UK Health Alliance on Climate Change Response to the UK Government open consultation ‘Coal Generation in Great Britain: The pathway to a low-carbon future’

General comments

The UK Health Alliance on Climate Change welcomes this opportunity to respond to the open consultation. The Alliance exists as a collaboration of Britain’s major health associations, including the British Medical Association, the British Medical Journal, the Faculty of Public Health, the Faculty of Sexual and Reproductive Healthcare, The Lancet, the Royal College of Anaesthetists, the Royal College of Emergency Medicine, the Royal College of General Practitioners, the Royal College of Nursing, the Royal College of Obstetricians & Gynaecologists, the Royal College of Paediatrics and Child Health, the Royal College of Psychiatrists, the Royal College of Physicians and the Royal Society of Medicine. The UK health profession has a vital part to play in driving a joined-up response to address air pollution and climate change, two major public health challenges.

Catalogue of consultation questions

Consultation Question

1. Do you have any views and evidence on the options outlined above, including on relative benefits and risks? Are the principles above a sound basis for designing a regulatory approach?

We applaud the UK Government and the Department for Business, Energy and Industrial Strategy (BEIS) for its commitment to phase-out unabated coal by 2025, and for the thousands of lives it will save from improvements in cardiopulmonary health. Ending unabated coal by 2025 is one of the six core recommendations outlined in our recent report, ‘A Breath of Fresh Air’, published last October.

We agree with the report’s findings about the substantial health and societal benefits available to the UK from interventions that simultaneously address air pollution and climate change. Coal-fired power impacts health directly, contributing to air pollution and leading to higher rates of ischaemic heart disease, stroke, lung cancer, and the exacerbation of chronic lung disorders. As a major driver of climate change – both in the UK and around the world – coal also damages human health indirectly, increasing the frequency and severity of extremes of weather like floods and heatwaves; altering the pattern and distribution of infectious disease; and threatening the environmental determinants of health that underpin our patients’ wellbeing.

As outlined in the consultation document burning coal produces a number of air pollutants including nitrogen oxides (NOx), sulphur dioxide (SO2), heavy metals such as mercury, and particulate matter (PM) – all of which are dangerous for human health.
However, neither the consultation document nor the impact assessment fully capture the health impacts of coal-combustion, or the health co-benefits of a phase-out of coal-fired power. The effects of air pollution disproportionally impact those in our society who are most vulnerable, in particular, children and those already suffering from chronic illness. Of particular concern, air pollution from coal-fired power has also been linked to low-birth weight and preterm delivery as a result of maternal exposure. To this end, estimates suggest that coal-fired power is responsible for an additional 2,900 deaths every year in the UK, and an additional £6.7bn in costs to the NHS\(^1\). The consultation document rightly considers the impact of the phase-out on the electricity system and on providing investor certainty to enable them to invest in renewable energy sources. However, the rationale should place stronger emphasis on the health dimensions of the decision, which come with tangible and immediate effect. A full consideration of the health co-benefits of decarbonising the UK’s energy system will provide a more compelling argument in favour of the intervention, and demonstrate the UK’s leadership in implementing cross-sectoral policies that deliver clean energy, tackle climate change, and improve public health.

We believe that it is imperative that policies to address this common driver of ill health are implemented as a matter of urgency. Not only is this vital for the health of the general population, but it will also unlock significant health benefits and costs-savings for the NHS and the wider economy.

With reference to the Impact Assessment published alongside this consultation, do you have any views and evidence on the impact of these proposals? Are there alternative approaches that meet the objectives of closing unabated coal generation?

N/A

Under option 1, do you have any views on the proportion of generation capacity on which CCS demonstration should be mandated?

N/A

Do you have any evidence or analysis on the impact of these proposals on the likelihood of generators moving to higher levels of biomass co-firing?

We are concerned about the health implications of a transition from coal-fired power to higher levels of biomass co-firing, as such an approach runs the risk of transitioning to new technologies that have fewer societal benefits, and which are less likely to tackle the pressing original concerns of reducing air pollution and greenhouse gas emissions.

Compared to solar and wind power, the technologies and processes associated with biomass (from sourcing the fuel to its combustion) result in higher levels of greenhouse gas emissions and harmful pollutants such as NOx and PM. This makes it a less-than-ideal transition fuel, and serious consideration should be given to the potential direct health impacts from biomass co-firing. In the long-term, there is a clear public health imperative to transition from coal-fired power to renewable sources of energy, most notably in wind and solar power.

We believe that attempting to achieve this transition without investment in wind and solar power, and reducing the health risks associated with biomass, would be a missed opportunity for both public health and climate change.

The UK Government made the mistake of not connecting public health and climate change imperatives in the past, when it encouraged diesel road transport – it should be weary of making a similar misstep here.

**Might there be any unintended consequences for other forms of generation? Are there better alternatives, and if so, why? If so, do you have any evidence to support your suggestions?**

To this end, it is equally concerning that the consultation document and the Impact Assessment place heavy emphasis on gas as a central replacement option for coal.

Whilst gas does provide emissions reductions advantages over coal-fired power, and there is clearly a cautious transitional role for it in the UK energy mix, the Government should take advantage of the opportunity to maximise health in the long-term, and minimise the extent to which gas acts as a replacement for coal-fired power.

There are health and air quality impacts to be considered from gas-fired power stations, including from NOx, SO2, and ground-level ozone. Emphasising the need to replace coal with cleaner alternatives such as solar and wind power would send a clear signal to investors and lead to a safer transition to net-zero electricity generation.

The transition to low-carbon electricity generation is a clear first step as part of the UK’s commitment for an 80% emissions reduction by 2050. Being a leader in phasing-out coal will enable us to champion similar transitions around the world, and demonstrate the enormous health benefits available. On this basis we urge BEIS to redouble on its efforts to phase-out coal, and couple them with a push to substantially increase the use of renewable and clean energy sources, rather than simply defaulting to biomass co-firing or gas.

**Do you have any views or suggestions on the date in 2025 from which the proposed obligations should take effect?**

No level of climate change or poor air quality is safe for human health. Hence, the phase-out of coal-fired power should take effect as soon as is feasibly possible.
BEIS own assessment suggests that ending unabated coal-fired power by 2022 is a realistic target, and we hence urge the UK Government to take all necessary measures to ensure coal-fired power stations are progressively closed from present-day up until 2025, avoiding a delay up until the final year of the target deadline. To do otherwise would be to risk the lives and health of local communities.

The consultation document makes it clear that many of the UK’s coal-fired power plants are likely to close in the near-term, as ongoing investment are already required for many of them to remain operational whilst complying with appropriately strengthened pollution standards.

Given the major public health benefits to be gained from an earlier retirement date, and that BEIS’s own estimates of the electricity market demonstrate that all coal-fired power plants will be closed for financial reasons by 2022, we urge the Government to more thoroughly assess the possibility of setting a more ambitious deadline, placing obligations on the phase-out of unabated coal, earlier than 2025.

2. Do you agree with the principle of establishing a constraint on coal generation in the years ahead of 2025?

Have you any views on how a constraint might be implemented, including on whether a constraint should be applied uniformly to each plant or across the fleet of generators, and any supporting evidence?

We support any mechanism that will help facilitate a phase-out of coal-fired power at the earliest possible date. As long as coal-fired power plant stations remain open, even at low capacity, they continue to harm the health of the British public directly through air pollution, and indirectly through climate change.

The BEIS consultation document should fully integrate the Government’s impact assessment’s findings, including the projected economic savings that result from improved wellbeing and air quality and the “total carbon costs” reductions. The consultation document fails to mention the ‘unquantified benefits’ linked to a constraint on coal generation from 2023 onwards, described in the impact assessment, which include more rapid reductions in UK net emissions. We urge BEIS to integrate the consideration of these benefits in to the decision of imposing a constraint in years ahead of 2025.

We would welcome views and supporting evidence on the level of constraint and time from which might it apply, including the impact on Capacity Market commitments.

See our response to the following question.

Have you any views on the extent to which a constraint might affect coal plants’ ability to participate in the Capacity Market?

We believe that BEIS’s overall approach to the national energy mix should be designed to limit the participation of coal-fired power in the Capacity Market.
We are concerned that several coal-fired power plants have bid into the 2020-2021 auction, and have already won contracts. We are equally concerned that the consultation document states that coal-fired power plants would be permitted to bid for three-year refurbishment contracts up to 2022-2023, ‘provided they meet the investment thresholds’.

To allow such mechanisms to extend the half-life of coal-fired power plants would risk implementing a policy that conflicts with its own stated objectives and with the actions of other parts of Government.

Regardless of the policy alternatives selected, BEIS should look to maximise the health and environmental benefits available, and must incorporate a more complete health impact assessment.

**Are there alternative ways of delivering the objective of phasing out coal generation by 2025 without negative impacts on the security of supply?**

N/A

3. **We would welcome comment on our proposals. What are the positive and negative aspects of the Secretary of State retaining powers to be able to temporarily suspend the closure date or constraint in previous years if he believes this is justified?**

We accept the Government’s argument that the security and reliability of the UK’s electricity supply is an important and central consideration.

However, while accepting this sensible provision, expert consensus and the analysis carried out by BEIS, make it clear that energy security will not be threatened by the closure of coal plants. We therefore recommend that use of this provision should be made with great caution, taking care to avoid the perverse temptation to allow coal-fired power plants to remain open indefinitely.

**If such a measure were introduced how might it be best designed to minimise the impact on the investment climate for new capacity?**

N/A

**Does the assessment of future build rates summarised above and in the Impact Assessment published alongside this consultation represent a reasonable benchmark against which the closure of coal can be assessed?**

N/A

**With reference to the analysis set out in the Impact Assessment, what additional factors and evidence might we need to take account of to measure the impact on investment in replacement capacity?**

N/A
4. We would welcome views and supporting evidence on the wider impacts of regulating the closure of unabated coal by 2025, particularly where these are additional to what might be expected without this measure.

We accept that regulating the closure of unabated coal will create a level playing-field, providing certainty for investors and trade partners alike as to where the future of the UK’s energy market lies.

However, and given the variety of factors at play – including fluctuations in the capacity market auction – a legislative framework that establishes the intention and regulation to support a coal phase-out by 2025 is crucial to ensure the lives of such plants are not artificially extended.

We feel it is important that the Government provides greater clarity as to the nature of the regulation and legislative change being considered.