The Chartered Institution of Building Services Engineers (CIBSE)

1.1 CIBSE is the primary professional body and learned society for those who design, install, operate and maintain the energy using systems, both mechanical and electrical, which are used in buildings. Our members therefore have a pervasive involvement in the use of energy in buildings in the UK with a key contribution to sustainable development. Our focus is on adopting a co-ordinated approach at all stages of the life cycle of buildings, including conception, briefing, design, procurement, construction, operation, maintenance and ultimate disposal.

1.2 CIBSE is one of the leading global professional organisations for building performance related knowledge. The Institution and its members are the primary source of professional guidance for the building services sector on the design, installation and maintenance of energy efficient building services systems to deliver healthy, comfortable and effective building performance.

1.3 CIBSE has produced an initial analysis on the implications of Brexit for buildings, energy and the environment. Overall, we believe that the EU has been instrumental in driving energy policy in the UK and that we should retain and enhance EU-led energy policies and legislation. Improving energy security, reducing carbon emissions and reducing business and consumer bills are positive outcomes of a focus on energy efficiency and renewable energy, and would benefit from a coherent overall approach.

2. To what extent have the Government’s energy policies been driven by the EU? Are any policy areas currently at risk?

2.1 The UK has benefited from the strong overarching approach of transnational policy making at an EU level, and the consistent focus on energy has been invaluable in a variable national political climate. It has enabled the UK to start to take a coherent, long term approach to energy issues.

2.2 The EU energy policies that CIBSE and its membership has significant interaction with are the:


[http://us6.campaign-archive2.com/?u=6b20ea5b6c&id=317d639623&e=%5bUNIQID](http://us6.campaign-archive2.com/?u=6b20ea5b6c&id=317d639623&e=%5bUNIQID)
- Energy Efficiency Directive (EED)
- Energy Related Products Framework Directive (ErP)
- Renewable Energy Directive
- F-Gas Regulation

The EU’s Circular Economy Package is also of increasing importance to energy policy.

2.3 There has been a good balance between setting a common EU framework and allowing member states to implement Directives in a manner which is suitable for their own particular national situations. For example, the EPBD has been successful in reinforcing building energy policies in the UK. It has raised the profile of energy management in buildings, emphasising the importance of monitoring and measurement to catalyse improving performance. The UK has been setting energy performance standards for buildings since at least 1985 and reinforcement of this through the EPBD has been welcome.


2.4 A focus on measuring and publicising energy consumption has been a key success of the EPBD. It has helped to keep the UK government on track when national legislation around carbon and energy has been withdrawn. There is now a greater interest in the performance of existing buildings, and an awareness that there is a need to improve this even further. The implementation of the EPBD in the UK has had positive effects e.g. energy performance certificates (a key component of the EPBD) have made energy consumption very visible whilst encouraging building owners to focus on energy management.

2.5 **Display Energy Certificates (DECs)** - in the public sector are intended to keep up the pressure on this sector to use taxpayers/citizens money wisely on energy and to carefully manage energy use in public buildings. It is key that this element of energy policy is not lost, and it should be strengthened following the lead of successful schemes such as NABERS, a national rating system that measures the environmental performance of Australian buildings, tenancies and homes. NABERS measures the energy efficiency, water usage, waste management and indoor environment quality of a building or tenancy and its impact on the environment. It has had a transformational impact on the quality of office buildings in Australia, with strong private sector uptake.

2.6 **Nearly Zero Energy Buildings (NZEBs)** - the EPBD includes provisions for all new buildings to fulfil a nearly zero-energy standard by the end of 2020 and new public buildings by end of 2018. With the cancellation of zero carbon policy outside London in July 2015, the NZEB
2020 target may now provide the next uplift in building regulations for energy efficiency standards. It would be a huge disappointment if the UK could not make the NZEB target by 2020 since it was the UK that led the way by setting this target initially and inspiring the EU to follow suit. This is a policy area which is at risk and we recommend that the UK keeps the 2020 NZEBs target.

2.7 **Minimum Energy Efficiency Standards** are a domestic policy measure introduced through the Energy Act 2011, but which use energy performance certificates initiated in response to the EPBD. The minimum energy efficiency regulations will mean that, by 1 April 2018, all properties in the domestic and non-domestic private rented sector with energy ratings falling below a certain level will normally have to be improved to a specified minimum energy efficiency standard before being let to tenants. The minimum standard is currently proposed to be an E rating on the Energy Performance Certificate (EPC) and properties with an F or G rating are in scope of the minimum standard regulations. These standards, using EPBD derived EPCs, are proving to be an effective catalyst in the private rented residential sector, with landlords already gearing up to meet the requirements, and in the commercial sector they are driving landlords to review carefully the state of their existing stock.

**Energy Efficiency Directive (EED)**

2.8 The 2012 Energy Efficiency Directive (EED) establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. Under the Directive, all EU countries are required to use energy more efficiently at all stages of the energy chain from its production to its final consumption. A number of national measures in the UK are related to the Directive including the Energy Savings Opportunities Scheme (ESOS) which is to now play a key part in reforming the business energy efficiency tax landscape. This has been a positive driver for businesses to identify opportunities to reduce energy consumption and costs.

2.9 The Heat Networks (Metering and Billing) Regulations 2014 also derive from the EED. These regulations provide ample case study material in the introduction of regulations without adequate attention to the legal and technical complexities entailed, without any consultation with the commercial sectors directly affected by the regulations, and without any accurate understanding of the scale of the regulatory burden. However, despite all these challenges, the commercial sector has largely come to understand the requirements and develop solutions which meet them at the lowest costs. The underlying concept of the Directive and the Regulations, which is that tenants should receive accurate metered bills for the heating, cooling and hot water they receive from the landlord is very sound and to be encouraged. Now that the leading businesses in the sector have, at considerable expense, implemented the requirements, to drop them purely because the originate in an
EU measure would further penalise the law abiding and compliant businesses who have implemented the Regulations, and further reward and boost the competitiveness of the non-compliant. Whilst there may be improvements to be made to the Regulations, the Institution’s dialogue with commercial property operators leads us to the view that these Regulations should be retained when the UK withdraws from the EU.

**Renewable Energy Directive**

2.10 The **Renewable Energy Directive** establishes an overall policy for the production and promotion of energy from renewable sources in the EU. The UK is legally bound to provide for 15% of its energy needs—including 30% of its electricity, 12% of its heat, and 10% of its transport fuel—from renewable sources by 2020. A raft of changes to the incentives set up to encourage renewable energy in the UK have undermined the sector and this is an area at risk. Renewable energy not only has environmental, social and economic benefits, it is a key part of energy security. Relying on fossil fuels and imported fuels is not a secure strategy. Renewable energy, along with energy efficiency, is a much more resilient option and should be supported nationally as such. The UK is falling behind other countries in this area and is likely to fail to meet its target.

**Energy Related Products Framework Directive (ErP)**

2.11 This major package of Directives has introduced the familiar A-G rating scales for a wide range of consumer products, but also for heating and ventilation systems and other energy related products installed in buildings. UK manufacturers have invested huge resources of time and money, re-engineering processes and products, to comply with these requirements, which also deliver significant emissions reductions which contribute to the delivery of UK targets under the Climate Change Act.

**F-Gas Regulation**

2.12 This Regulation addresses the control of fluorinated substances, in particular refrigerants. It is the EU mechanism for implementing the Montreal Protocol for reducing emissions of ozone depleting substances. Whilst the provisions of the Regulation will cease to apply once the UK leaves the EU, part of the exit negotiation will need to address the ongoing commitment of the UK under the Montreal Protocol to the control of these gases. It is inconceivable that the UK would contemplate not maintaining a commitment to this global agreement. However, the details of implementation post EU membership need to be addressed.

**Circular Economy**
2.13 Resource efficiency and the circular economy is an area in which the UK is lacking a clear strategy, and is reliant on the EU to drive policy. There are important drivers for taking the concept of a circular economy seriously, for example the growth in electric vehicles and increasing interest in energy storage will lead to increasing demand for batteries and associated control systems. Natural resources will be required but resource scarcity is becoming more of an issue, with risks affecting the availability and price of materials essential to industry. The EU is helping to push the transition towards a circular economy and stopping valuable resources leaking from our economies, and this is a policy area which is at risk for the UK.

3. What should be the Government’s priorities on energy when negotiating the UK’s exit from the EU? What would a successful negotiation outcome look like?

3.1 The Government’s priority should be maintaining and strengthening energy policy which delivers improved energy productivity and enhances the security of supply, even where it has originated from the EU, incorporating those measures fully into UK law and focusing on compliance. Where these measures have been adopted under the European Communities Act, they should be fully adopted in domestic legislation. This would help not only with minimising disruption and uncertainty which has been damaging to industry, but also to improve energy security and our ability to meet our legally binding climate change commitments, both under the Climate Change Act, but also under the Paris Agreement. Whilst the precise requirements of the COP21 agreement for the UK are still to be finally defined, it is certain that they will require further commitment to reduce UK carbon emissions. The Government needs to see energy policy as an opportunity to help meet carbon reduction targets and stimulate business. The Climate Change Act (2008) requires an 80% reduction in UK emissions relative to 1990 levels by 2050. It is worth noting that this target doesn’t refer to per capita emissions, so with current rates of population growth (and associated buildings and infrastructure), the actual reductions required are significantly higher.

3.2 A successful negotiation outcome is one that reinforces the UK’s position internationally as a country which takes climate change seriously and has viable activities in place to reduce carbon emissions. The Climate Change Committee’s recent Progress Report indicates a policy gap of some 100MtCO\textsubscript{2} when it comes to abatement, in part due to removal of standards such as Zero Carbon Homes, and in part due to a lack of delivery mechanisms e.g. for energy efficiency improvement in the private-rented sector. Exiting the EU should not be used as an excuse to dismantle energy policy further as this will take the UK in the wrong direction, rather we should be focusing on our global position and
taking our COP21 commitments seriously. Inertia in ratifying the Paris Agreement will affect our competitiveness and relevance on the global stage. Furthermore, as we seek to become a nation trading more widely with the world outside the EU, the UK needs to be seen clearly as a leader in carbon reduction technology.

3.3 Energy productivity should be a priority; this is the measure of how much energy is required to produce a pound in the economy. Boosting energy productivity supports the UK economy by getting more for less\(^2\). Energy policy is currently approached in silos, separately addressing carbon and the environment, security, and cost, resulting in policies pulling against one another. We should be taking a systems-thinking approach, addressing the interests of businesses and householders, as well as reducing emissions.

4. What aspects of existing EU energy policies and directives are beneficial to the UK? What should be the Government’s priorities in deciding which EU-led energy policies and legislation to retain?

4.1 As noted previously, the EU has played a key role in energy in the built environment, setting targets and legislating to improve energy efficiency in buildings and products, as well as promoting renewable energy. There needs to be a coherent and stable policy landscape to provide appropriate market signals to support business growth and investor confidence in the energy efficiency and renewable energy sectors, alongside reducing carbon emissions. This is why we should retain and enhance all EU-led energy policies and legislation. A substantial amount of work has already been carried out to comply with EU legislation, and the benefits are clearly visible. Further change purely for the sake of change will be a further burden and resource requirement for industry, and will detract from the more pressing needs to develop new commercial opportunities beyond the EU.

4.2 Where EU requirements have been implemented through secondary legislation under the powers of Section 2(2) of the European Communities Act, there will be a need to consider the future standing of the relevant legislation, of which there is a very substantial body. Early indications of how the government propose to handle such secondary legislation in whatever field would be very helpful to business. Given the scale of the body of secondary legislation made under Section 2(2) there is going to be a clear need to transfer many of the regulations into national law, at least in the short term, pending review and revision of individual regulations. Early indications of a “bulk transfer” mechanism would be most

welcome. Such a bulk transfer would allow legislators and interested parties to focus on those EU regulations that are not suitable to transfer into national law.

4.3 Looking more specifically at energy related legislation, operational energy performance should be prioritised, as should the publicising of energy consumption data. For example, the EPBD has been successful in reinforcing building energy policies in the UK. It has raised the profile of energy management in buildings, emphasising the importance of monitoring and measurement to catalyse improving performance. Air Conditioning Inspections which have also been introduced as a result of the EPBD have raised awareness of the importance of running efficient systems.

4.4 Another example of how EU directives are delivering benefit to the UK is the Energy Savings Opportunity Scheme (ESOS), set up to help meet the UK’s requirements under Article 8 of the EU Energy Efficiency Directive. This an energy assessment scheme that is mandatory for organisations in the UK that are classified as large enterprises or are part of a large group enterprise, and will identify thousands of energy saving initiatives in buildings, industrial activities, and transportation.

4.5 Renewable energy requires coherent support from Government, the UK is still far behind many countries when it comes to renewable energy generation and this is a key factor in reducing our carbon emissions and meeting our targets.

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