BRITISH ceramic CONFEDERATION

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**British Ceramic Confederation Response to the European Commission Green Paper "A 2030 framework for climate and energy policies"**

**Executive Summary**

The impact of the crisis on the EU and UK economies, the access to new energy sources and the recent experience with international climate change negotiations clearly show that the domestic and international context for EU climate and energy policies has changed dramatically. Therefore, the debate on the 2030 framework should give the opportunity to "think outside the box" and not only to define adjustments to existing policy instruments. This implies also a rethinking of the current cost-driven approach based on unilateral binding targets. Consequently, the 2030 framework should establish a regulatory environment that favours access to secure energy sources at internationally competitive prices and promotes investments in R&D and low carbon technologies. At the same time, the debate on climate objectives should be based on a bottom-up approach that addresses the technical feasibility and the cost efficiency of emission reductions.

## Introduction

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. Our 100 member companies comprise over 90% of the industry's manufacturing capacity and include manufacturers from the following industry sub-sectors:

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

The sector (including its suppliers) employs approx. 20,000 people and generates £2 billion sales. The sector is an active exporter, particularly for industrial ceramics, refractories, clay drainage pipes, tableware and giftware.

The European and UK ceramic industry is energy-intensive but is not energy inefficient. Energy bills / taxes can be up to 30 to 35 % of total production costs. In excess of 1,000 European ceramic installations are currently included in the EU Emissions Trading System (EU ETS). This represents approx. 10% of total ETS installations, but less than 0.5% of total emissions.

The ceramics sector is also a solution provider for the low carbon energy generation, distribution and storage. As highlighted both in the recent European Commission low carbon energy generation materials roadmap[1]

[1] Materials Roadmap Enabling Low Carbon Energy Technologies
http://setis.ec.europa.eu/activities/materials-roadmap/Materials_Roadmap_EN.pdf/at_download/file

ceramic components are critical in most renewable technologies, with applications including: wear resistant components (for heat pumps / wind turbine bearings), heat resistant refractory products (essential for the fabrication of solar photovoltaic panels) and electroceramics (for numerous applications including smart meters, temperature / flow regulators, heat sinks, piezoelectric energy harvesting and solid oxide fuel cells).

Ceramic products are designed to be durable. There are many examples of ceramic products still in use after hundreds of years and many technical products are specifically fabricated from ceramic materials because of their long-life performance. This is achieved through high-temperature firing of a wide range of minerals, from locally-sourced clay to natural or synthetic high-quality industrial minerals. Due to their extended lifetimes, ceramics are very material efficient and hence exhibit low cradle-to-grave lifecycle carbon footprints per year of life. Often, ceramic goods are replaced due to consumer choice rather than the need to replace a worn out product.

The European and UK ceramic industry welcomes the launch of the debate on the 2030 framework for climate and energy policies that follows the publication of the European Commission's green paper on this subject[2]. A predictable regulatory framework is essential for a sector with long-term investment cycles like ceramic manufacturing. Indeed, European and climate and energy policies have a major impact on the competitiveness of the ceramic industry.

**Dramatic Changes to Policy Context**

Major developments (at both European and international level) have dramatically modified the context within which the 2030 framework will be defined. In particular, we would like to draw attention to the following:

- **The economic crisis.** Since 2008 the economic recession has severely affected the financial position of UK and European businesses, households and governments. In the case of the European and UK ceramic industry, this meant that the production value was 30% lower in 2012 than in 2007. The economic and social consequences of this crisis have confirmed the essential role the industry plays in delivering jobs and growth. At this stage, the signals of recovery remain very uncertain, and the return to pre-crisis levels is not expected in the short or medium term. It is therefore essential that the climate and energy framework takes this situation into account and does not create an unmanageable financial burden. For instance, the feasibility of the investments foreseen in the 2050 Competitive Low-carbon Economy Roadmap (€270 billion a year over the next four decades) requires transparent engagement with all interested stakeholders.

- **Access to new energy sources and divergence in international prices.** One of the assumptions of the 2020 climate and energy package was that access to traditional energy sources would become restricted over time with an increasing impact on prices. However, recent technological developments have offered the opportunity to exploit new sources such as unconventional hydrocarbons (e.g. shale gas and coal-bed methane). In the case of the USA, access to shale gas is likely to make them a net exporter of gas within a few years, solving their dependence on third countries. This has resulted in an increasing divergence of energy prices in the EU compared to other major industrial / competitor economies. For instance, in 2012 industrial gas prices in the USA were around one quarter of those in the EU. Of course, other elements, such as the linkage of oil and gas prices and the regulatory costs have affected this trend.

- **International negotiations and third countries' strategies**. The experience of recent years has demonstrated that progressing towards an international climate agreement requires difficult negotiations that have taken longer than was initially foreseen. The results of the Copenhagen summit also put into question the effectiveness of the European strategy to use a conditional 30% target as leverage in the negotiations. Although positive developments have been registered in recent years, an international scenario of fragmented action seems the most likely in short and medium term. More broadly, the recent experience has shown that third countries may prefer alternative strategies to binding commitments, such as developing an internal R&D framework that favours investments in low carbon technologies. At the same time, the shale gas exploitation in the USA has confirmed that breakthrough technologies may offer unexpected opportunities to reduce emissions.

[2] Green Paper "A 2030 framework for climate and energy policies"
http://ec.europa.eu/energy/green_paper_2030_en.htm

## Learning from the Current Climate and Energy Package

In addition to the dramatic changes to the European and international context, it is essential that the debate on the 2030 framework also addresses the lessons learned from the 2020 climate and energy package:

- **Impact of the combination of European and National regulatory framework on energy prices and competitiveness**. As demonstrated by the recent trends in energy prices, national and European climate and energy policies affect national energy prices heavily. The trend of increasing energy prices is expected to continue in the future. Rather than acting as a spur, the rising cumulative cost of climate change-related taxes and policies on UK energy bills and other costs acts now, our members tell us, as a barrier to investment, hampers international competitiveness and increases the likelihood of carbon leakage. This is especially important in the ceramics sector since all sub-sectors are deemed to be at significant risk of carbon leakage. The need to promote energy efficiency must be balanced against the ability of manufacturing industry to pay. Most ceramic manufacturing companies operate in highly competitive international markets, meaning there are limits on how much of the additional costs can be passed through to customers. There is a need to assess the cumulative impact of all national and European policies on energy prices as significant differences exist between member states and with competitors outside of Europe. The indirect impact of the EU ETS (through higher electricity prices) is also of great concern due to the exclusion of ceramic manufacturing from the list of sectors eligible for state-aid compensation. There are some unique highly electro-intensive ceramic manufacturing processes, for example technical ceramics and refractories manufactured in electric arc furnaces and electric induction furnaces at > 2000°C; indeed these are some of the most electro-intensive processes in Europe. The combination of national and EU taxes on electricity is crippling and it is this combination that should be considered by the EU in its assessment on individual processes / companies (rather than sectors). Finally, several studies have shown that the reduction of emissions related to the manufacturing of EU products is frequently accompanied by an increase of total emissions embedded in imported products from third countries.

- **Overlapping European policies**. The 2020 climate and energy package was based on the three targets concerning energy efficiency, renewables and greenhouse gas emissions. The legislation adopted to meet such targets (mainly Emissions Trading Scheme Directive, Renewables Directive and Energy Efficiency Directive) has resulted in partially overlapping instruments, leading to trade-offs and inefficiencies. For instance, the adoption of the EED was followed by a decrease of the carbon price because it introduced new obligations for installations covered by EU ETS. At the same time, the EU ETS carbon price does not show fully the costs related to the development of renewables.

## Policy Recommendations

BCC would like to draw the attention to the following policy recommendations that we believe are relevant for defining the 2030 policy framework:

- **A comprehensive 2030 strategy for growth.** The debate on the 2030 framework is an opportunity to define a clear strategy to boost the European recovery. However, in order to be successful and effective, it needs to embrace all aspects that affect the competitiveness of the EU economy. The starting point of such strategy would be to identify a clear target based on the ability of the EU to access affordable and secure energy supplies. One option would be to set a target based on retail energy price differences between the EU and major trading countries. Another possibility would be to define a reduction trajectory for the regulatory costs. Such targets should be accompanied by additional policy initiatives, such as the development of unconventional energy sources. Furthermore, the strategy should address the trade-offs between different European policy tools and between European and national policies. One possible option to tackle the first challenge may be the definition of a unique European climate target on greenhouse gas emissions that is not accompanied with energy efficiency and renewable targets.

- **A bottom-up approach based on technical feasibility and cost efficiency**. In the absence of a legally binding international agreement with comparable effort from competing countries, the EU should also rethink the approach of unilateral, long term targets (such as the 2050 Competitive Low Carbon Roadmap). Furthermore, a linear path to 2050 objectives is not necessarily the most cost-efficient one, since breakthrough technologies may offer new and unexpected solutions in the long term. Therefore, it is essential that the commitment to emission reductions takes into account what is technically feasible and economically cost-efficient for each sector. This should entail a greater focus on the untapped emission reduction potential in non-ETS sectors, such as buildings.

- **Rethinking the cost-driven approach**. One of the assumptions of the current climate and energy framework is that investments will be driven by higher costs (through either energy prices or carbon price). However as explained above, the international context as well as the financial profitability of the remaining European manufacturers has dramatically changed. Therefore, the priority of the new package should be to establish a framework that favours investments in decarbonisation technologies (for example by promoting R&D and early development of breakthrough technologies) rather than further increasing regulatory costs. To develop emerging technologies to meet challenging targets will require significant additional UK / EU financial support to fund (or co-fund) industrial research, development and demonstrator projects. The high risks associated with investing in unproven technologies mean individual companies are highly unlikely to act in isolation. The recently published European ceramic industry roadmap summarises breakthrough technologies which could be applied across the ceramic industry[3]. In addition, it is essential that embedded emissions from imported products are also accounted for to ensure Europe is not simply decarbonising by deindustrialisation.

- **A "fitness check" for the EU ETS.** The debate on the 2030 climate and energy framework offers also an opportunity to discuss some elements of the EU ETS that will need an update after the third trading period:

    - **Carbon leakage beyond 2020**. In the absence of a legally binding agreement that levels the playing field with competing partners, it is essential that the free allocation for sectors exposed to the risk of carbon leakage is extended beyond 2020, as the current rules will expire by 2027. Furthermore, the validity period of the carbon leakage list should be extended to the entire trading period in order to increase the stability and predictability for operators.

    - **Separate policy instruments for Power Generation and industrial sectors**. Due to the different signals associated with the carbon price, separate policy instruments for industrial operators and the power generation sector are required.

    - **No direct or indirect costs for best performers**. In the current framework even best performing installations may face additional costs as a result of the rules on free allocation and indirect compensation. For instance, all ceramic sectors are excluded from the list of sectors at EU level eligible for indirect EU ETS compensation. As a general approach, the 2030 framework should aim at enhancing the competitiveness of best performers by avoiding any additional direct or indirect cost.

    - **Regulatory certainty and competitiveness**. Investment decisions are made with the long-term prospects of a particular business in mind. Realising high-cost, long-term decarbonisation measures therefore requires a stable and competitive regulatory framework that covers energy and environmental policies as well as broader industrial strategies. The current framework lacks long-term consistency which is vital to underpin investment in energy efficiency technologies. Examples of potential EU ETS interventions include backloading and further structural reform.

    - **Diversify domestic and international energy sources**. The 2030 framework should promote the responsible development of unconventional energy sources. Furthermore, it should develop an energy strategy to improve relations with major supplying countries.

Please feel free to contact me if you require clarification on any of the above information. As an energy intensive industry we are keen to continue engaging with European Commission to support cost effective measures to reduce carbon emissions.

**Dr Andrew McDermott**
**Technical Director**

[3] Paving the Way to 2050: The European Ceramic Industry Roadmap.
http://www.cerameunie.eu/en/doc/198/CU_IndReport_21Jan_Screen_sp.pdf