

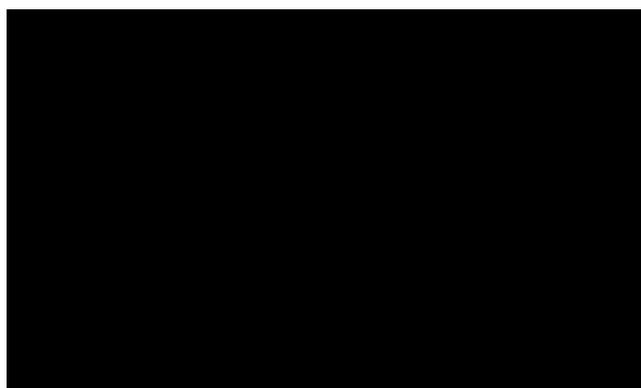


***Response to HM Treasury/HM Revenue & Customs  
Consultation Paper***

**on behalf of**

**AES Ballylumford Ltd and AES Kilroot Power Ltd**

**11 February 2011**



## **Introduction**

AES Ballylumford Limited and AES Kilroot Power Ltd (“AES”) welcome the opportunity to respond to the HM Treasury/HM Revenue & Customs consultation ‘Carbon Price Floor: Support and Certainty for Low-Carbon Investment’.

AES is the largest independent electricity generator in Ireland owning both the Ballylumford (1,213 MW sent out) and Kilroot (618 MW sent out) Power Stations in Northern Ireland.

AES is a participant in the Single Electricity Market (SEM) which is the all-island electricity market for Northern Ireland and the Republic of Ireland. The SEM is a centrally dispatched gross mandatory pool and participation in the pool is mandatory for generators (greater or equal than 10MW) and suppliers. A market power mitigation strategy was developed as part of the implementation of the SEM and a key feature of this is that generators are required to bid their power into the pool at short run marginal cost (the incremental cost which a generator incurs to generate an incremental unit of power). Generation Licence conditions and a Bidding Code of Practice set out the basis on which generators are expected to bid in the SEM and a Market Monitoring Unit monitors compliance against these.

## **Summary**

AES believes that the existing Climate Change Levy (CCL) (for coal and gas) and fuel duty (for HFO and distillate) exemptions must be retained for fossil fuels used to generate electricity in Northern Ireland because of its geographic separation and the unique circumstances of the SEM.

The SEM is a unique market in that it operates across two separate legal jurisdictions with generators in Northern Ireland and the Republic of Ireland directly competing with each other. The introduction of the proposed CCL and fuel duty on fossil fuels would increase the generation costs for Northern Ireland generators relative to their Republic of Ireland counterparts (assuming that the CCL and fuel duty can be included in generator bids) thereby weakening their competitive position in the market and ultimately their profitability and sustainability. It is also likely to skew investment in new plant towards the Republic of Ireland and will increase electricity prices for the whole of Ireland when a Northern Ireland plant is the price setting plant in the SEM.

There is also a serious risk that the Regulatory Authorities in Northern Ireland and the Republic of Ireland (the Northern Ireland Authority for Utility Regulation and the Commission for Energy Regulation), who manage the SEM through the SEM Committee, will not permit the inclusion of the proposed CCL and fuel duty in generator bids and therefore the pass through to electricity customers. While this would clearly conflict with the intention of the CCL and fuel duty, AES considers this risk to be credible since the SEM Committee recently directed generators in the Republic of Ireland not to include a carbon levy (the Electricity Regulation

(Amendment)(Carbon Revenue Levy) Act 2010 which claws back the value of free EUAs granted) in their bids into the market. Given this precedent, there is a risk the SEM Committee would similarly not permit the inclusion of the proposed CCL and fuel duty in generator bids. Failure to do so would result in Northern Ireland generators operating at a loss when either they are the price setting plant in the SEM or when they are constrained on, and at lower margins when they are not the price setting plant. This would be both anti-competitive and unsustainable and in turn could lead to security of supply issues.

## Comments

### Investment

**3.A1: What are your expectations about the carbon price in 2020 and 2030? And how important a factor will it be when considering investment in low-carbon generation?**

It is difficult to assess the anticipated carbon price for 2020 and 2030 while there is uncertainty about whether the EU will increase its emissions reductions targets for 2020 from 20% to 30% and until the Government clearly establishes the emissions reduction targets for 2030.

The carbon price will only be one of a number of factors when considering investment in low-carbon generation and certainty of revenues will be extremely important.

**3.A2: If investors have greater certainty in the future long-term price of carbon, would this increase investment in low-carbon electricity generation in the UK? If so, please explain why.**

While the carbon price support mechanism will increase market revenues for low-carbon electricity generation this is unlikely to provide sufficient certainty for investment without the feed-in-tariff element of the Electricity Market Reform proposals.

**3.A3: How much certainty would investors attribute to a carbon price support mechanism if it were delivered through the tax system?**

Investors would not place as much certainty in a carbon price support mechanism delivered through the tax system as it would in a contractually based mechanism due to the political risk of change of the tax system.

**3.A4: In addition to carbon price support, is further reform of the electricity market necessary to decarbonise the power sector in the UK?**

AES agrees that in addition to carbon price support further reform of the electricity market is necessary to decarbonise the power sector in the UK in order to increase certainty of revenues.

### Administration

**4.B1: What changes would you need to make to your procedures and accounting systems to ensure you correctly account for CCL on supplies to electricity generators?**

AES is not a fuel supplier.

**4.B2: How long would you need to make the necessary changes to your systems to account for CCL on supplies to electricity generators?**

AES is not a fuel supplier.

**4.B3: Please provide an estimate of how much the system changes would cost, both one-off and continuing?**

AES is not a fuel supplier.

**Types of generator**

**4.C1: Do you agree that all types of electricity generators should be treated equally under the proposed changes? If not, please explain why.**

In principle AES believes that all types of generators should be treated equally however geographically AES believes that the existing CCL and fuel duty exemptions must be retained for fossil fuels used to generate electricity in Northern Ireland because of the unique circumstances of the SEM. If the existing CCL and fuel duty exemptions are not retained the costs of generators in Northern Ireland will be higher than generators in the Republic of Ireland thereby reducing their competitiveness and decreasing returns from the market.

**4.C2: Is there a case for providing additional or more preferential treatment for CHP? If so, what is the best way of achieving this?**

AES does not consider there to be a case for providing additional or more preferential treatment for CHP however neither should CHP be negatively impacted. CCL and fuel duty should not therefore be payable on fossil fuels used to generate heat.

**4.C3: Do you agree that tax relief should be considered for power stations with CCS? If so, what are the practical issues in designing a relief; what operational standards should a CCS plant meet in order to be eligible; and how might these issues differ for demonstration projects?**

AES agrees that tax relief should be considered for power stations with CCS. Relief should be granted on the basis of the volume of carbon that is captured and stored.

**Imports and exports**

**4.D1: What impact would the Government's proposals have on electricity generators and suppliers that export or import electricity?**

The Government's proposals are likely to increase the quantity of electricity imported into the UK and therefore transfer generation from the UK to Europe. In paragraph 4.35 of the consultation paper the Government states that the impact of this will be marginal for the UK. Looking at the UK as a whole is however misleading given the geographical separation of Northern Ireland and so the impact on the SEM needs to be considered separately. Currently there is 500 MW of interconnection between GB and the SEM however this will increase to

1,000 MW in 2012. This represents approximately 15% of peak demand and 45% of minimum demand which is clearly not marginal.

Historically the SEM imports electricity from GB and SONI and Eirgrid's recently published 2011-2020 All-island Generation Capacity Statement assumes this will continue. If however imports into the SEM were reduced or reversed, due to higher prices in GB, electricity prices in the SEM could increase significantly as higher cost local generation will be required to offset the reduction in imports.

Rather than introducing specific carbon price support proposals for the UK and potentially distorting investment in Europe the Government should work with the EU to develop the EU ETS in order to ensure a level playing field for all generators and suppliers in the EU.

**4.D2: What impact might the proposals have on trading arrangements for electricity?**

The proposals could either enhance or reduce market liquidity depending on their predictability.

**4.D3: What impact might the proposals have on electricity generation, trading and supply in the single electricity market in Northern Ireland and Ireland?**

The proposals will have a distorting effect on the SEM as the competitiveness of Northern Ireland generators will be reduced relative to generators in the Republic of Ireland who are in direct competition. This will lead to less scheduling in the market, lower returns and ultimately reduce profitability and sustainability. It is also likely to skew investment in new plant towards the Republic of Ireland and could lead to security of supply concerns.

There is also a risk that the SEM Committee will not permit the inclusion of the proposed CCL and fuel duty in generator bids and therefore the pass through to electricity customers. Failure to do so would result in Northern Ireland generators operating at a loss when they are the price setting plant in the SEM or when they are constrained on, and at lower margins when they are not the price setting plant. This would be both anti-competitive and unsustainable and again could lead to security of supply issues.

AES therefore believes that the existing CCL and fuel duty exemptions should be retained for fossil fuels used to generate electricity in Northern Ireland because of the unique circumstances of the SEM.

**Carbon price support mechanism**

**4.E1: How should the carbon price support rates be set in order to increase certainty for investors, in particular over the medium and long term?**

Certainty for investors will be increased if the Government clearly sets out its carbon target price trajectory with a reasonable lead time for example three years. The rates should also be linked to a carbon market index.

#### **4.E2: Which mechanism, or alternative approach, would you most support and why?**

Rather than introducing specific carbon price support proposals for the UK and potentially distorting investment the Government should work with the EU to develop the EU ETS in order to ensure a level playing field for all generators and suppliers in the EU. It is also worth considering whether carbon price support is required if the Government's preference is to introduce a contract for difference based feed-in tariff.

Regarding the three options set out in the consultation paper AES would require more detail before expressing a preference however as noted in 4.E2 above any mechanism should provide a clearly set out carbon target price trajectory, a reasonable lead time and be linked to a carbon market index.

#### **4.E3: What impact would the proposals have on you carbon trading arrangements?**

AES would have to review and realign its risk management and carbon trading arrangements with whatever mechanism is adopted.

### **Future price of carbon**

#### **4.F1: Should the Government target a certain carbon price a) for 2020 and b) for 2030? If so, at what level?**

AES agrees that the Government should target a carbon price for 2020 and ideally out to 2030 however until the Government clearly establishes the emissions reduction targets for 2030 and the EU determines whether emissions reductions targets are going to be increase from 20% to 30% in 2020 it is difficult to see how any meaningful price can be set. AES is not in a position to suggest an appropriate target price.

#### **4.F2: What is the most appropriate carbon price for the UK to meet its emissions reduction targets in the power generation sector? How would this be affected by changes in the structure of the electricity market?**

As noted in 4.F1 above AES is not in a position to suggest an appropriate target price.

#### **4.F3: When would be the most appropriate time for introducing a carbon price support mechanism and what would be the most appropriate level?**

Reasonable notice, for example three years, should be given prior to introducing a carbon price support mechanism. AES is not in a position to suggest an appropriate target price

### **Electricity investment**

#### **5.B1: What impact would you expect the carbon price support mechanism to have on investment in low-carbon electricity generation?**

While the carbon price support mechanism will increase market revenues for low-carbon electricity generation this is unlikely to provide sufficient certainty for investment without the feed-in-tariff element of the Electricity Market Reform proposals.

**5.B2: What other impacts would you expect carbon price support to have on investment decisions in the electricity market?**

The introduction of carbon price support will have a distorting effect on the SEM as the competitiveness of Northern Ireland generators is reduced relative to generators in the Republic of Ireland who are in direct competition. This is likely to skew investment in new plant towards the Republic of Ireland and could lead to security of supply concerns in Northern Ireland, particularly since 510MW of AES's plant is scheduled to close in 2015 and construction of the new interconnector between Northern Ireland and the Republic of Ireland has been delayed until approximately 2015-17.

Security of supply concerns are further compounded by the fact that Northern Ireland has set itself an aggressive target of 40% of electricity generated from renewables by 2020 which will predominately be in the form of on-shore wind. If new plant is incentivised to locate in the Republic of Ireland there may be insufficient conventional plant to back-up such large quantities of wind. Due to the unique circumstances of the SEM AES believes that the existing CCL and fuel duty exemptions must be retained for Northern Ireland.

Investment in new conventional plant in GB is also likely to be skewed towards Europe or interconnectors built in preference for the same reasons.

**5.B3: How should carbon price support be structured to support investment in electricity generation whilst limiting impacts on the wholesale electricity price?**

Setting the carbon price floor at the minimum level to attract the required level of investment and introducing the support in a clearly transparent incremental way will limit the impact on wholesale electricity price.

**Existing low-carbon generators**

**5.C1: Can you provide an assessment of the impact of the proposals on your generation portfolio and overall profitability?**

AES does not have any low carbon generation in its portfolio. The proposals are likely to negatively impact the scheduling of AES's conventional plant in the SEM which will lower market revenues and overall profitability and sustainability.

**5.C2: What would be the implications of supporting the carbon price for existing electricity generators and how should the Government take this into account?**

Supporting the carbon price will increase revenues for existing low-carbon generators and generate super-profits. Government should therefore seek to adjust existing renewable support mechanisms to ensure that the economic status quo of existing low-carbon generation is maintained.

## **Electricity price impacts**

### **5.D1: How do you currently manage fluctuations in the wholesale electricity price?**

In the SEM fluctuations in the wholesale electricity price are managed through contracts for difference between generators and suppliers.

### **5.D2: What difference will supporting the carbon price make to your business?**

Supporting the carbon price support will increase AES's generation costs relative to its competitors in the Republic of Ireland and therefore reduce AES's scheduling in the SEM. This will reduce market revenues and overall profitability and sustainability. It will also make Northern Ireland less attractive for investment in new conventional plant.

### **5.D3: As an electricity generator or supplier, how much of the cost of the carbon price support would you pass on to consumers?**

As a generator in the SEM AES is required to comply with generation licence requirement and a Bidding Code of Practice which set out the basis on which generators are required to bid. AES considers that the cost of the carbon price support clearly meets the definition of a short run marginal cost as set out in one of AES's Generation Licence conditions and as such would be recovered from customers through its bid in the SEM.

### **5.D4: As a business, how much of the cost of energy bills do you pass on to customers?**

AES is a participant in the SEM gross mandatory pool and therefore does not have any direct customers.

### **5.D5: How might your company or sector be affected and would there be any impact on your profit margins?**

Supporting the carbon price support will increase AES's generation costs relative to its competitors in the Republic of Ireland and therefore reduce AES's scheduling in the SEM. This will reduce market revenues and overall profitability.

### **5.D6: Do you have any comments on the assessment of equality and other impacts in the evidence base of the Impact Assessment, included at Annex D?**

AES does not believe that the geographic separation of Northern Ireland and the unique circumstances of the SEM have been adequately considered in the impact assessment.

In paragraph 89 of the Impact Assessment it states that the Government does not envisage that increasing the proportion of electricity into the UK would have significant implications for the operation of the UK electricity market or for the security of UK supply. As outlined in 4D1 interconnection between GB and the SEM will represent approximately 15% of peak demand and 45% of minimum demand from 2012 which could have a significant impact on electricity prices in the SEM and on security of supply.

The competition assessment outlined in paragraphs 104 to 107 of the Impact Assessment relies on the fact that as the proposals would apply equally to all generators it should not impact their ability to compete. This however does not take into account that in the SEM Northern Ireland generators are competing directly with generators in the Republic of Ireland. As generators in

the Republic of Ireland will not be subject to the carbon support mechanisms the increased cost of fuel for Northern Ireland generators will place Northern Ireland generators at a competitive disadvantage to their Republic of Ireland counterparts.



## Submission to the HM Treasury Consultation Carbon Floor Price: support and certainty for low-carbon investment

### Context

1. Alstom supports the UK Government's target of reducing emissions by 80% by 2050. We strongly agree with the assessment that – in order to meet the 2050 target – the UK power sector needs to be largely decarbonised by 2030. This needs to be achieved by using the full portfolio of technologies, by increasing the efficiency of power generation, and by applying CCS to fossil fuel generation as speedily as practicable.
2. As the supplier of around 25% of the world's installed power generation capacity (and around 50% in the UK), Alstom has wide experience of power plant design and construction in over 70 countries. We offer technologies and services for all energy sources: gas, coal, oil, geothermal, biomass, hydro, nuclear, wind and solar. We have also developed 12 CCS demonstration projects around the world.
3. We agree with the Government that the existing arrangements will not deliver the scale of long-term investment, at the pace we need, in particular in renewables, new nuclear and CCS, nor will it give consumers the best deal. The case for reform is clear.
4. In principle, we favour market solutions, such as the EU-ETS, but agree that there is a need for complementary regulation and incentives to support faster development of the low carbon economy.
5. We have five key tests for the electricity market reforms put forward by the Government, including the carbon price floor. Will the reforms:
  - Give greater certainty on the 2030 decarbonisation target?
  - Provide *cost effective* support for low carbon generation?
  - Create the right incentives for investment in the UK & try to minimise any hiatus?
  - Take account of increasing EU market integration?
  - Reduce regulatory complexity?
6. Those tests frame the comments we make below on the pros and cons of the Carbon Price Floor proposal.

### Carbon Price Floor (CPF)

7. We support the Government's overall objective of creating greater carbon price certainty. A higher and more stable carbon price is one element of a more stable framework for the investment required in the UK over the coming decades.
8. An amendment to the Climate Change Levy is one way to attempt to deliver that certainty, though we have several comments on the proposal as currently designed.
9. On the positive side, we recognise that:

- the proposal is based on the correct assumption that raising the price of carbon is central to driving decarbonisation.
- One benefit of the CPF is that it could help to ensure that there is not a large difference between the proposed Contract for Difference strike price and the wholesale electricity price.

10. But we also have a number of reservations, comments and questions:

- It is important that the CPF does not interfere with the successful operation of the EU-ETS. One potential risk is that the measure could depress the EU-ETS price by reducing demand in the UK for EU-ETS allowances. If the CPF is introduced, we strongly urge the Government to introduce measures in parallel to support and improve the effectiveness of the EU-ETS.
- The CPF will do little, if anything, to reduce carbon emissions across Europe, as any reduction in demand for allowances in the UK will allow other countries to increase emissions up to the level of the EU cap.
- We agree with the Government that a key test for the CPF is whether or not it is 'bankable'. It is not clear that investors do currently see the CPF as bankable and therefore there is an element of uncertainty around the effectiveness of the policy.
- The CPF is a carbon tax set annually by the Government. We do not consider that investor certainty will necessarily be increased by a tax that may, or may not, survive from year to year; and may, or may not, automatically rise to meet a theoretical trajectory. Any policy exposed to annual, variable, political decisions is unlikely to create great certainty. A tightening of the EU-ETS would be a more effective policy measure.
- A CPF set high enough to make a difference may only force existing plants into premature closure. That would then create a greater capacity issue, which would have to be addressed, potentially, through the Government's proposed capacity mechanism. That mechanism is likely to bring on to the system new fossil fuel plant in practice. Overall, costs would rise to a greater extent than if existing power stations were not forced into premature retirement and could still be used to balance supply and demand.
- The potential strategic value of the UK maintaining a reasonable amount of coal within its fuel diversity – something that the CPF will discourage – does not receive enough attention in the EMR documentation. The existing UK generating portfolio is well diversified among multiple resources. This balance allows for a hedge against price spikes in one or more fuels, especially for the price volatility that is associated with gas. With coal-fired generating capacity reducing anyway (largely due to the LCPD & IED), it will be important to protect the remaining coal capacity, in order to maintain a balanced portfolio. If sufficient coal generation is not available in the winter season, then more gas plant output will be required at the time of year when gas prices would be at their highest.
- The CPF – in combination with the other EMR policies – is likely to speed a reduced contribution from coal plant. There is a risk therefore that we may lose the opportunity to create a successful CCS industry in this country (see paras 12-14 for further comments on CCS).
- A CPF that increases UK electricity prices above average prices in other European countries may, among other things, create problems for greater EU energy market integration.

11. In our forthcoming submission to DECC on the Electricity Market Review, we will also be highlighting our concern about the complexity and coherence of the full package of EMR measures, which may result in a higher risk of an investment hiatus. It will be important for Government to ensure that the interaction of these measures with the Carbon Price Floor is fully understood, such that investor confidence is maintained.

### **Carbon Capture & Storage**

12. The Government is proposing to introduce:

‘...partial relief from the CCL for fossil fuels used in CCS plants to reflect the proportion of CO<sub>2</sub> abated and for making a commensurate adjustment to the amount of fuel duty that can be reclaimed on oil used in CCS plants. Subject to State aid approval by the European Commission, the Government proposes to legislate for such a partial relief once the technology has been proven and is available commercially.’

13. The proposal as it stands is not of great reassurance for CCS technology developers. The relief will potentially only be available once the technology is ‘available commercially’ (and even then is subject to State aid approval) and will therefore do nothing for the demonstration phase. The emissions not captured in a CCS demonstration would be subject to the tax, which could either lead to fewer demonstration projects materialising, or could require Government to offset the effect of the tax through any support it offers to CCS demonstration projects.
14. By applying only once the CO<sub>2</sub> has been abated, the proposal will not help with the upfront financing of CCS facilities, which already bear a higher risk premium and cost of capital. In any event, we are concerned that the policy does nothing to help CCS demonstration projects and we therefore believe that demonstrations should be completely exempt from the CCL.

### **Background on Alstom UK**

15. Alstom UK employs around 6,500 people in the UK at around 30 locations and has an annual turnover of about £1bn. We are responsible for the maintenance, refurbishment and operation of nearly half of the country’s existing power plants, providing a full mix of power generation technologies, combining traditional and renewable energy sources with clean power solutions. Alstom is responsible for the construction of four of the six new gas-fired power plants in the UK providing close to 6 GW of new electrical power. We are also delivering three onshore wind farms.



Association for the  
Conservation of  
Energy

Westgate House  
2a Prebend Street  
London N1 8PT

020 7359 8000

## HM Treasury: *Consultation on Carbon Price Floor*

ACE response – February 2011

---

### **Introduction to the views of ACE**

The Association for the Conservation of Energy is a lobbying, campaigning and policy research organisation, and has worked in the field of energy efficiency since 1981. Our lobbying and campaigning work represents the interests of our membership: major manufacturers and distributors of energy saving equipment in the United Kingdom. Our policy research is funded independently, and is focused on three key themes: policies and programmes to encourage increased energy efficiency; the environmental, social and economic benefits of increased energy efficiency; and organisational roles in the process of implementing energy efficiency policy.

We welcome the opportunity to respond to this consultation.

[REDACTED]

[www.ukace.org](http://www.ukace.org)

### 5.D6: Do you have any comments on the assessment of equality and other impacts in the evidence base of the Impact Assessment, included at Annex D

1. The Carbon Price Floor (CPF) could be a useful tool to help reduce UK CO<sub>2</sub> emissions, but ACE cannot support it unless the receipts are used by Government to help reduce energy demand in households and businesses. Without this, carbon savings will be minimal, and Government will be indirectly and regressively taxing energy consumers and exacerbating fuel poverty – at the same time as Warm Front, the only publicly funded fuel poverty programme, is being cut. This poses a serious risk to public acceptance of the low carbon transition, which is already under strain.
2. Recycling CPF receipts to consumers was advocated by the Conservative Party when they initially proposed an adjustment to the CCA to create a CPF<sup>1</sup>. The change was to be “revenue-neutral”, “rebating the proceeds to energy consumers”. Since joining the coalition, this proposal has been lost, with the Carbon Floor Price now set to generate significant revenue for the Treasury.
3. Were these revenues to be used to fund energy efficiency schemes for homes and businesses, the CPF could deliver much greater and cheaper carbon savings through reducing demand alongside promoting low carbon generation. The investment would help protect businesses and households from the negative impacts of energy price rises, creating more efficient and productive industries, and stimulating the economy through greater efficiency.
4. Receipts could help support fuel poor households in particular, and show the public that a low carbon future does not have to be high cost and unfair – that support is there to assist them to reduce energy demand and fuel bills. Such recycling would still encourage investment in new low carbon generation, and carbon savings would be immediate as well as into the future.
5. Without revenue recycling, the CPF represents a tax, with Government raising funds from energy consumers, and pushing up to 220,000 people a year into fuel poverty<sup>2</sup>. It is also unacceptable, especially in light of the current trends of passing policy costs onto energy bills and (the lack of) support for fuel poverty, for the reasons set out below:

<sup>1</sup> Conservative Party (2010) Rebuilding Security - Conservative Energy Policy for an Uncertain World [http://www.ukgbc.org/site/document/download/?document\\_id=793](http://www.ukgbc.org/site/document/download/?document_id=793)

<sup>2</sup> HM Treasury (2010) Carbon Price Support - Regulatory impact assessment [http://www.hm-treasury.gov.uk/d/consult\\_carbon\\_price\\_support\\_ia.pdf](http://www.hm-treasury.gov.uk/d/consult_carbon_price_support_ia.pdf)

- a. Levies on energy bills are increasing. The long-standing Renewables Obligation and Carbon Emissions Reduction Target (and previous Supplier Obligations) have been joined by the Community Energy Saving Programme, Feed-in-Tariffs and the EU ETS. Over the coming years, bills will also bear the cost of the Warm Homes Discount, the Energy Company Obligation, Smart Meter roll-out, (potentially the Renewable Heat Incentive beyond 2014), and a larger EU ETS in Phase 3. Added to this will be the CFP. The increasing cost of bills will add to the number of fuel poor households in the absence of a fit-for-purpose fuel poverty strategy.
  - b. Funding for fuel poverty programmes is currently being cut. From April 2011 the Warm Front budget is being cut by two thirds, with Government estimating that only 107,000 English households will receive help through the scheme over the next two years – two per cent of those currently deemed to be in fuel poverty. To replace this, Government is proposing an Energy Company Obligation and a Warm Homes Discount. Both of these will ultimately be funded through energy bills, and so any reductions in fuel poverty numbers will be (at least in part) offset by the resulting increase in energy prices. For example, the CERT Extension is predicted to remove 21,000-31,000 households from fuel poverty, but the increase in bills that result will mean an additional 70,000-150,000 are deemed to be fuel poor. The degree to which the ECO is to target fuel poor households from 2013 is as yet undefined – at present there is no certainty that it will be the primary focus with the Energy Bill also specifying support for hard-to-treat homes and more generally ‘underpinning the Green Deal’. The Warm Homes Discount will simply provide a rebate to certain vulnerable groups, thus not providing any sustainable assistance to help reduce their energy demand.
  - c. Furthermore, the Treasury seems set to radically increase the amount of money extracted from households through indirect taxation. Whilst several of the levies support tangible investment in sustainable energy (RO, FITS, ECO etc), from 2013 the EU ETS and CPF funds will simply see money flowing from energy consumers to the Treasury, in the hope that this sends sufficient signal to those investing in new generation plant. At a time when Treasury funded fuel poverty programmes are being cut, the impact is magnified by Treasury raids on energy bills.
6. This narrative is one that is likely to be repeated over future years by anyone that is against tougher action on carbon emissions. Rather than not act, it is vital that the Treasury is seen to be supporting households and businesses to reduce their demand by using revenues raised to fund demand reduction policies. A failure to do so and to be seen to do so undermines the CPF’s viability. No one wants the CPF to suffer the same

fate of the previous government's Fuel Duty Escalator<sup>3</sup>. And the stakes today are much higher. Channelling revenues into the forthcoming Green Deal to assist low income households in accessing the scheme, perhaps via the Green Investment Bank, would indicate that Government is serious about its fuel poverty obligations, and eager to see a low carbon transition that is both affordable and equitable - not simply an excuse for stealth taxes.

7. Finally, as identified in the Impact Assessment, there is a risk that the CPF could result in fuel switching, particularly in energy intensive industries that can switch their fuel supply from electricity to gas. As a result, Government could find that a policy developed to create additional low carbon generating capacity could in fact negate that demand by moving consumers onto gas.

---

<sup>3</sup> See the then Environmental Audit Select Committee's report at <http://www.publications.parliament.uk/pa/cm200001/cmselect/cmenvaud/71/7104.htm#a2>



**Response to HM Treasury's Consultation on  
"Carbon price floor: support and certainty for low-carbon investment",  
published December 2010**

**About AEP**

The Association of Electricity Producers (AEP) represents large, medium and small companies accounting for more than 95 per cent of the UK generating capacity, together with a number of businesses that provide equipment and services to the generating industry. Between them, the members embrace all of the generating technologies used commercially in the UK, from coal, gas and nuclear power, to a wide range of renewable energies. Members operate in a competitive electricity market and they have a keen interest in its success – not only in delivering power at the best possible price, but also in meeting environmental requirements. Contact details for the Association are given at the end of this paper.

**Introduction**

AEP members accept the principle that, to achieve longer-term carbon reduction ambitions, short and medium term investment decisions have to be on the low-carbon path. However, the sums of money required to replace ageing plant and, more significantly, to meet the requirements of the Renewable Energy Directive and the UK's own target for the reduction of carbon emissions mean that the energy industry has to attract significant new investment – £200 billion for new power production and networks and gas infrastructure by 2020 and another huge sum in the following decade. In the present financial climate, there is a serious risk that this investment will not be available if investors do not have confidence in the UK electricity market arrangements. If these huge sums are to be attracted to the UK, there must be a clear, credible and stable political and regulatory environment which delivers appropriate rates of return. We do not have that today, because a) the current design of the electricity market will not bring forward the full range of low carbon technologies needed to meet the UK's highly demanding low carbon agenda in an economically efficient manner and b) the emission limits applied by the EU Emissions Trading Scheme (EUETS) currently do not offer the visibility and confidence of longevity beyond 2020 that would help to bring forward the diverse low carbon investment required to meet those UK targets. There is a fundamental need to align the policy framework with the investment timescales and payback periods for large-scale, low-carbon technologies.

Given the importance of the Government's proposed changes to the Electricity Market, of which carbon price support is a key element, we would have appreciated more time to consider our response alongside the Electricity Market Reform consultation issued by DECC in December 2010. That could

have been achieved if the Government had followed its own Code of Practice on consultation.

Our responses to specific questions in the consultation document are set out below.

## **Investment**

### **3.A1: What are your expectations about the carbon price in 2020 and 2030? And how important a factor will it be when considering investment in low-carbon generation?**

The AEP supports the EUETS as an EU-wide mechanism to deliver a price signal for carbon. We acknowledge that the de-carbonisation of the power sector has a critical role to play in achieving the CO<sub>2</sub> emission reduction target set by the EU and the more ambitious targets set out in UK legislation. A stronger carbon price signal will help to encourage delivery of de-carbonisation in electricity generation. Given the emissions reduction trajectory established for Phase 3 of the EUETS, some parties may have sufficient confidence to take a view on how the carbon price will rise in the period to 2020. Individual companies will have their own view of prices informed by third party data, but company views cannot be aired or shared for competition reasons. Any view would, however, have to be amended if the EU changed its ambition for CO<sub>2</sub> emission reduction from 20% to 30% by 2020. It is therefore very difficult to take a firm view on the carbon price that may emerge up until 2020 and the same applies beyond 2020 because the trajectory of the EU emissions cap for that period, although prescribed in legislation, is subject to political uncertainty.

The importance of the price of carbon to investment in low-carbon generation will be technology-specific and ultimately dependent on the outcome of the Electricity Market Reform package of measures.

### **3.A2: If investors have greater certainty in the future long-term price of carbon, would this increase investment in low-carbon electricity generation in the UK? If so, please explain why.**

A stronger carbon price signal will help to encourage delivery of de-carbonisation in electricity generation. We agree with the Government that this will not be sufficient on its own and that, for many low-carbon developments, it is likely that other incentives will also be needed to attract the necessary investment, including a system of revenue support. We look to the Government's Electricity Market Reform (EMR) to deliver a suitable framework of policy and regulation.

### **3.A3: How much certainty would investors attribute to a carbon price support mechanism if it were delivered through the tax system?**

While any mechanism delivered through the tax system is subject to political risk and, unlike a contractually-based mechanism, risks revision in response

to changing political imperatives, it may nonetheless be helpful in influencing investment decisions. However, some issues may arise if the core purpose of the policy measure becomes obscured and the tax simply provides a means for Government to raise revenues. Successive Governments may take different views of the purpose of the tax or the rate it should be set at, taking account of other goals including ensuring that energy prices remain affordable for consumers. This makes it difficult to rely on the tax alone as a means of incentivising investments in assets which will not begin operation until towards the end of this decade. The greater the perceived risk, the greater the discount that will be applied to it for investment and financing purposes. To offset that risk, we would like to see a clear statement of the Government's objectives for the use of the mechanism. That could be achieved by specifying in primary legislation how the tax will be set and might be adjusted in the future. Such provisions will need to take into account the potential impacts of revisions to the EUETS on which the UK's carbon tax is predicated.

**3.A4: In addition to carbon price support, is further reform of the electricity market necessary to decarbonise the power sector in the UK?**

The current design of the electricity market will not bring forward the full range of low-carbon technologies needed to meet the UK's highly demanding low-carbon agenda in an economically efficient manner. We are considering the Government's proposals on Feed-in Tariffs, capacity mechanisms and an Environmental Performance Standard (EPS). AEP is not convinced of the benefits of introducing an EPS.

The AEP wishes to see a robust, competitive and liquid wholesale electricity market, which should provide a reliable and credible wholesale price where the investments required to meet the Government's de-carbonisation objectives are incentivised at best value to consumers, whilst maintaining security of supply.

**Administration**

**4.B1: What changes would you need to make to your procedures and accounting systems to ensure you correctly account for CCL on supplies to electricity generators?**

This is a question for individual operators to address.

**4.B2: How long would you need to make the necessary changes to your systems to account for CCL on supplies to electricity generators?**

This is a question for individual operators to address.

**4.B3: Please provide an estimate of how much the system changes would cost, both one-off and continuing?**

This is a question for individual operators to address.

## Types of generator

**4.C1: Do you agree that all types of electricity generators should be treated equally under the proposed changes? If not, please explain why.**

Yes, with the exceptions addressed under Questions 4.C2 and 4.D3.

**4.C2: Is there a case for providing additional or more preferential treatment for CHP? If so, what is the best way of achieving this?**

We do not see a case for providing additional or more preferential treatment for CHP, but nor should it be disincentivised. Under the proposed arrangements, we consider that this is likely to happen. Given that the objective of the tax is to support the EUETS, the proposed application of the CCL to fossil fuels should reflect the benefits of CHP in the same way as the EUETS (which provides for free allocation of allowances to electricity generators for heat production). This would mean ensuring that CHP did not pay the levy on fossil fuel supplied for heat production.

The consultation document states in 4.25 that CHP obtains various forms of exemption. The list is inaccurate and misleading e.g. the EUA ring-fence does not apply from 2013, CRC does not include heat and the remaining incentives are available to a few, but by no means all, Good Quality CHP plants.

The rationale given in 4.27 for including heat in the Carbon Price mechanism is simplicity, fairness and polluter pays. Excluding heat would appear to be simple, by using information currently obtained in the CHPQA submissions. The 'fairness' criterion does not appear to be met as the proposals penalise CHP and create the perverse outcome that CHP operators may pay Government for making carbon savings. The question structure implies that the proposals already provide preferential treatment for CHP and other stakeholders are likely to respond "no" to this question as a result.

Charging CHPs Carbon Price Support on the fuel used to generate heat means that CHP projects will be disadvantaged versus the separate production of power and heat. The vast majority of hosts have CCAs (hence are 65% exempt from CCL) or are in exempt sectors such as refining and would therefore not be subject to CCL for the production of heat in stand-alone boilers. The incentive as currently drafted would mean that one such site that saves carbon by CHP investment (as CHP emits less carbon than the separate production of power and heat), would be paying more Carbon Price Support than a site that imports power and has stand-alone boilers. There is no relief from this incremental cost since it cannot be passed through to a heat customer. This has the impact of disincentivising CHP investment and may ultimately even encourage some existing CHP facilities to operate as a CCGT and use standalone boilers. This will obviously act as a disincentive to investment in new CHP, and it may also affect how existing facilities are run in the future. Some CHP would be incentivised to declassify as CHP (thus increasing carbon emissions) or operate differently. For industry that requires

very stable high pressure steam, CHP is the most efficient method of doing so available to them.

The Cogen Directive ensures there are no State Aid issues.

**4.C3: Do you agree that tax relief should be considered for power stations with CCS? If so, what are the practical issues in designing a relief; what operational standards should a CCS plant meet in order to be eligible; and how might these issues differ for demonstration projects?**

Yes. The relief should be aligned with the volume of carbon abated/sequestered as determined through the Monitoring Reporting and Verification requirements of the EUETS.

### **Imports and exports**

**4.D1: What impact would the Government's proposals have on electricity generators and suppliers that export or import electricity?**

The Government's proposals are likely to increase the incentive for greater levels of import of electricity to the UK. With the future prospect of 4 GW of interconnector capacity, the Government may not have attached sufficient significance to this in its impact assessment. Moreover, arbitrage opportunities could be expected to stimulate further investment to the detriment of indigenous producers. We would prefer to have an EU-wide mechanism to support the carbon price, which would create a level playing field for electricity generation and supply.

**4.D2: What impact might the proposals have on trading arrangements for electricity?**

The severity of the impact of the proposals on electricity trading arrangements will depend largely on the way in which they are introduced. To avoid market shocks, the method and timing of setting the tax should be visible to operators well in advance of its introduction, be as predictable as possible and be aligned with market arrangements. A lack of predictability would tend to reduce hedging through forward sales of electricity and thereby reduce market liquidity.

Generators operating under long term power purchase agreements which do not include adequate provision for price review in the event of the introduction of a tax on input fuel could face financial difficulties. For instance, National Grid's standard terms for the procurement of long term STOR service provision do not include a right for the generator to vary its price in the event of introduction of a carbon tax (or reduction in the rate of reclaimable fuel duty), nor does National Grid accept STOR tenders where prices are linked to wholesale electricity prices, so even an indirect and delayed indirect price correction mechanism may not be available to long term STOR providers.

#### **4.D3: What impact might the proposals have on electricity generation, trading and supply in the single electricity market in Northern Ireland and Ireland?**

The Single Electricity Market (SEM) is the all-island electricity market for Northern Ireland and the Republic of Ireland. The SEM is a centrally dispatched gross mandatory pool and participation in the pool is mandatory for generators (greater or equal than 10MW) and suppliers. A market power mitigation strategy was developed as part of the implementation of the SEM and a key feature of this is that generators are required to bid their power into the pool at short run marginal cost (the incremental cost which a generator incurs to generate an incremental unit of power). Generation Licence conditions and a Bidding Code of Practice set out the basis on which generators are expected to bid in the SEM and a Market Monitoring Unit monitors compliance against these.

The AEP considers that the increase in the cost of fossil fuels used to generate electricity, caused by the Government's proposal to remove the CCL and fuel duty exemptions, clearly meets the SEM's definition of a short run marginal cost and as such would be recovered through a generator's bid. However, we are aware that the Regulatory Authorities in Northern Ireland and the Republic of Ireland (the Northern Ireland Authority for Utility Regulation and the Commission for Energy Regulation who manage the SEM through the SEM Committee) have recently directed generators in the Republic of Ireland not to include a carbon levy (the Electricity Regulation (Amendment)(Carbon Revenue Levy) Act 2010 which claws back the value of free EUAs granted) in their bids into the market and given this precedent, there is a risk they would similarly not permit the inclusion of the proposed CCL and fuel duty in generator bids. Failure to do so would result in Northern Ireland generators operating at a loss when they are the price setting plant/marginal plant in the SEM, or at lower margins when they are not the price setting/marginal plant. This would be both anti-competitive and unsustainable and in turn could lead to security of supply issues. We also consider that it would be inconsistent with the Bidding Code of Practice and Generator Licence conditions, but in light of the recent precedent established by the SEM Committee, there is a considerable risk. The AEP therefore requests that the Government confirm with the SEM Committee that the inclusion of CCL and fuel duty in generator bids in the SEM is consistent with the Bidding Code of Practice and Generator Licence conditions.

The SEM is a unique market in that it operates across two separate legal jurisdictions with generators in Northern Ireland and the Republic of Ireland directly competing with each other. The introduction of the proposed CCL and fuel duty on fossil fuels would increase the fuel costs for Northern Ireland generators relative to their Republic of Ireland counterparts (assuming that the CCL and fuel duty can be included in generator bids) thereby weakening their competitive position in the market and ultimately their profitability and sustainability.

## **Carbon price support mechanism**

### **4.E1: How should the carbon price support rates be set in order to increase certainty for investors, in particular over the medium and long term?**

The carbon price support rates should be set to provide:

- certainty for operators in the electricity market e.g. by giving visibility of the target price trajectory well ahead of time (at least a three-year horizon would be reasonable, in line with current strategies for forward sales);
- an indication of the direction of travel in the longer term;
- a link with the existing carbon market e.g. via reference to a traded index.

### **4.E2: Which mechanism, or alternative approach, would you most support and why?**

AEP member companies would like to have more detail on the three options set out in the consultation before expressing a preference. However, we agree that whichever mechanism is selected, it should:

- provide a visible target price trajectory up to three years ahead;
- be fully transparent;
- be indexed against the current carbon market, based on the EUETS;
- address issues around the exchange rate to be used for conversion between Euros and Sterling
- not be applied retrospectively.

### **4.E3: What impact would the proposals have on your carbon trading arrangements?**

This is a question for individual operators to address.

## **Future price of carbon**

### **4.F1: Should the Government target a certain carbon price a) for 2020 and b) for 2030? If so, at what level?**

If a carbon price floor mechanism is to be introduced, the Government should target a certain carbon price covering both the EUETS and the carbon support rate for 2020. Given the lack of visibility of the emissions reduction trajectory in the EUETS post-2020 and the political uncertainty surrounding EU emission reduction targets for 2020, it will be challenging to target a price for either 2020 or 2030 at this stage. AEP is not in a position to suggest a target price.

### **4.F2: What is the most appropriate carbon price for the UK to meet its emissions reduction targets in the power generation sector? How would this be affected by changes in the structure of the electricity market?**

AEP is not in a position to suggest a target price.

**4.F3: When would be the most appropriate time for introducing a carbon price support mechanism and what would be the most appropriate level?**

We would like to see a minimum of two years between the announcement of a mechanism and rates in the Budget Statement and their coming into force. Beyond that, AEP members differ in their views on the timing of the implementation of the mechanism. Dates ranging from 2013 to 2015 have been suggested. However, the timing of implementation in any case needs to:

- coincide with investment horizons
- provide transparency in the electricity and carbon markets;
- take account of legacy long-term power off-take contracts.

The effect of the carbon price support should be relatively low in its early years, with an increasing trajectory over time to smooth the effects on the market, which would also limit the extent of any impact on security of supply, consumers and UK competitiveness.

**Electricity investment**

**5.B1: What impact would you expect the carbon price support mechanism to have on investment in low-carbon electricity generation?**

This will depend on the combined outcomes of both the carbon price support mechanism and the other measures proposed under Electricity Market Reform.

**5.B2: What other impacts would you expect carbon price support to have on investment decisions in the electricity market?**

Carbon price support is likely to affect investment decisions for projects that are not subject to any “contract for difference” model as proposed under EMR. It will also affect investment decisions for existing coal and gas-fired power stations that will be subject to the requirements of the Industrial Emissions Directive in the period post-2015. Those stations are expected to make an important contribution to the security of electricity supply during the transition to a low-carbon generating fleet.

**5.B3: How should carbon price support be structured to support investment in electricity generation whilst limiting impacts on the wholesale electricity price?**

As the purpose of the carbon price support mechanism is to influence the wholesale price of electricity, it should be introduced in a way that minimises disruption of the existing electricity market arrangements. Introducing the mechanism so that its impact is relatively low in its early years, with an increasing trajectory over time, will help to smooth the effects on the market.

## **Existing low-carbon generators**

**5.C1: Can you provide an assessment of the impact of the proposals on your generation portfolio and overall profitability?**

This is a question for individual operators to address.

**5.C2: What would be the implications of supporting the carbon price for existing electricity generators and how should the Government take this into account?**

This is a question for individual operators to address.

## **Electricity price impacts**

**5.D1: How do you currently manage fluctuations in the wholesale electricity price?**

This is a question for individual operators to address.

**5.D2: What difference will supporting the carbon price make to your business?**

This is a question for individual operators to address.

**5.D3: As an electricity generator or supplier, how much of the cost of the carbon price support would you pass on to consumers?**

This is a question for individual operators to address.

**5.D4: As a business, how much of the cost of energy bills do you pass on to customers?**

This is a question for individual operators to address.

**5.D5: How might your company or sector be affected and would there be any impact on your profit margins?**

It is very difficult to assess the impact of the proposals on the power sector, as they represent only part of the Government's proposed Electricity Market Reform. The effect on individual companies will depend on the composition of their generating portfolios.

**5.D6: Do you have any comments on the assessment of equality and other impacts in the evidence base of the Impact Assessment, included at Annex D?**

We consider that there are flaws in the analysis that underpins the Impact Assessment, many of which stem from insufficient attention paid to sensitivities. The following issues in particular are open to question:

- the future coal price;
- the assumptions around the timing of CCS development;
- the assumption that all renewable energy targets are met.

11 February 2011

Association of Electricity Producers  
Charles House  
5-11 Regent Street  
London  
SW1Y 4LR



[www.aepuk.com](http://www.aepuk.com)

**To:** [Consultation: Environmental Taxes \(ECSM\)](#)  
**Subject:** Carbon Price Floor Consultation  
**Date:** 11 February 2011 19:37:00

---

Sir / Madam

While this Carbon Price Floor consultation is clearly aimed at stakeholders upstream of customers, I would like to make a customer's view to this situation.

#### Double Taxation

I fully appreciate the argument that there need to be price signals attached to pollution, where dirtier fuels attract heavier penalties. However I am concerned that the impact will be totally mitigated by operational needs to produce power in a tight generation market and the chance to simply pass the cost downstream. Answering the question on margin impact in question box 5.D is simple – it'll be passed on: Although the intended respondents may not actually say so in as many words, the impact definitely will be passed on. Because this extra charge will be part of the commodity cost, suppliers will simply pass it onto customers. As we already pay CCL on our electricity bills, we will be paying TWO amounts of CCL on the same power.

I am aware of the argument that customers should simply use less, thereby incurring less CCL charge. This business is using less and has continued to drive consumption savings year on year. The unavoidable reality that we will continue to use some electricity, albeit less and it's upon that where we face double taxation.

#### Price Certainty & Volatility

As the three levy proposals are ON TOP of the prevailing ETS price, there won't even be certainty on this tax. What will exist is a levy element to commodity that can fluctuate depending on generating mix AND prevailing ETS price, on top of the existing volatility of the commodity market prices. My fear is that so many levels of uncertainty on top of each other could give rise to some VERY dramatic price changes in the commodity market, just when energy-consuming industry needs some price certainty and stability to make investment decisions.

I agree that having an element in the final commodity price with a minimum value will create a 'floor', but how far above that can the price soar and how erratically? I have grave doubts about this consultation's assertion that the underlying cost of commodity electricity will start to fall in the mid 2020's. Economic recovery, the migration towards an electric energy culture, questions over forecast need (given the migration) and some new generation still under construction gives me little confidence. Additionally, through the longer-term Electricity Market Reform, there are proposals to offset infrastructure investment with greater reliance on commercial consumers to 'switch off' at peak times. This "Demand Side Response" indicates a preparation for insufficient supply against demand, which is more likely to generate price increases rather than decreases.

#### Scenario Preference

Given the current state of generation and the time required to change the generation mix, I feel the option chosen should allow as much time as possible to effect those changes before the penalties start impacting customers. As the first of the new nuclear fleet won't be ready before 2018, the UK can't substantially change before that. Small projects involving gas, CCS coal and some renewables are possible, but I don't believe they will have a material impact on their own. My free choice preference would be to apply a set of price signals from the 2020s on and not before. If I had to choose between the three scenarios provided, the least punitive during the period of generation change is Scenario 1.

Regards

[Redacted signature block]

-----  
B&Q plc

Registered Office: Portswood House, 1 Hampshire Corporate Park, Chandlers  
Ford, Eastleigh, Hampshire, SO53 3YX

Buy Online NOW at [www.diy.com](http://www.diy.com)

Registered in England, Number 973387

This e-mail is only intended for the person(s) to whom it is addressed and may contain confidential information. Unless stated to the contrary, any opinions or comments are personal to the writer and do not represent the official view of the company. If you have received this e-mail in error, please notify us immediately by reply e-mail and then delete this message from your system. Please do not copy it or use it for any purposes, or disclose its contents to any other person.

Thank you for your co-operation.

This email was received from the INTERNET and scanned by the Government Secure Intranet anti-virus service supplied by Cable&Wireless Worldwide in partnership with MessageLabs. (CCTM Certificate Number 2009/09/0052.) In case of problems, please call your organisation's IT Helpdesk. Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

Our Ref: PCB/GW

11 February 2011

Mr M Shaw  
Environmental Taxes  
HM Revenue and Customs  
3<sup>rd</sup> floor west  
Ralli Quays  
3 Stanley Street  
Salford  
M60 9LA

**BY EMAIL:**  
**Environmentaltaxes.consultation@hmrc.gsi.gov.uk**

Dear Mr Shaw

## **CARBON PRICE FLOOR: SUPPORT AND CERTAINTY FOR LOW-CARBON INVESTMENT - CONSULTATION**

We are responding to the consultation document issued in December 2010 as we are a business primarily involved in energy raw materials and investment in low carbon generation.

The Banks Group has one of the largest and most successful development teams in the UK. We develop land for a variety of uses including residential and commercial property, surface mining, renewable energy and energy from waste. We are actively involved in over 120 projects from inception through to completion including gaining all necessary planning permissions and consents.

We have over 34 years of experience of developing complex projects and have a strong reputation of success and high standards of delivery. Our development with care approach ensures that our developments have a positive long term effect on the environment and the local communities we are working within. Please find attached our brochures dealing with our mining and renewable activities.

In many respects what the government is trying to achieve through its energy and investment policy at a national level is what we have been doing as our business approach over the last eight years. Over this period we have diversified from our traditional energy business base of surface coal mining and waste management to develop our renewable energy business, which currently has an extensive programme of projects including onshore wind farms, advanced waste management facilities and other alternative renewable technologies. Proceeds from the coal and property businesses have and continue to be invested in the renewable business, however on a daily basis we have to address the competing demands for investment from our business areas. As a business we currently have an annual turnover of circa £55m and over the last five years have invested some £50m into our renewable energy projects whilst continuing to sustain and develop our coal activity through further investment of over £50m. We are currently in the process of contributing to the delivery of the UK's renewable energy needs with over 600Mw of renewable generation in various stages of development.

We support the government's efforts to create a more stable environment for investment in low carbon electricity generation and the publication of the consultations on Carbon Price Support and Electricity Market Reform.



**In Summary** the key points in our comments are:-

**We need to have joined up thinking across all fiscal policy related to energy and the electricity market in order to deliver low carbon energy generation. In particular, we must have consistent and transparent policy and an effective planning system that enables the delivery of energy related developments on a timely basis.**

**We must ensure that there is a level playing field across Europe, and the wider international community, to avoid unfair competition for indigenous generation, leakage of carbon and export of jobs and economic activity from the UK. This country's competitiveness should not be undermined by the introduction of carbon floor pricing. It is essential that UK business and manufacturing is given the best opportunity, especially in the current economic climate, to maximise economic growth to address the fiscal deficit.**

**We are concerned that UK's energy security of supply will be prejudiced by the carbon floor price resulting in a dramatic reduction in indigenous coal production and a heavy reliance on gas. This we feel is particularly worrying bearing in mind the recent experiences in prolonged periods of cold weather and the potential effects on gas supplies through political or terrorist activities.**

**Introduction of a carbon floor price will, on the timescales and level proposed, have a sharp disincentive to further investment in coal related projects. We believe that this will impact on planned indigenous coal production, any further investment in existing coal generating capacity, especially to meet new emission standards, any medium /long term investment in new coal generating capacity, and commercial investment in carbon capture and storage. We strongly advocate that the start date is pushed back to post 2016 and that the level of the price floor is low at the start to enable a steady transition to low carbon generation.**

**We need a phased and steady transition that actively promotes business confidence and ensures that sufficient energy is delivered to meet society's needs in the short, medium and long term. Fundamentally, existing UK jobs and economic activity need to be preserved in the short term to absorb the structural change without unplanned repercussions e.g. substantial job losses, substantial hikes in energy prices or specific energy shortages.**

**We do not believe that the current proposals for a carbon floor price alone will actually encourage more investment in low carbon renewable energy generation.**

**It is easy to destroy generating capacity through future uncertainty or prospective punitive fiscal regimes, but it is much much harder to create new generating capacity. Therefore policy needs to be weighted towards support and certainty.**

**For our business, the carbon floor price proposals could have a significant impact on our ability to achieve our planned investment in renewable energy as we are potentially faced with a shortfall in income from our coal business if the proposals are implemented as set out.**

**We are concerned that the proposals will result in a significant increase in consumer's bills whilst increasing the risk that electricity generation capacity is insufficient to meet demand, this is especially so at peak periods of demand during winter prolonged cold spells when coal generation capacity has traditionally met the requirement.**

Response to individual questions:

### Investment

#### **3.A1: What are your expectations about the carbon price in 2010 and 2030? And how important a factor will it be when considering investment in low-carbon generation?**

In our experience it is important that longer time frames for carbon prices are considered. Early introduction of the carbon floor price in 2013 will have a negative impact on new investment already in the pipeline, due if nothing else, to the uncertainty associated with change. Appraisals of potential generating projects will usually cover periods extending significantly beyond 2020, for example 25 years typically for wind energy projects and even longer for fossil or nuclear plant.

We are of the view that the key driver for investment in low carbon energy will be the Feed in Tariff (FIT) regime, that is intended to replace the Renewables Obligation (RO) rather than the setting of a carbon price. To achieve the desired investment, it is not considered that carbon floor price alone would achieve this. A FIT regime based on a premium FIT tariff rather than Contract for Difference (CfD) approach is adopted in the Electricity Market Reform (EMR).

In addition, the consequences of any carbon floor pricing measures need to be carefully considered and undoubtedly will take time to have an effect. We are concerned that the proposals to introduce carbon floor pricing from April 2013 will have a dramatic effect on the indigenous coal market and will have consequential impacts such as loss of jobs and greater insecurity in energy supply at a time when we need to grow the economy. The introduction of the carbon price needs to be carefully implemented and staggered to prevent a dramatic 'cliff edge' effect on high carbon producers and suppliers. For this business an abrupt change i.e. by implementation of carbon pricing in 2013 will lead to immediate destabilisation of the coal business which will impact on our ability to plan for further investment in renewable energy. It would be far more effective to have a delayed start – say – post 2016 that will enable a phased shift in the business following the implementation of the Industrial Emissions Directive (IED) which is likely to have a significant impact in the way coal based generation is likely to be operated in the future.

We are also concerned that by charging for carbon on delivery of fuel to the generators, rather than when used to produce energy the proposals will have a significant distortional effect between different suppliers of raw material. Coal (which is for the foreseeable future a major element of the energy mix) will be disadvantaged because:

- Generator stocking costs will be increased;
- Reduced coal stocks at power stations, (because of the financial implications for holding stocks) will have the effect of exposing the UK to short term energy demand spikes, such as the current winter.
- Behavioural changes in buying coal could have an impact on UK coal producers in the short term, affecting an industry that provides circa 7000 direct jobs and some 3-4 times that in the wider supply chain.

- Environmental impacts resulting from coal being stockpiled at mines rather than the power stations.

There will be major disparity between coal and gas powered generators who will have a much lower on-stock cost to bear as gas is largely transported and stored within the reservoir, through pipeline or network facilities and therefore there is little need to stockpile gas at the power stations. This will unfairly prejudice coal compared to gas, not due to carbon content but due to management of working capital constraints.

The carbon price should be applied when energy and carbon is emitted from carbon fuels **not when generators by the fuel**. It should take these things into consideration and be balanced in its implementation across industrialised economies so as not to disadvantage indigenous sources unduly or too quickly.

**3.A2: If investors have greater certainty in the future long-term price of carbon, would this increase investment in low-carbon electricity generation in the UK? If so, please explain why.**

Yes we agree that this could be the case provided that, as in 3A1, the FIT regime is based on Premium FIT. If the CfD approach is used then from our perspective it is likely that any future investment would not necessarily be directed to investment in renewables capacity, but would probably be favoured towards the more attractive short term CCGT or longer term nuclear. Our investment appraisals for onshore wind consider future carbon price to be irrelevant.

Long-term carbon price certainty is important as a basis for investment decisions. Given the differential levels of carbon emissions from alternative technologies, uncertainty as to carbon prices leads to suboptimal investment decisions, both from an economic and environmental viewpoint.

However, 'most affordable' and 'value for money' statements from the Government should not be considered in isolation, and need to take account of other constraints and influences on investment. In our view investment decisions are based on a wide range of issues and are not likely to be based solely on carbon price floor measures. Of prime importance is the need for greater joined up thinking in strategic planning policy and legislation supporting investment in low carbon energy sources.

Localism principles need to be steered heavily in favour of clean energy planning decisions to ensure local benefits come from supporting the best value low carbon generation. For instance, the Government has remained generally silent on supporting 'on-shore' wind despite it being the proven technology and most cost effective wind solution. Ongoing investment in the full range of onshore solutions is essential to continue to drive down technology costs and provide low carbon value. The recent announcement of a review of the current FIT scheme to specifically restrict the opportunities for field scale PV solar energy is clearly portraying some confusion and certainty as to whether the government is truly looking to encourage low carbon generation.

**3.A3: How much certainty would investors attribute to a carbon price support mechanism if it were delivered through the tax system?**

Whilst taxation can be a big driver that investors can consider and that the level of certainty is only part of the solution – see 3A2 above. Overall we do not believe that the carbon floor price offers any further enhancement that cannot be achieved through existing mechanisms. i.e..FIT .

**3.A4: In addition to carbon price support, is further reform of the electricity market necessary to decarbonise the power sector in the UK?**

Yes, although it is felt that not only electricity market reform, but also strategic planning guidance is necessary to support the development of low carbon electricity generation. A clear planning context is also necessary as a basis for investment decisions, and policy in these different areas needs to be "joined up".

The comments in 3A2 are relevant and it is really the other elements of the EMR that will encourage and deliver the long term decarbonisation of the power sector, e.g. the FIT and Renewable Heat Incentive (RHI).

We are concerned that the carbon floor price will effectively result in a renewed dash for gas at the expense of coal and renewable energy and consequently have an adverse effect on the UK economy.

Administration**4.B1: What changes would you need to make to your procedures and accounting systems to ensure you correctly account for CCL on supplies to electricity generators?**

The proposals will require our business to introduce new finance and reporting systems which are not currently available. This will place an additional financial burden on our business which we estimate to be around £50k.

However we believe that it would be far more efficient if the electricity generators themselves accounted for all coal and fuel supplies. This would also have the advantages of also dealing with imports (more than 50% of the current coal burn for electricity is from imports) and those stations that use multiple fuel sources.

**4.B2: How long would you need to make the necessary changes to your systems to account for CCL on supplies to electricity generators?**

We estimate that it could take somewhere between 12-18 months depending on the extent of system upgrades required.

**4.B3: Please provide an estimate of how much the system changes would cost, both on-off and continuing?**

We estimate that the cost to us will be of in the range of £50k depending on the amount of integration that can be achieved with our existing accounting system. We would like to see some further element of additional tax relief to assist this specific upgrade of our systems.

Types of Generator**4.C1: Do you agree that all types of electricity generators should be treated equally under the proposed changes? If not, please explain why.**

Yes, but we **do not** think the current proposals do.

In the short term, the proposals will have a negative effect on the UK supply chain and fossil fuel suppliers well ahead of the 2030 target for decarbonisation. The effect of this will be to

reduce the attractiveness of the sector in the longer term for investment and research and development into Carbon Capture & Storage (CCS). In the short term it will have a significant and negative impact on the core base load energy suppliers in the immediate period up to 2020

All energy suppliers and fuel types must be supported in this period of recession and growth recovery in order to meet energy demands, keep costs down to consumers, maintain and increase jobs and maintain and develop supply chains. Poorly considered increases in taxation will have a negative impact on these aspects.

**4.C2: Is there a case for providing additional or more preferential treatment for CHP? If so, what is the best way of achieving this?**

Yes, however, a more efficient mechanism should be to take account of the additional heat production, through the Renewable Heat Incentive framework.

**4.C3: Do you agree that tax relief should be considered for power stations with CCS? If so, what are the practical issues in designing a relief, what operational standards should a CCS plant meet in order to be eligible; and how might these issues differ for demonstration projects?**

Yes – A broad range of incentives are required for getting CCS implemented on a commercial scale across the coal powered generation sector. We believe it is essential for the longer term energy security of UK PLC. The importance of renewable generation is understood and agreed, however the UK has significant and long term supplies of indigenous coal that should be part of the energy security mix going forward. CCS should not be viewed as a gesture by the developer/operator of the plant but an essential requirement.

However to get to this point CCS has to be made deliverable and tax relief and / or incentivisation is part of the measures to make it attractive to investors. Support should be sufficient to keep coal with CCS in contention, but not to make it so attractive as to disadvantage other technology options.

Imports and Exports

**4.D1: What impact would the Government's proposals have on electricity generators and suppliers that export or import electricity?**

We are concerned that the current proposal will result in a distortion of the market and the position relating to exports and imports needs to be treated on the same playing field as indigenous production.

The issue is not just a concern for electricity generators, but will have an impact on energy raw material suppliers.

The existing and further development of off shore grids and international interconnectors etc necessitate that we consider this issue on a wider EU basis and would urge the government not to adopt a position through the carbon price floor tax that puts UK suppliers at a distinct disadvantage to our European colleagues.

**4.D2: What impact might the proposals have on trading arrangements for electricity?**

We are not in a position to comment on trading arrangements. However, we remain concerned that if it is possible for generators to buy coal/oil/gas from European suppliers and/or their European affiliates and be subject to a different mechanism to that of UK producers, then it will place the UK producers at a market disadvantage in what is a European/global market.

**4.D3: What impact might the proposals have on electricity generation, trading and supply in the single electricity market in Northern Ireland and Ireland?**

No comment.

Carbon Price Support Mechanism**4.E1: How should the carbon price support rates be set in order to increase certainty for investors, in particular over the medium and long term?**

Do not use a straight line, but provide soft hit up to 2020 – 2025 for those high carbon sectors of the energy industry and supply chain that are delivering at the present time.

**4.E2: Which mechanism, or alternative approach, would you most support and why?**

We feel that in the medium to long term the rates should increase on a steepening curve post 2025.

Short term adjustment according to changing political objectives, will result in the less long-term certainty, which is what is required.

In the short term the rates must be set such that they don't create significant uncertainty that adversely impacts on the high carbon sectors - they are still the base load of energy production in the short term. Start low in short term. It should be higher in the longer term – possibly not linear. Funding of investment in new renewable technologies is being undertaken by industry, and the change and investment being facilitated by existing high carbon activities. Don't create an environment that upsets this balance and approach.

**4.E3: What impact would the proposals have on your carbon trading arrangements?**

No comment.

Future Price of Carbon**4.F1: Should the Government target a certain carbon price a) for 2020 and b) for 2030? If so, at what level?**

If a carbon price is introduced the start should be delayed and it should be set at the lowest levels in both 2020 and 2030 if a dash to gas and over dependence on gas is to be avoided.

**4.F2: What is the most appropriate carbon price for the UK to meet its emissions reduction targets in the power generation sector? How would this be affected by changes in the structure of the electricity market?**

We are concerned that should there be a premium of UK Carbon Pricing over and above EU Carbon Pricing. If EU pricing is different to UK pricing then there are potential issues and implications throughout the supply chain that will impact on jobs and economic recovery in the short term up to decarbonisation, examples being:-

- What regime does a UK coal exporter operate to ?
- Will European generators close UK plants but continue to burn coal in their European plants? EU generators will look at their generation mix from an EU level not a national level to obtain their best profile
- In the event that carbon pricing levels are significantly different in Europe then with interconnector facility it is reasonable foreseeable that carbon generation could take place in Europe and be exported to UK. What are the competition implications of such generation? This scenario would also lead to failure in meeting the strategic environmental benefit whilst having a significantly negative impact on the UK economy.

**4.F3: When would be the most appropriate time for introducing a carbon price support mechanism and what would be the most appropriate level?**

There should be a low level introduction that allows experience to be gained before impact of carbon pricing is increased and allow time for industry to plan – 2013 is virtually immediate in energy industry business planning terms.

Electricity Investment

**5.B1: What impact would you expect the carbon price support mechanism to have on investment in low-carbon electricity generation?**

It is unlikely to encourage investment in low carbon generation, however the impact on short term high carbon generators needs to be assessed particularly in period up to 2020.

The increased working capital requirements in the short term for high carbon generators may impact on generator ability to fund other projects in a period that the government has identified as requiring substantial private sector investments. Increased UK working capital may be a factor for generators to invest in countries which have less of a financial impact on their running costs.

**5.B2: What other impacts would you expect carbon price support to have on investment decisions in the electricity market?**

There will be minimal investment at coal-fired plant to meet the requirements of the IED with consequent closures and low load-factor operation. There must be a question as to whether sufficient coal-fired generation capacity will remain to ensure security of supply objectives can be met.

The carbon price support mechanism will stimulate a dash for gas and large-scale investment in unabated gas-fired plant. This will have a long term negative effect on UK PLC.

**5.B3: How should carbon price support be structured to support investment in electricity generation whilst limiting impacts on the wholesale electricity price?**

It is essential to ensure fuel diversity of supply if security of supply objectives are to be met. Carbon price support should therefore be structured in such a way as to not make it totally uneconomic for investment in existing coal-fired plant to meet the requirements of the IED such that a reasonable amount of such capacity remains in the mid-2020s. At the same time, it should be structured to avoid an excessive level of investment in unabated gas-fired plant and thus avoid an excessive overdependence on such plant in the mid 2020s (and long-term carbon lock-in). Only by ensuring a diversity of fuel sources can potentially very high and volatile wholesale electricity prices at peak periods be avoided.

Existing Low-Carbon Generators**5.C1: Can you provide an assessment of the impact of the proposals on your generation portfolio and overall profitability.**

No comment.

**5.C2: What would be the implications of supporting the carbon price for existing electricity generators and how should the Government take this into account?**

No comment.

Electricity Price Impacts**5.D1: How do you currently manage fluctuations in the wholesale electricity price?**

No comment.

**5.D2: What difference will supporting the carbon price make to your business?**

See response to 5D.5 below.

**5.D3: As an electricity generator or supplier, how much of the cost of the carbon price support would you pass on to consumers?**

The full cost of carbon price support to be passed on to our customers and we would anticipate this to be passed on to consumers.

**5.D4: As a business, how much of the cost of energy bills do you pass on to customers?**

Coal prices are wholly determined by the international market. Coal producers are therefore unable to pass on any cost increase, from whatever source, that is not also incurred by our international competitors. Higher electricity prices as a result of carbon price support could not therefore be passed on to customers.

**5.D5: How might your company or sector be affected and would there be any impact on your profit margins?**

The effect on our company's and UK coal production will be dramatic.

Our surface mines are, characterised by short lives (typically five years), generally lower levels of output, inherently more flexible, comparatively low levels of fixed costs and comparatively lower investment requirements with generally shorter lead times. Nevertheless, we have a portfolio of sites at various stages of development; from initial identification of a potential reserve to eventual production through a demanding and time consuming planning system might typically take ten years. Some of our investment will be prejudiced if the CCL is introduced in 2013.

These uncertainties are also likely to lead to a curtailment of our development effort and expense on potential longer-term surface mines within our portfolios. Surface mine output is therefore likely to fall in the medium term.

The combined effect will be a severe loss of highly paid, high-skilled jobs in already depressed areas, loss of tax revenues and other economic benefits. Just one of our operational coal sites in South East Northumberland is providing over 140 jobs and contributing over £1m a month to the local economy.

The overall impact of carbon price support is likely to be the replacement of UK produced coal by imported gas. If the market for coal in the 2020s proves to be higher than we fear, UK produced coal will be replaced by imported coal.

It would also seriously impair our planned renewables programme due to the diversion of funds to deal with the downscaling of the coal operations and the reduced ability to raise external funding due to the smaller asset base.

**5.D6: Do you have any comments on the assessment of equality and other impacts in the evidence base of the Impact Assessment, included at Annex D?**

No comment.

If you have any queries please do not hesitate to contact me.

Yours sincerely

[Redacted signature]

[Redacted name]

Enc: Banks Mining Brochure  
Banks Renewables Brochure





**BG Group's response to HM Treasury consultation, Carbon Price Floor: support and certainty for low-carbon investment (December 2010)**

Question 3A1 [What are your expectations about the carbon price in 2020 and 2030? And how important a factor will it be when considering investment in low-carbon generation?](#)

BG Group plc does not publish its assessments of future EUA prices.

Question 3A2 [If investors have greater certainty in the future long-term price of carbon, would this increase investment in low-carbon electricity generation in the UK? If so, please explain why.](#)

BG Group plc agrees believes that if investors are confident that the costs of emitting greenhouse gases will not fall, they will be more willing to consider investments that reduce emissions. They will have more confidence in the long term value of the associated cost savings and may even be willing to raise debt to cover the associated capital expenditure.

Question 4E1 [How should the carbon price support rates be set in order to increase certainty for investors, in particular over the medium and long term?](#)

BG Group plc agrees that the price "floor" trajectory for, say, 15 years should be set by Government. Potential changes should be flagged well in advance, in line with the third five-year carbon budgeting period of the Climate Change Committee.

Question 4F1 [See answer to 4E1. The level should be set so as to stop the operation of new unabated coal stations.](#)

Question 4F2 [What is the most appropriate carbon price for the UK to meet its emissions reduction targets in the power generation sector? How would this be affected by changes in the structure of the electricity market?](#)

BG Group plc believes that the price level should ensure that coal stations with CCS fitted should have an incentive to keep the capture plant operational.

Question 4F3 [When would be the most appropriate time for introducing a carbon price support mechanism and what would be the most appropriate level](#)

BG Group plc believes that it should be introduced as soon as possible. The level should initially mirror the EUA and follow a trajectory so that, by the time newly ordered plant is commissioned, it will reach a level that would justify the appropriate investment.

Question 5B1 [What impact would you expect the carbon price support mechanism to have on investment in low-carbon electricity generation?](#)



BG Group plc agrees that it would allow capital to be attracted at a lower price. Operators would have confidence to invest in plant, or plant upgrades, with lower emissions. They would be able to estimate the value of future emissions reductions with greater confidence.

Question 5B2 [What other impacts would you expect carbon price support to have on investment decisions in the electricity market?](#)

BG Group plc believes that industrial electricity customers would be able to invest in efficiency improving measures, and so would have an advantage over competitors in other European countries where such support did not exist. This advantage would exist as long as average spot prices were greater than the support level.

Question 5C2 [What would be the implications of supporting the carbon price for existing electricity generators and how should the Government take this into account?](#)

BG Group plc believes that it would reward generating plant already justified under previous market arrangements. It could, therefore, allow windfall profits to existing non fossil generating stations whose output is not completely contracted at a pre-determined price.

*February 11, 2011*

**Contact:**

[REDACTED]

[REDACTED]

BG Group

Thames Valley Park

Reading RG6 1PT

[REDACTED]

[REDACTED]

11<sup>th</sup> February 2011

to: [Environmentaltaxes.consultation@hmrc.gsi.gov.uk](mailto:Environmentaltaxes.consultation@hmrc.gsi.gov.uk)

---

**RESPONSE: Carbon Price Floor: Support and Certainty for Low-carbon Investment**  
[http://www.hm-treasury.gov.uk/d/consult\\_carbon\\_price\\_support\\_condoc.pdf](http://www.hm-treasury.gov.uk/d/consult_carbon_price_support_condoc.pdf)

The British Ceramic Confederation (BCC) is the trade association for the UK Ceramic Manufacturing Industry, representing the common and collective interests of all sectors of the Industry. Its 100 member companies comprise over 90% of the Industry's manufacturing capacity.

Membership of the Confederation includes manufacturers from the following industry sectors: -

- |                      |                        |                      |
|----------------------|------------------------|----------------------|
| ▪ Gift and Tableware | ▪ Floor and Wall Tiles | ▪ Sanitaryware       |
| ▪ Bricks             | ▪ Clay Roof Tiles      | ▪ Clay Pipes         |
| ▪ Refractories       | ▪ Industrial Ceramics  | ▪ Material Suppliers |

The industry is energy-intensive (but not energy-inefficient): energy bills / taxes can be up to 30-35% of total production costs.

Many thanks for the opportunity to respond to your consultation. We are disappointed that there is very limited time available for response – and the timelines are not the same as for the Electricity Market Reform Consultation published on the same date– as there is overlap in policy areas <http://www.decc.gov.uk/en/content/cms/consultations/emr/emr.aspx>

The British Ceramic Confederation is a member of and is supporting the Energy Intensive Users Group's response to the consultation.

**Against this background, responses relevant to the UK ceramic industry are:**

- **Ceramics is an energy-intensive industry.** Although the sector uses more gas than electricity, the amount of electricity used is still significant. (About 85% of the total energy used is from gas). Much of the electricity used is for process control or essential safety and environmental equipment. It is therefore more difficult to reduce consumption for these essential functions.
- The Government recognises that the optimal way to achieve a green economy is through the retention within the UK of the whole supply chain for green products. This includes the energy intensive industries who already enable a range of low carbon solutions. **Ceramic products are a key part of the lower carbon economy.** For example, industrial ceramics provide critical components for renewable energy and electricity production and distribution; ceramics also have low lifecycle carbon footprints as they are durable; long life refractory materials help reduce the carbon footprint in steel, chemicals, glass, cement and ceramic production – all essential materials for a low carbon transition. As a trade association, we have been working with the Carbon Trust Industrial Energy Efficiency Accelerator scheme to develop longer term technologies applicable across the industry to reduce emissions and improve sustainability.

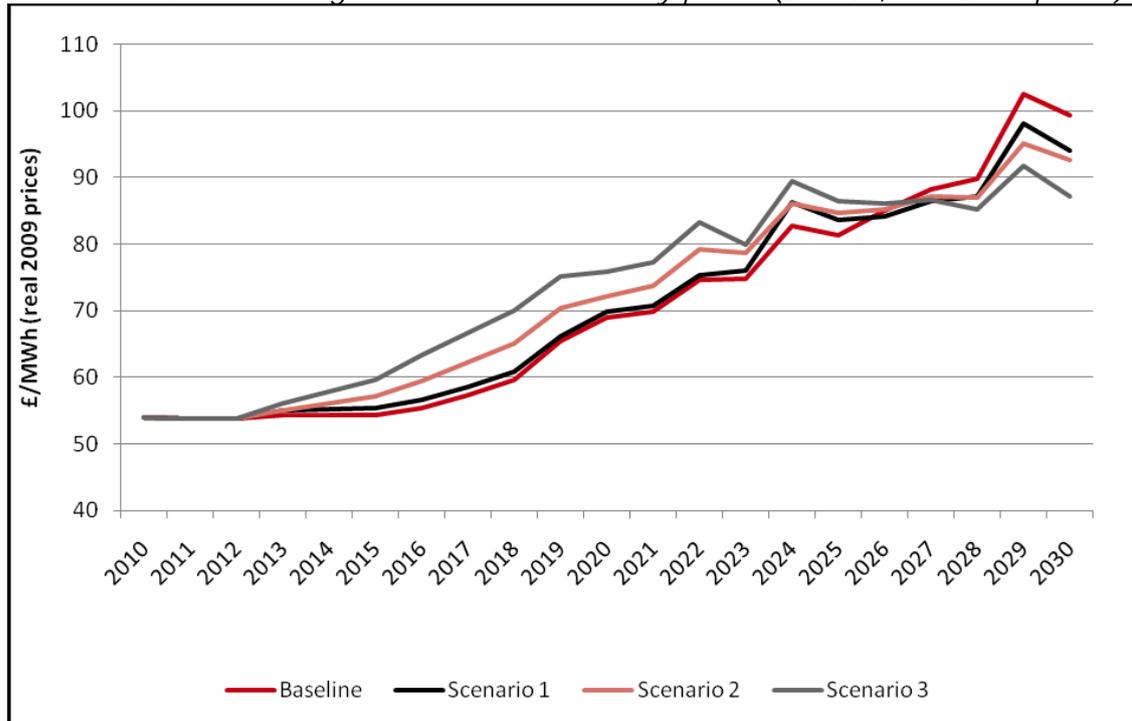
- We support an international agreement on climate change which seeks to regulate greenhouse gas emissions from industry on an equal footing, regardless of location. We note that unfortunately the majority of world ceramics production is not covered by mandatory carbon dioxide / environmental legislation.
- To achieve energy security and self-sufficiency, investment is necessary in the UK. The policy objective should be about providing greater certainty to investors, including those in low carbon generation, not generous subsidies or windfalls.
- The Carbon Price Floor Consultation is being run alongside the DECC Electricity Market Reform Consultation which sets out a package of reforms designed to help deliver secure and affordable supplies of low-carbon electricity including a fixed price for low carbon generation and renewables. The proposed **Contracts for Difference / Feed in Tariff** effectively aims to achieve the same outcome as the Carbon Price Floor and therefore we question why both mechanisms are needed. We are concerned there is too much interference in the market, with multiple policy instruments, which would result in increased costs for consumers and a policy burden that is already complex, crowded and costly.
- Low carbon electricity investors require the certainty now that when new generation capacity comes on stream, the electricity will then receive financial support. A Carbon Price Floor - a policy designed primarily to support nuclear electricity - should therefore remain at zero until at least 2020 (estimated timescales for new nuclear capacity coming on stream).
- Government policy is to encourage manufacturing growth. This can only be achieved if costs are comparable with EU and global competitors. Therefore any new policy/legislation must be tested against this criterion. The proposal as it stands increases costs to manufacturers. Therefore it fails manufacturers and the growth agenda.

**We are concerned that the impact assessment is inadequate:**

**1) The assessment does not quantify the cost to energy intensive industries**

We were interested to see that the majority of the modelling done by Redpoint used a target carbon price of £50/te CO<sub>2</sub> as they needed that level to reduce the carbon intensity. However, for the HMT consultation the highest priced scenario is £40/te CO<sub>2</sub> in 2020. Chart 5A at the bottom of page 36 appears to show UK baseload electricity prices increasing from current levels by c.**27-38%** by 2020 and c.**65-90%** by 2030 *in real terms.* *Alternatively, as a very conservative cost estimate, we note also that the difference between the baseline assumption and the "£40" scenario is approximately £7/ MWh (on approx £69/ MWh) in 2020. However, paragraph 81 in the impact assessment states "The carbon price support scenarios might lead to increases in average non-domestic retail electricity prices of between 1-2 per cent in 2013 and 1-6 per cent in 2020. So 1-6% seems a major underestimate of the real terms price increase that non-retail sectors will bear.*

Chart 5A: Time weighted baseload electricity prices (£/MWh, real 2009 prices)



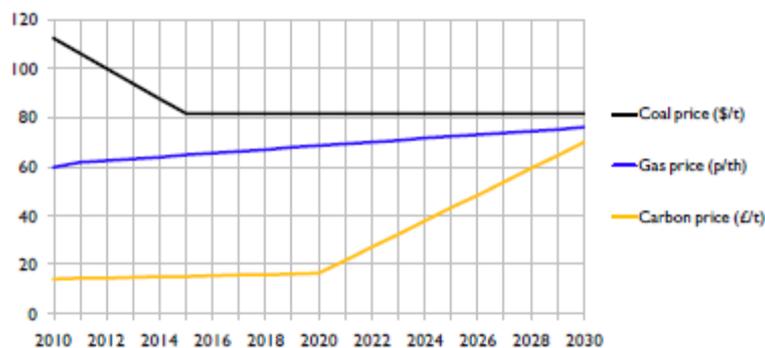
2) **All energy intensive sectors will be “impacted”**. While recognising that some sectors will be “most impacted” – not identifying all energy intensive sectors, such as ceramics as significantly impacted is a major weakness in the impact assessment and needs to be corrected (paragraph 83).

3) **We note that the baseline case price for carbon at £70/ te appears very high in 2030**. We believe that most of the baseline price increase from 2010-2030 in Chart 5A will be due to the cost of UK Climate Change policies and relatively little due to fuel price assumptions – see graph below<sup>1</sup>.

**Fuel and carbon prices**

Fuel price assumptions are based on DECC’s Updated Energy Projections (UEP) June 2010 Central price case. EU Allowance (EUA) carbon price assumptions are taken from DECC’s Central assumptions.

**Figure 77 Fuel and carbon prices assumptions**



Not all the policies will be experienced by manufacturers in other competitor economies (some will have no extra measures). The proposals state, £70 is “an illustrative price consistent with global prices needed to limit the increase in temperature to an expected 2° Celsius” i.e. it may

<sup>1</sup> Redpoint Electricity Market reform Analysis of Policy Options - see Appendix C Figure 77 <http://www.decc.gov.uk/assets/decc/Consultations/emr/1043-emr-analysis-policy-options.pdf>

not reflect the true level of EU ETS Carbon Price in 2030 (many estimates are much lower). We believe this effectively over-inflates the baseline and therefore underestimates the true cost of the policy. We have taken this into account in scenarios looking at the total electricity consumption in our sector to estimate effects on costs (see 5.D5 below). We also note that the baseline used (£16.30 to 2020 and linear rise to £70 in 2030) is higher than the level at which DECC's cited reports are using for their carbon leakage assessments. E.g. €15/te (Oko); €20/te Hourcade et al (2007 – Climate Strategies); Droge (2009) references a variety of costs - €1-€20 (and we note the EC value of €30). Therefore more sectors need to be identified as "impacted". These reports largely ignore intra-EU trade – a significant factor for the ceramics industry.

4) The impact assessment does not consider the cumulative cost on energy intensive industries as a result of all UK energy tax measures. The ceramics industry included 2 examples in the "***The Cumulative Impact of Climate Change Policies on UK Energy Intensive Industries – Are Policies Effectively Focussed? A summary report for The Energy Intensive Users Group and the Trades Union Congress Prepared by Waters Wye Associates July 2010<sup>2</sup>***". An updated WWA analysis including these proposals will be appended to the EIUG response.

5) The impact assessment **ignores the broader effects on the UK economy. For example:**

- **tax revenues** from corporation tax / national insurance / income tax from EI industries.
- **extra costs** (e.g. unemployment payments etc and **consequences on GDP** / balance of payments if these companies were no longer able to operate profitably in the UK. We note that there is a **significant GDP multiplier** for the construction sector<sup>3</sup>. Moreover, much of the **supply chain is integrated and interconnected**. For example, materials and kiln suppliers work across many ceramic sectors and we have seen in 2008-10 that a single manufacturer in administration can cause a series of UK suppliers (and some of their UK customers) failing right across the industry in a cascade.
- **Cost increases cannot easily be passed on to consumers (paragraph 84)**. While electricity companies may be able to pass through costs to domestic and industrial users, the industrial users cannot pass through the full amount or even a sizeable amount of this tax. In our sector, many products compete with products made in other countries (inside and outside the EU) that will not have the same high taxes. Paragraph 106 applies only within the UK *"For those sectors where electricity costs are a significant proportion of total costs, all businesses in the sector have the same opportunities to reduce the impact of the proposal on their costs. The proposal should not therefore limit their ability to compete with each other."*
- **Profit margins of UK businesses will be reduced** compared with foreign competitors, driving investment overseas and causing profitability in the UK to decline further (Paragraph 84). Competitors in countries in and outside Europe will have lower cumulative energy costs and / or energy tax rates. So return on capital is being predicted at higher rates in other countries than in the UK. Our members report that this has now been factored into the assessments by company headquarters of where to invest – especially in new energy efficient technology. **Many UK sites cannot now receive the investment they need from parent companies**. The current carbon price floor proposal is making the situation worse. The UK is losing this investment at a critical time when the Government is trying to rebalance the economy towards manufacturing.

---

2

<http://www.eiug.org.uk/publics/WWA%20Impact%20of%20Climate%20Change%20Policies%20EIUG%20TUC%202010723.pdf>

<sup>3</sup> LEK Report for CBI / UKCG "Construction in the UK Economy - The Benefits of Investment" October 2009. Slide 10: *£1 spent on construction output generates a total of £2.84 in total economic activity (i.e. GDP increase)*  
[http://www.cbi.org.uk/ndbs/press.nsf/38e2a44440c22db6802567300067301b/1b0460221653edd28025765c005a5db8/\\$FILE/UKCG%20L.E.K%20report%2028.10.09.pdf](http://www.cbi.org.uk/ndbs/press.nsf/38e2a44440c22db6802567300067301b/1b0460221653edd28025765c005a5db8/$FILE/UKCG%20L.E.K%20report%2028.10.09.pdf)

- **There is no target or requirement to measure carbon in competitor products imported into the UK.** Products made in less stringent environmental conditions overseas will therefore be at a competitive advantage. As a result, net global emissions will rise. We need to see an amendment of the UK Climate Change Act to include imported carbon, so that UK government policy is focussed on reducing emissions on UK consumption – rather than on putting UK industry at a further competitive disadvantage.
- Para 82 – the **DECC/ BIS study on EI sectors has specifically excluded a number of sectors – including ceramics** – and we are concerned that these departments are **not adequately addressing how to maintain the competitiveness of all these energy intensive industries.**
- **Combined Heat and Power plants are a sensible option** a number of our members want to explore. CHP offers a practical and affordable means of saving energy, typically by up to 20%. European competitors have been encouraged to take up this technology. **The proposed extra tax places UK manufacturers at a further disadvantage. Moreover it also taxes heat, not just power – not intended by the policy.** There is also a strong case for CHP power to continue to receive preferential treatment – this would be consistent with the Government’s previously established CHP target and the current incentives for domestic CHP.
- For many processes that are **continuous** (and therefore more energy efficient than batch processes) shutdowns have to be planned well in advance, particularly for **safety reasons.** The proposals could **sharpen the wholesale price difference** within a day and over a season and this will present challenges for companies on cost as they **won’t be able to provide some demand response.** This will result in **proportionally higher costs in these companies.**
- This policy will provide incentives for interconnectors. This will not increase energy self-sufficiency in the UK. In effect UK manufacturers and consumers will subsidise electricity plants overseas.

**For the specific questions below, we have surveyed our members. Responses are as follows:**

*BCC comment: The companies responding range from some of the largest to some of the smallest ceramic manufacturers – and are a reasonable sample across our membership sectors. We note that nearly all are active in our energy / emissions committees. Many have been role models for investment in energy-efficient technology. We think therefore that the effect on them may therefore be **less severe than for many other members.***

#### **Questions on administration:**

The costs of the mechanism, if it goes ahead, should be clear to consumers and an indication of its impact should be disclosed on their bills.

#### **Questions on investment:**

**5.D4: As a business, how much of the cost of energy bills do you pass on to customers?**

*BCC comment – We strongly disagree with HM Treasury’s assertion that industrial energy users are able to pass on the costs of unilateral energy price increases. As HM Treasury ought already to be well aware, manufacturing businesses operate in an international market. There is no ability to pass on energy costs, unlike power generators. The effect of the Carbon Price Floor proposals would simply to erode profit margins for UK-based manufacturers and hence, over time, to encourage carbon leakage. This fact has already been acknowledged for intensive sectors covered by EU ETS and Climate Change Agreements, so it should not be necessary to debate this matter yet again.*

Companies have to stay profitable to survive. They may be able to sustain a short period of non-profitability in a recession – but can only do this where there are adequate cash reserves. The construction-related sectors have fared badly in the recession –e.g. volumes were reduced by 30-50% for some companies. Cash is now depleted. All companies compete internationally. Several firms mention that they may attempt / have attempted to pass through some energy price increases. They will only be able to do so if all their competitors are facing the same increases - otherwise they will lose profitability. We note that some companies here had to attempt to increase prices last year just to survive. We believe they would not be able to do this on a sustained basis.

- Ability to pass through additional cost of energy bills is limited and is balanced against the price of imported products which may not be subject to any such tariffs.
- We find it very difficult to pass on energy cost increases to consumers (and even when we can pass on some of the cost increase it is usually with a time lag.) *(BCC comment - sector is subject to fierce international competition)*
- All studies of manufacturing selling prices for ceramic wall and floor tile show that there has been real erosion in average prices over the past decade due to the excess capacity and stiff competition worldwide.
- We compete against international companies worldwide and that competition is fierce. We are only able to pass on increases in energy costs to the extent that our competitors around the world are experiencing and passing on their energy costs. We sell to over 50 countries around the world and the extent to which we can increase our prices in our markets is limited. If energy costs increase in the UK only then as a UK manufacturer we will be further disadvantaged.
- In 2009 we had to pass on the cost of the market energy prices to our customers to attempt to stay profitable and we made a significant loss endangering the company's survival and the welfare of the company's stakeholders – employees, suppliers, customers, the local environment and so on. By the skin of our teeth we have pulled through - for now - but additional costs will seriously undermine our ability to sustain our recovery as illustrated above. This would put at risk the significant benefits our company contributes to the economy, environment and local society that we have continued to deliver over our xx year history.
- As a business, we attempt to offset some of the increased energy cost in our annual price review. However, in order to try and maintain and increase business, the company has to offer discounting schemes to some of our customers, meaning that we have to try and absorb a great percentage of any increase. *(BCC note: this sector is subject to fierce international competition and a very high % of imports)*
- The company actually made a loss in the last financial year due to increased costs. An increase in the electricity costs would obviously have impacted further on this. *(BCC note: the company is located in an area of very high unemployment)*
- During the course of our trading agreements with our principal customers we guarantee no fuel surcharges, we therefore absorb any additional costs. With spare capacity in the industry pricing power is muted and we are seeing margin erosion all the time.
- Any significant increase has to be passed onto consumers as the low levels of industry profitability would necessitate this.

**5.D5: How might your company or sector be affected and would be there any impact on your profit margins?**

As a sector, our CCA return compiled for 2008 had approx 800,000,000 kWh electricity delivered

2008 electricity consumption at £50/ MWh baseload rates costs:	£40M
2008 electricity consumption at 27% premium – lowest cost 2020 option	+ £11M increase
2008 electricity consumption at 38% premium - highest cost 2020 option	+ £15M increase
2008 electricity consumption at 65% premium - lowest cost 2030 option	+ £26M increase
2008 electricity consumption at 90% premium- highest cost 2030 option	+ £36M increase
2008 electricity consumption at £7/ MWh premium (difference between baseline and “£40” option in 2020)	+ £6M increase

So we note that even the most conservative estimate of the floor price alone, £6M is a very significant proportion of, say, the 2008 total Climate Change Levy on our sector – a significant tax (and £36M is almost 3 times the 2008 sector CCL).

This is just the effect on electricity. This does not include all cumulative energy taxes applying in the UK e.g. EU ETS, CCL / CCA etc. It appears to exclude other costs on electricity and energy from the suite of electricity market reform proposals (e.g. capacity payments, knock-on effect on gas prices and gas transportation by its increased use for intermittent generation – see EIUG response).

**In your last financial year if you had to pay more for electricity, what % of profits would this be?**

Taking the 27% premium (lowest cost 2020 option) and the at 90% premium (highest cost 2030 option), we asked our members:

A 27% increase in baseload electricity price represents what % of profits of last financial year?
We estimate that average of returns is approx. 42% of profits <sup>4</sup>
Approx. 25% companies would be unprofitable
A 90% increase in base load electricity price represents what % of profits of last financial year?
We estimate that average is approx. 84% profits <sup>4</sup>
Approx. 50% of companies would be unprofitable.

*BCC Note: ceramics is not the most electro-intensive sector, therefore this is a significant concern if this measure / electricity costs / taxes alone have this effect.*

**Electricity Price Impacts**

**5.D1: How do you currently manage fluctuations in the wholesale electricity price?**

*BCC note: these 3 comments reflect a much wider variety of approaches by our membership. In practice it can be very difficult in any case for SMEs to have enough purchasing power to choose the type of contract that they would like. Choice of supplier and type of contract has been very limited indeed in the last 2 years. Many companies (approx. 25% of our members – reflected in*

<sup>4</sup> We have attempted to account for loss-making companies in this analysis. We can provide a little more detail if requested on individual numbers – but have to preserve company confidentiality

the respondents to this survey) were asked to pay a deposit for their energy (up to contract value plus 30pc in one case). To retain enough cash to survive, many companies have been pushed into contracts with little / no ability to manage the wholesale price.

- We manage the fluctuations in the wholesale electricity price by forward purchasing in our own "basket" of companies (BCC note – they can only do this as they are part of a much larger group and can dedicate significant resource to this)
- In previous years when wholesale electricity prices were predicted to fall, the company has worked with a broker who linked us with other users in order to obtain critical mass. This enabled the company to negotiate the most beneficial price via a flexible price contract. However as prices were then expected to rise, for the last two years the company signed up to a fixed contract, which is due to expire in September of this year. The company will obviously carry our further assessments prior to this contract expiring in order to obtain the best price possible. (BCC note – moderate-sized company – several hundred employees)
- Our electricity is bought on an annual fixed price contract. (BCC note - Small company < 100 employees)

#### The general comments we have received are as follows:

- Supporting the carbon floor price will have a severe impact on profitability (see above)... 2030 more than wipes out profit entirely (BCC note: large company i.e. more than 500 employees).
- On the issue of the cost impact of the proposed electricity price hike we very much share your concerns. Total energy costs account for circa 25% of our production costs and electricity makes up circa 40% of our total energy cost.
- The UK company would need to lose 24 shop floor workers at 2010 pay levels to offset this (2030) increase in costs (BCC note – this factory is in an area of very high unemployment)
- Had we faced these additional losses the future of the company's 28 employees would have faced significantly extra risk not to mention the contribution to the economy that a £2 million turnover company makes to the local and wider economy.
- We also provide bricks no other manufacturer makes that are produced at a relatively low carbon cost compared with foreign competitors.
- The company actually made a loss in the last financial year due to increased costs. An increase in the electricity costs would obviously have impacted further on this.
- We made an operating loss in 2009... (so we are measuring these costs) against our 2010 budgeted ... operating profit.
- The cost of energy has the most profound effect on our profitability and this is compounded by the unpredictability of energy prices, in the main the spot price of gas. (We have reported the effect on profitability for 2009/10.) The percentage fall in operating profit based on the forecast for this financial year will be much higher. This is due to the impact of higher gas prices we have experienced over the last 9 months. (BCC note: this comment also reflects the need for energy security and stable prices)
- We have invested over £55 million in low energy, high efficiency technology during the duration of the CCA period 2000-2010.
- I hope that you may see that the UK is not looking like an inviting place for investment for a multi-national company with global investment opportunities and we would urge HM Treasury and the Government to view the impact **of each of these taxes / levies / incentives etc combined together** on energy intensive industry. Energy intensity as you know does not equate to energy inefficiency and we would choose to invest in new facilities if profitability can be projected for a period of 15+ years. Under the current projections the erosion of profitability from each of the above items (list of cumulative UK taxes) **combined**

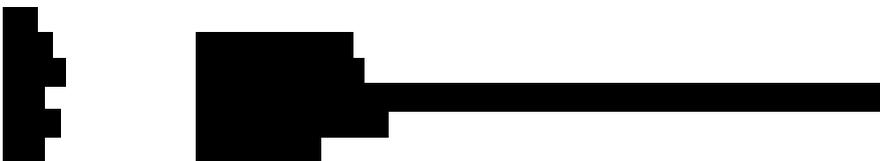
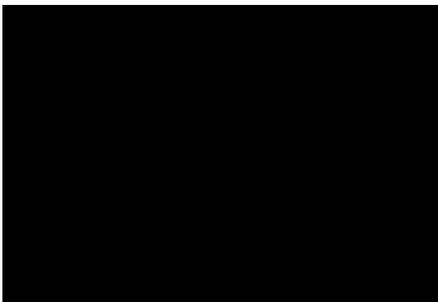
together is so severe that by 2020 we may not have a viable business - I can put it no stronger than that. The only alternative to investment is to see core industries start to wither on the vine and the UK then becomes a net importer of (products) that can be manufactured locally giving rise to employment and reduced traffic (congestion and emissions due to local availability).

- All I can indicate is that energy costs are 20 % of our prime /direct costs of manufacturing. Any significant increase has to be passed onto consumers as the low levels of industry profitability would necessitate this. This approach by the Government will kill off an industry already on its 'knees' and will result in more lost jobs in the UK!!! This is madness!!! (BCC note – company is in sector subject to very fierce international competition indeed)

**In conclusion**, we believe the proposed carbon price floor (rising to £70/ te in 2030) is far too high to ensure viability of most ceramic (and other) manufacturing companies in the UK that are energy-intensive. Rigorous impact assessment was missing from the consultation. We are not against, in principle, a policy that sensibly (at the lowest cost) incentivises low carbon energy security – i.e. nuclear energy. Recognising that investors in electricity generation require a predictable return, not a windfall, we suggest that if a price floor is used it would need to be set at a much lower level to achieve this balance (e.g. much lower than £20/ te) throughout the 2020-2030 period.

We also believe that a policy that provides certainty for investors in energy provision should also provide certainty for investors in energy intensive industries – as this creates economic activity, jobs and growth – creating products essential for our low Carbon transition. It cannot be acceptable for HM Treasury to disadvantage UK-based manufacturing in this way in favour of overseas competitors.

Please feel free to contact me if you require any more information.





**11<sup>th</sup> February 2011**

**Carbon Price Support Consultation  
Response from the British Glass Manufacturers' Confederation**

Sent on 11/2/11 to [Environmentaltaxes.consultation@hmrc.gsi.gov.uk](mailto:Environmentaltaxes.consultation@hmrc.gsi.gov.uk)

The British Glass Manufacturers Confederation represents the UK's Glass Industry.

*It is recognised that decarbonisation of the power sector must be achieved however this should not come at the expense of the UK manufacturing base. We cannot agree with the proposals in this consultation as they currently stand due to the resulting rise in electricity prices which would negatively affect the glass industry.*

Whilst the glass manufacturing sector has been identified as likely to be impacted by the Carbon Price Support in paragraph 83 of the impact assessment, we do not feel that government has attempted to assess or consider this impact in any serious way. Instead, the impact appears to be dismissed and government assumes that costs can be passed on to customers. In reality this is not true and energy intensive industries are likely to bear the greatest cost of this measure. Not only is there no impact assessment for this measure's effect on energy intensive sectors such as glass, the wider cumulative burden of costs from the plethora of climate change policies has not been addressed. In the absence of an adequate impact assessment, EIUG (Energy Intensive Users Group) has commissioned an update report from WWA on the impact of climate policies (including the CPS and Energy Market Reform proposals) on energy intensive businesses, which is appended to the EIUG response to this consultation.

We currently find ourselves involved in a variety of discussions on future climate change policies including CRC, electricity market reform and CCAs. In addition to the existing legislation, any new measures introduced contribute to an ever more confusing and overlapping policy landscape which is costly and burdensome. We would urge government to simplify this in a way that does not harm the UK economy.

**Answers to specific questions:**

Page 1 of 4

9 Churchill Way, Sheffield, S35 2PY. Telephone (0114) 290 1850. Fax (0114) 290 1851

Web site <http://www.britglass.org.uk>

The British Glass Manufacturers Confederation

This Company (no 539065) is Registered in England and Limited by Guarantee. Registered Office is at the above address.

## Investment

3.A2: If investors have greater certainty in the future long-term price of carbon, would this increase investment in low-carbon electricity generation in the UK? If so, please explain why.

If energy prices are certain to be significantly higher for UK manufacturers in the future than elsewhere it follows that investment will be made outside the UK. For example if the manufacture of solar panels is cheaper elsewhere, then it would not be in the interests of a company to invest in the UK.

3.A3: How much certainty would investors attribute to a carbon price support mechanism if it were delivered through the tax system?

Prices cannot be judged as certain when the government is at liberty to change the tax.

## Administration

4.B1: What changes would you need to make to your procedures and accounting systems to ensure you correctly account for CCL on supplies to electricity generators?

From an energy consumer's perspective, who is not necessarily an energy supplier, any additions to cost of energy for a carbon price support mechanism should be clearly stated on energy bills so that the full impact of this policy measure is clear and transparent.

## Types of generator

4.C2: Is there a case for providing additional or more preferential treatment for CHP? If so, what is the best way of achieving this?

Government should not introduce a policy that discourages CHP take up by industry.

## Imports and exports

4.D1: What impact would the Government's proposals have on electricity generators and suppliers that export or import electricity?

It is clear that by raising the cost of fuel for UK generators in comparison to non-UK generators, the former will be at a competitive disadvantage. In a fully liberalised market this could lead to increased dependence on overseas providers which whilst helping UK carbon budgets may lead to loss of energy security.

4.D2: What impact might the proposals have on trading arrangements for electricity?

Potential continued government interference increases uncertainty for future energy prices

## Carbon price support mechanism

4.E1: How should the carbon price support rates be set in order to increase certainty for investors, in particular over the medium and long term?

The concept of setting a carbon support rate conflicts with the principles of a cap and trade system where carbon savings across the participants can be made at the lowest cost to all involved. Setting any rate at all conflicts with trading principles.

4.E2: Which mechanism, or alternative approach, would you most support and why?

We support none of the mechanisms. Adding cost to the energy bought by manufacturers that cannot be passed on will only damage the UK glass industry's profitability.

## **Future price of carbon**

4.F1: Should the Government target a certain carbon price a) for 2020 and b) for 2030? If so, at what level?

The intention of any cap and trade system is to reduce CO2 at the lowest cost, thereby the market price is set by demand and as long as the overall cap is reduced, the scheme is successful regardless of the carbon price. Setting the price or adding a support tax as is proposed goes against that principle.

4.F2: What is the most appropriate carbon price for the UK to meet its emissions reduction targets in the power generation sector? How would this be affected by changes in the structure of the electricity market?

The move to decarbonisation within the power generation sector should not be accompanied by opportunistic price rises to industrial consumers.

4.F3: When would be the most appropriate time for introducing a carbon price support mechanism and what would be the most appropriate level?

As previously stated, under the present circumstances we do not consider a carbon price support mechanism to be appropriate at any time or level, however it would be particularly damaging to introduce further costs at a time when the country is emerging from recession and looking to rebalance its economy.

## **Electricity price impacts**

5.D1: How do you currently manage fluctuations in the wholesale electricity price?

Energy purchasing is specific to each business and we cannot comment on general practise.

5.D2: What difference will supporting the carbon price make to your business?

For glass manufacturers electricity prices are certain to be higher as generators pass through this cost. This will reduce profitability as has already been proven in the glass sector EUETS competitiveness study which recognises that the glass industry is particularly sensitive to overseas competition. Ultimately, where international companies see dwindling profitability, they will cease to invest in the UK operations.

5.D3: As an electricity generator or supplier, how much of the cost of the carbon price support would you pass on to consumers?

In reality there is no doubt that this will be 100%.

5.D4: As a business, how much of the cost of energy bills do you pass on to customers?

The glass manufacturing sector has been identified as not being able to pass costs on to customers. The assumption in paragraph 84 is that it can. It is extremely difficult to pass costs through in the face of foreign competition and foreign price support.

5.D5: How might your company or sector be affected and would there be any impact on your profit margins?

As previously stated, a rise in energy prices that cannot be passed to customers reduces the profitability and competitiveness of the UK glass manufacturing sector. To follow through to the

logical conclusion this would lead to lack of investment in the UK followed by job losses and the export of manufacture of goods to other countries where conditions are more favourable. It would be particularly disconcerting to see the manufacture of green products such as thermal control glass, solar panels and glass fibre move abroad since these technologies contribute to the wider UK climate change programme. The removal of glass container factories from the UK would disrupt recycling infrastructure and downstream operations which could lead to further job losses for the UK.

5.D6: Do you have any comments on the assessment of equality and other impacts in the evidence base of the Impact Assessment, included at Annex D?

The impact assessment wrongly assumes that businesses will be able to pass through rises in energy costs, paragraph 84, where in fact the glass sector has been identified by both the UK government (by inclusion in the CCAs) and the EU commission (competitiveness study for phase 3) as not being able to pass on costs. Thus a rise in energy prices would lead to a loss of profitability which would discourage investment in UK operations. Since over two thirds of glass manufacturing operations (in energy terms) are owned or controlled from outside of the UK, we would expect to see further carbon leakage. The glass sector has already seen the majority of domestic, cookware and special glass manufacture move abroad, whilst the demand for those products remains or grows. Furthermore, the removal of funds from manufacturing will be a further barrier to investment in new technologies.



Mr Martin Shaw  
Environmental Taxes Team  
HM Revenue and Customs  
100 Parliament Street  
London  
SW1A 2BQ



11 February 2011

Dear Mr Shaw

**BRC response to consultation on *Carbon Price Floor: support and certainty for low-carbon investment***

The British Retail Consortium (BRC) welcomes the opportunity to respond to the Government's consultation, *Carbon price floor: support and certainty for low carbon investment*.

The BRC is the voice of the retail sector, representing small and independent stores through to the large multiples, food and non-food, operating on the High Street, out of town, in community and rural shops and online. Retailers employ around 2.9 million people and are growing new jobs even in the current difficult trading environment. The health of retail directly affects the 1 in 8 households with a retail employee. And the services we provide in communities across the country deliver many wider social and economic benefits.

The retail sector has taken a strong lead in voluntarily reducing their carbon emissions and the use of energy within their buildings, both in existing and new stores. Retailers have made significant progress in recent years by improving the efficiency and sustainability of their estate, including investment in renewable energy supplies and energy efficiency improvements. In 2010, signatories to the BRC climate change initiative, *A Better Retailing Climate*, who make up 49% of the retail industry by value, cut energy-related emissions from buildings by 18 per cent on a like-for-like basis since 2005, with a reduction in absolute emissions of 5 per cent.

However, the shifting energy policy environment in the UK, particularly around renewable electricity, energy efficiency regulation and carbon reporting, has held back progress for retailers.

We believe it is vital that the Government start to develop a long-term, consistent and holistic policy on energy. Issues around carbon intensity, energy security, energy efficiency and carbon reporting should be considered together if market dynamics are to be used effectively to achieve the Government's objective of a low-carbon generation future. All aspects of regulation, taxation and reporting should be used to recognise and promote energy efficiency and low carbon generation at the expense of high carbon energy usage and wastefulness.

In this context, we support in principle the Government's objective to provide greater certainty and support to the price of carbon provided that it is focussed on encouraging the necessary investment to secure a sustainable, low-carbon generation future for the UK. The introduction of a carbon price support mechanism through an extension of the Climate Change Levy to fossil fuels used in electricity generation, along with wider reform to the electricity market, would help to meet this objective. We believe the carbon price should set at a level which strikes the right



balance between the need to incentivise carbon reduction and promote economic growth and productivity.

At the same time, we are concerned that the introduction of a carbon price floor could add yet another layer of taxation for retailers, with many already subject to the Climate Change Levy (CCL) and the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme.

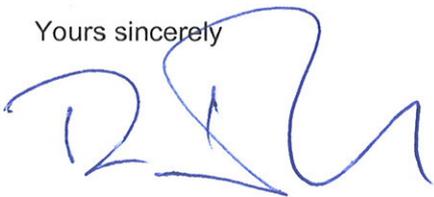
There is a strong consensus across the retail sector that carbon taxation should be reviewed holistically in order to minimise and/or eliminate unnecessary red tape and bureaucracy for business. More importantly, carbon taxes should be applied equally and fairly to all commercial sectors, creating a level playing field. The BRC remains very concerned at the recent changes to the CRC Energy Efficiency Scheme, which will result in participating organisations paying more for carbon than high energy-intensity industries which are already covered by the EU Emissions Trading Scheme. At this stage, there is substantial support across the sector for Government to replace the requirement to purchase allowance sales with a straight carbon tax for all sectors.

Furthermore, the anticipated revenues collected from the carbon price floor, and carbon taxes more generally, should be hypothecated to support investment in low or zero carbon energy improvements.

The Government has acknowledged that applying the 'CCL carbon price support rates' to fossil fuels is likely to increase both domestic and non-domestic electricity retail prices in the short to medium term. It must be recognised that, in relation to non-domestic consumption, the decision for many retail businesses is whether or not to pass on increased energy costs directly to customers. Households are already facing uncomfortably high levels of inflation through rising food and transport costs and the rise in VAT – the latest data from the Consumer Price Index showed inflation at 3.7% in December. Adding extra inflationary pressure – both directly by raising the price of domestic energy and indirectly by raising retailers operating costs – will constrain household budgets further, weaken consumer spending and in turn undermine the fragile economic recovery. The Government should be careful to ensure that increased costs do not adversely affect the broader aim of deficit reduction and a return to growth.

We trust that you will give careful consideration to the issues raised in the paper. Please do not hesitate to contact me or my colleague Maria Hadisutanto ([maria.hadisutanto@brc.org.uk](mailto:maria.hadisutanto@brc.org.uk); 020 7854 8946) should you require any assistance in the future.

Yours sincerely



**Tom Ironside**  
Director, Business and Regulation  
British Retail Consortium



Martin Shaw  
Environmental Taxes HM Revenue and Customs  
3rd floor west, Ralli Quays, 3 Stanley Street  
Salford,  
M60 9LA

8<sup>th</sup> February 2011

Dear Martin,

## **Response to HM Treasury consultation on proposal for a Carbon Price Support mechanism**

There are 8 tyre manufacturing plants in the UK employing 5 000 people directly and as many indirectly. Energy costs typically represent 15% of the cost of transforming incoming raw material into finished tyres. 80% of tyres manufactured in the UK are exported. Equally, 90% of tyres sold in the UK are imported, of which over half come from low cost countries outside Europe. Consequently, UK manufacturing plants are competing as much against plants in other European countries as with Asian competitors. It is from this international perspective that we examine the UK's proposals for national energy and climate change policies.

We applaud the Government's determination to address in a timely manner the need for major investment in the renewal of electricity generation and distribution infrastructure. We are, however, greatly disturbed by the forecast impact of the proposed policies on the cost of electricity to manufacturing industry. All the more so since industrial electricity costs in the UK are already amongst the highest in Europe.

We also welcome the Government's responsible approach to the climate change issue, recognising the need for continued engagement from Industry and for stronger policy support and long term stability from Government. However, we are gravely concerned by the anticipated effect of the Government's energy and climate change policies on the competitiveness of the UK tyre manufacturing industry.

According to the Government's own figures, the combined effects of the proposed energy and climate change policies would be an increase in excess of 40% in the cost of energy (electricity plus natural gas) to UK tyre manufacturers by 2020. Given the fierce international competition within the tyre industry it would be impossible to pass through the additional costs of these proposals. Margins are slim and savings generated through future energy efficiency improvements will be absorbed by the cost of financing them. Without mitigation of the impact of these proposals tyre manufacturers in the UK would have no choice than to relocate production to other countries with a more favourable business environment.

These points have clearly been taken on board by Government in the case of "Energy Intensive" industries. However, we are concerned that the criteria under consideration in defining "Energy Intensive" may lead to unintended damage to a number of sectors from "middle industry" like tyre manufacturing that have very high UK trade intensity and for which energy represents a significant

element of manufacturing cost. We are anxious to have the opportunity of engaging with Government on this important issue.

The majority of the questions set out in the Consultation are aimed at electricity generators and are not applicable to tyre manufacturers. However, we would offer the following responses to the section on Electricity price impacts:

*5.D1: How do you currently manage fluctuations in the wholesale electricity price?*

Like most industrial users tyre manufacturers usually buy annual fixed price contracts. However, the important issue for the future is how can tyre manufacturers selling into a global market manage the proposed steep increase in electricity prices due to UK national energy and climate change policies? Whilst it may be laudable for the UK to take the lead on these topics amongst industrialised nations it must not be at the price of UK manufacturing industry.

*5.D2: What difference will supporting the carbon price make to your business?*

From an energy consumer's point of view, the issue of supporting the carbon price cannot be considered in isolation from the body of measures relating to energy and climate change policies currently under consideration. Manufacturing industry cannot withstand an additional burden of taxation. Any increase in taxation to modify market behaviour must be compensated for by an equal and simultaneous reduction of the fiscal burden elsewhere in the manufacturing economy.

*5.D3: As an electricity generator or supplier, how much of the cost of the carbon price support would you pass on to consumers?*

Not applicable

*5.D4: As a business, how much of the cost of energy bills do you pass on to customers?*

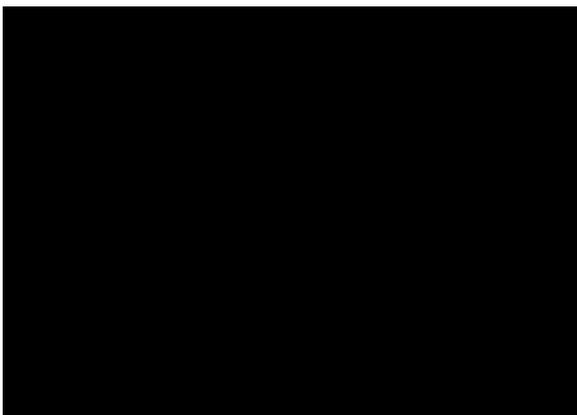
This question is at the heart of our concerns. International competitive pressure in the tyre market would prevent the pass through of the projected increase in costs of the Government's policy proposals. The scale of the increase is such that tyre manufacture would no longer be economic in the UK.

*5.D5: How might your company or sector be affected and would be there any impact on your profit margins?*

See response to 5.D4 above.

*5.D6: Do you have any comments on the assessment of equality and other impacts in the evidence base of the Impact Assessment, included at Annex D?*

We are deeply concerned by the inadequate consideration given to the impact of the proposals on the international competitiveness of UK manufacturing industry. The assumption that with the exception of a dozen sectors the whole of UK manufacturing operates independently of the global economy is an unjustifiable simplification.





# Brunner Mond

Mr Martin Shaw  
Environmental Taxes HM Revenue and Customs  
3rd floor West, Ralli Quays  
3 Stanley Street  
Salford  
M60 9LA

4 February 2011

Dear Mr Shaw

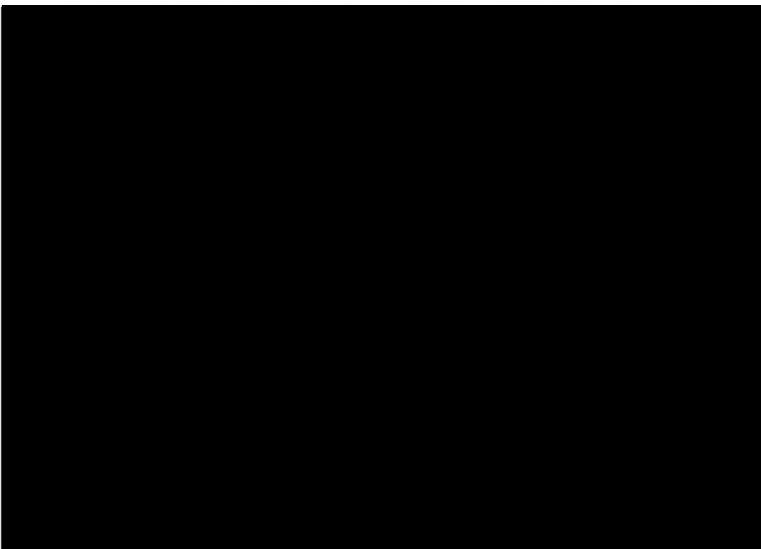
**Re: Carbon Price Floor Proposal from HMRC**

I am writing to you regarding the proposed Carbon Price Floor (CPF) mechanism sent out by HMRC on 16 December 2010 and ask for your consideration and support in respect of exempting Good Quality CHP (GQCHP) plants from the proposal.

- Brunner Mond is a wholly owned subsidiary of Tata Chemicals Limited (TCL).
- Brunner Mond continues to support initiatives to encourage low carbon investment in the energy sector and believes strongly that the chemical sector has a role to play in reducing carbon emissions.
- Soda ash is a critical raw material for the manufacture of carbon reducing materials such as building insulation, solar panels, high tech multi-glazing for buildings and highly recyclable packaging.
- Brunner Mond is the UK's only producer of soda ash.
- The production of soda ash is energy intensive irrespective of how it is produced.
- Through foresight and investment of £140m in a state of the art Gas fired CHP plant in 2000, TCE currently operates one of the lowest carbon footprint soda ash facilities in the world.
- Brunner Mond is now in the process of gaining planning approval from DECC for a £300m investment in a sustainable CHP plant to supply a third of our energy demand from renewable sources as part of Tata's continued commitment to reduce carbon emissions.
- Implementation of the sustainable CHP plant will result in our soda ash having a world leading carbon footprint.
- Brunner Mond agrees that the proposed Carbon Price Floor (CPF) is likely to deliver higher and more predictable electricity prices which will in turn have a positive impact on low carbon electricity generation projects.

- Large-scale Good Quality CHP plants, which are encouraged throughout the EU as best practice, are designed to provide heat for production processes at maximum efficiency by co-generating electricity resulting in gross thermal efficiencies of >80%.
- The CPF proposal will have a surely unintended consequence of heavily penalising GQCHP as a high efficiency mode of heat generation for energy intensive industries.
- CHP support mechanisms highlighted in the consultation document are of little help to large scale CHP schemes where cost of input fuel dominates the economics of their operation.
- It has been established by the EU, as part of EUETS Phase 3, that the European soda ash industry is at serious risk of carbon leakage.
- Brunner Mond has supported the proposals for targeting carbon savings in the soda ash industry by means of EUETS Phase 3 (cap/trade) applied multilaterally across 25 EU states.
- Because the implementation of CPF is on a UK only basis, it puts our business under severe threat from EU competitors most of whom have significantly higher carbon footprints.
- To put the threat in perspective, if implemented the total additional costs to our business of CPF will be double our current year profits.
- There will no ability to mitigate this additional cost through price increases as soda ash is an internationally traded commodity.
- This unilateral imposition would make us un-competitive against producers within and outside of EU including countries such as the USA who have significantly lower fossil fuel costs and no obligations on its manufacturers to reduce carbon emissions.
- The introduction of CPF will put at risk 4000 direct and indirect manufacturing jobs in the Northwest and could result in the import of 700,000 tes of soda ash to the UK.
- **Brunner Mond believes good Quality CHP Power plants which are the life blood of energy intensive processes must be exempt from the carbon price support mechanism.**

In view of this business critical matter, I would seek the opportunity to discuss the contents of this letter with you at the earliest opportunity.



### Company Background

- Tata Chemicals Europe (Brunner Mond) is the sole UK manufacturer of Soda Ash with UK market share of over 80%, Sodium Bicarbonate and other alkaline products.
- Brunner Mond products are used as key raw materials for industries such as glass, insulation, detergents, chemicals, food and pharmaceuticals.
- Brunner Mond has recently acquired British Salt, which supplies 50% of the UK salt demand, for £93m. This acquisition enhances the manufacturing base of Brunner Mond in Cheshire.
- The combined business has a turnover of £200m and employees 620 people and underpins another 4000 jobs in the Northwest region.
- Brunner Mond is a net exporter of £30m of goods to mainland Europe and the rest of the world.



**HM Treasury**

**Consultation on Carbon Floor Price: support and certainty for low-carbon investment**

Response from BT

11<sup>th</sup> February 2011

# Consultation on Carbon Floor Price: support and certainty for low-carbon investment

## Introduction

1. This consultation is described as being about proposals to provide greater certainty and support to the carbon price. It is said to be aimed at helping to create more incentives for investment in low-carbon electricity generation. The consultation is aimed at companies and individuals involved in the generation and supply of electricity and/or the supply of fossil fuels used to generate electricity.
2. There is a parallel consultation on wider Electricity Market Reform, to which we will respond separately.
3. BT believes that in this consultation on the carbon price floor the Government has missed an opportunity to rethink incentives so as to provide consumers of carbon with the power and incentive to influence investments by suppliers using the usual market mechanism of exercising consumer choice through purchasing decisions.
4. In this response we confine ourselves to some basic principles rather than responding to the many detailed questions in the consultation, since those questions effectively pre-suppose a policy outcome which we think is flawed because it does not provide consumers with any real choice.

## Policy principles

5. For the UK to achieve its carbon reduction targets, as set out in the Climate Change Act 2008, a simple, effective policy framework must exist that encourages:
  - organisations to become more energy efficient;
  - organisations to develop their own low carbon self-generation schemes;
  - the market to supply organisations with the lowest carbon sources of energy; and
  - electricity generators to reduce the carbon intensity of energy generated.
6. BT believes that any policy changes should:-
  - simplify and consolidate tax and incentives to drive the low carbon economy;
  - ensure a long term commitment to the current FITs and ROCs schemes. Businesses cannot plan given the uncertainty arising from the many potential changes being discussed;
  - support the introduction of carbon reporting rules that are consistent across Europe and globally;
  - differentiate carbon emissions from different electricity sources of CO<sub>2</sub>, in order to incentivise generation of electricity from renewable sources; and
  - streamline the planning process at local level and encourage local authorities to work with local communities and promoters of developments to process applications faster.
7. Changes must be beneficial to both the Government and business alike and we propose a major simplification of climate change fiscal instruments such that:
  - revenues to the Exchequer are maintained;

- administrative overheads for both Government and business are significantly reduced;
- incentives to go for stretching energy efficiency targets are reintroduced; and
- renewable electricity is consistently and properly recognised.

**BT's proposal**

8. We believe that:-

- the CRC and Climate Change Levy (CCL) should be merged, with the CRC allowance cost paid to the energy suppliers in the same way as the current CCL;
- the price of carbon in the combined scheme should be designed to ensure that there is no reduction in post-CSR revenue to the Exchequer;
- the proposed carbon floor price mechanism should be built into the new scheme; and
- the levy on electricity should be banded according to its carbon content. For example;

Electricity CO <sub>2</sub> Label		CO <sub>2</sub> / kWh	£/MWh
<b>A</b>	Renewable / zero carbon	0g	£4
<b>B</b>	Low carbon / CCS	<200g	£6
<b>C</b>	Gas CHP	<300g	£8
<b>D</b>	CCGT Gas	<400g	£9
<b>E</b>	UK Average / Gas	<600g	£10
<b>F</b>	Good Coal / Oil	<800g	£12
<b>G</b>	Coal	>800g	£14
<b>AVERAGE LEVY</b>			<b>£9</b>

9. This proposal is aligned to the carbon floor price in that it takes account of the carbon content of energy. By putting a levy on carbon at the demand or usage side of market, the Government would create greater leverage from the carbon floor mechanism. The Carbon floor as currently proposed will create a hidden cost that flows through to users, even though users have no choice as to the carbon content of their electricity supply - therefore missing the opportunity for buying decisions to be taken on the type of energy to purchase. These types of buying decisions will require board level sign-off and in most cases will create a long term commitment to purchase renewable energy, thus creating a demand side market driver that will support the Government's long term plans for low carbon energy generation.

10. BT believes that Government's current review of energy and carbon policy, alongside productive dialogue with business, represents an excellent opportunity to develop a simplified energy and carbon policy framework that will also enable the UK to meet its commitments to carbon reduction.

BT  
11<sup>th</sup> February 2011