

Working for chemical and
pharmaceutical businesses



Making Brexit Work for the
Chemical Industry



Contents

Foreword by CIA Chief Executive	—	1
Trade	—	2
Chemical Regulations	—	5
Industrial Emissions Directive	—	8
Energy and Climate Change	—	11
Skills	—	14
Squire Patton Boggs Viewpoint	—	16



Foreword –

Steve Elliott,

Chief Executive Chemical Industries Association

A strong chemical manufacturing sector is at the heart of every successful economy. The chemical industry is an important part of the economic, social and environmental life of the UK, with its products providing essential building blocks for other sectors. Put simply, cars don't run, planes don't fly and medicines don't work without chemicals and chemistry. Our industry is also at the forefront of providing solutions to current challenges on big societal issues such as climate change through fuel cells and insulation of buildings.

The chemicals sector contributes £18 billion a year to the UK economy, employs 500,000 people directly and indirectly and has £50 billion worth of exports – the largest of any manufacturing sector. Most importantly 60% of these exports go to the EU and 75% of our chemical imports, including essential raw materials, come from the EU.

The terms of the UK's exit from the EU are therefore critical for the future success of the sector, as well as downstream sectors that rely on our products. As we move to the second phase of Brexit negotiations uncertainty grows, and it is becoming increasingly difficult for businesses to plan for future investment. It is therefore essential that we have a smooth transition period which causes minimum change for business.

The most important aspect of any new deal for the sector is frictionless trade. With most of our products going to or coming from the EU the imposition of tariffs and related non-tariff barriers will negatively impact trade in both directions. The manufacturing supply chains are well established, with materials crossing the channel four or five times for some complex products. Even minimal tariffs, when combined with the related bureaucracy

and need for documents to precede goods at borders are likely to mean that companies will re-evaluate their manufacturing strategies.

The chemical industry is, rightly, highly regulated as we need to give confidence to our employees, our customers and our local communities with regard to how we run our plants and make and sell our products. In leaving the EU we ask for regulatory consistency and continuity in many areas, to ensure continued access to the market place. Secure access to the EU marketplace by remaining as close as possible to the existing REACH regime, ensuring any post-Brexit future protects UK industry's existing compliance commitments, avoids duplication of cost or prevents our ability to negotiate other free trade deals.

Many people employed by the chemical sector are very highly skilled; these include scientists, engineers as well as experienced managers and specialist contractors, required for limited periods. Not all these skills are currently available in the UK in the quantity required. Maintaining ready access to this skilled workforce is therefore essential for the future competitiveness of the industry and will help secure the futures of the whole workforce.

As we progress with the Brexit negotiations we will continue to work with Government to ensure the best possible solution for the sector. Linked to that, we also look forward to maximising the industry's contribution and opportunities flowing from the country's new Industrial Strategy – helping to deliver long term growth and competitiveness of this vital industry.

A handwritten signature in black ink, appearing to read 'S Elliott', written in a cursive style.



Trade

Key Messages

- The European Chemical Industry is united in wishing to see zero tariffs on chemical trade between the UK and EU27 following Brexit.
- Chemical businesses need clarity on the trading platform that will exist during any transition or implementation phase. Our ask of Government remains that companies face only one change in how business is conducted between the UK and the EU and that should happen when the final bespoke deal has been agreed.
- With 60% of UK Chemical exports going to the EU and 75% of raw materials travelling in the other direction it is critical that Government delivers on promises to secure near frictionless trade between markets. Companies need time to adjust to new trade requirements.
- The UK chemical industry commits to working with Government to develop an independent trade policy framework that supports producers, enhances jobs, protects the UK competitive advantage and secures industry competitiveness.

Tariff-free access to the single market and the prevention of non-tariff barriers to trade

The requirement of UK Chemical Industry in relation to the exporting of goods into Europe remains unchanged since the June 2016 Referendum. Our companies need tariff-free access to the single market and the prevention of

non-tariff barriers to trade. Are we any closer to achieving this? Maybe, yes, but there remains everything to play for.

Government has acknowledged that our industry faces acute challenges due to the integrated nature of modern value chains. Molecules, feedstocks, raw materials or basic chemicals can cross EU borders on multiple occasions during the development of products. Consequently any presumption that 4-6% in average tariffs can be absorbed by companies is naïve and ignores the economic reality of UK Chemical Industry's trade. Similarly, an alternative suggestion that the recent devaluation of Sterling might help to offset any future tariff charges does not take into account that many raw materials are priced in either euros or USD and so any short term benefits are rarely as significant as one might anticipate at first glance.

Why is securing zero tariffs so important and what else is needed for the UK to remain competitive?

The majority of the UK's chemical trade is with the EU, representing 60% of exports, 75% of imports. And that's not because our industry does not look further afield for future growth, the US remains our single largest market taking 19% of total UK exports. More and more of our companies are building connections in India and China but Europe remains the biggest market for UK chemicals companies, representing around 1/3 of total global production.

Should the UK revert to WTO rules and Most Favoured Nation (MFN) tariffs, upon departure from the EU in March 2019 it will negatively impact trade in both directions, but particularly exports, as most value-added activities

are subject to higher MFN tariffs than raw materials. For example while some petro-chemicals are zero-rated, many intermediate and speciality chemicals have tariffs up to 6.5%. Our customers, for example in food and car production, may experience even higher rates, creating cascades of direct and indirect impacts on UK industry. Keeping existing trade channels open, not just with the EU but also with non-EU countries, is a necessity for the UK chemical industry.

Tariff-free access to the single market in the future could be achieved through a UK-EU comprehensive free trade agreement. But we recognised that any agreement might take many years to finalise. Because Government policy states that the UK will leave the EU and the Single Market (which means the Customs Union) by 30 March 2019 CIA argued that a transition period was vital to ensure that UK businesses avoid the “cliff edge” scenario that would deliver significant upheaval on both sides of the Channel. Government now accepts that a transition or implementation period IS necessary but critically also that during any implementation phase we should continue to trade under current terms. We argued that to force companies to adjust their systems upon departure from the EU and then again when an FTA was agreed was bad for business and bad for both the UK and EU economies. The detail has to be negotiated but we continue to provide Government departments with evidence of the negative consequences of failing to agree a deal. The latest suggestion that any transition or implementation phase will be restricted to finish on 31 December 2020 only pushes back the deadline without providing the solutions (certainty) desired by businesses.

It will also be necessary to review existing FTAs, preferential trade arrangements such as the Generalised Scheme of Preferences, and other Multilateral agreements signed by the EU and the member states since 1975 (the year the UK joined the EU) and ensure that their provisions will continue to apply as from the date of withdrawal, including during any transition phase) The UK Government believes that delivering continued access to existing FTA's requires only a technical rectification to comply with WTO requirements but the concern is that signatories will look to renegotiate elements of what will become bilateral agreements. This will inevitably delay the process in what will be an already pressured timeframe. The CIA believe that the UK Government will have to prioritise those FTAs seen as having the greatest importance as resource constraints within home departments and in foreign governments are fully considered.

The Government has started to prioritise Countries with whom new bilateral agreements are sought after we have left the EU and thus “free” to negotiate in good faith. The US and China are high priorities followed by Commonwealth nations including Australia and New Zealand. A note of caution, negotiating in haste does not always deliver the best deal and CIA will continue to consult members to fully appreciate what tariffs and barriers to trade should be negotiated in those jurisdictions, and what negotiating position will deliver the best deal for the UK chemical sector.

Devil is invariably in the detail

As the UK leaves the European Union, it will need to develop its own independent trade policy. The UK has long been recognised as an advocate of free and fair trade and CIA through CEFIC has routinely championed trade liberalisation over many years. However, for any trade policy to function effectively it has to be underpinned by an effective system of legal protection against unfair trade practices. This system should allow trade remedies to be used to combat market distortions (such as dumping and subsidised exports) that disrupt genuine free trade and can be economically devastating to the UK economy. In October 2017 the Department for International Trade released a trade white paper setting out its vision for the UK's post EU trade policy. The CIA, supported by GMB and Unite Unions have been advising DIT on what our industry might benefit from in any new legal framework. We would prefer a simple complaint process and quicker investigations than currently exist under the EU system. We want more evidence from Government explaining its preference for a mandatory Lesser Duty Rule and an Economic Interest Test measure that the EU and other countries are moving away from.

While we recognise that China and other emerging markets present considerable opportunities there remains a threat to UK supply chains and key building block products should we not approach increasing Chinese imports in a sensible and WTO compliant manner. The WTO Anti-Dumping agreement authorises the use of a special methodology when dealing with countries that do not meet the requirements of a fully functioning market economy, such as China. CIA will continue to provide the Department for International Trade with evidence of distortions to ensure that whatever framework is established will be at least as strong as what is currently applied by the EU. Any divergence might encourage trade to be diverted in either direction, which ultimately will not serve the UK chemical industry's long term position.

Customs and Trade Facilitation

Upon launching the Customs White Paper in October 2017, Chancellor of the Exchequer, Philip Hammond stated that “Investment and trade are crucial to the economic future of this country. This White Paper sets out our plan to keep trade with the EU as frictionless as possible, and reaffirms the government’s commitment to deliver a smooth transition”. It has been acknowledged at Ministerial level that when the UK operates outside of the Single Market there will (inevitably) be an increase in bureaucracy, effort now is to look to identify ways of minimising that disruption. The Customs Bill (21 November 2017) identifies trade facilitating options such as negotiating mutual recognition of Authorised Economic Operators (AEOs) or bilateral implementation of a technology-based solution for roll-on, roll-off ports which consist of pre-arrival notification of consignments on a port IT system. Industry has been encouraged to contribute to deliberations and CIA worked closely with Member companies at a chemical round table meeting with Her Majesty’s Revenue and Customs and Her Majesty’s Treasury at which some solutions and many issues were aired.

One potential problem area was surrounding the complicated field of determining Rules of Origin. RoO presents challenges to many sectors but CIA believes it is one heightened for the chemical industry. Our products and raw materials can be stored, blended or mixed and transformed out of recognition from the originating feedstock. Consequently, after the UK leaves the single market it will need to be able to show that it is not being used by third countries to gain low tariff access to the single market (EU27). The EU27 are unlikely to allow the UK to import foreign goods, repackage them, and sell them on to the EU as if they originate in the UK. UK exporters will therefore need to comply with the EU’s ‘Rules of Origin’ bureaucracy which can be time consuming and costly. This must lead to an increase in costs but also and of considerable concern is the potential for it delaying critical exports at UK ports and at ports bringing time critical raw materials into the UK.



Chemicals Regulation

Key Messages

- In light of the UK decision to leave the EU, the chemical industry does not argue for lower regulatory standards in the area of chemicals regulations but regulatory consistency and continuity.
- EU exit implications for the regulatory framework in which the UK chemical sector operates should not be underestimated
- Many companies want to continue to secure access to the EU market place by remaining fully within REACH or as a minimum as close as possible to REACH.
- Any post Brexit future needs to protect UK chemical industry's existing compliance commitments, avoid duplications of costs and assists our ability to negotiate free trade deals with the EU and beyond
- In a complex area such as chemical policy, a transition that allows the UK to continue to remain within the framework of EU regulations will be essential for companies as well as government to adapt to potential future changes and minimise disruption A transition should however not mean a continuation of the period of uncertainty for industry.

Chemical Regulations

The rules for supplying chemicals in the EU are set by Registration, Evaluation, Authorisation and Restriction of chemicals (REACH) and Classification, Labelling and Packaging (CLP) Regulations. These horizontal pieces of legislation are complemented by other sector specific legislation, such as the Biocidal Products Regulation (BPR). REACH, CLP and the BPR are aimed at ensuring high level of protection of human health and the environment by making industry responsible for demonstrating that chemicals placed on the EU market can be used safely throughout the supply chain. REACH, CLP and the BPR directly apply in the Member States of the European Union, including the UK.

REACH is the key regulation the chemical sector have to comply with in order to manufacture, import and trade chemicals within the European Union. This is one of the largest and most complex regulations ever produced by the European Union and companies have been continuing to work hard and invest in its implementation since it entered into force in 2007.

Currently, companies are busy registering chemical substances by the 31 May 2018 deadline. Alongside this, necessary activities including updating dossiers, reacting to any request from the European Chemical Agency on evaluation, monitoring developments on substances of very high concern and, for some companies, even seeking authorisation and complying with restrictions, are important aspects of REACH compliance and customer requirements today and will continue to be in the future, beyond 2018.

EU exit implications for the regulatory framework in which the UK chemical sector operates should not be underestimated. CIA has been vocal on critical issues businesses could be facing in the short term and which require detailed consideration before exit, to help avoid regulatory trade barriers and minimise uncertainty.

The chemical industry is still facing major uncertainty in the area of chemicals regulations. Many companies would want to stay as close as possible to REACH to ensure continued access to the EU market place. REACH is not perfect – far from it. It is, however, rapidly becoming an international standard of influence and our compliance with and involvement in such a regulation is essential in enabling us to continue trading efficiently across borders. Following years of investment in the system, many CIA members also value the efficiency of compliance with REACH, when trading elsewhere due to its high bar in respect of protection of human health and the environment. REACH is seen by many as the gold standard for environmental protection and it's taken as reference by other countries that have implemented or are in the process of implementing similar regulations.

CIA team of member companies' experts believes it would be better for the UK to fully remain within REACH and continue to use the services of ECHA if possible rather than setting up (or expanding) separate institutions in the UK, which could be costly for the UK taxpayer and the chemical industry itself. A deal between the EU and the UK that allows UK companies to continue to be part of the EU REACH system is likely be the only scenario that would not generate additional costs for companies. The UK authority's voice in EU committees is also important to the European chemical industry and CIA member companies have directly seen the UK support the need for sound science and risk-based decision-making. The UK has a balanced, pragmatic and proportionate approach and the prospect of losing the UK presence in EU committees is a matter of concern amongst CIA members. Similar considerations in the area of biocides would help ensure businesses operating in this sector are not disrupted by Brexit.

Squire Patton Boggs' EU Head of Environment, Dave Gordon, comments:

"REACH should be a priority area for government consideration given the importance of the sector to UK exports and as one of the industries where the UK shares the same vision as the EU in respect of both market access and regulatory standards"

Recognition of existing compliance commitments

The immediate concern for chemical companies remains the uncertain future for all existing compliance work that permits market access within the single market. At the moment, UK businesses are recognised as EU manufacturers, importers or UK-based only representatives of non EU manufacturers. Leaving the European Union means they will become non-EU entities under REACH, immediately bringing into question the validity of registrations, authorisations and approvals obtained before the withdrawal date.

Under a "UK out of EU REACH" scenario, it is imperative to ensure that registrations do not become invalid and a process is established to avoid re-registration in the EU,

and to avoid the requirement for repeat or additional registrations (and possibly additional animal testing) in the UK. Post Brexit, exports from the UK to the EU will have of course to continue to be REACH compliant and imports from the EU into the UK will have to be compliant with the new UK law.

The EU Withdrawal Bill

REACH, CLP and the BPR represent important examples of EU legislation

that need to be "converted" into domestic law on exit day. It is encouraging to see that the EU Withdrawal Bill recognises the technical challenges of transposing EU regulations, arising in those cases where implementation is currently managed by EU institutions. REACH alone makes over 500 references to EU bodies and Member States. Through the Withdrawal Bill, UK businesses will be subject to the same regulatory requirements on exit day in order to manufacture and import chemical products in the UK.

The proposed UK Government's approach would remove references of EU bodies and transfer functions to the UK. Changes should be limited to address technical issues in order to facilitate regulatory equivalence with EU legislation on exit day. The key challenge ahead remains how the UK government will create, administer and maintain the new legislation (in a quick and cost effective way) and the bodies needed to support its implementation and decision-making, as through the EU Withdrawal Bill, the UK require a similar set-up to the EU.

Whilst the Government's efforts to provide certainty, stability and limit disruption to businesses are welcomed, concerns about potential duplication of costs that UK exporters in particular may face and the consequent impact on the competitiveness of the UK chemical sector will need to be addressed. The chemical industry is looking for regulatory continuity and to minimise any additional legal hurdles and costs associated with the UK decision to leave the European Union.

Brexit of course brings an appetite within the UK business community to shape a more risk-based legislation, but at this stage any divergence must not come at the cost of market access and any future preferential trade agreement with the EU.

Transition arrangements

The UK Government intention to seek an implementation period of around two years, during which market access should continue on current terms, will be extremely important to the UK chemical sector. Staying in the single market and related policy framework during a transition period will be essential to help to support trade, investment, jobs and overall economic growth in a critical time that will take the UK to exit from the EU and to a future new trading relationship. In a complex area such as chemical policy, a transition that allows the UK to continue to remain within the framework of EU regulations will be essential for companies as well as government to adapt to potential future changes and minimise disruption. A transition should however not mean a continuation of the period of uncertainty for industry.

Industrial Emissions Directive

Key Messages

- Environment legislation affecting the UK chemical industry is largely underpinned by EU Directives that have for the most part already been transposed in the UK. As with many policy areas, significant uncertainty remains around environment legislation owing to the stage of negotiations at EU level.
- With the UK's withdrawal from the EU however, it is vital for industry that the UK continues to be involved in revising and drawing up BREFs at least while we remain in the EU, and as necessary during any transitional period, until it is certain which BREFs will be implemented in the UK and what the future relationship with the EU will be.
- Complying with the IED can require significant investments and the appropriateness of BREFs is largely dependent on strong industry involvement. Therefore, post-Brexit, if the UK is no longer fully involved in the Seville process, in our view new and revised BREFs should not be applied in the UK in the same way.
- The impacts of the revised Chemicals BREF Strategy are not yet fully understood and will depend in part on how the WGC BREF develops.
- Additionally, CIA strongly advocates a risk-based approach to environmental permitting and any opportunity to strengthen this upon leaving the EU should be capitalised on.

Why is it important?

The EU Industrial Emissions Directive (IED) is the most important legislation that protects the environment from industrial emissions, including those from chemical manufacturing sites through permitting at national level. Chemical manufacturing sites across the European Union have to comply with requirements for reducing or preventing emissions in order to protect human health and the environment. These are defined within Best Available Technique (BAT) reference documents also known as BREFs (BAT Reference) documents. Complying with the IED can require substantial investment at a site, an example being the installation of additional abatement techniques to ensure compliance with the legally binding BAT conclusions and any associated emission limit values. Costs are also incurred by industry during the resource-intensive review and drawing up of these BREFs.

In England and Wales the IED has been transposed into the Environmental Permitting Regulations (EPR). Scotland's transposition is currently the Pollution Prevention and Control (Scotland) Regulations (PPC), yet this will change when these regulations are combined with other legislation to form an integrated authorisation framework expected to be published during 2018.

Current state of play

There are currently eight BREF documents specifically applicable to the European chemicals industry sector, all of which existed prior to the adoption of the IED. These are currently going through an EU review process with the aim to complete this by 2020. To date though only three reviews have been completed, with two already

published, and the remaining five will not be reviewed until after a new and somewhat controversial, highly important BREF “Common Waste Gas Treatment in the Chemical Sector” (WGC) has progressed in its development. The chemicals sector BREF reviews completed (or nearing completion) under the IED are:

- Production of Chlor-alkali (CAK) – December 2013;
- Chemical Waste Water and Waste Gas Treatment Management Systems in the Chemical Sector (CWW) – June 2016; and
- Large Volume Organic Chemicals (LVOC) – December 2017.

The five existing chemical sector BREFS waiting review are:

- Large Volume Inorganic Chemicals – Solids (LVIC-S);
- Large Volume Inorganic Chemicals – Acids, Ammonia and Fertilisers (LVIC-AAF);
- Production of Speciality Inorganic Chemicals (SIC);
- Manufacture of Organic Fine Chemicals (OFC); and
- Production of Polymers (POL).

In addition to the above chemical sector BREFs there are others which are of relevance to the chemical industry. These include for example the BREFs on Waste Treatment, Waste Incineration and Large Combustion Plants.

How are BREF documents developed?

Following an extensive exchange of technical information facilitated by the Joint Research Centre (known as the “Seville process”) between Member States, industry and non-governmental organisations, the legally binding conclusions of BREF documents are published in the EU Official Journal. These BAT Conclusions must then be implemented by Member States by way of installation permit reviews and variations within four years of publication for BAT conclusions that are related to the main activity of the relevant installation. Guidance interpretation documents are then usually prepared by the Member State for implementing the BREF. Guidance writing for the CWW BREF is underway and

CIA is working with the regulators to circulate a draft to membership. It is very important the process progresses quickly in order to help provide certainty for operators.

In the UK permit reviews are triggered by BREFs that relate to the primary activity, determined by the regulator, of an operator’s permit. Other published BREFs relevant to a site not necessarily related to the primary activity may also need to be considered during this process and possibly before the primary activity BREF cycle under certain circumstances.

What happens to BREFs after UK leaves the EU?

The impact of the UK’s exit from the EU on permitting is not clear at present. To date, messages to CIA from the Department for Environment, Food and Rural

Affairs (Defra) and most of the UK Competent Authorities (Environment Agency, Natural Resources Wales, Scottish Environment Protection Agency) with respect to the IED have been a ‘business as usual’ approach, at least until the UK’s exit. However what is not yet certain is whether BREFs that are still being developed or reviewed on the exit date will automatically be transposed into UK law when they are later finalised. This is an extremely important point, not just for the UK chemicals industry, since the UK needs to remain involved in the BREF process if BREFs are going to continue to be incorporated into UK law after the UK leaves the EU. Any prospective transitional period could add a further layer of complexity.

Anita Lloyd, Director in the Environmental, Safety & Health Group at Squire Patton Boggs comments:

“Over 80% of our UK environmental legislation is derived from EU law. It is essential for business continuity and certainty that industry understands at the earliest possible stage how EU derived environmental legislation will operate after the UK leaves the EU, particularly where there are associated EU standards and measures, such as BREFs, that will continue to evolve and change after the exit date.”

Insight into EU Chemical BREF Strategy and Member State positioning

The aforementioned, highly important BREF “Common Waste Gas treatment in the chemical sector” (WGC) has been very much at the centre of debate regarding the EU Chemical BREF Strategy. On 20 December 2017, a decision was taken by the Commission at the Article 13 Forum meeting to only include in the current BREF review cycle the WGC BREF and a single Large Volume Inorganic Chemicals BREF, that will combine the current LVIC- Solids and LVIC- Acids, Ammonia and Fertilisers BREFs. This means that the unreviewed vertical BREFs: Production of Speciality Inorganic Chemicals (SIC); Manufacture of Organic Fine Chemicals (OFC);

and Production of Polymers (POL) will not be reviewed individually in this review cycle, but instead will be considered within the WGC BREF. It has taken some time for this clarity to be provided and since the scope of the WGC BREF had already been defined at the Kick-Off Meeting (September 2017) and has now since changed, the scope will need to be revisited and clearly defined in order to reduce unnecessary confusion and debate as this BREF continues to be developed.

Requests of government

CIA's primary requests are that the UK continues to be heavily involved in revising and drawing up of BREFs at least while we remain in the EU, and as necessary during any transitional period, at least until it is certain which BREFs will be implemented in the UK and what the future relationship with the EU will be.

Any opportunity to increase the risk-based approach to environmental permitting, similar to the approach taken under the IED's predecessor, the Industrial Pollution Prevention and Control Directive, should be capitalised on.

Other important environmental policy

Environment legislation affecting the UK chemical industry is largely underpinned by EU Directives that have for the most part already been transposed in the UK. The list of EU environmental laws affecting CIA

members extends far beyond the Industrial Emissions Directive. For example, the circular economy continues to be an important area of policy development for the chemical industry primarily in the context of the Waste Framework Directive. Since the EU Circular Economy Package remains under development, the UK's devolved administrations appear to be progressing at different rates. Most notably, Scotland is pushing ahead with adopting principles of the circular economy and has published a circular economy strategy, a waste to resources framework and guidance on reuse activities. Similar actions are being taken forward by Wales although the same cannot yet be said for England. The UK Government's Clean Growth Strategy contained a commitment to produce a resources and waste strategy but like the anticipated 25 Year Environment Plan, no clear publication timeline has been given. The European Commission roadmap on the interface between the waste, chemical and product legislation that is being developed as part of the Circular Economy package is delayed even though a provisional agreement has now been reached on the Waste Framework Directive and is awaiting a vote by the COREPER and the EU Parliament. CIA is still collecting case studies that highlight current issues for recycling routes for certain chemicals as well as those that describe well-functioning recycling routes, and members are requested to come forward with further case studies.



Energy and Climate Change

Key Messages

- Concern that UK energy is getting less competitive and secure undermines investment by energy intensive industries.
- Chemical businesses need clarity about the direction of policy post-Brexit so they can plan their businesses.
- We need free and fair access to the EU's internal energy markets. While BEIS and Ofgem are focused on addressing non-tariff barriers, early approval of the EU Withdrawal Bill and the nuclear safeguards bill by UK Parliament would assist business certainty. There would be added security of supply benefits post-Brexit from the UK's continued pursuit of the environmentally safe development of UK shale gas reserves.
- The government should develop a UK alternative to the EU ETS that not only delivers equivalent CO₂ emission reductions but supports the ability of UK chemical businesses to compete on a global basis. In the meantime, businesses need clarity the question of the allocation and surrender of emissions allowances for the 2019 target period whether under transition or hard Brexit scenarios.
- With Brexit potentially adding to the costs of chemical businesses, it is important that the UK takes the opportunity to minimise energy related policy costs for energy intensive businesses. Once EU state aid rules no longer apply we call for 100% exemptions and wider scope for activities to qualify for this. There should be a single route for securing these exemptions.
- The government should also remove EU requirements like the Energy Savings Opportunity Scheme which overlap with other instruments.

Concern that UK energy is getting less cost-competitive and secure undermines investment by energy intensive industries (EIIs). In energy and climate change policy, membership of the EU has been both a positive and negative influence. Chemical businesses need clarity about the direction of policy post-Brexit so they can plan their businesses.

The importance of energy

Many chemical processes are energy intensive and some use energy as a raw material (feedstock), and not just as sources of power and heat. This particularly applies to the manufacture of basic chemical materials in bulk, where energy costs can be as much as 60% of production. Our materials are essential inputs to UK value chains and enable a range of climate change solutions for the power sector, homes and businesses, and transport.

With 70% of chemical operations headquartered from overseas, there is strong competition for the global

location of production. Our contribution to the UK is therefore critically dependent on secure and competitive energy supplies and cost effective climate policies which do not leave us internationally exposed. Competitive energy makes the UK a more attractive location for chemical industry investments.

UK position in the EU

Overall the UK industry has some of the highest costs related to energy and climate policy. The UK has made significant progress in decarbonising power, but this has led to UK power costs which are 70% higher than in competing EU member states. By contrast UK gas prices, an area with little or no policy intervention, remain competitive within the EU. However, the picture on prices elsewhere is more mixed, e.g.: the US, where shale gas is a 'game-changer'. And the UK is increasingly dependent on imported gas.

The UK is integrated with the European internal energy market. Access to this wider market is vital to security of supply. We source 6% of our power from the internal market, including Norway (with more interconnection planned) and 30% of our gas. Around 50% of gas comes from the North Sea with the balance met by shipments of liquid natural gas and some UK gas storage.

Our energy and climate change policies influence, and are influenced by, the EU. The UK has pushed for energy market liberalisation and tougher greenhouse gas (GHG) reduction targets. It also led calls for an EU Emissions Trading Scheme but the EU has not, so far, copied the UK's additional Carbon Price Floor for emissions from electricity generation. While the UK is not expected to meet its 2020 target under EU renewable energy directive, the UK's carbon budget for 2028-2032 targets a 57% reduction in GHGs on 1990 levels (compared to the EU's 40% by 2030).

Free and fair access to the EU's internal energy market

Free and fair access to the EU's internal energy market, and, in the case of nuclear, recognition under Euratom are vital for UK security of supply. Not just for gas but also as the contribution from intermittent renewable electricity

increases. Access to the wider EU market also helps to reduce average prices. A study by National Grid estimates that loss of access could increase costs for UK consumers by up to £500m p.a. by 2020.

The positives are that the EU currently has no customs tariffs for electricity and gas. There are also strong security and commercial drivers for continuing free trade between the EU and the UK.

An unknown is whether the EU might seek to require continued adherence to EU regulations such as the Renewable Energy Directive over which we will have no influence once we leave the EU. It is possible that this will

be picked up in any future free trade agreement negotiation. Rather than try to deliver its renewable energy target for 2020 and contribute to EU-level 2030 target, it would be more cost effective for the UK to have complete flexibility in determining its energy mix. We'd note that Dieter Helm also advocates a flexible approach in his independent energy cost review for government.

In the absence of a reciprocal agreement, the UK also needs to ensure there is fair access to the EU market, i.e.: that there are no non-tariff barriers to participation which could impact on efficiency. In other words that interconnectors, transmission systems and markets could continue to operate efficiently and without restriction. For example,

it is unclear whether the UK would become a 3rd country under the EU's gas solidarity mechanism. Consultation with BEIS and Ofgem confirms they are focused on ensuring the satisfactory operation of arrangements from day one in a scenario with agreement as well as in one without.

Either scenario also necessitates the approval of the EU Withdrawal Bill (to write EU regulations into UK statute) and the nuclear safeguards bill (to replicate the provisions of the Euratom Treaty on which the availability of nuclear fuels and materials depend). Early approval of this legislation by UK Parliament would therefore assist business certainty. There is no doubt that there would also be added security of supply benefits post-Brexit from the UK's continued pursuit of the environmentally safe development of UK shale gas reserves.

Ken Huestebeck, European Public Policy Associate comments:

"Ensuring supply of energy at competitive costs in a transforming market will remain an issue after Brexit. Connections with the European internal energy market can contribute to these objectives. As in other fields, the UK needs to provide short-term policy certainty during a transition phase – but it should also aim for long-term investor confidence that is so important for energy infrastructure projects. When the application of EU state aid control ends, the UK will have more flexibility that it can use to offset high energy costs due to its interventions in the market."

EU Emissions Trading Scheme

Turning to EU climate policies, the most significant instrument is the EU Emissions Trading Scheme (EU ETS). The EU ETS imposes a cost of carbon on direct combustion at the largest energy using installations including both electricity generators and larger energy users in the chemical sector.

We believe the government should develop a low cost UK alternative to the EU ETS that not only delivers CO₂ emission reductions but supports the ability of UK chemical businesses to compete on a global basis.

As an exposed sector, possible options include: a UK trading scheme that is swiftly linked to the EU ETS and/or other nations' trading schemes (for liquidity, though negotiations for a Swiss link to EU ETS were drawn-out); extending the coverage of the UK Climate Change Agreements; re-integration of carbon emissions under environmental permit conditions; or a carbon taxation.

In addition to the ability to compete globally and grow, other key criteria include realistic abatement potential and UK ability to influence (which, for EU ETS, would be lost post-Brexit). We would underline that in the interests of maintaining or boosting international competitiveness and growth, the UK's future approach should be no more ambitious than that of the EU ETS

Currently most sectors would prefer to continue to participate in EU ETS to the end of Phase 3 to avoid a messy exit. The UK supports this position but, with future relationship negotiations yet to get to EU ETS, it is keeping its options open regarding longer term participation in EU ETS or, EU ETS alternatives.

Unfortunately, in the meantime, the EU has proposed legislation which would invalidate UK allocations of EUAs issued for the 2018 compliance period (due for reconciliation by 30 April 2019 – after Brexit). The UK has worked to address this by bringing 2018 reconciliation deadlines forward in the UK. However, this leaves open the question of the allocation and surrender of emissions allowances for the 2019 target period whether under transition or hard Brexit scenarios. This adds to an already uncertain situation when UK chemical companies need early clarity to plan their businesses.

Minimise UK energy related policy costs

With Brexit potentially adding to the costs of chemical businesses, it is important that the UK takes the opportunity to minimise energy related policy costs for a broader scope of EILs.

We welcome the government's commitment to competitive and affordable energy. We hope that the recommendations in Dieter Helm's energy cost review and their commitment to set out a long term roadmap to minimise business energy prove effective in reducing UK wholesale power prices and related network costs.

The Government's Clean Growth Strategy also helps to clarify that its plans to meet the 5th carbon budget will harness innovation to reduce the costs of low carbon technologies first and use the flexibilities available under the Climate Change Act if this proves more cost effective. We therefore hope that the future decarbonisation of power and heat will be reliable and affordable. We also appreciate the support to reduce costs provided under the Chemical Sector Decarbonisation and Energy Efficiency Roadmap.

However, we believe that Brexit also provides an opportunity to maximise the scope and level of relief from renewable policy and carbon price impacts on power costs. While we support carbon pricing as a least cost means of reducing carbon emissions we would underline the need for this to be consistent with a level playing field internationally. In seeking to top-up the carbon price signal from the EU Emissions Trading Scheme (EU ETS), Carbon Price Support (CPS) has created a competitive disadvantage for UK EILs relative to the EU and the rest of the world and this has been exacerbated by the very narrow scope of activities that can qualify for CPS compensation. For this reason, we have long called for its abolition.

Once EU state aid rules for these renewable policy and carbon cost reliefs and exemptions no longer apply we would therefore call for 100% exemptions and wider scope for activities to qualify for this to the extent that WTO subsidy rules permit. The government should also ensure that there is no increase in unrelieved Climate Change Levy costs from Business Energy Tax Reforms. To reduce administrative burdens there should be a single route for securing these exemptions.

The government should also remove EU requirements like the Energy Savings Opportunity Scheme which overlap with other instruments.



Skills

Key Messages

- Continued access to skilled people is vital to the future growth and competitiveness of the chemical industry.
- Brexit should not mean we lose the opportunity to continue to collaborate in areas such as Horizon 2020. We want to see continued public expenditure and working together on R&D projects to deliver a future that works.
- We must invest heavily in apprentices and equip them with the skills for the future, under transition or hard Brexit scenarios.

Leaving the European Union presents both a challenge and an opportunity for the UK's skills landscape.

In Europe the Horizon 2020 programme plans to invest 77 billion euros between 2014 and 2020. It is one of the largest public Research & Development (R&D) funding programmes in the world, accounting for 8% of the EU budget. The Government has said it wants to remain part of it after we leave the EU, with the European Parliament (in a non-binding vote) calling for an increase in the budget to 120 billion euros after 2020. Apart from funding big projects such as research to combat the outbreak of the Zika virus, one of its outputs allows researchers to move between countries, another is to provide loans for start-up companies. Scientific encouragement and mobility will help chemical companies to continue to invest and grow in the UK.

Recent Government announcements have been encouraging. Lifting R&D spending to 2.4 per cent of GDP by 2027 from the current 1.7%, which could increase public and private R&D investment by as much as £80 billion over the next 10 years, is a step in the right direction.

Beyond science we need more focus on lifelong learning. Changing technologies and ways of working, coupled with longer working lives are intensifying the demand for new skills. The chemical industry globally, and especially in this country, has a high skill level. However as the Director for Education and Skills at the Organisation for Economic Cooperation and Development (OECD), Andreas Schleicher, said recently "Technology is racing ahead of the skills people have". A population with the right mix of skills can help ensure globalisation translates into jobs and productivity gains, according to the OECD's Skills Outlook 2017 report. On a local level the UK can learn from this outlook.

At apprenticeship level we can do worse than learn from Germany. The dual vocational training programme gives students theoretical education in the classroom, coupled with real-world experience on the factory floor. On seeing this in action earlier this year, the American Presidency doubled federal spending on apprenticeship programmes to 200 million dollars. The institutes Germany has set up to educate its apprentices are being used increasingly to retrain older workers and keep their minds fresh.

Access to skilled people is one of our three key priorities. Chemical businesses rely on skilled people. Some of the specialist skills required are not yet available in the UK. We need to achieve as near as practically possible freedom of movement for those EU citizens skilled to

fill certain jobs within the overall workforce. Getting the best can help secure employment for the rest. Moreover chemical businesses need to be able to bring in specialist contractor teams for a limited period to undertake essential maintenance and overhaul activity in shutdown and turnaround situations. As with Horizon 2020, agreeing to EU scientists who are employees of companies moving freely between the EU and UK is essential. Chemical businesses need scientists and engineers. Movement

of scientific and engineering skills around companies delivers growth. We also want to ensure multi-national companies can move their staff – particularly graduate and management trainees – between different countries to gain experience and develop skills. Brexit should not stand in the way of development experience. If we can achieve this then we can compete on a European and global stage.



Squire Patton Boggs Viewpoint

As a global law firm, with a major presence in the UK and Europe, we are acutely aware of the effects Brexit could have on the chemicals industry. Given the significance of the chemicals industry to the UK economy, it is vital that the interests of the UK industry, as already flagged by the CIA, are recognized as fully as possible in the final Brexit deal between the UK and the EU and the core principles of the UK's post-Brexit relationship with the EU is agreed as soon as possible. There are a number of critical issues, which include:

Tariff-free access to the single market and the prevention of non-tariff barriers to trade

Over the past decades, the UK chemical sector and its EU counterparts have developed stronger trade links so that UK's value chain integration in the chemical sector is mainly with the EU27. For this reason, it is in the interests of both negotiating parties that the European Chemical Industry and the CIA unite in advocating for a zero tariffs on chemical trade between the UK and EU27 following Brexit. It is essential to ensure that the zero-rated principle between the UK-EU27 extend to intermediate and specialty chemicals which face higher tariffs than raw materials.

Going beyond tariffs, customs should be at the heart of the EU27 and UK trade negotiations. As recognized by the Government, customs is a cliff-edge issue for many sectors, but most importantly for UK chemical trade. Any delay at borders would disrupt an highly integrated UK-EU supply chain and have repercussions for business partners, buyers, consumers, end-users and most importantly patients. It is matter of public safety and security that UK chemical trade continues to function smoothly post Brexit. It is worth bearing in mind, that companies, and most importantly SMEs, will need time, money and practical help from the Government to adjust to new trading requirements where they have been functioning under a frictionless system for the past decades.

Legal clarity over what will be a new UK/EU trade regime is and remains a priority to ensure that investments continue to flow in the country, and that business decisions are not halted. It is crucial indeed that the UK chemical sector will only face "one set of legal change only" and for this reason, priority should be given to trade rules over the implementation phase. Any legal change should be known as soon as practicable, and its entry into force pushed back to when the final bespoke trade deal will have been agreed.

Regulatory consistency and continuity

As REACH is founded on the basis of a single market model it appears unlikely that the UK will remain regulated by EU Reach. It is therefore vital that the government provide certainty around future regulation and policy and as a minimum confirms their intention to negotiate a significant (2 year minimum) implementation period (during which EU Reach would continue to apply) in order to allow for the conversion of EU Reach into UK law in a way that would address potential data sharing/ duplication of costs issues and not inhibit the ability of UK manufacturers/distributors to access the EU market.

UK environmental legislation derived from EU law

Over 80% of our UK environmental legislation is derived from EU law. It is essential for business continuity and certainty that industry understands at the earliest possible stage how EU derived environmental legislation will operate after the UK leaves the EU. This is particularly pertinent and complex where there are associated EU standards and measures, such as BREFs, that will continue to evolve and change after the exit date. In the worst case scenario, the UK may find itself having to continue to comply with BREFs that are updated after the UK's exit, without having a vote in relation to the adoption of those measures. The EU's circular economy package is another range of legislation and policy measures that is likely to be in the process of being

adopted and implemented when the UK leaves the EU, so the UK could be left with a somewhat incomplete set of transposed legislation. On the other hand, that may mean this is an area where the UK has an opportunity to lead the way and embrace a more circular economy more quickly than the rest of the EU.

Full and free access to the EU's energy markets

It is critical for the UK to ensure supply of energy supply at competitive costs. Retaining full and free access to the European internal energy market can contribute to that, but there has been little detail provided on this to date, which has a detrimental impact on business confidence and stability. This is even more crucial for energy users in Northern Ireland that shares a Single Energy Market (SEM) with the Republic of Ireland. The UK should use the opportunity offered by the SEM to advocate for the desired level of energy market integration with the EU27 after Brexit. Likewise, there remains considerable uncertainty as the UK's role in the EU Emissions Trading Scheme going forward. If the UK is leaving this scheme, the timing of this will have a significant impact on the effect for participants. With Phase 3 due to end in 2020, it may make sense to remain in the scheme at least until then. The government would have opportunities after exiting the EU to reform or abolish some of the less popular EU measures, should be considered too bureaucratic or duplicative of other requirements, for example the Energy Savings Opportunity Scheme.

Maintaining access to skilled labour

To be able to compete globally and grow, the UK chemical industry is fully aware of the need to invest not only in apprenticeships but also at the secondary education and undergraduate level (particularly in STEM subjects). In the meantime, however, the sector needs the certainty of knowing it will have continued access to the skills it needs once we leave the EU (or following a transition period, if free movement will continue for a limited period). In practice, post-Brexit immigration policy for EU nationals should allow for a system which is unencumbered by the cost and administrative hurdles of the current Tier 2 Points Based System for non-EU nationals (borne both by sponsor employers and individual applicants). Access to skilled non-EU nationals via Tier 2 should also be improved, for example, through the creation of a more dynamic and effective Shortage Occupation List to reflect the scarcity of certain skillsets now and post-Brexit (the current list was last properly reviewed in 2013).

Helping CIA members navigate Brexit

Immediately after the "Leave" vote in June 2016, we brought together our trade, immigration, tax and contract specialists in the UK and across Europe to provide a coordinated Brexit Advisory Service to help our clients understand the implications. With our team of experienced lawyers and Senior Policy Advisors, who have direct access to both the UK and the EU negotiating teams, we are ideally positioned to monitor, analyse and influence the reality of the negotiations and keep CIA members prepared for coming dramatic legal developments. We can help you assess, in advance or in real time, which UK, European or international government policies in relation to Brexit could affect your business interests. We have designed our Brexit-related services into the following categories:

Monitoring – client specific monitoring on the Brexit offers the strongest combination of legal, regulatory and government advocacy expertise to assist client in understanding the current position.

Analysis – providing custom impact assessments / analysis from a legal angle.

Planning and preparation – we support clients in designing and implementing strategies to mitigate the risk and uncertainty of Brexit.

Engagement – providing the appropriate legal support to policy decisions

We also provide a number of our clients with Public Policy support, for example, helping develop effective strategies to make sure they are heard at the right time, by the right people, such as government ministers. We can help CIA members by providing the necessary specialist legal and strategic support as well as access at the European and international level.

With the EU being a rules-based organisation and international trade being a highly technical, legalistic area, it will be important for the Public Policy positions advocated by CIA to be capable of implementation as a matter of law.

