

Submission to European Commission Consultation on
Structural options to strengthen the EU Emissions Trading System
Call for public views

Prof Michael Grubb
Chair of Energy and Climate Policy,
4CMR Cambridge University

Board Member, Climate Strategies / EiC, Climate Policy journal

Senior Advisor, UK Office of Gas and Electricity Markets (Ofgem)

Introduction.

The European Commission consultation document¹ suggests that the central challenge facing the EU ETS is a very low price, caused by the accumulated surplus mapped in the report. Backloading can help to address this, but as acknowledged in the document, can be understood best simply as a way to buy time for structural reforms that will, inevitably, take longer.

This submission argues that effective structural reform will require a *package* of measures, based on recognising a deeper set of challenges:

- The history of the EU ETS is the biggest, but by no means the first, demonstration of the **depth of uncertainties** around energy and emission projections. With eight years of Phase III to run and the EU still in the midst of a fundamental structural economic transition, removing any given number of allowances may not have the price impact intended or resolve the periodic price instability implied by quite inelastic demand set against fixed supply;
- The ETS now faces a major **credibility problem**. Along with diverse and growing doubts in business particularly for investment purposes, it faces growing public and political scepticism. Moves targeted purely at jacking up the price, without a deeper compelling rationale, risk backfiring into threatening the instrument itself;
- The ETS in its current form *does* create **tensions with other policy instruments** targeted at tackling climate change, and can carry a risk of demotivating other actors in society.

A fourth but crucial factor is the **radically different political landscape in Europe**, which remains in the grip of fiscal, economic and potentially political crisis. Climate change is not a primary concern. Unless the discourse around the EU ETS can be changed to one that appeals to these higher political priorities, no significant reform is likely to gain the traction required.

This submission points briefly to evidence on the above, suggests a ‘new narrative’, and considers implications for one of the options in the Consultation paper.

CONTENTS

¹ *The State of the European carbon market in 2012*, COM(2012) 652 final

1.	The four structural challenges.....	2
2.	Objectives and new narrative.....	4
3.	Options from an Investment and financial stability perspective.....	6
4.	The objections.....	7
5.	Concluding remarks.....	9

1. The four structural challenges

a) The deep and enduring nature of uncertainties around energy and emission projections.

The ‘story’ around the ETS surplus has been widely cast in terms of the economic recession. Phase 1 saw a price collapse before the credit crunch, despite rising gas prices that drove utilities back towards coal. The Phase 2 surplus is despite strong Commission intervention to cut allocations by 10% to be consistent with Kyoto obligations. All other quantified cap systems to date have seen similar patterns of surplus and price collapse (eg. RGGI, UK ETS, UK CCAs), and data on the history of forecasting industrial energy demand shows systematic upward bias.

As the Commission paper notes, the recession is only one of many factors driving the surplus. Our report² presents reasons to believe that Phase III would have anyway seen a declining carbon price, though not as quickly or dramatically. Analyses which presume the problem is one *purely of force majeure recession* impacts miss the point; solutions built on this assumption are, therefore, do not solve a structural problem.

The fundamental problem is one of relatively inelastic demand, set against fixed supply. Banking forward was intended as the solution to this problem, but since the impact of structural economic changes tend to endure, banking along with the 8-year period risks actually amplifying the problem over longer periods – as we are now finding. The EU ETS needs to be made more robust in the face of enduring uncertainties.

b) The credibility problem

My assumption is that DG Climate are aware of this – but it is possible that, working mainly with those already engaged with and familiar with the instrument, its rationale, and history, do not see the level of criticism and scepticism that is now swirling around the EU ETS. The crucial point is that the ETS is not only being attacked for its potential costs (an irony, in the present circumstances); it is being criticised for being ineffective, and even an obstacle to emission reduction policies that are perceived as having been more effective, eg. w.r.t. energy efficiency and renewable energy. DG Climate is perceived as having an unhelpful ideological attachment to the ETS in its current form, and inability to rethink and reframe the issues to cope with the new realities.

I see increasing arguments erupting that the ETS has become part of the problem, not the solution. For an instrument under attack for entirely different reasons, this is dangerous. The most recent EU Energy Council for example underlined the level of European concern about rising fuel bills, as a high priority to be addressed. Energy

² Unless otherwise indicated, all points in this Submission can be drawn from data or references in Climate Strategies (2012): M.Grubb, *Strengthening the EU ETS: creating a stable platform for EU Energy Sector Investment*, www.climatestrategies.org.

prices dominate headlines in the UK and elsewhere. ETS solutions targeted simply at reducing the surplus and jacking up the carbon price in this context are unlikely to succeed – and risk backfiring.

c) Tensions with other policy instruments and (de)motivation

There is an unresolved tension with other policy instruments. There are perfectly good rationales for ‘complementary’ measures – the term itself says a great deal. The Stern Review itself underlined the need for policies on energy efficiency, carbon pricing, and innovation and infrastructure, including the build-up of new, low carbon industries. This theme can be more fully understood in terms of three Domains of decision-making, and associated Pillars of policy, but that is beyond the necessary scope at present. The fact is that Price has a crucial role, but it is not the only thing that it is needed.

In its current form however, *and particularly given the historical tendency to prices much lower than expected or considered needed for the long term trajectory*, progress on the other two policy pillars is in tension with the ETS.

This has two adverse consequences.

First, it risks creating tensions within climate policy – with other good and necessary measures being charged with causing an unwelcome fall in the carbon price. Outside the ETS world, this is widely seen as a shocking confusion of ends and means, and undermines the coherence of EU climate policy.

Second, the fixed cap of the ETS creates a paradox for all other actors: their actions do not save any CO₂. This has been a significant popular issue in Australia, where the opposition ran campaigns saying that the only benefit of citizen’s actions under a fixed cap would be to save their power company’s costs but actually would have no environmental benefit. In the UK I have witnessed parallel views, even at the top management level in Ofgem: views that the UK regulator should not credit any of its actions with reducing CO₂ emissions, because the only consequence would be to drive up the cost to UK consumers whilst enabling others in Europe to emit more (I should add that this was not an agreed view, but its expression indicates the problem). If that view is expressed at senior levels in the UK, it is presumably a wider concern too. Of course, complementary measures help to build the capacity for deeper emission caps to be set in subsequent rounds, but an eight year period limits the weight of this observation.

This is one of the fundamental arguments in favour of a hybrid instrument in which the level of cap has some capacity to automatically adjust if the combination of other actions and developments also deliver substantial emission reductions.

d) A new political landscape in Europe

Finally, I need hardly elaborate on the fact that Europe remains in the grip of fiscal, economic and potentially political crisis. Climate change is not a priority. Minor tweaks to climate policy may well get carried through, but structural reform of the ETS is not in that category. It can only be achieved if it speaks to Europe’s core concerns about economic recovery and renewed international standing.

This underpins the observation in our report that consensus on reform of the EU ETS is only possible if there is first consensus about the Objectives. In its second paragraph,

the Consultation document refers to the ETS influencing “Strategic investment decisions”. In the present state *and given its history* this is unfortunately highly questionable.

2. Objectives and new narrative

Our report suggests that a coherent debate should form based on clarification around four objectives:

Primary objectives:

- To reduce GHG emissions efficiently, at a negotiated balance of cost and environmental gain;
- To promote low carbon corporate investment, by providing a credible price signal that enhances the economic viability of energy efficiency, renewable energy and other low-carbon energy sources, as cost-effectively as possible.

Secondary objectives:

- To contribute to the EU’s international commitments in assisting developing countries (e.g. through the Clean Development Mechanism (CDM));
- To raise revenue, some of which could be used to support low carbon innovation and/or energy efficiency programmes.

The options in the Commission document should be tested against all these objectives. All options could contribute to the first, but would provide little predictable basis on which to base the other three. In particular, industry cannot invest on the basis of an instrument which has delivered a history of price collapses, if the only fix is an *ad-hoc* intervention; and governments cannot make good use of revenues that are fundamentally unpredictable, whether in domestic or international contexts.

The *political* problem is that the first objective (and in particular, GHG reduction) is in itself now low on the list of European priorities. Thus, most of the reforms suggested are targeted simply at removing the surplus, without providing a more secure or predictable basis for investment, international engagement, or domestic revenue – yet, it is these objectives which are, potentially, now closer to the heart of EU policymaking.

The central political discourse is now around economic recovery, with public finance also critical. Thus, EU ETS reform is only likely to get political traction if it can demonstrably contribute to these goals. The most obvious way of doing so would be to focus on what it can contribute to *investment*. Low carbon investment in the EU out to 2020 could be on the order of €1 trillion. This could make an important contribution to economic recovery, both through its demand effects and its contribution to future supply potentials.

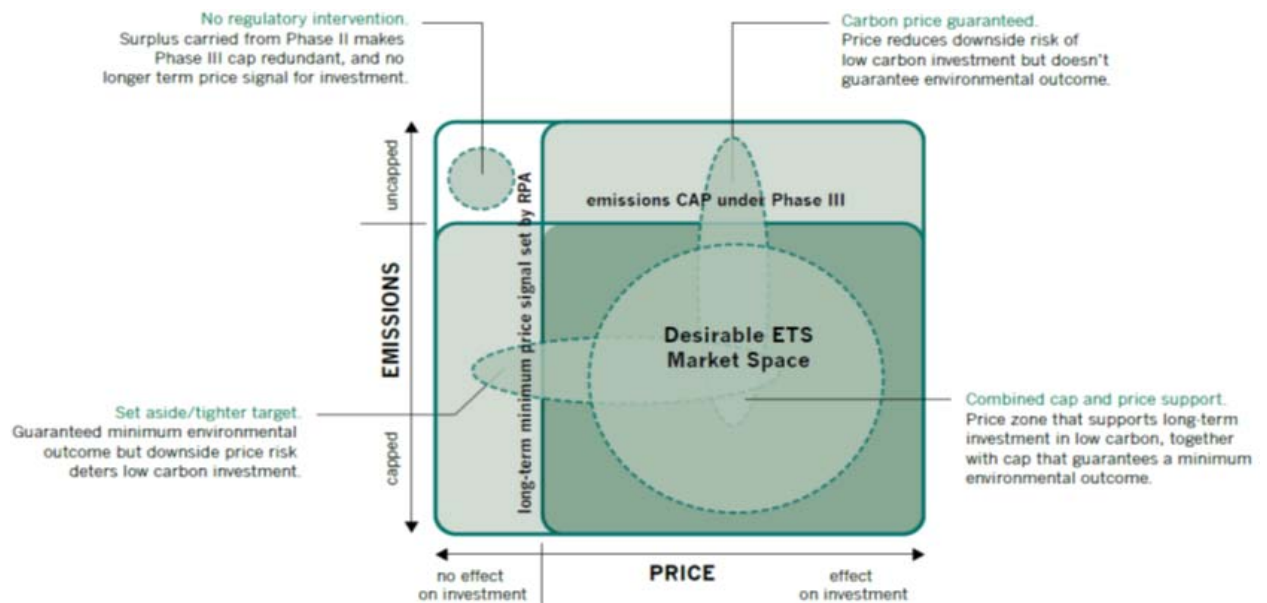
At present however, the overwhelming view from industry is that the EU ETS is virtually irrelevant to low carbon investment. *Ad-hoc reforms to remove some of the surplus are unlikely to change this*, for the reasons indicated.

If the EU ETS is to gain the political traction required, therefore, Investment first, and financial predictability along with it - not emissions reduction alone - needs to be made centre stage in the process.

3. Options from an Investment and financial stability perspective

The core conclusion of our study was that no single instrument can provide what is needed. Thus, the EU needs to think in terms of a reform package. This could include Set-Aside, on grounds of *force majeure*, and must clearly include acceleration of the efforts towards the 2030 package.

Since we have largely articulated the basic reasoning in our report, this submission simply offers some points in relation to the third element required, namely establishing a floor price so that the EU ETS becomes a hybrid instrument with both quantity and price features, as illustrated in the Figure.



Mechanism

The obvious mechanism for establishing a floor price would be an announced minimum price on sales at future auctions (given the Consultation document on the meaning of 'reserve price' as a confidential underpinning against manipulation, I avoid that term), though other mechanisms could be considered.

Obviously, the secondary market would continue to trade at whatever price it wished, but no more allowances would enter the market until people were willing to buy at the minimum auction price – which would guarantee that the secondary market would rapidly converge towards that level, or above.

As illustrated in our report, this would:

- Reduce the downside risk for investors; so that the ETS could play a credible part of strategy to attract investment into the European energy sector; and
- Increase the level and predictability of government revenues available for multiple purposes

An agreed *rising* floor price would also incentive purchase from auctions *earlier*, and thus bring forward the revenue streams.

4. The objections

The Consultation document makes no attempt to disguise its dislike of such a mechanism. It only refers to the option as a “temporary way of supporting the price ... which would alter the very nature of the current EU ETS being a quantity based market instrument”.

To be clear: in my view – and that of a growing body of academic research – this is a fundamental misunderstanding. It is not a temporary measure. It is part of a structural design to ensure an appropriate balance between quantity and price in the face of deep uncertainty. It would *partially* change the nature of the EU ETS, by introducing *explicitly* dialogue between price and quantity objectives, ensuring some delivery of both.

That dialogue, in fact, is already implicit: the targets are always negotiated against some set of price and cost expectations; and the Commission Consultation only exists because of concern about the price being ‘too low’. The proposal for a hybrid development of the EU ETS is merely to suggest that the objective of avoiding ‘too low’ a price should be explicit, and built into the instrument as a part of a coherent package of reforms.

The Consultation document appears to struggle to take a balanced view of the issues. Thus it states that it would:

“require governance arrangements, including a process to decide on the level of the price floor or the levels that would activate the reserve. This carries a downside in that the carbon price may become primarily a product of administrative and political decisions (or expectations about them)... “

Of course – the price in the current system is too a product of exactly these processes.

..., rather than a result of the interplay of market supply and demand.”

The ‘market supply’ here referred to is of course entirely due to those same political procedures.

Such discretionary price management would also raise a number of design issues, central to the effectiveness of the instrument, starting with the appropriate price levels. For instance:

□ If it would not lead to cancellation of allowances which were withdrawn from the auctioning process because prices were too low, then it would not achieve any additional environmental benefit which is determined by the cap.

The issues around treatment of any allowances not entering the market due to a minimum price would be basically the same as those around withdrawal of allowances by any other means (such as Set Aside).

If the floor price or minimum price for the reserve were set too high, it would in fact just fix the carbon price, reduce the flexibility and result in higher costs.

The purpose of all six of the reform options in the Consultation is to increase the price, and hence “result in higher costs”. As the UK debate on Energy Market Reform has

convincingly concluded, the core issue is over *investment efficiency*. A volatile price in which the market has no confidence is far less efficient than a mapped out price floor which reduces the downside risk of investments, in ways that can be clearly quantified to any investment analyst. By reducing the cost of capital, the cost to consumers is reduced.

Yes, the current scale of the surplus is so large that if there were no Set Aside, a price floor of any consequence would do much to determine the actual price. This would reduce (or eliminate) trading. It would be more desirable to create a balanced package with a more ambitious target and reasonable prospect of prices higher than the floor. Trading however is not the objective: again, the Commission really needs to be clear about Objectives.

As part of a more balanced package, note that a floor price would *not* have to be binding to be relevant, and it is only in very extreme circumstances that it would replace trading. Its general influence would be to lower the risk associated with allowances, and thus sustain a price in the trading market above the floor – in effect, it would create a rising, rather than vertical, supply curve, aligning ETS behaviour closer to normal markets.

It is unclear whether Consultation imputes any (desirable) objective to “increasing flexibility” beyond trading: a carbon tax is often supported by economists precisely because it maximises the flexibility of all emitters to respond to the economic signal.

If the [price mechanisms] were low to be triggered, they would not be effective in their aim to address the problems identified and create more certainty about the price.

Of course. In a quantity-based trading system, the best floor price is one that is never activated: this means the system evolved as expected. The Commission might like to consider what could have been set in 2008, as a “too low” insurance mechanism against unexpected developments. Again, the statement suggests that the Consultation document struggles with the fundamental nature of uncertainty and the value of mechanisms to handle uncertainty and increase confidence and robustness in the face of it.

A carbon price floor or minimum price for the reserve would provide more certainty for investors and suppliers of low-carbon technologies at the risk of potentially imposing excessive cost on ETS participants and society for emissions abatement in case of technological breakthroughs, which substantially lower abatement costs.

From both a climate and economic point of view it would be wonderful if we had this problem. Given how far the world is moving away from a 2 deg.C path, presumably the first response to technological breakthroughs of this nature *should* be to increase the level of ambition (which is exactly what a floor price would help to preserve). Were a technological breakthrough sufficient to obviate the need for a significant carbon price at all, of course, the ETS itself would become redundant, and there is an obvious solution to ensure that a floor price did not get in the way.³

³ The obvious way of addressing it would be to agree a “climate-safe” indicatively desirable steady trajectory towards the 2050 goals, which if overachieved would indicate the floor price to have outlived its relevance, and be withdrawn. The logical basis would be a fixed exponential reduction in emissions. The EU has set an indicative goal of reducing emissions 80-95% by 2050, and it is generally

The Commission document is correct to note that a minimum price would complicate linking between trading schemes. It might have been accompanied by the observation that the main effect of the only link in place, with Australia, has been to destroy the carbon price intended in Australia and thus, unfortunately at present, undermine Australia's own mitigation efforts.

The final concern expressed by some officials about a floor price is that it would engender the converse discussion, as well, of a price ceiling (and hence, price collar), and hence lead to "managed prices".

Again, this seems to display a lack of clear thinking. As illustrated by the Californian NOx crisis, probably the greatest *existential* danger to the EU ETS could be if the EC does manage to get a major Set-aside, the EU economy picks up, and there is then a major gas crisis which drives both gas and carbon prices to politically unacceptable levels – which would probably then be followed by panic intervention to at least suspend the ETS. Surely it is infinitely better to pre-plan contingencies for such a hypothetical situation.

The degree of "price management" would be defined by the width of the collar, and the economic and political principles on which the price and ceiling are based. Some "price management" is implicit in all intervention options, and fundamentally appropriate given the recognition that prices too low are inconsistent with strategic objectives.

5. Concluding remarks

None of this is to belittle the enormous complications that would be involved in developing the ETS into a hybrid design with a floor price. All significant options face major political obstacles, in part because most are cast purely in terms of climate.

Backloading can maintain the relevance of the ETS for a limited period, but the central argument of this Submission is that effective structural ETS reform can only succeed if it is part of a new narrative in which it provides something positive to the dominant agenda of economic reform and recovery.

This means clarifying the Objectives and shifting the focus to a package of structural reform which can demonstrably help to attract investment, and provide more predictable financial flows. That requires greater confidence about future prices, through mechanisms that demonstrably increase the robustness of the system overall.

A floor price is not the only thing that is required, but it would seem to be a key missing element in stabilising the system. The Commission consultation document does not give convincing reasons why it should not be part of package – a package designed not just to increase the price, but to align the ETS with the EU's current priorities, and thus attract new (and some disaffected) constituencies to support the scale of reform that is needed.

Prof Michael Grubb
Chair of Energy and Climate Policy, 4CMR Cambridge University
Telephone: 01223 764869 E-mail: mjg7@cam.ac.uk

acknowledged that some of the most difficult sectors lie outside the EU ETS. UK analysis concludes that energy sector emissions need to reduce by at least 90% by 2050. To illustrate, a fixed 5% / yr reduction below 2000 levels on ETS emissions would result in a 90% reduction by 2050. Even with the recession, we are a very long way from achieving that.