DELLIVERING INVESTMENT TO IMPLEMENT EUROPE’S 2030 CLIMATE & ENERGY TARGETS
IIGCC response to the revision of the EU Emissions Trading System (ETS) Directive
17 June 2015
Following the agreement by the European Council on the 2030 climate-energy framework on 23 October 2014, attention is shifting to implementing the agreed targets of Heads of State and Government; most notably, a domestic 2030 greenhouse gas reduction target of at least 40% compared to 1990 levels.

In this paper, we provide our recommendations on the post-2020 ETS in order to strengthen the investment signal from the ETS by introducing a meaningful and more stable carbon price. This paper reaffirms our support for the decisions taken by policy-makers on the market stability reserve (MSR, Section I) and outlines our recommendations to help the EU achieve the objectives of its 2030 framework by creating the right conditions and incentives to drive investment in low carbon technologies by taking supplementary action (Section II).

IIGCC has long supported effective reform of the European Emissions Trading Scheme, and welcomes the market stability reserve which will help strengthen the investment signal from the EU-ETS.

Projected development of the surplus and price in the EU-ETS

In order to effectively drive investment into the low-carbon economy, EU policy-makers are currently considering additional measures to repair the EU-ETS. In section II, we put forward five recommendations to improve the ability of the EU-ETS to deliver investment. As shown in the graph above, the EU-ETS price will only reach a meaningful level very late in the 2020s, and these additional measures are thus crucial. The recommendations:

- **A gradual move towards comprehensive auctioning** as a measure of allowance allocation for the energy-intensive industry, with carbon leakage protection limited to those companies actually at risk

- **Using the rate at which emitters can pass on the cost of the EU-ETS to customers to determine carbon leakage risk (pass-through rates).** Threshold levels should be set sufficiently high to drive European industrial modernisation

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• Transfer leftover allowances into the MSR or cancel them completely
• Focussing the modernisation fund on sustainable projects
• Introducing an Emissions Performance Standard to complement the ETS in case the EU-ETS does not deliver soon enough to achieve the 2030 targets

We look forward to working with the European institutions in ensuring an ambitious and effective reform of the emissions trading scheme.

Who we are

The Institutional Investors Group on Climate Change (IIGCC) represents more than 100 mainstream pension funds, insurance companies and asset managers as well as specialist infrastructure funds, with collectively more than €10 trillion of assets under management.

IIGCC members have major investments in virtually all sectors affected by EU-ETS legislation: energy intensive industry, the traditional power sector and low-carbon energy companies and projects. We are long-term owners. Systemic risks such as climate change have a significant impact on our investments and liabilities.

1 Introducing the Market Stability Reserve as soon as possible

Investments in sectors covered by the EU-ETS often last for several decades. The EU-ETS has historically experienced high levels of long-run volatility, which has undermined the ability of the EU-ETS to send an investment signal. This has lowered the confidence of low-carbon investors in the EU-ETS. Volatility levels influence the level of risk that a certain investment is associated with.

Hedging can reduce the risks resulting from volatility, but usually only has time horizons of a few months to a few years. Time horizons of hedging instruments are too short to completely de-risk emission reduction investment projects in industry or the power sector since those last significantly longer. Uncertainty about future carbon prices is partially caused by political uncertainty and uncertainty about the development of fundamentals such as actual production levels in industry or the power sector (since these depend on economic growth, energy efficiency improvement rates and many other factors).

Because of this great uncertainty about future carbon prices, discount rates applied to future carbon prices are very high. If uncertainty about future prices is high, there will be a lower likelihood that projected cash flows from emission reductions will be realised. Investors will consequently assign these uncertain cash flows a lower present value.

The result of this is striking: To trigger a positive investment decision, future carbon prices need to rise much higher than they would need to rise if the future price was more certain. The cost polluters have to pay for their emission allowances thus needs to rise higher than would be necessary – we are getting less emission reduction investment at the same cost to energy intensive industry and the power sector.
How the market stability reserve will reduce the surplus of allowances

We currently have a large surplus of allowances in the EU-ETS. The surplus can be described as the difference between the amount of allowances that had to be surrendered to the government for emissions, and the amount of allowances that were assigned to polluters. This surplus has been calculated to be as large as a whole year's worth of EU emissions, and was caused by the economic crisis (with the resulting reduction of demand for allowances). The surplus currently stands at roughly 1.6 bn allowances.

The EU has already reached political agreement on reducing the surplus and thereby leading the market to expect gradually rising carbon prices that are more certain.

To close the gap between the allowances allocated and the allowances that were actually used, the EU will withhold a certain number of allowances from future allocation rounds and put them to the side (through the market stability reserve). The mechanism tackles a decisive source of volatility in the EU-ETS: the impact of a misbalance between supply and demand from the overallocation – or underuse – of emission allowances. If the market becomes too tight, volatility levels would increase. In consequence, the MSR will guarantee that a certain minimum surplus remains.

IIGCC welcomes that policy-makers are introducing the market stability reserve.

Furthermore, because power sector and industry projects last for decades, the investment decisions made today will have a strong impact on the ability of the EU to deliver on its 2030 climate-energy targets. The market stability reserve will only gradually reduce the surplus and thus repair the EU-ETS: the reason for this is that each year, there is a maximum on the amount of allowances that can be withheld. The surplus will thus not disappear overnight. However, we need a strong carbon price as soon as possible in order to start work on the 2030 targets.

Moreover, policy-makers had already agreed a few years ago on withholding a certain amount of allowances from allocation and reintroducing them into the market later on (backloading). Policy-makers have now decided that the reintroduction of allowances would unduly delay the point in time from which the EU-ETS makes a material difference to investment decisions. They have therefore decided to place the backloaded allowances in the market stability reserve instead of allowing them to flood the market.

IIGCC welcomes that policy-makers have settled on the early introduction of the market stability reserve.

IIGCC also supports the transferral of backloaded allowances into the market stability reserve.
The current EU-ETS drives operational decisions, but not new investment

Two objectives of the EU-ETS should be distinguished.

1. **Short-term operational decisions:** existing plants and industrial installations need to be utilised in the most efficient way – in particular by driving high-carbon installations out of short-term markets when prices require this. The prime example is switching from coal to gas wherever excess capacity allows this. A price that is significantly above current levels is required in order to make gas plants more economical than coal plants because gas plants have a higher marginal cost (a higher cost of producing an additional unit of electricity).

   Most analysts forecast the point in which the price will rise to the level necessary for gas plants to displace coal plants in energy trading for the late 2020s. This is clearly too late – but there is a certain likelihood that ETS reform can deliver on this at some point in the future.

2. **Long-term investment decisions:** This is even more difficult to achieve due to two factors: time horizons and cash flow profiles.

   Firstly, time horizons for most emission reduction investment decisions are very long and require certainty over a prolonged period of time. The EU-ETS is getting better with respect to this, but further measures are necessary.

   Secondly, whereas the capital expenditure for most emission reduction investment occurs at the beginning of the project – and this up-front capex is very high – the project only generates returns over decades. Consequently, uncertainty about future prices is very damaging.

   As a result, the EU-ETS is currently an upside in investment decisions rather than their ultimate driver.

2 Five recommendations for the forthcoming structural reform of the ETS

**Towards comprehensive auctioning of ETS allowances**

It has been argued that free allocation to industry is of no consequence since the delivery of the overall cap is guaranteed. We agree that the priority should be delivering the emissions reductions. In its 2030 guidance, the European Council decided that free allocation should continue post-2020. The European Council has not decided on the methodology for determining carbon leakage risk and the resulting scope of free allocation. In the following section, we make our recommendations for these crucial issues that will determine how strong the incentive for energy intensive industry to innovate becomes.

Firstly, in order to ensure a level playing field between EU industrial companies and their competitors from outside the EU, protecting European industry against competitors from outside the EU might be necessary (carbon leakage protection). The method by which this is currently achieved is free allocation to energy intensive industry of an amount of allowances that is set through comparison with other companies in the same industry inside the EU (benchmarking).
However, past evidence suggests that free allocation to industry has been far too generous and has led to increased revenues rather than the internalisation of the cost that carbon emissions cause. The reason for this is that the criteria for determining who is at risk of carbon leakage are too vague and have led to an inflated list of protected industries. This has undermined the incentive for the protected industries to innovate.

The consequences of this can become worrisome: whereas we are making good progress in developing, commercialising and deploying the technologies we need for the decarbonisation of the power sector, industry has not had an incentive for continuous innovation from emissions trading. Efficiency improvements were almost exclusively due to the desire to reduce energy costs or take advantage of government support programs. The consequence: innovation is stalling in several sectors and some industries in Europe are now less efficient than their Asian competitors.

According to the London School of Economics and Political Science (LSE), even a ten-fold increase in carbon prices and a 30% increase in energy prices would only have a negligible impact on international trade patterns. Energy prices – let alone carbon prices – are not driving investment decisions and are not causing investment leakage: they are only one of the factors that make an economy competitive.2

As a result of inflated carbon leakage protection, we might in future years reach technological limits to emission reductions in industry because there was no incentive from the ETS for innovation. Energy intensive industry might be unable to make further emissions reduction because the technologies are not ready. If the market is tighter then, we might see spikes in allowance prices that would be highly damaging across the economy. Rather than delaying the transformation of European industry further into the future, we have to start today. The experience of the power sector shows that delayed innovation can lead to sunk investments that become stranded.

Even if there would be no free allocation to industry any more tomorrow, the energy intensive industry would will feel little immediate impact: the surplus in the EU-ETS will only reduce slowly over time. This surplus is to a large extent owned by the energy intensive industry, and provides protection against rising carbon prices well into the future. A move to comprehensive auctioning for those parts of European industry that are not at risk of carbon leakage would therefore only have an effect on European industry many years down the line.

Furthermore, the risk of perverse incentives increases with rising carbon prices: If an installation receives valuable allowances for free, this might provide an incentive for inefficient installations to stay operational rather than close. This would further delay industrial modernisation.

Lastly, the net welfare effects of an end to free allocation to all those industries not really at risk of carbon leakage would be positive, as a recent study by FTI consulting has found3. Increased government revenue from auctioning could be used for low-carbon innovation either in the industries affected or in the wider economy, with positive effects.

IIGCC supports a gradual move to comprehensive auctioning of EU-ETS allowances to energy intensive industry, with carbon leakage exemptions limited to those companies actually at risk (as determined by pass-through rates, see next section).

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Pass-through rates as carbon leakage risk indicator

The European institutions currently determine carbon leakage risk according to two main criteria: carbon cost and trade intensity, or a combination thereof. The European Commission acknowledges that carbon leakage protection has been granted to too wide a range of industries and is currently looking into pass-through rates as a means of determining who is at risk of carbon leakage.

The rationale is that if companies cannot pass through the cost of emissions trading to their customers because they face competition from outside the EU or their customers’ demand for their goods is very elastic, they are at risk of carbon leakage. If demand was very inelastic or if competition from outside the EU was weak, we would be allocating allowances to industries for free that could well pay for them without any material threat to their competitiveness.

Moreover, this money would be better spent incentivising the industries of the future: rather than paying what is essentially a subsidy to old industries, proceeds from emissions trading should be used for new technologies. This can be described as the difference between keeping the horse carriage alive, or incentivising advanced low-carbon transport.

As more and more jurisdictions outside the EU introduce carbon trading, carbon leakage risk reduces and the pass-through rate increases. The new methodology would reflect these changes dynamically.

IIGCC encourages the Commission to propose pass through rates as a means of determining carbon leakage risk.

Treatment of unallocated allowances

There is a large number of allowances from the current trading period that have not been allocated to their intended recipients – for example, because the installation that was to receive the allowances closed. Flooding the market with these allowances would cause the EU-ETS price to drop even further.

It has been argued that these unallocated allowances should be used as compensation for the earlier introduction of the market stability reserve since the reserve was not built into the original legislation covering the current trading period. It is our view that the market stability reserve is a response to the lower demand for allowances that resulted from the economic crisis – the extent of which was also not foreseen when the original legislation was passed. Market participants are paying a much lower price for allowances today than they were originally planning – if they are paying at all.

IIGCC supports leftover allowances being transferred into the MSR or permanently cancelled as agreed in principle by the European Institutions.

Using the modernisation fund to reduce the transition cost

The European Council has also decided that a modernisation fund should be established to enable countries to make the transition to a low-carbon economy. The modernisation fund should be funded from a certain proportion of government revenues resulting from the auctioning of allowances. However, there is a real risk that the fund will undermine the trading scheme by incentivising – through the back door – the very high-carbon assets that need to be closed, particularly in the power sector.
This is particularly relevant for coal plants. According to the IEA\textsuperscript{4}, coal plants have the worst emissions performance of any European mainstream power generation technology. Carbon risk is significant. Coal plants will need to be closed soon in order to deliver on 2020 and 2030 climate-energy targets, with many European countries already taking measures to directly tackle coal assets. This trend will also reach countries that are still backing coal-based energy generation.

Policy risk around coal plants is increasing significantly. A smooth transition to a low-carbon economy requires a gradual phase-out of coal-based generation assets. This course of action is preferable to keeping coal plants on the grid artificially through subsidies, because they might then get closed or production levels reduced abruptly once there is a change in government in the respective countries or the government decides to do so to ensure attainment of CO\textsubscript{2} targets.

IIGCC calls upon policy-makers to ensure investments by the modernisation fund are exclusively focussed on sustainable projects. Funding criteria should be clearly laid out in the legislation establishing the modernisation fund.

An emissions performance standard as a backstop measure

In order to deliver the transition to a low-carbon economy, additional measures complementing the EU-ETS could be considered. It is often argued that additional measures to complement the EU-ETS would undermine its effectiveness. With the introduction of the market stability reserve, this is no longer entirely correct. We would therefore support the consideration of an emissions performance standard if the EU-ETS is not projected to deliver the 2030 targets.

With the introduction of the market stability reserve, the cap on emissions governing the emissions trading scheme has become flexible. Whenever additional efforts are made to reduce emissions through measures other than emissions trading, the surplus of allowances in the EU-ETS initially increases. However, the market stability reserve then automatically withdraws these surplus allowances from future allocation rounds, in essence lowering the amount of allowances that are auctioned and thus making the cap flexible.

In order to enable investors and utility companies to have planning stability on the future development of the conventional power sector, and to avoid the construction of new coal plants that will become stranded very soon, an emissions performance standard could be introduced. An emissions performance standard essentially sets a limit on how polluting power stations can be, and progressively tightens this limit to gradually remove the worst polluters from the grid. We think this would be a welcome addition to the ETS in order to ensure that power sector emission reductions are delivered. However, we would only support this in the event that the contribution of the ETS would be too late for the 2030 targets.

IIGCC would support the introduction of an EU-wide emissions performance standard if ETS reforms are not projected to deliver power sector abatement on the scale required.

Conclusion

The emissions trading scheme has not delivered an investment signal due to its substantial volatility and low price levels. The MSR will strengthen the investment signal from the EU-ETS, but further measures are necessary to increase incentives for innovation in the energy intensive industry and deliver an investment signal to the low-carbon power sector. Gradually introducing auctioning for energy intensive industry, improving the method for determining carbon leakage risk, and ensuring a constructive use of the modernisation fund can help in strengthening this crucial investment signal.

These actions will not only benefit low-carbon energy investors; they will provide the right framework for European industry to drive European industrial modernisation, and help the EU achieve its climate and energy objectives while strengthening its position as a global leader for sustainable technology.

Contact

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IIGCC Membership 2015

Aberdeen Asset Management
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AP1 (First Swedish National Pension Fund)
AP2 (Second Swedish National Pension Fund)
AP3 (Third Swedish National Pension Fund)
AP4 (Fourth Swedish National Pension Fund)
AP7 (Seventh Swedish National Pension Fund)
APG Asset Management
ATP
Aviva Investors
AXA Real Estate
BBC Pension Trust
Bedfordshire Pension Fund
BlackRock
BNP Paribas Asset Management
BT Pension Scheme
CB Richard Ellis
Caisse des Dépôts
CCLA Investment Management
Central Finance Board of the Methodist Church
CF Partners (UK) LLP
Church Commissioners for England
The Church of England Pensions Board
Church of Sweden
Climate Change Capital
Danske Bank
DIP
Dragon Capital Group Ltd.
Deutsche Asset & Wealth Management
Earth Capital Partners
Environment Agency Pension Fund
Environmental Technologies Fund
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Low Carbon Ltd
M&G Real Estate
Marguerite Advisor S.A.
Mayfair Capital Investment Management
Mercer Global Investments Europe Limited
Merseyside Pension Fund
Mn Services
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  Friends Provident Foundation
  Jesuits in Britain
  Joseph Rowntree Charitable Trust
  The Lutheran Council of Great Britain
  Panapur
  Polden-Puckham Charitable Foundation
  Religious Society of Friends
  Representative Body of the Church in Wales
  Roman Catholic Diocese of Plymouth
  Roman Catholic Diocese of Portsmouth
  Servite Friars
  United Reformed Church Ministers Pension Fund
  United Reformed Church South Western Synod
  United Reformed Church Trust
  United Reformed Church Wessex Synod
  William Leech Foundation