

Targeting 2030

Giving the EU Emissions Trading System a long-term future

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An effective EU Emissions Trading System (EU ETS) should be the cornerstone of European energy and climate change policy, delivering investment to ensure energy security, reduce emissions, and boost growth. But investment is not forthcoming because the EU ETS' short-term focus has exaggerated the impact of the recession on the system, leading to uncertainty amongst investors. This cannot be resolved without a longer-term view: an EU ETS cap must be set out to 2030, in line with an economy-wide EU 2030 emissions target. Short-term measures such as the Commission's backloading proposal cannot be helpful without this longer-term context. To be successful, it is also vital that the EU ETS works for all businesses, and to ensure this, carbon leakage support needs to be improved. This should include harmonised measures for supporting electro-intensive industries not in the EU ETS but facing pass-through costs in their electricity bills.

Europe requires around one trillion euros of investment in its energy system by 2020 to meet its long-term energy and climate change policy goals of security of supply, decarbonisation, and competitive energy prices. This represents a potentially significant growth opportunity.

However, at present, the necessary level of investment is not forthcoming. Yet delaying this investment is likely to both increase the cost of meeting future emissions targets and cause Europe to miss out on immediate growth opportunities.

The EU Emissions Trading System (EU ETS) was designed to be the primary vehicle for generating this necessary investment in low-carbon energy and infrastructure in Europe, by setting a carbon price derived from an emissions cap for the sectors it covers.

However, the EU ETS is not currently delivering on its investment potential and is also causing concerns for certain sectors, especially manufacturing, vital to both the UK and European economy. In fact, confidence in the EU ETS amongst both businesses and policymakers has fallen so low that some are even calling for it to be removed from its position at the heart of EU energy and climate change policy, or are taking steps which undermine its very existence.

The European Commission has grasped the seriousness of the issue and has made proposals to reform the EU ETS.

However, the Commission's proposals are generally focused on the short-term. **What is required to get the EU ETS working effectively is a 2030 strategy. With this at the heart of measures to reform the EU ETS, shorter-term options can be considered.**

Therefore, this brief argues that:

- Emissions trading should be the cornerstone of an effective EU climate framework
- The EU ETS is not currently delivering on its potential because of its short-term focus
- Europe must reach political agreement on a 2030 energy and climate change package as soon as possible
- Short-term measures can only be helpful in the context of a long-term strategy
- To support growth and set a global example, the EU ETS must work for all businesses

Emissions trading should be the cornerstone of an effective EU energy and climate change policy

Smart energy and climate change policies can provide immediate growth opportunities

European energy and climate change policy needs to deliver one trillion euros of investment in Europe's energy system by 2020 to meet the EU's long-term energy and climate policy goalsⁱ of security of supply, decarbonisation, and competitive energy prices.

Unlocking this low-carbon investment today will ensure that these goals are achieved as cost-effectively as possible over the long-term. Energy infrastructure projects have long lead times – so the longer investment lags, the more difficult and expensive it becomes to meet future goals.

However, tackling these long-term energy and climate change challenges can also provide immediate business growth opportunities. In *The Colour of Growth: Maximising the potential of green business*ⁱⁱ, the CBI showed that British business sees going green as not just complementary to growth, but a vital driver of it. This could also be true on a European scale; while the European economy grew 1.5% in nominal terms between 2008-2011ⁱⁱⁱ, total low-carbon sales in Europe grew 6.5%^{iv}.

But green growth will not flourish automatically. To get investment flowing, we need a smart policy framework which minimises the risks and maximises the opportunities of the transition to a low-carbon economy. This includes maintaining the competitiveness of manufacturing firms, especially energy-intensive industries, which are as important in the UK as they are in the EU as a whole (Box 1). As a world leader in low-carbon business, sensible policy should enable Europe to capture the benefits from a global green market worth £3.3 trillion^v.

Emissions trading should be at the centre of a smart energy and climate framework

British business continues to support emissions trading as the most effective way to reduce emissions and stimulate investment in the EU. As set out in the CBI's December 2009 brief, *Trading up: The future of emissions trading*^{vi}, setting a carbon price within a market-based cap and trade approach has three advantages:

- It 'locks-in' emissions cuts once a legally binding cap has been set.
- It guarantees the cuts will come from the lowest cost options across the sectors covered by the scheme.
- It provides a long-term market signal for making low-carbon investment.

In this way, the EU ETS has the ability to give a clear price signal to drive low-carbon investment in Europe and creates

Box 1 – Manufacturing in the UK economy

- Manufacturing contributes £130 billion annually to the UK economy, around 9% of UK GDP.
- This makes the UK the 9th largest manufacturer in the world, and the 4th largest in the EU^{vii}.
- UK manufacturers employ over 2.5 million workers.
- Manufacturing is responsible for over 50% of UK exports.
- The UK is the 3rd largest destination for inward foreign direct investment in manufacturing in the OECD, and inward investment generated nearly 95,000 jobs in 2010/11.

Source: BIS Manufacturing Sector Analysis

an important level playing field for EU Member States in the transition to a low-carbon economy.

As well as reducing emissions most efficiently within the EU, the EU ETS also has the potential to provide a foundation for similar schemes around the world. It is encouraging to see emissions trading schemes starting to spring up in places as diverse as China, South Korea, California, Vietnam and Australia; in 2011, the total value of global carbon markets grew by 11% to €126 billion^{viii}.

If done effectively, beginning to link these markets together can provide a springboard towards a global carbon market. The CBI therefore supports the planned link between the EU and Australian emissions trading schemes.

The EU ETS is not currently delivering on its potential because of its short-term focus

The EU ETS is technically operating well

The carbon price in an emissions trading scheme is a means to an end: meeting the emissions cap. In other words, there is no pre-determined level at which policymakers should set the carbon price. If policymakers design the correct market parameters – the supply of emissions allowances over time, and the rules for surrendering and trading them – then the market will naturally deliver the appropriate carbon price to encourage investment.

In a technical sense then, the European carbon market is working effectively. While many stakeholders have commented on the recent relatively low European carbon price (around €7-8), that price is an accurate reflection of the EU ETS' current goal: to reduce emissions to 21% below 2005 levels by 2020 within the sectors covered by the scheme^{ix}.

The cap was set to ensure that the sectors covered by the EU ETS make a cost-effective contribution to the EU's overall target of reducing emissions to 20% below 1990 levels by 2020. Emissions from installations participating in the EU ETS decreased by over 2% last year^x, indicating that reductions are being made in line with the cap.

The EU ETS also has good market liquidity – a sign of a healthy market – with year on year traded volumes in EU ETS allowances (EUAs) up 25% in the first five months of 2012^{xi}. In addition, the scheme has now largely overcome some initial teething problems with respect to measurement, reporting and verification. From Phase III (2013) onwards, there will be a single European registry for trades, ensuring trades within the EU ETS are registered in one place, and under one authority.

But the system's short term focus has exaggerated the effect of the recession

It is natural that the recession in Europe has reduced the carbon price in the EU ETS. EU leaders set the 2020 emissions target in March 2007, when the economic outlook was much more positive. Since then, power demand and industrial output have been lower than expectations (figure 1). The result has been a build-up of surplus EU ETS allowances – with one allowance equating to a permit to emit one tonne of carbon dioxide or equivalent – as the total supply was fixed when the cap was introduced, yet fewer allowances than anticipated have been needed by companies to cover their output. The surplus allowances have put downward pressure on the allowance price, the natural response of a market faced with oversupply.

However, the short-term focus of the market has exaggerated this effect, meaning the recession has had a greater impact on the market than it should have done. With no cap yet in place after 2020, investors are struggling to see beyond Phase III of the scheme, despite the technical lack of a sunset clause. Without a long-term goal, markets have been unable to see the long-term value of EU ETS

allowances, which are being valued only against short-term (2020) criteria for which there is an oversupply.

While the EU ETS is designed to incentivise investment to meet long-term emissions goals, businesses do not currently have the confidence to invest as they do not know what these future emissions goals will be. This is particularly damaging as energy and industrial projects have long lead-times, so companies are thinking now about investments beyond 2020.

Had a long-term framework been in place, it is likely the EU ETS market would have been affected less by the recession, as market participants would have been able to see beyond the current economic period.

The current situation is threatening both long-term investment and the future of the EU ETS

European emissions targets are almost certain to be extended beyond 2020, as envisioned in the Commission's *Roadmap for moving to a competitive low-carbon economy in 2050*^{xii} and committed to under the UN process begun at Durban in 2011. Without investment in low-carbon power now, meeting these long-term targets will be more expensive overall. However, the present policy reality is not incentivising this investment. It is not even achieving switching to lower-carbon fossil fuels: coal demand in Europe increased 3.3% last year, at the same time as a 2.1% fall in demand for natural gas.^{xiii}

If this situation continues, there is a real possibility the EU ETS could be supplanted by national policies. Already, there is an increasing trend towards domestic action by Member States to give investors the long-term signal that the EU ETS

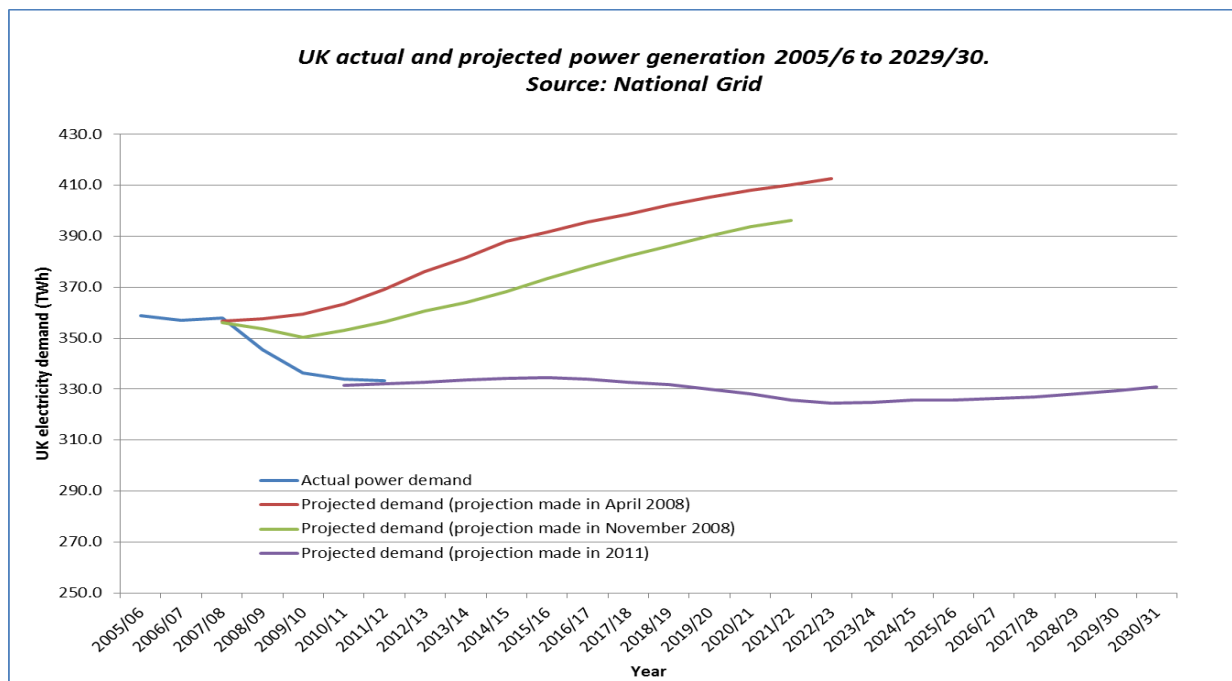


Figure 1 – Power demand projections made in 2008 could not account for the depth of recession.

is meant to provide. For example, the UK's carbon price floor uses a national tax to top up the European carbon price in the UK to a pre-determined level.

Such unilateral action undermines the level playing field the EU ETS provides across Europe. An effective EU ETS is needed to prevent any further national action and to render existing policies, such as the UK carbon price floor, redundant.

Europe must reach political agreement on a 2030 energy and climate change package as soon as possible

Investors need an EU ETS cap and an emissions target for 2030

Getting long-term certainty back into the EU ETS is the most important step towards restoring confidence in it, and hence getting investment flowing.

In practice, businesses need to see the overall emissions cap for the period beyond 2020, the end of Phase III. Making changes to the 2020 cap is unlikely to have the desired impact as 2020 is already in the 'rear-view mirror' for businesses looking to make investment decisions. So Phase III should be followed by a Phase IV, which should start in 2021 and run until at least 2030. Getting this clarity on 2030 and beyond is needed to give investors long-term confidence.

As the EU ETS cap needs to be set in line with overall European emissions targets to ensure the sectors covered by the scheme are making their fair share of emissions reductions, the EU needs a 2030 economy-wide emissions target before a Phase IV cap can be set.

To give maximum long-term certainty, the 2030 target should be developed as a clear milestone en route to a 2050 EU emissions reduction goal. The path set out in the Commission's *Roadmap for moving to a competitive low-carbon economy in 2050* and reconfirmed by the European Council in February 2011^{xiv} provides Europe with a sensible objective; it envisages a 2050 emissions reduction goal for Europe of 80-95% below 1990 levels.

As part of this, the Commission's pathway proposes an EU emissions reduction goal of 40% by 2030 as being on the cost-effective pathway to 2050. Under the UK Climate Change Act, the UK already has a fourth carbon budget which requires a 50% average reduction from 1990 levels during the period centred on 2025 as a milestone en route to an economy-wide target to reduce emissions to 80% below 1990 levels by 2050. It is important that both of these pathways are consistent to give business confidence in the direction of travel.

To be cost-efficient, a future EU energy and climate change package should only set a target for emissions. Renewable energy and energy efficiency targets are likely to unhelpfully overlap with emissions targets, potentially hampering the ability of the carbon market to select the lowest cost options for reducing emissions.

Setting a 2030 target will require political movement

At present there are political barriers to making progress towards a long-term energy and climate change package. For example, the *Roadmap for moving to a competitive low-carbon economy in 2050* requires unanimous agreement amongst Member States in the European Council for it to be adopted. So far unanimity has not been achieved, and reluctant Member States are yet to be persuaded that a long-term energy and climate framework is actually in Europe's economic interest.

Given the need for agreement in the European Council, Member State governments have a vital role to play in securing the future of EU energy and climate change policy as progress is only likely to be made by building bridges at the political level. The CBI therefore urges European governments to work constructively together to find solutions which will bring all Member States on board.

Mainstreaming energy and climate change discussions within the broader EU budget context may help to make progress as it would link energy and climate change issues to the fundamental economic factors at the heart of Europe, especially the need to go for growth. The low-carbon economy should not be seen as a stand-alone sector within Europe's economy, but rather driving growth right through it.

The current Commission can and must secure a political agreement by 2014

The current Barroso Commission, which ends in 2014, can and should leave Europe a legacy of a political agreement on the future of EU energy and climate change policy in the form of a 2030 package on energy and climate change. With urgency and strong political will in the Commission, agreement should be possible by mid-2014 given the Commission's intention to commence work on a 2030 package in 2013 and the need to set long-term targets by 2015 as part of the Durban agreement under the UN climate process.

To provide sufficient investor confidence, a political agreement by 2014 should consist of European Council conclusions specifying a Europe-wide greenhouse gas emissions target for 2030 and committing to setting a Phase IV EU ETS cap in line with it. It would be the responsibility of

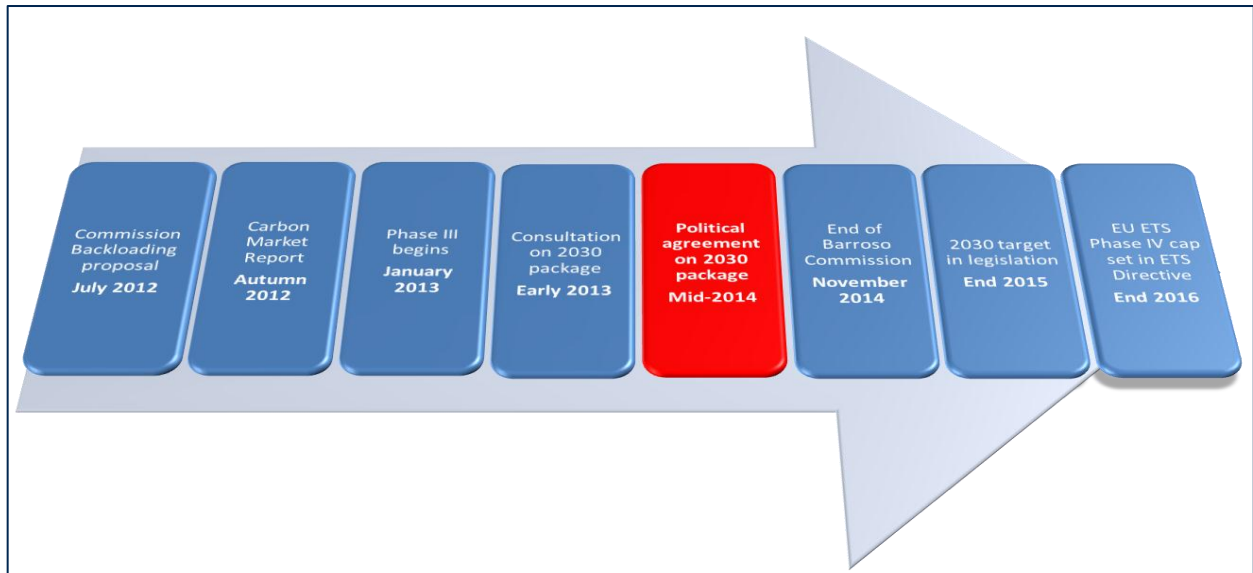


Figure 2: An indicative timeline towards setting an EU ETS Phase IV cap

the next Commission to practically translate Council conclusions on a 2030 package into European legislation, and ensure the necessary political process is undertaken to accurately translate the economy-wide emissions target into a Phase IV ETS cap written down in the ETS Directive (Figure 2).

Short-term measures can only be helpful in the context of a long-term strategy

Any short-term action must be clearly geared towards a long-term goal to avoid harming investor confidence

While giving the EU ETS a long-term focus is the most important step towards its reform, policymakers are currently devoting much time and energy to considering short-term interventions which might temporarily alleviate the oversupply in the EU ETS.

To avoid creating added uncertainty, any short-term action to reform the EU ETS **must** only be considered as part of a clear long-term strategy. Making changes to the EU ETS at short notice has the potential to undermine confidence in the market further as it changes the basis on which investment decisions have been made. Moving the goalposts with little warning should generally be avoided in any policy area.

Therefore, when proposing short-term measures, policymakers need to reassure business that the EU ETS is being reformed once-and-for-all with

strong statements of political will and a clear forward process and end point.

Backloading alone will not recalibrate the EU ETS

The Commission's current short-term proposal to 'backload' auction allowances in Phase III of the EU ETS risks being seen as a knee-jerk intervention which increases uncertainty further if not carefully packaged as part of a long-term strategy.

Backloading is a process proposed by the Commission whereby some allowances originally intended to be auctioned towards the beginning of Phase III (2013-2020) would instead be auctioned towards the end, with the purpose of not increasing the surplus of allowances further in the short-term.

The current 'backloading' proposals do not involve the cancellation of allowances. As a result, analysts do not expect the current backloading proposals to have any significant impact on the carbon market over the medium-to-long-term as the market realises allowances will be returned in a few years (figure 3).

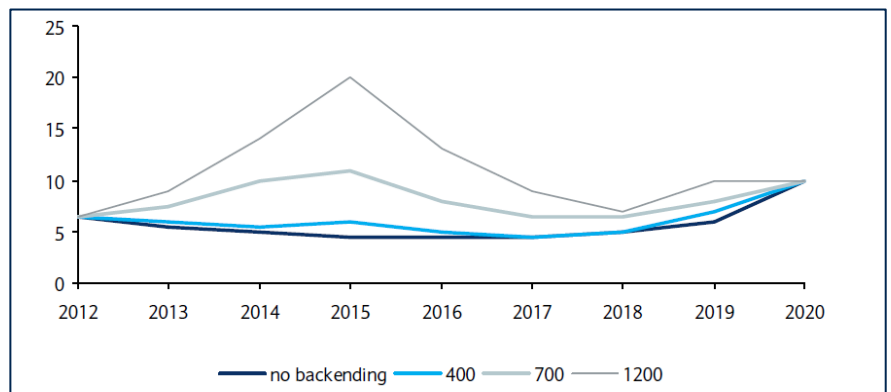


Figure 3: Backloading alone will have little impact on the medium/long-term EU ETS allowance price - Impact on EU ETS price (€/t) of backloading different numbers of allowances (millions) Source: Barclays, Quarterly Carbon Standard: Worse before better. June 2012

Without more structural reforms, affecting the overall supply of allowances in Phase III and/or the perceived value of those allowances in the context of Phase IV, the carbon price is likely to be similar in 2020 regardless of the number of allowances backloaded.

However, backloading with cancellation could help to smooth the trajectory towards meeting future caps

It is likely that once a 2030 target is set, a smooth path to meeting it will require emissions to be reduced more quickly in Phase III than the existing EU ETS trajectory. This would be relatively easy to achieve given the recession-induced reduction in output over recent years.

A smooth EU ETS trajectory towards the 2030 target is in business' interest to give investors confidence they are on the right path towards meeting future emissions targets. Therefore, within the 2030 context, it would be sensible for the Commission to consider whether action needs to be taken to put Phase III of the EU ETS on the correct pathway towards meeting long-term goals.

Cancelling 'backloaded' allowances – removing them permanently from the EU ETS market – is one option for achieving this, and other options are likely to be discussed in the Commission's forthcoming Carbon Market Report both on the demand and the supply side.

However, it is impossible to determine whether and how to apply an appropriate Phase III trajectory adjustment without a clear view of Phase IV. For example, differing analyses of the backloading proposals currently suggest very different numbers of allowances to remove and potentially cancel (Table 1). This is partly because without visibility of Phase IV, the extent of the EU ETS surplus is not fully understood.

Taking short-term action which is not perceived as evidence-based would undermine confidence in the process, and therefore the market. However, justifying any intervention as necessary and appropriate in the context of a long-term target would help to reassure businesses that the process is seeking to reform the EU ETS for the long-term.

Analysis	Projected ETS surplus
Deutsche Bank ^{xv}	1.26bn units in 2020
Commission ^{xvi}	1.4bn units in 2012
Sandbag ^{xvii}	3.1bn units in 2020
WWF & Greenpeace ^{xviii}	1.42bn units in 2020
Barclays ^{xix}	2.063bn units in 2020

Table 1: EU ETS surplus allowances projected by different analysts

To support growth and set a global example, the EU ETS must work for all businesses

The world is looking on to see if the EU ETS can support growing energy-intensive industries

Energy-intensive industries make a direct and significant contribution to economic growth and are a crucial piece of a low-carbon future (Box 2). The low-carbon transition will depend on products made using energy-intensive processes, and if we do not secure the future of these industries, the EU will be forced to import what it should be exporting.

Despite their value, European energy-intensive industries have suffered during recent economic times. Reduced output in these sectors is illustrated by the fact that industrial emissions in Europe were 80Mt CO₂ lower in 2011 than in 2008^{xx}. This has left some of the firms concerned with much-publicised surplus EU ETS allowances. These surpluses are a consequence of reduced production and the companies concerned would much rather be using them up through increased production.

Box 2: The role of energy-intensive industries in a green economy

- A wide variety of chemicals are needed in products like insulation, double glazing, and material for wind turbines, lightweight material in planes and cars and low-temperature detergents. It is estimated that use of these materials saves over twice the amount of CO₂ produced during their manufacture.
- The International Energy Agency estimates that 9-150 tonnes of cement and 25-150 tonnes of steel are needed for megawatt's capacity of gas power, nuclear or offshore wind.
- Increasing amounts of strong, but lightweight, steel, aluminium, and plastic materials are needed to help increase the fuel efficiency of new vehicles.
- Robust ceramic refractory materials are needed to improve the efficiency of producing various metals and glass.
- Low rolling resistance tyres can save significant carbon emissions when used, far exceeding the emissions associated with their manufacture.
- Among the materials needed for retrofitting buildings (to make them more energy efficient), 0.5-3kg of glass and 10-100kg of bricks and tiles are needed for every square metre of retrofitted housing space.

This is also important because the EU's global partners are looking closely to see whether Europe can successfully integrate its energy-intensive industries into an effective ETS, preventing "carbon leakage" in which investment in European industries is deterred by the cost of complying with the EU ETS and other energy and climate change

policies, often flowing instead to jurisdictions with lower environmental standards.

Proposed emissions trading schemes in high-growth nations like South Korea are unlikely to come to fruition unless they can see emissions trading as being consistent with competitive industry.

With the most developed carbon market in the world, Europe sets an example for others to follow on emissions trading, and must therefore design policy smartly to ensure those industries at genuine risk of carbon leakage are supported.

Current EU competitiveness and carbon leakage support should be improved

The main system of support for competitiveness and carbon leakage concerns in the EU ETS is provided through allocating free allowances to industrial sectors on the basis of product benchmarks. These are set using the average of the top 10% most carbon-efficient installations in the sector. Sectors deemed to be significantly at risk of carbon leakage get 100% of the benchmarked allocation free. Sectors not deemed at significant risk will get 80% of their benchmarked allocation for free in 2013, falling to 30% in 2020 and 0% in 2027.^{xxi}

Many companies participating in the scheme are concerned that support based on past rather than actual output means compensation levels may be inaccurate. Indeed, allocation is made on the basis of old production data, which can quickly be rendered irrelevant in an uncertain economic climate as production levels change. There are also concerns that the benchmarks for setting allocation may not be evidence-based, with the benchmarks for certain sectors set more stringently than what is achieved by Europe's best performer in the sector, let alone the top 10%.

To be successful, the Commission must make measures to improve competitiveness and carbon leakage support an integral part of EU ETS reform. The process to develop a 2030 energy and climate change package should include consideration of these issues from the start, and the political agreement of the package must include a commitment to implement improvements in the design of Phase IV. Any practical opportunities to make shorter-term improvements should also be taken, particularly if other short-term changes are made to the EU ETS.

To develop an improved approach, the Commission should work closely with European industry both to examine the way in which the current support system works, and look more broadly at how to ensure a competitive environment for energy-intensive firms in Europe. This must be done in an evidence-based way, and include:

- **Seeking to target action at the installation-level rather than the company-level** to ensure that each installation within a company receives the appropriate level of

support. This would help to overcome the issue of energy-intensive installations within firms with more varied activities not being adequately supported.

- **Learning lessons from how other emissions trading schemes seek to support energy-intensive industries.** As mentioned, emissions trading schemes are springing up around the world. A number of these have different measures in place for supporting at-risk industries. For example, the Australian scheme, linking to the EU ETS from 2015, has a more flexible support system, basing free allocation on actual rather than past production (Box 3).
- **Supporting initiatives to develop global sectoral agreements.** For example, the work of DG Enterprise in developing a steel sector roadmap is a positive development, and should be fully co-ordinated with energy and climate change policy. Such initiatives should be used as an example to speed up the development of global sectoral roadmaps, which would help to determine how best to treat whole sectors, rather than just how best to treat sectors within the EU ETS.

Box 3 – Carbon leakage protection in the Australian Scheme

The Australian emissions trading scheme (Carbon Pricing Mechanism) approach to supporting energy-intensive trade-exposed industries differs subtly, but importantly, from the EU ETS. In the Australian scheme, the amount of free allocation is directly linked to the actual level of production of a company over time. Allocation is determined according to production during the previous financial year so it varies year-to-year depending on production levels. In the EU ETS however, allocation is fixed according to past production in a given year, irrespective of changes in production levels annually.

Part of the package of measures surrounding the Australian ETS legislation includes investing AUS\$1.2 billion in innovation, to try and find low-carbon solutions for sectors such as manufacturing and agriculture.

Source: Australia's Clean Energy Legislative Package, Carbon Market Institute, November 2011

A new support mechanism is needed for electro-intensive industries

In addition, there is a particular issue with supporting electro-intensive businesses that are not in the EU ETS itself but face the pass-through costs in their electricity bills. These businesses do not qualify for free allowances, and rely on support from Member States governments, which must follow guidelines on compensation for indirect costs.

Support based on indirect emissions guidelines is uncertain and uneven. It is uncertain because it depends on the willingness of Member State governments, and also

requires state-aid approval. It is uneven because Member States can choose their own level of support. For example, the UK and Germany are both providing support – but at different levels – and many countries provide no support at all.

This situation leaves many electro-intensive businesses without adequate support and acts to further undermine a European level playing field for reducing emissions.

The lack of support for electro-intensives can create an artificial incentive to generate electricity on site rather than import it from the grid, as there are benefits in terms of free allocation from generating electricity on site. Companies should be able to choose the best approach for their production facilities, both commercially and environmentally, without the EU ETS potentially distorting the decision.

The Commission should therefore **propose a new mechanism to support electro-intensive industries** on a harmonized – EU wide – basis. One option could be enabling these industries to opt-in to the EU ETS to be covered by the free allowance system. Permits which would otherwise have been auctioned directly by the EU or Member States could be given to electro-intensives, who could then sell them on. Making use of the free allowances system should ensure that support is not taken directly from consumers' energy bills.

Summary of key recommendations

- Political agreement must be reached by 2014 on a 2030 energy and climate change package, including a specific EU-wide emissions target for 2030.
- The EU ETS Directive must then be amended to set a Phase IV cap in line with the EU-wide 2030 emissions target.
- Proposals for short-term changes to the EU ETS can only be considered if they are developed in parallel with a 2030 target and a Phase IV cap.
- The 2030 package must include measures to improve competitiveness and carbon leakage support for at-risk energy-intensive industries, including a new, harmonized system of support for indirect costs to electro-intensive installations.
- Any practical opportunities to make shorter-term improvements to competitiveness and carbon leakage support should also be taken.

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