decarbonisation strategies:** Throughout their response (eg points 29-37) WCM disputed the evidence that we put forward for steel decarbonisation, claiming that coal from the mine will be required to produce steel over the next fifty years. However, this is not in line with the expert consensus from the steel industry itself, or from independent experts, who state that decarbonisation of steel is possible by mid-century or earlier. In setting out this position, we cited many industry and independent studies (see below).

In short, it is clear that this document from WCM was not balanced or accurate. We advised Cumbria County Council to seek advice from a range of independent experts. We are not aware that they have done so.

## **2. The role of independent expertise in decision-making**

In our involvement in the planning process for Woodhouse Colliery, we have been concerned about the way in which evidence has been assessed and used. In making decisions in the public interest, it is crucial to assess:

- The extent to which interested parties use evidence from independent experts, respected in their field – including climate science and policy, the steel and coal industries, and resource economics.
- Whether claims made are backed up by good quality data, evidence and research.
- To what extent different parties have a financial or other interest in promoting a particular argument.

As independent experts, our representations on the mine have followed these principles. We have worked on a pro-bono basis. In fact our work has been an unwelcome drain on our time, motivated by a desire to have a high quality assessment of the mine application, with the pros and cons clearly understood by decision makers. Having scrutinised the evidence carefully, as we summarise below, we have come to the conclusion that this mine contravenes planning policy and the UK’s commitments on climate change.

As we set out in [our response to West Cumbria Mining](#), we were disappointed that they did not follow these principles. Their attempted rebuttal of our evidence

contained many obvious factual errors, and many unsubstantiated assertions. We documented these in full in our response. Yet WCM has neither acknowledged these errors, nor corrected its argument. Conversely, WCM's response to our report contained no evidence-based challenges that could not be defended by ourselves with notably stronger and more credible evidence in return. WCM have not commented on the many flaws we exposed in their documentation.

### **3. Summary of our objections to Woodhouse Colliery.**

We have made our objections to Woodhouse Colliery clear in our submissions to Cumbria County Council, in various representations since 2019. We understand that all documentation previously submitted to Cumbria County Council will be taken into account in the Planning Inquiry process. We summarise our objections below: the contradictions with UK and global climate strategy; and the issues around decarbonisation of the steel industry.

#### **3.1 The implications of this mine for UK and global climate strategy**

Climate change is a global issue and concern, with a long-standing international framework of obligations including the Paris Agreement, on which the UK has sought to take a leading position and is urging other countries for stronger action at COP26.

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 last year, the Committee on Climate Change published its recommendation on the level of the Sixth Carbon Budget, covering the period 2033-2037. All sectors of the economy, including industry, will be expected to contribute to emissions reduction.<sup>1</sup> Government has now accepted the Committee on Climate Change's recommendation for a 78% reduction in greenhouse gas emissions by 2035.

We note that Cumbria County Council imposed the condition of a 2049 end-date for the mine, in an attempt to ensure compatibility with the UK's net-zero target. However, 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. 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. 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.<sup>2</sup>

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.

### **3.2 Emissions reduction from coal and steel**

As described above, over the period to 2050, UK industry, and the global steel industry, will need to continue to reduce emissions of GHGs. 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 on steel demand, technological advances, and climate legislation (such as a carbon price).

Carbon emissions from the steel sector can be reduced in three ways: through technological advances; more use of recycled steel; and reductions in demand for steel.

In terms of technological advances, there will be more 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). Examples of innovation include Tata Steel's H2ermes project, and the Hybrit project, Sweden, using hydrogen in place of coal, which aims to produce fossil-free steel by 2026. [The Green Steel Tracker](#) database, established by Lund University in Sweden, logs steel decarbonisation efforts. It notes that 75% of global steel production is now covered by a net-zero target, either national or company-wide, and that US\$30bn is being invested over the next decade. The pace of change is picking up, with many steel companies making announcements over the past six months, further weakening the case for new coal supplies.

Looking at reduced demand, the Climate Change Committee assumes a 30% reduction in steel use in UK under its scenario to achieve net-zero emissions by 2050, through greater efficiencies in use.<sup>3</sup>

As a result both of innovation and reduced demand, the need for metallurgical coal in the European market is likely to reduce very significantly in the next fifteen years: a published estimate combining these various factors projects that European demand for coal-based primary steel will roughly halve by 2035, and will need to do so if the temperature targets in the Paris Agreement are to be met.<sup>4</sup> The Climate Change Committee states that "Coking coal use in steelmaking could be displaced completely by 2035" in the UK.<sup>5</sup> The Energy Transitions Commission (ETC) states that "a complete decarbonisation of the steelmaking industry is achievable by mid-century".<sup>6</sup>

However, this is not a foregone conclusion. A sizeable new supply of UK coal, from the Cumbria mine, would create an incentive to maintain old coal-based steel plants, and reduce the incentives for steel producers in the UK and elsewhere to accelerate adoption of alternative low-carbon technologies.

### **4. Conclusion**

The UK's Climate Change Act is world-leading, as its commitment to steady reductions in greenhouse gas emissions in order to achieve net-zero emissions by 2050. However, targets do not reduce emissions by themselves. It is crucial for the UK to translate these targets into policies and actions across different sectors of the economy. As part of this there can be no place for a new development whose sole aim is to dig coal, the most polluting of all fossil fuels, out of the ground. If the mine were to go ahead, the burden on other economic sectors, including, for example, agriculture and transport, would be huge. Having assessed the evidence carefully, we urge you to refuse permission for the mine.

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

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

<sup>3</sup> *Net zero – The UK's contribution to stopping global warming*, Committee on Climate Change, May 2019, page 164.

<sup>4</sup> Vogl, V., M. Åhman, and L. J. Nilsson, 2021: The making of green steel in the EU: a policy evaluation for the early commercialization phase. *Clim. Policy*, **21**, 78–92, <https://doi.org/10.1080/14693062.2020.1803040>.

<sup>5</sup> Letter: Deep Coal Mining in the UK, Climate Change Committee, January 2021

<sup>6</sup> Energy Transitions Commission, July 2018, 'Reaching zero carbon emissions from steel', consultation paper.