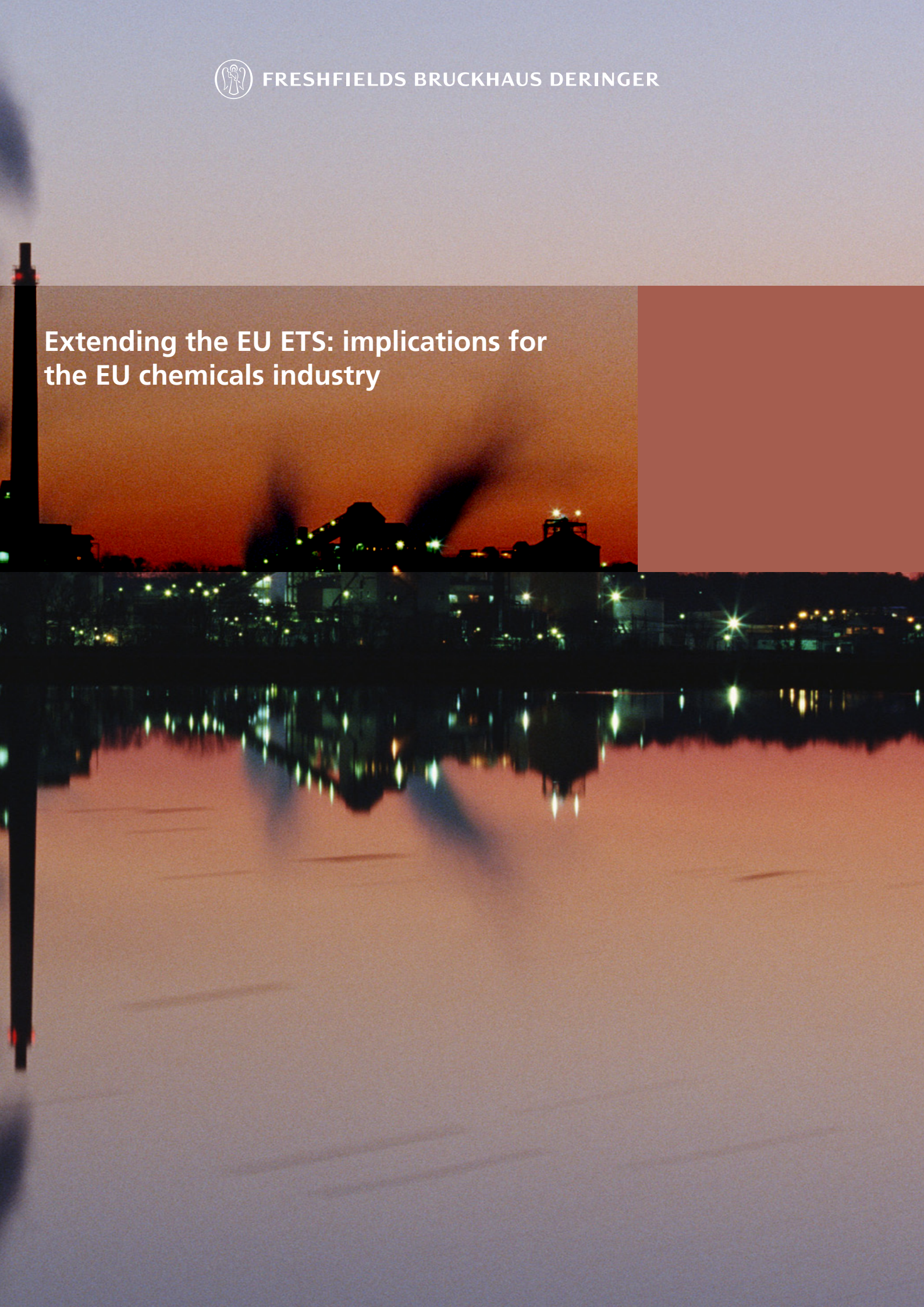




FRESHFIELDS BRUCKHAUS DERINGER

## Extending the EU ETS: implications for the EU chemicals industry





Having to pay for the right to emit may have a significant effect on profit margins and shareholder returns

## Introduction

Last year, the EU agreed to a unilateral commitment to reduce greenhouse gas emissions by 20 per cent by 2020 from 1990 levels, rising to 30 per cent if other industrialised countries followed suit in a new international climate change agreement. The means to achieving the target became clear when the European Commission published its climate and energy package earlier this year. The package includes a proposal that would involve a radical revision of the EU emissions trading scheme (EU ETS) from 2013, under which installations covered by the EU ETS would take on most of the burden for meeting the EU's emissions reduction target, and a new burden-sharing agreement under which individual emissions reduction targets for the non-EU ETS sectors for the 27 member states are set. According to a piece of research that we commissioned, it is clear that the proposals' effects are different for each sub-sector of the EU chemicals industry, with the petrochemicals and basic inorganic chemicals sub-sectors likely to be most affected. This guide examines the proposals' likely effects and how Freshfields Bruckhaus Deringer can assist those affected by adding value through legal solutions.

## Background

The EU ETS is the EU's chosen method for reducing greenhouse gas emissions from major industrial installations – particularly electricity producers – to mitigate the effects of climate change. The scheme puts a price on the emission of carbon dioxide (known more commonly as the price of carbon) in the EU and the right to emit is in effect a commodity, which is currently trading at between €18 and €25<sup>1</sup> per tonne. The vast majority of EU ETS allowances are currently awarded free of charge, although a small percentage are auctioned by the member states, particularly to electricity producers; if a company subject to the EU ETS emits more than its annual quota, it must purchase additional allowances or carbon credits (see below) on the open market with the consequential cost that that entails.

Some EU chemicals companies are already subject to the EU ETS because their own combustion activities are included in the scheme. Even those that are not will have begun to feel its effects in terms of increased electricity prices as the large electricity producers seek to pass on the opportunity cost of carbon despite the largely free allocation of allowances – a controversial issue given the windfall profits that many have recorded since the scheme began.

The Commission's proposal for revising the EU ETS from 2013, as discussed below, will expose those already subject to the EU ETS to ever more stringent caps on their emissions and higher levels of auctioning, which will inevitably drive up the price of carbon. Having to pay for the right to emit – at an initial auction or via subsequent purchases of allowances or carbon credits – may have a significant effect on a company's profit margins and shareholder returns, particularly if the industry faces significant competitive pressure from non-EU producers and may face difficulty passing on compliance costs.

The Commission has proposed 100 per cent auctioning for large electricity producers in a bid to eradicate the problem of windfall profits. For those reliant on large electricity producers for their electricity supplies, it can be anticipated that, in a scenario with proposed tighter constraints on carbon dioxide emissions and therefore increased allowances prices, the EU ETS will inevitably cause energy prices to increase further because compliance costs are passed through to them, given that

<sup>1</sup> The price of carbon (dioxide) depends on whether EU ETS allowances or carbon credits are being used for compliance purposes. As carbon credits entail greater risk than EU ETS allowances, their price tends to be lower. However, operators face limits on the number of carbon credits that can be used for compliance purposes (see below).

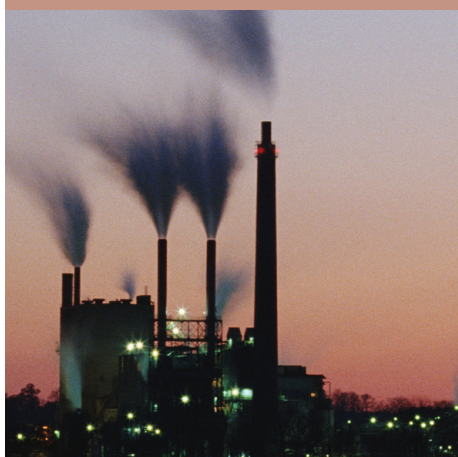
large electricity suppliers are not subject to the same competitiveness issues facing the chemicals industry generally. In addition, chemicals companies that are not subject to the EU ETS may in any event find themselves subject to emissions caps. This may be by virtue of the application of national measures designed to reduce greenhouse gas emissions, as a result of the adoption of national targets to reduce greenhouse gas emissions or as a consequence of the introduction of measures designed to deliver the requirements of the proposed new EU burden-sharing agreement – ie the additional reduction required by the non-EU ETS sector to reach the EU's 2020 target. The UK government, for example, is proposing to introduce a mandatory cap and trade emissions trading scheme (to be called the Carbon Reduction Commitment) for non-energy-intensive sectors from 2010 as a means of achieving its own emissions reduction targets – to reduce greenhouse gas emissions by 60 per cent of 1990 levels by 2050, with an interim target for 2020 of 26 to 32 per cent – that will almost certainly affect many UK-based chemicals companies that are not subject to the EU ETS.

## The Commission's proposal to revise the EU ETS

If the proposal is implemented, its effects from 2013 will be:

- more of the EU chemicals industry's process and combustion emissions will be subject to the EU ETS as a result of its extension to new sectors and activities;
- the scrapping of national allocation plans in favour of a single EU-wide emissions cap set by the Commission at 1.72bn allowances for 2020, 21 per cent below 2005 levels. To achieve the 2020 cap, allowances will be cut from 2013 levels, when 1.97bn allowances will be awarded, at a linear rate of reduction of 1.74 per cent per year between 2013 and 2020. The same linear rate of reduction will apply in the fourth phase of the scheme, with provision for a review in 2015;
- increased auctioning – ie fewer allowances being available free of charge. Under the proposal, electricity generators will be subject to 100 per cent auctioning; other sectors will initially receive 80 per cent of their allowances for free. Free allocation will be phased out in favour of full auctioning by 2020. Allocation of allowances to installations will be on the basis of harmonised Community-wide rules; and
- reduced access to the use of carbon credits for EU ETS compliance purposes. At present EU ETS operators are able to use carbon credits generated by the Clean Development Mechanism (essentially UN-approved emission reduction projects undertaken in developing countries) or Joint Implementation (UN-approved emission reduction projects undertaken in countries listed in Annex B to the Kyoto Protocol<sup>2</sup>) up to a percentage of total emissions stipulated by the relevant member state and approved by the Commission. From 2013, although banking of carbon credits and allowances between the second and third phases will be allowed, pending conclusion of a post-2012 international climate change agreement, the use of carbon credits in the third phase will be limited to the unused portion of the applicable limit in the second phase.

The proposal's implications for EU industry's competitive position have figured high in debate so far



The proposal's implications for EU industry's competitive position have figured high in debate so far. The proposal does require the Commission to investigate those 'energy intensive' industries most at risk of carbon leakage – ie relocation outside the EU to countries without carbon constraints as a consequence of competitive pressure – and to propose compensatory measures to prevent it, where appropriate. We anticipate that those parts of the EU chemicals industry that are subject to the EU ETS will be among those pushing for inclusion in any such measures and they are likely to have a good case.

<sup>2</sup> See [http://unfccc.int/kyoto\\_protocol/items/2830.php](http://unfccc.int/kyoto_protocol/items/2830.php).

## The proposed burden-sharing agreement

The targets in the proposed burden-sharing agreement cover only the non-EU ETS sectors – for example, transport, buildings, services, small industrial installations, waste and the domestic sector. They are calibrated from 2005 and have been shared out using a gross domestic product (GDP) per capita calculation. Overall, these sectors must achieve a 10 per cent reduction in emissions compared with 2005 levels by 2020 (the EU ETS proposal would deliver an overall 21 per cent reduction). The poorest countries within the EU – including Romania, Bulgaria, Latvia and Poland – will be able to increase their emissions to enable their economies to grow while those with the highest GDP per capita will be required to invest to ensure that emissions are reduced. Germany's and the UK's targets are among the highest.

It is inevitable that the burden-sharing agreement will lead to the adoption of further policy and legislative measures by the EU member states. Measures such as the Carbon Reduction Commitment proposed by the UK government may become increasingly common, particularly because a number of member states are already finding it difficult to meet their 2012 emissions reduction targets under the Kyoto Protocol. Although such measures may be expected to have less of an effect than inclusion in the EU ETS would, it is any overlap with the EU ETS that may cause concern. The Carbon Reduction Commitment, for example, is designed to tackle both the direct emissions of those subject to it and the indirect emissions associated with their electricity consumption. It will therefore have a 'double jeopardy' effect, given that the EU ETS introduces a cap on emissions produced by the power sector, which in turn leads to an increase in electricity prices to the very customers likely to be subject to the scheme. The interaction of national policy measures with the EU ETS may well raise concerns about the effect on a sub-sector's competitiveness, in both the EU and international contexts.

## Our research

Our own research, commissioned from the centre for economic and business research (cebr), focuses on how financially exposed the chemicals industry may be to carbon pricing and the extent to which the sector faces competition from outside the EU. It suggests the following.

- While the EU chemicals sector as a whole continued to grow between 1996 and 2006, albeit at a slower rate than the all-economy growth rate, annual EU production growth rates for the chemicals sector are lower than those in other key world trading blocs and there is evidence that the sector has struggled in the face of international competition. Examining the sectoral breakdown of this reveals that annualised production growth rates are strongest for the EU consumer chemicals and polymer sub-sectors between 1996 and 2006 and that the speciality chemicals sub-sector has the weakest growth rates, experiencing significant fluctuations in production during the period.
- Assuming a price of €20 per tonne of carbon dioxide (ie there are no free allocations under the EU ETS, as may be the case from 2020) and that this induces an increase in electricity of €10 per megawatt hour and that the sector does not respond in any way to the costs increases it faces – ie it does not raise prices or undertake carbon abatement measures – the minimum<sup>3</sup> and maximum<sup>4</sup> percentages of the gross value added (GVA) at risk from carbon pricing of the chemicals industry, as whole, are 1.7 and 4.7 per cent respectively, compared with

<sup>3</sup> The minimum value at stake assumes the sector is excluded from the EU ETS or other carbon pricing policies and is exposed only to the electricity cost passed on by electricity generators as a result of their inclusion.

<sup>4</sup> The maximum value at stake assumes the sector is included in the EU ETS or other carbon pricing policies and is also subject to the electricity cost passed on by electricity generators.

a typical benchmark threshold for concern of 4 per cent<sup>5</sup>. Using a higher, perhaps more realistic, price of €40 per tonne raises the maximum value at stake to 9.4 per cent because the value at stake measure increases linearly with the price of carbon dioxide. The results are derived using UK data but cebr does not consider it likely that using EU data, were it available, would lead to materially different results.

- The EU speciality and consumer chemicals sub-sectors' exposure to carbon pricing under the EU ETS is lower than that of the chemicals industry as a whole, with the EU consumer chemicals sub-sector the least affected; cebr estimates that the minimum and maximum values at stake for the consumer sub-sector are 0.3 and 0.4 per cent respectively at a carbon price of €20 per tonne. The basic inorganic chemicals and petrochemicals sub-sectors are the most affected by exposure to carbon pricing under the EU ETS, with their maximum values at stake far exceeding the typical benchmark threshold of concern.
- The non-EU trade intensity for the UK chemicals sector reveals that the UK speciality and consumer sub-sectors are subject to a significant amount of overseas competition but, given the relatively low values at stake, are unlikely to be particularly adversely affected by carbon pricing. Of the two sub-sectors most affected by carbon pricing, the petrochemicals sub-sector is subject to significantly more non-EU overseas competition. Accordingly, of all the sub-sectors it is petrochemicals that is most likely to be affected by carbon pricing initiatives. Regrettably the data is not available to run this measure at the EU level but it is assumed the same challenges are likely to be faced.
- cebr finds that the chemicals industry, as a whole, has already achieved an impressive reduction in the absolute amount of greenhouse gas emissions for which it is responsible and an even more impressive reduction in terms of greenhouse gas emissions per unit of production (energy intensity), which improved by more than 40 per cent between 1990 and 2005. This would suggest that any lower-cost carbon abatement or energy efficiency opportunities have already been taken to reduce energy costs as a result of competitive pressure.

## How we can assist companies affected by the proposals

We have a well-established carbon economy team that:

- comprises lawyers from all of our practice groups, including lawyers from our environmental, planning and regulatory (EPR) group, which is consistently ranked as the top environmental and regulatory practice by the major legal directories;
- was established to help major international, European and national companies prepare for the inevitable move towards a low-carbon international economy and gain competitive advantage by exploiting the opportunities this will deliver; and
- recognises that the effects on our clients of international, EU and national measures designed to tackle climate change require a global, integrated approach, not least because of the diversity of existing and proposed measures, in terms of both the objectives to be achieved and the sectors they are targeted at.

Our EU ETS experience includes:

- involvement in developing and implementing the EU ETS, including advice on the legal issues that can arise from allocation of allowances via national allocation plans (NAPs) – we are working on a number of challenges regarding the German NAP for phases I and II of trading before the national and European courts; and
- advising on achieving and creating value from emission reductions for EU ETS compliance purposes, whether as a result of own action or through contractual arrangements with third parties – we have advised on the acquisition of carbon

The reduced access to carbon credits envisaged in the event that a post-2012 international climate change agreement is not reached may, however, have a negative effect on the carbon credit market, pending resolution of the agreement



<sup>5</sup> According to research by the Carbon Trust.

credits and on the issues that arise as a consequence of investing in them, as well as advising intermediaries, traders in the resulting carbon credits, carbon fund managers and carbon reduction project developers, who then sell on the resulting credits.

There are many ways in which we are able to assist companies affected by this proposal or similar national measures. For example, in the short term, our EPR group can assist:

- companies and their trade associations in devising lobbying strategies and influencing the passage of European and national legislation through the relevant legislative process;
- in devising strategies to achieve the best financial advantage from the existing EU ETS rules for companies already subject to the scheme, as well as those that are likely to be brought into it – for example in relation to the treatment of new entrants. Our experience of the first and second phases indicates that implementing a single EU allocation system into national law, and at installation level, will be a complex process, especially given the existing differences in member states' environmental permitting and EU ETS allocation regimes, and consideration now of adjustments to environmental permits at installation level may prove beneficial in the context of the allocation of allowances in the third phase of the EU ETS; and
- companies in understanding how national climate change policies may affect them and on similar strategies to maximise any financial advantage that inclusion in the measure offers.

In the longer term;

- Our dispute resolution group can assist with bringing challenges to the EU and national implementing legislation, once adopted, in the EU and national courts. For example, the financial burden of the phasing out of free allocation could trigger the application of national hardship rules or other mechanisms to limit the effect for some companies of the new allocation rules on the basis that the industry or individual operators are especially affected by the legislation and achieving its aims is disproportionate to the effect on them. We can also assist with challenges to any proposed national measures that may have an adverse effect on individual companies or business sectors; and
- our corporate and commercial teams will be able to bring to bear their experience, combined with input from our regulatory teams, to provide a focused response to the likely consequences of the proposal's adoption, including assisting with any consequent mergers and acquisitions and other corporate activity and on overseas investment, whether as a result of relocation of a company's business or investment in overseas projects generating carbon credits via the Clean Development Mechanism and Joint Implementation.

For further details on how the chemicals sector is likely to be affected by the proposal and how we are able to assist affected companies, please contact

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