**Paper 3 - Energy and climate change**

**Introductions**

European Targets and related Directives provide multiple benefits for UK industry and the wider economy:

* Investor confidence driven by ambitious objectives
* Lower energy bills and reduced carbon emissions through progressive building, product and generation plant improvements
* A single market approach to placing energy related products and/or systems on the market

**Specific policies are outlined below:**

* The Energy Performance of Buildings Directive has been the key driver for transforming the market for new construction and existing buildings. EPC ratings since 2008 have seen progressive improvement towards band A with an overall average at band D (Source: EPC register). In 2013 new homes had an average SAP rating of 81 (band B) against the overall average of 59 (band D) and the overall average had been 45 (band E) in 1996. Building regulations linked to EPBD requirements have been at the heart of this improvement. The Clean Energy Package includes new proposed amendments to this Directive which would lead to further improvements in new build and existing building regulation. The Clean Energy Package of amendments goes beyond energy efficiency and drives regulation to ensure future built in functionality for load management, which is supported by and driven through the new ‘Smart Building Indicator’.
* The Renewable Energy Directive has laid the foundation for investment in on/off shore wind energy and renewable heat deployment. In 2016 we achieved nearly 6% of heat from renewable sources compared to 2% in the last decade but we need the leadership of policy driven targets to deliver investor momentum as we are still only half way towards the 2020 12% heat target. The Clean Energy Package includes amendments to this Directive in addition to a Market Design initiative consisting of recasts to the Electricity Directive (COM(2016864), a recast of the Electricity regulation(COM(2016)816) and ACER Regulations (COM(2016)863), all driving the required market design framework for flexibility in the European Market. This will help drive EU markets for new low carbon technologies including grid scale energy storage.
* The Energy Related Products Directive (eco-design and energy labelling) has provided a progressive product development trajectory which bottom slices the poorest performing products and provides market transformation signals for customers through up-selling through the energy label classifications. Government statistics show household energy consumption is decreasing and improved technology energy performance such as switching to A rated appliances is part of the success.
* The Third Energy Package is currently in development and is expected to support increasing connection between UK and Continental power network via HVDC interconnectors which, in turn, will be needed to integrate higher levels of renewable generation.
* The Internal Market in Electricity Directive (2009/72/EC) and Natural Gas Directive (2009/73/EC), aim to deliver real choice for all consumers, so as to achieve efficiency gains, competitive prices and higher standards of service, as well as contributing to security of supply and sustainability. These Directives have been key drivers for change, providing a clear working framework for the UK’s national energy market policies, have encouraged the energy industry to work together to find solutions, and supported UK technical innovation in smart grids, smart metering and connected homes. The Clean Energy Package has a clear focus on consumer empowerment and association amendments within this package will continue to help deliver choice for consumers and competitive markets for energy supply and potentially new flexibility (DSR) services.
* Energy Efficiency Directive (2012/27/EC). The UK is facing unprecedented challenges resulting from increased dependence on energy imports and scarce energy resources, and the need to limit climate change and to overcome the economic crisis. Energy efficiency is a valuable means to address these challenges. The Directive sets out requirements on regular billing and billing based on actual consumption, the provision of information to energy service providers, the availability of electronic billing information and bills and the provision of information to customers with the bill. All of these are key elements of the UK’s smart meter programme and will deliver much improved and timely energy information for consumers.

BEAMA members support the single market principle for energy related products at the very least, for reasons already outlined within this paper. It must be understood that many of the product related directives apply to products where they are placed on the market, so UK companies exporting to the EU will continue to make products that comply with these regulations. It does not make economic sense for UK based manufacturing (or even multi-nationals with a UK distribution presence) to develop UK specific products and/or systems, nor for regulatory standards to be lowered in the UK to the detriment of companies that have invested to comply with existing EU regulations.

Government should also note that a large number of companies will have entered long term investment backed arrangements based on the UK following the horizontal type regulations driven by Directives such as EPBD, in which it is expected the standards for buildings will be improved up to and beyond 2020.

On a general principle, BEAMA supports the UK government to respect its ambitious commitments to reduce Greenhouse Gasses made by the EU on member states’ behalf during the COP21 process. BEAMA believes this is best achieved by ensuring all future UK policies in support of the energy and climate change agenda should be developed in close cooperation with the development of European directives, policies and standards.