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# Welsh Government Consultation – summary of responses

# Coal Policy in Wales

March 2021

Mae'r ddogfen yma hefyd ar gael yn Gymraeg. This document is also available in Welsh.

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## **Executive Summary**

Energy policy in Wales is focused on enabling the decarbonisation of the energy system. This involves both encouraging low carbon generation and reducing emissions from high carbon sources. The devolution, in the Wales Act 2017, of powers on petroleum extraction and authorisation of licences for coal mining, brought into sharper focus the need for Welsh policy on fossil fuels.

Welsh Government held a public consultation on the draft policy on coal in Wales, which ran from 1 July until 23 September 2020. The consultation document set out the Welsh Government's proposed policy objective to avoid the continued extraction and consumption of fossil fuels. The consultation sought views on the draft policy and provided an opportunity to provide additional evidence to inform the policy.

The draft coal policy is part of the Welsh Government's decisive shift away from the use of fossil fuels in order to tackle the climate emergency. The Welsh Government's policy objective is to avoid the continued extraction and consumption of fossil fuels. This position is also established in Planning Policy Wales, which places fossil fuels at the bottom of the energy hierarchy and states that proposals for opencast, deep-mine development or colliery spoil disposal should not be permitted. Where a local planning authority does not propose to refuse an application for coal and petroleum development, the authority must notify the Welsh Ministers.

## About the consultation responses

A total of 45 consultation responses were received. Respondents included: the owners of all mines operating in Wales; the main industrial users of Welsh coal; the UK's solid fuel trade body and coal merchants in Wales; representatives of the heritage rail sector individually, their UK association and the All-Party Parliamentary Group on Heritage Rail. The companies supplying speciality carbon markets provided their market intelligence. Responses included evidence submitted originally as part of the planning applications for coal mines in Durham, Northumberland and Cumbria, which post-dated the 2019 evidence report published alongside the consultation.

#### Overview of responses

The consultation responses from companies extracting coal or using coal considered the policy should reflect that indigenous coal was not used as a power station fuel. The final coal-fired power station in Wales closed after the consultation evidence was completed. However, the high value characteristics of Welsh coal has meant new market sectors have developed.

The majority of consultation responses acknowledged the transition to lower carbon fuels is inevitable and coal consuming industries must innovate and develop new options to replace coal. However, respondents raised concerns about the decline in coal production in Wales. The majority of responses said the coal available in Wales had properties their sectors required and that imports were less suitable and created higher emissions than Welsh coal.

A high proportion of consultation responses referred to the heritage steam railway sector, citing reports and evidence in articles in the steam railway press. The dominant view was that restrictions on coal extraction in Wales would shift dependence to imported coal, which respondents considered will result in higher emissions due to transport distances and poorer quality. The view that domestic production will have lower transport emissions compared to imports was reported by almost everyone.

A high number of responses questioned the Welsh Ministers' approach to indigenous versus imported coal. Coal mine operators and industrial consumers believe coal extraction is decided by a fixed demand for coal, predominantly using coal for the manufacture of steel. The evidence from an expert in coking coal and steel trading said coal is extracted based on contracted quantities of steel orders, so Welsh coal will be replaced by an equal amount of imported coal to Wales. However, the evidence from the expert community, including a number of economists, considered more extraction lowers prices and therefore increases demand, which causes emissions to go up.

The original evidence report and the UK Committee on Climate Change both flag the issues associated with movement of emissions offshore.

Some responses considered the decline in UK coal demand, as a result of power station closures and policies on domestic coal, was increasing prices due to the need to recover the fixed costs of operating a mine from a much smaller output.

There was broad agreement on the inevitability of the shift to low carbon fuels and reduced emissions in goods and services in all sectors. Businesses and local authorities with coal stakeholders in their regions believe coal, from Wales or overseas, will remain essential for the production of the cement and steel required for infrastructure, while these sectors work towards introducing low carbon technologies and methods of production. However, they consider more incentives to support communities and businesses to transition away from coal are still needed.

Non-industry groups feel a move to a low carbon economy, and specifically moving away from fossil fuels, provides additional opportunities for communities throughout Wales to develop renewable energy, in particular projects with community benefits.

## 1. Introduction and background

- 1.1 Energy policy in Wales is focused on enabling the decarbonisation of the energy system. This involves both encouraging low carbon generation and reducing emissions from high carbon sources. The devolution, in the Wales Act 2017, of powers on petroleum extraction and authorisation of licences for coal mining, brought into sharper focus the need for Welsh policy on fossil fuels.
- 1.2 Welsh Government held a public consultation on the draft policy on coal in Wales, which ran from 1 July until 23 September 2020. The consultation document set out the Welsh Government's proposed policy objective to avoid the continued extraction and consumption of fossil fuels. The consultation sought views on the draft policy and provided an opportunity to provide additional evidence to inform the policy.
- 1.3 The approach proposed was to make decisions on the specific circumstances of each case based on its impact, with the presumption being against extraction. Welsh Ministers would retain the option to consider authorisation in exceptional circumstances, based on evidence of contribution to Wales' global climate change emission reduction targets.
- 1.4 The consultation asked five questions that focused on the respondents' views of the evidence, the policy and any additional evidence available.

# 2. Responses to the Consultation

- 2.1 We received 45 responses to the consultation. The majority of responses were submitted online, with fewer responses submitted via email with the consultation form attached. No responses were submitted in Welsh.
- 2.2 Welsh Government officials also met respondents who wished to discuss specific issues they raised in responses. For clarity, in some cases evidence provided in response to one question has been considered as part of another section where it was more relevant. All responses were reviewed and analysed to develop the themes set out in this document.
- 2.3 Some of the information contained commercially sensitive information, provided in confidence. We have respected this confidence. The Welsh Government would like to thank stakeholders for their constructive and useful contributions to this process.

# 3. Question 1: the policy context and evidence base for Wales' policy on coal

3.1 The first part of the consultation set out the policy context in which the policy statement was developed, and summarised the evidence from a review

commissioned by Welsh Government, which was completed in late 2019. Respondents were asked "What additional factual reports should be taken into account as part of the evidence base for Wales' policy on coal?"

3.2 The full list of references to evidence cited by respondents is at Annex 1. Evidence related to two principal themes. One was the issue of the need for new coal, and the pros and cons of Wales based extraction versus imported coal. The other issue was the challenges faced by the heritage rail sector because of declining overall demand for coal and the resulting reduction in domestic supply.

#### The case for new extraction

- 3.3 Evidence was presented confirming both demand and UK supply is falling. For example, a response referenced the Shotton and Bradley coal mines, owned by Banks group, which ceased coaling in the middle of 2020.
- 3.4 A number of respondents referenced two coal mine applications in Durham and Northumberland, which the Secretary of State for Communities & Local Government, Robert Jenrick, refused in September 2020. The Secretary of State considered "both cases raise issues in respect of whether greenhouse gas emissions resulting from the burning of coal extracted at the developments are a substitute for the greenhouse emissions that might in any event otherwise arise from burning imported coal; and whether there is a national need for coal and, if so, the extent of that need." Further views on the need for extraction were provided in response to other questions.
- 3.5 The publication "The Case Against New Coal Mines: Green Alliance" (January 2020) was referenced in these coal mine applications. The report states "There is a need for a consistent strategy around fossil fuel extraction and use in the UK. The imperative to reduce the risks of climate change, and to meet targets set both nationally and internationally, means that there should be a moratorium on new extraction projects."

<sup>&</sup>lt;sup>1</sup> https://www.green-alliance.org.uk/resources/The case against new coal mines in the UK.pdf

#### The Heritage Rail Sector

- 3.6 A high proportion of consultation responses to Question 1 referred to the heritage steam railway, citing reports and evidence in articles in the steam railway press. This sector consumed more than 26,000 tonnes of coal in 2018. The dominant view was that if Welsh mines are not granted licences for new mines or extensions to existing mines then supplies from overseas will be essential. Respondents considered the transport of coal to the UK and poorer quality coal will result in higher emissions.
- 3.7 The continuing decline in both demand and supply, particularly if a moratorium on new projects accelerates matters, is likely to present an issue for the heritage rail sector. Respondents provided evidence describing the benefit from tourism income from the sector and how it supports the Welsh language by maintaining local employment. The response from the Heritage Railway Association referenced the All Party Parliamentary Group on Heritage Rail report "Steaming Ahead?" published in July 2019, which considered heritage railways will struggle to find alternative sources of supply if the closure of British opencast sites is as rapid as forecast.
- 3.8 Thomas Bright's article in Steam Railway magazine<sup>2</sup> states "Any coal ban would naturally hasten that decline, but with domestic coal production now almost negligible, and the mines which supply the preservation sector expected to close within the next decade, we face the distinct possibility of being totally reliant on imports in the near future."
- 3.9 In the same article Chris Price, general manager of one of preservation's single biggest consumers of coal, the North Yorkshire Moors Railway, adds: "In my opinion, the days of having a favourite coal are gone. If it's black and we can use it to make steam then we will use it, and adapt to do so". Some heritage respondents considered reducing imported coal would reduce global emissions, bring jobs to Wales and retain more value within the country than buying imports.

#### **Welsh Government Response**

Britain's reliance on coal for electricity has dropped from 70% in 1990 to less than 3% today. Demand for coal is continuing to decrease, due to challenging abatement requirements and the development of low carbon alternatives.

Whilst the additional evidence was useful, it did not contain any information that significantly changed the analysis underpinning the draft policy. Welsh Government supports the view expressed by some that additional extraction will only serve to delay the need to change to low carbon options where they already exist. Friends of the Earth Cymru quoted the January 2020 report from Green Alliance. That said new mining would hinder the development of low carbon alternatives to conventional steel production. We will explore to what extent the demand for coal from non-power sectors, where there is no alternative solution, can potentially be supplied from Wales' existing mines and coal stocks.

<sup>&</sup>lt;sup>2</sup> March 2019 Issue 490

# 4. Question 2: Accelerating the low carbon transition whilst improving prosperity

4.1 The next question asked "What other levers or actions could be taken to accelerate the low carbon transition whilst improving prosperity?" A number of consultees considered alternatives to some uses of coal were already available, but other areas would require significant innovation and investment.

## Reducing demand for coal

- 4.2 Natural Resources Wales suggested "To be truly globally responsible, it would be better to reduce our current dependence on coal, and a managed transition is required for the key industries that currently rely on coal as fuel sources to complement the effective implementation of the policy approach set out in this consultation document." They considered there is a case for replacement of coal heating.
- 4.3 A common theme was the perspective that it would be more effective to focus on reducing the demand for fossil fuels rather than limiting production. This was supported by the views of one coal mine operator in England, who considered "The focus on policy and taxation should be on the consumers not producers. Without this approach in the UK any policy measures will focus on the wrong drivers and will invariably lead to higher GHG emissions elsewhere through offshoring."

#### **Need for Innovation**

4.4 The Mineral Products Association (MPA) represents 530 members in the UK, the vast majority of which are independent SME quarrying companies. Cement is a key industry and the Association says considerable work and investment in novel technologies will be required to entirely switch away from using coal. ERI Reclamation made a similar observation that replacing coal in cement manufacture has reached its technical limits in the short term. Respondents considered the use of novel technologies like hydrogen and plasma in cement production are still 10-20 years away from widespread commercial deployment. Pembrokeshire County Council suggested stakeholders need to commission further research on how to reduce coal use in steel production.

#### Improving prosperity

4.5 Celtic Energy, the owners of Nant Helen mine, said the coal policy must encourage inward investment to create jobs and the creation of new Welsh businesses with strong foundations in innovation and developing products in sustainable sectors, such as the Global Centre for Rail Excellence, in which they are a development partner.

- 4.6 Energybuild, the owner of Aberpergwm mine in Glynneath, felt a scheme should be set up to allow the payment for the removal of CO<sub>2</sub> from the air, in parallel with carbon pricing. Energybuild suggested an industry of carbon removal could be established, making coal extraction carbon neutral.
- 4.7 The British Geological Survey proposed redeploying coal assets. Closed mines can provide low temperature geothermal energy for heat use, which will reduce GHG emissions from heating buildings.

## Other ways to speed-up the transition

- 4.8 ERI, experts in reclamation management of coal mines, proposed "the coal policy should indicate a preference for sources of coal that bring the greatest ancillary benefits i.e., improved prosperity for Wales, such as coal reclaimed from colliery tips where restoration utilises best available technology."
- 4.9 The Mineral Products Association said any new coal policy should consider how industry can be supported to remain competitive and still transition away from coal. This might include support for increased use of biomass and hydrogen.

## Welsh Government response

We agree both supply and demand must be reduced, to achieve change as quickly as possible. We agree with many businesses in the coal supply chain that a reduction in emissions is essential for businesses using coal to survive. Switching away from coal will deliver multiple benefits including improving the health of communities. The Welsh Government will continue to encourage coal sellers and coal buyers to find creative solutions and new models that provide a long term future beyond coal.

# 5. The Welsh Ministers' approach to indigenous vs imported coal

- 5.1 Section 3 of the consultation set out the proposed policy, including Ministers' views on the global impacts of decisions on coal extraction. The Welsh Ministers consider domestically produced coal used within Wales increases global climate change impact, as the coal which would have been imported into Wales will likely be consumed elsewhere. Question 3 asked "Do you agree with the Welsh Ministers' approach to indigenous vs imported coal?"
- The majority of responses were to this section of the consultation. Overall, the majority of individual responses disagreed with the Ministers' view in the consultation, but did not provide additional evidence to justify their stance. However, more than 70 economic experts, in a single collective response, considered an expansion in coal supplies will lead to an increase in greenhouse gas emissions in both the short and long term.

#### The economics of the coal market

- 5.3 The evidence from coal mine operators referred to 'proof of evidence' statements that UK mines will offset extraction overseas. These referred to evidence related to unsuccessful coal mine applications in England during 2020. H J Banks' response to this consultation considered the driver for use of coal is consumption not production, suggesting businesses use coal because it is needed to produce products or energy to satisfy demand, not because it is 'available'.
- A number of responses referenced evidence<sup>3</sup> from Dr Neil Bristow, a professional and expert in steel, iron ore, coal and ferro-alloy markets, submitted in support of an application from West Cumbria Mining (WCM). He considered it most likely that the extraction of WCM coal would offset the extraction of metallurgical coal elsewhere, most probably leading to a reduction in the extraction of an equivalent grade of metallurgical coal.
- 5.5 ERI Reclamation undertakes colliery tip reclamation schemes and provided a 2019 paper titled "Does the U.S. Export Global Warming? Coal Trade and the Shale Gas Boom" which examines the effect of the U.S. boom on the global trade and consumption of coal and CO<sub>2</sub> emissions. The paper states that U.S. coal exports simply displaced other coal without affecting global CO<sub>2</sub> emissions"
- 5.6 However, 73 economic and natural resource academics wrote to the Minister collectively during the consultation, to make clear the connection between opening new coal mines in the UK and an increase in UK and global greenhouse gas emissions, almost double the individual responses.

### **Environmental protection standards**

- 5.7 The British Geological Survey cautioned that the true environmental cost of imports needs to be clearly understood, saying Ministers should be aware that a policy which relies on imported coal will result in environmental impacts and obligations associated with its extraction and processing being 'offshored' to other countries, which might not always have the same high standards of environmental regulation for coal extraction and processing as Wales. A few respondents supported the case that if the coal is local, we can control how it is extracted and managed, and the damage to our environment can be mitigated.
- 5.8 The Mineral Products Association (MPA) believes the lack of consumption-based emissions accounting, including emissions embodied in imports to the UK, means that UK targets could be met through the offshoring of industry. They consider it vital the UK takes responsibility for the emissions it consumes and not just the emissions it produces in the UK.

<sup>&</sup>lt;sup>3</sup> https://www.westcumbriamining.com/wp-content/uploads/Part-8.-Statement-of-Response-to-Green-Alliance-Report.pdf Attachment 2 Page 29 - WCM RESPONSE TO GREEN ALLIANCE REPORT APRIL 2020 -

#### **Climate impacts**

- 5.9 The evidence that domestic production will have lower transport emissions than imports was a repeated theme. The MPA concedes that it is possible that coal imports that are displaced by domestically produced coal might just be consumed elsewhere, but transport emissions are lower. The All-Party Parliamentary Group on Heritage Rail considered importing coal adds significantly to carbon emissions through the transport by rail and ship.
- 5.10 Caerphilly County Borough Council believed the policy supports Planning policy and practical measures set out in *Prosperity for All A Low Carbon Wales*, saying the proposed policy appears logical in adhering to the regulatory approach in Planning Policy Wales, whilst setting climate change emission targets as the major consideration for "exceptional" proposals submitted under the planning system, and for the coal licencing regime. Caerphilly considered the context of a climate emergency appears to raise the bar of the existing policy, concluding "It is difficult to disagree with this approach given the importance of the climate change agenda, but much will therefore be required in terms of developing alternative solutions for industry."
- 5.11 Natural Resources Wales' (NRW) reply was positive towards the policy, and believed reducing demand is essential. Even though Wales cannot manage the environmental impacts of overseas extraction, NRW supported the presumption against extracting further coal in Wales. NRW asked for clarification of the exceptional circumstances under which coal extraction might still be supported, in order to provide certainty and transparency to stakeholders.

### Welsh Government response

There appears to be no decisive evidence about the influence of supply or demand on global coal consumption. We consider, as a globally responsible Government, we must address both as far as our policy levers permit, minimising further extraction in Wales and reducing consumption. There is no consensus on the emissions associated with indigenous versus imported coal as the scale, nature, coal markets, and therefore impact of individual mines varies considerably. Therefore a precautionary approach is reasonable. This would support the previously proposed position, which is for Ministers to consider future applications on their individual merits.

## 6. Support for the transition away from coal

This section of the consultation discussed encouraging industry to find alternative agents to coke or coal-based fuels, to ensure the longevity of businesses that are currently carbon intensive, and to finding alternative sources of heat. The consultation asked "Is the draft policy appropriate, considering our commitment to support communities and businesses through the transition away from coal?"

- 6.1 The British Geological Society noted Welsh coal has been the key supply for several significant industrial consumers. If the supply chain is to be changed from indigenous production to imported coal, which may have different specifications and serve different markets, the true economic cost should be factored in.
- 6.2 Celtic Energy considered a transition away from coal, particularly in steel and cement, will need more time. Bryn Bach, the owners of Glan Lash mine in Carmarthenshire, believed the policy's emphasis was wrong and the Welsh Ministers' aims can be achieved by supporting business. The draft Coal Policy should prioritise the transition away from the use of coal, which will then lead to a natural cessation of coal extraction in Wales. Bryn Bach Ltd believed the Coal Policy should support businesses to transition away from the most polluting bituminous coals. Their response considered the draft Coal Policy should allow for the mining of anthracite as a smokeless fuel and especially where the use "will not involve the emission of particulate matter, noxious gases and carbon into the atmosphere".
- 6.3 The Coal Merchants Federation believe the intention of the Clean Air Plan to stop the burning of house coal will raise prices and increase fuel poverty. The Federation considered the coal policy could harm the 70 plus coal merchants businesses in Wales who supply approximately 1,000 customers each.
- Responses also said the impact of the coal policy on the water filtration market needed further consideration. Western Carbon, who supply water treatment works in the UK, say Wales is the last place in Europe to mine low density anthracite used to manufacture anthracite filter media, a vital requirement for the UK water utilities. The UK requirement for anthracite filter media is approximately 6,000 tonnes per year. The Drinking Water Inspectorate (DWI), which monitors and enforces water quality regulations on behalf of the Department for Environment Food and Rural Affairs (Defra), acknowledged Welsh suppliers are selling to the water treatment market.
- 6.5 The heritage rail responses showed concern about the impact on their own and wider communities. The heritage railway industry did not consider there were alternatives to coal for the sector. Paul Lewin from the Ffestiniog Railway considered if supplies of Welsh coal continue then "these are more likely to result in the careful use of the correct coal rather than alternatives."
- 6.6 A few respondents suggested further clarification in the policy on exceptional circumstances, particularly where there is further need to support the transition. In particular, end uses not involving burning coal should be viewed more favourably.
- 6.7 Carmarthenshire County Council said a policy which seeks to stop all coal production with immediate effect, unless wholly exceptional circumstances apply, is not reflective of demand. They pointed out the Welsh Government coal policy evidence considered TATA to be critical to the local economy and needing time to transition.

- 6.8 Carmarthenshire disagreed with a blanket ban and considered the policy should set out the criteria which would need to be met in order for permission for coal extraction to be granted. The Council said a criterion-based policy would make it clear to both businesses and communities what needs to be addressed and would be a more positive guide through the necessary transitional period. Carmarthenshire Council proposed a 10 year period for the mining of coal for important industrial uses whilst industries prepare to move away from coal in industrial processes such as steel making.
- 6.9 Merthyr South Wales, the owners of Ffos y Fran mine, said the coal policy should make clear that coal extracted for use in industrial processes (i.e. non-energy uses) can continue. Respondents emphasised the Welsh steel industry supplies nearly 2,000 customers across the UK including those "essential during the ongoing Covid-19 crisis (food and beverage packaging, public sector, construction and infrastructure) as well as to those sectors, such as automotive, which will play a critical part in the UK's economic recovery, when the crisis is over."

#### Welsh Government response

The draft policy recognised the transition away from coal will happen at a different pace in different sectors. The policy also acknowledges there are economically important industries that still need coal. We agree the coal policy should recognise there are different types and uses of coal. We also acknowledge the transition away from coal will have impacts on current business models and practices, which are already under pressure from global and UK wide changes. Given the clear move away from coal for thermal uses, there is already doubt over the future of indigenous mines where they rely on selling thermal coal as part of their business model. We have seen no evidence of the continuing need for coal use for energy purposes. We do see the continuing need for coal for a number of industrial processes and non-energy uses.

## 7. Wider evidence for consideration

The final question in the consultation document asked respondents to provide evidence on any issues not included in the previous questions, including a view on impact on the Welsh language.

- 7.1 Councils and consultants referenced the existence of some 2,000 coal tips across Wales, monitored by a combination of local authorities, the Coal Authority and Natural Resources Wales. Some are owned privately, others by the authorities themselves. Of these, more than 60 are categorised as being most at risk. Torfaen County Borough Council raised the matter of restoration of previous coal areas and the increases in extreme weather events, which has resulted in slippage of coal tips.
- 7.2 Respondents considered coal restoration schemes, creating significant environmental and ecological benefits on a sustainable basis, will not be realised

without allowing for the recovery and sale of coal. Respondents considered colliery spoil reclamation can help to fulfil many other policy objectives for Wales. Councils consider the approach reflected in the current draft of the Policy will not allow a path to achieving the many benefits of reclamation schemes.

7.3 Natural Resources Wales suggested carbon pricing might have a role, highlighting carbon pricing as the main driver for fuel substitution in cement production. To complement any new policy for coal extraction, NRW believe further incentives will be required to reduce the carbon footprint from energy use in coal dependent industries as part of the response to the climate change emergency. This could be explored as part of a wider Green Recovery from the impacts of the Covid-19 pandemic.

#### **Welsh Government response**

A number of respondents raised the issue of coal tips. Although this was not included in the consultation, recent impacts of flooding on coal tips means this is a live issue, with some proposals to fund restoration of unstable tips by reusing the residual coal. However, use of this coal for energy purposes would not be consistent with climate targets and would result in much greater future cost from climate impact. The Coal Authority has been working with local authorities to identify all coal tips across Wales and over 2,000 tips have been identified to date, of which over 85% are based in the South Wales Valleys. Work continues to cleanse and validate the data, which will provide a new asset database of coal tips in Wales.

The key priority for the Welsh Government is the safety of our communities and our primary focus has been to put in place a programme of inspections of high risk tips carried out by the Coal Authority and local authorities and for any urgent and emergency works to be undertaken. This has provided a better understanding of the scale of the risks, the work needed to eliminate those risks and the ongoing arrangements for minimising the risks to the extent it is possible to do so. However, there is more work to do and we will be considering potential options for the remediation of coal tips, where this is possible and in line with Welsh Government policies can provide social, environmental and economic benefits to Welsh communities.

#### Annex 1

#### Additional evidence

Respondents were asked to provide any additional evidence to support their views of the Consultation. A large number of responses have provided further evidence, outlined below.

The MPA provided a correction to Welsh Government's evidence. The MPA quoted the CO<sub>2</sub>e emissions given for 2019 in the EU Emissions Trading System for the two plants operating in Wales: Aberthaw CO<sub>2</sub>e emissions were 365,472 tonnes and Padeswood emissions were 478,483 tonnes.

https://www.banksgroup.co.uk/mining/need-for-coal/

https://static1.squarespace.com/static/59f1c5ec51a58457c01eaed0/t/5d3ae3e3b1b9770001a03658/1564140536632/Coal

The Department for Environment Food & Rural Affairs: - "Call for Evidence on Domestic Burning of House Coal, Smokeless Coal, Manufactured Solid Fuel & Wet Wood 2019"

The Department for Environment Food & Rural Affairs: - "Air Quality Briefing for Directors of Public Health" & "Clean Air Strategy 2019"

International Council on Mining & Minerals: - "Tackling Modern Slavery in the Mining Supply Chain 2016"

https://www.kateraworth.com/doughnut/

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/894939/Coal June 2020.pdf

House of Commons Briefing Paper Number 07317 2nd January 2018 on UK Steel Industry Statistics and Policy <a href="https://commonslibrary.parliament.uk/research-briefings/cbp-7317/">https://commonslibrary.parliament.uk/research-briefings/cbp-7317/</a>

#### https://www.hra.uk.com/coal

The Production Gap: The discrepancy between countries' planned fossil fuel production and global production levels consistent with limiting warming to 1.5'C or 2'C, United Nations Environment Programme, Nov 2019

Prof Ekins Nature 517 The geographical distribution of fossil fuels unused when limiting global warming to 2 °C https://www.nature.com/articles/nature14016

https://www.itm-power.com/news/european-commission-announces-hydrogen-strategy-energy-systems-integration-strategy-and-clean-hydrogen-alliance

The Department for Environment Food & Rural Affairs: Call for Evidence on Domestic Burning of House Coal, Smokeless Coal, Manufactured Solid Fuel & Wet Wood

IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels https://www.ipcc.ch/sr15/

Committee on Climate Change Net Zero Call for Evidence, April 2019

A map of sites producing grey Portland Cement is available at the link below. Coal is only used at the kiln sites and not at the grinding and blending sites. <a href="https://cement.mineralproducts.org/cement/manufacture/location">https://cement.mineralproducts.org/cement/manufacture/location</a> of mpa members cement plants.php

Options for switching UK cement production sites to near zero CO<sub>2</sub> emission fuel: Technical and financial feasibility.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/866365/Phase 2 - MPA - Cement\_Production\_Fuel\_Switching.pdf

Mineral Products Association, Cement roadmap

https://cement.mineralproducts.org/documents/MPA Cement 2050 Strategy.pdf (soon to be updated with a net zero roadmap that will also highlight fuel switching as a key part of decarbonising the sector)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/416674/Cement\_Report.pdf

https://www.theccc.org.uk/publication/biomass-in-a-low-carbon-economy/

'Research into the failure to restore opencast coal sites in south Wales' prepared for the Welsh Government by ERM (April 2014).

The 'Best Practice Guide on Restoration Liability Assessments for Surface Coal Mines (February 2016)' published by Welsh Government and The Coal Authority.

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#### RE: The implications of new UK coal mines for greenhouse gas emissions

Dear Ministers,

We the undersigned, including economists and natural resource experts, are writing to make clear the connection between opening new coal mines in the UK and an increase in UK and global greenhouse gas (GHG) emissions. This is to correct assertions by those proposing such developments that new UK coal mines will have no effect on, or even decrease, global GHG emissions.

Over the past 18 months, coal mining companies, local authorities and even some government ministers have claimed that coal from these new UK mines would substitute for coal which would otherwise be imported from abroad, so that opening these new coal mines in the UK would be 'carbon neutral' or even offer 'carbon savings'. See Appendix 1 for examples of this claim. We call this claim the 'substitution error'.

We write here to correct this error, and to explain on the basis of the well-accepted economics of natural resources that:

- 1. The expansion of the global coal supply will, in the absence of market features for which there is no evidence in respect of demand for coal, lead to downward pressure on the price of coal and an increase in demand for it.
- 2. This downward price pressure will worsen the competitive position of those developing coal-free technologies in such currently carbon-intensive industries as steel and cement
- 3. The result of these economic forces is highly likely to be an increase in GHG emissions in both the short and long term.

For expansion on these arguments, see Appendix 2,3 and 4: Letters by Professor Paul Ekins to three UK planning authorities involved in the potential permitting of new UK coal mines.

We are extremely concerned that acceptance of the 'substitution error' is in danger of influencing important decisions on coal at a local and national level that will lead to an increase in GHGs, put the UK's net-zero targets at risk (some of these proposed new mines are projected to be producing beyond 2050) and damage the UK's standing as a world leader in phasing out coal. This would be particularly unfortunate as the UK prepares

for COP26 in 2021, a major objective of which must be to persuade other countries to turn away from this most polluting and GHG-intensive of fossil fuels.

We hope that we can count on you to reinforce the UK's position as a world leader in decarbonisation by making clear that new coal mines have no place in the UK, and look forward to your response.

Yours sincerely,

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