

What are “unused” allowances?

“Unused”, “unallocated” or “unassigned” carbon allowances refer to those allowances left over in the New Entrants’ Reserve at the end of each trading period of the EU Emissions Trading Scheme (ETS), as well as free allowances that some manufacturing facilities no longer require because they have closed or significantly reduced their activity or capacity.



Figure 1 On top of the backlog, an avalanche of unused allowances threaten to return to the carbon market in 2020.

Article 10, paragraph 2 of the Auctioning regulations for the EU ETS specify that these need to be released at auction in the final year of each trading period.¹ This means that the end of Phase 3 will see an avalanche of allowances coming to market in 2020 that will seriously set back efforts to regulate supply via a Market Stability Reserve.

How big an issue are these unused allowances?

Sandbag have been working very hard to raise the profile of this issue since publishing new analysis last October. In our report “*Slaying the Dragon*”² we noted that over 800 million Phase 3 allowances remained unassigned and could potentially flood the market in 2020, alongside the 900 million backloaded allowances returning to market over 2019 and 2020. That analysis, highlighting that an avalanche of 1.7 billion extra allowances could be auctioned at the end of the phase, also featured in the joint NGO position on the MSR we prepared with CAN Europe, WWF, Greenpeace and Carbon Market Watch.³ This estimate was also referenced in amendments to the Commission proposal tabled by MEPs in both the ITRE and ENVI committee.⁴

In October 2014 this was our pessimistic scenario. Our central estimate at the time was that 675 million unused allowances would be available for auction in 2020. We have since updated our analysis in light of

¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02010R1031-20140227>

² Sandbag (October 2014) http://www.sandbag.org.uk/site_media/pdfs/reports/Sandbag-ETS2014-SlayingTheDragon.pdf

³ CAN-E joint NGO position on the MSR reform (July 2014) <http://www.climnet.org/ets-articles-list/772-can-europe-s-position-on-the-eu-market-stability-reserve-msr-proposal>

⁴ See ITRE Amendments 42 (S&D) and 105 (Greens) and ENVI amendments 55, 174 (S&D)

more recent data on Phase 3 free allocations published by the Environment Agency⁵, and an official update on the status of the New Entrants' Reserve.⁶ This indicated faster uptake of the New Entrants' Reserve than we had assumed, but also indicated that more installations were closing or reducing their activities. **All in all, this has increased out central estimate upwards from 675 million to 754 million.**

We have arrived at this figure by assuming New Entrants continue to grow at the rate seen in 2014, and by assuming that no further net changes up or down in free allocation will take place (no more partial cessations or closures and no resumption of earlier activities, or that these will balance each other out). We have ignored the role of unassigned allowances reserved for transitional free allocation to the power sector, as they are smaller in scale and we expect most of these to be released at auction before 2020.

We are reassured to see other analyst such as Ecofys (500-900m)⁷ and Tschach Solutions (671m)⁸ are coming up with similar estimates for the scale of this issue.

How do unused allowances affect the surplus

The incomplete take up of the NER and significant partial cessations and closures mean less allowances will be released into the market as free allowances across Phase 3 and more will arrive as auctions in 2020. In effect, two large tranches of Phase 3 allowances will be backloaded to the end of the phase, hugely increasing the supply of allowances immediately before the Commission's MSR proposal is scheduled to begin curbing them.

We have consulted with both the Commission and with the UK government, and they have indicated to us that, while they are aware of this as an issue, the surplus forecasts they have published do not account for this delay in supply. This means the charts we are used to seeing from these official sources downplay the extent to which the surplus worsens acutely in 2020. If we apply Sandbag's latest assumptions on unused allowances to the Commission and UK surplus forecasts, they change as follows.

⁵ European Environment Agency, ETS Data Viewer, (updated October 2014) <http://www.eea.europa.eu/data-and-maps/data/data-viewers/emissions-trading-viewer>

⁶ NER status table (updated January 22nd 2015) http://ec.europa.eu/clima/policies/ets/cap/allocation/docs/status_table_ner_en.pdf

⁷ Ecofys: Projections behind the 500-900 million estimate of "unused" Phase 3 allowances (27th January 2015) <http://www.ecofys.com/files/files/ecofys-2015-working-paper-leftover-allowances-phase-3-eu-ets.pdf>

⁸ Tschach Solutions/ICIS (private correspondence 5th February 2015) <http://www.icis.com/pages/carbon-emissions-ets/>

Figure 2 When the Commission Reference Scenario surplus forecast is adjusted for unused allowances, the “rollercoaster effect” on the surplus becomes even more pronounced (No MSR, 1.74% cap)

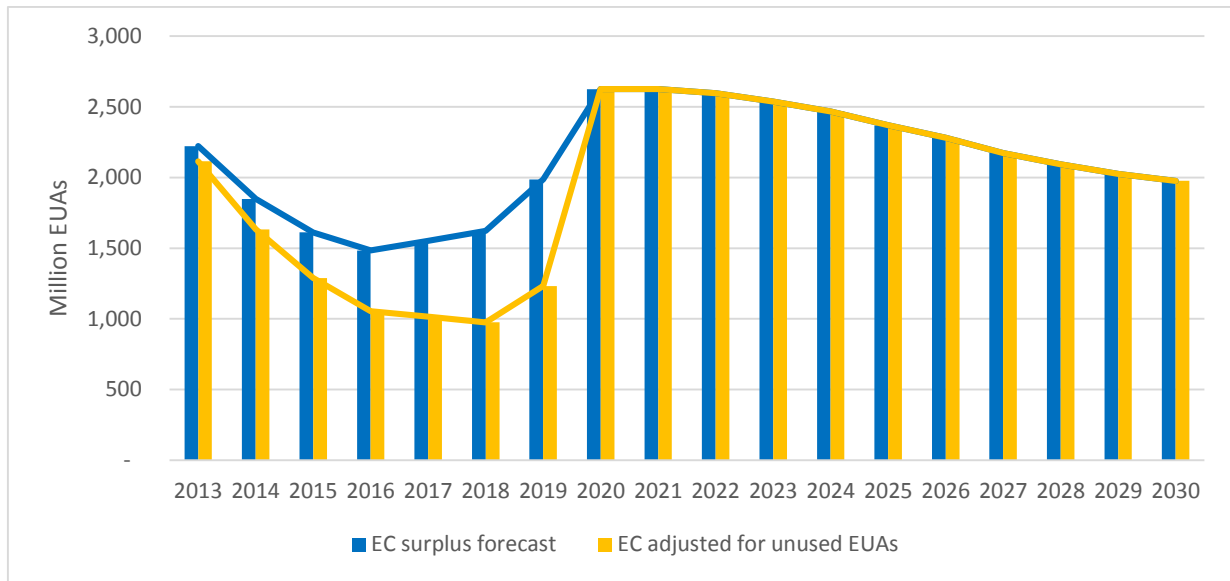
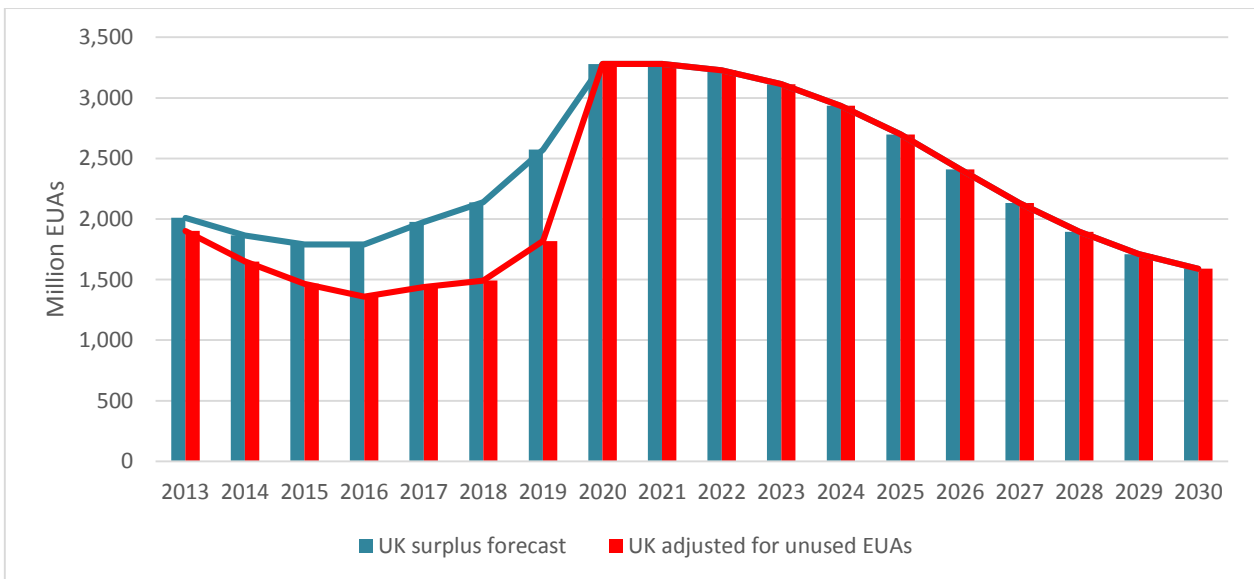


Figure 3 The UK government surplus forecasts also shows a more acute spike in surplus in 2020 when adjusted for unused allowances (No MSR and 2.2% cap, stationary installations only)

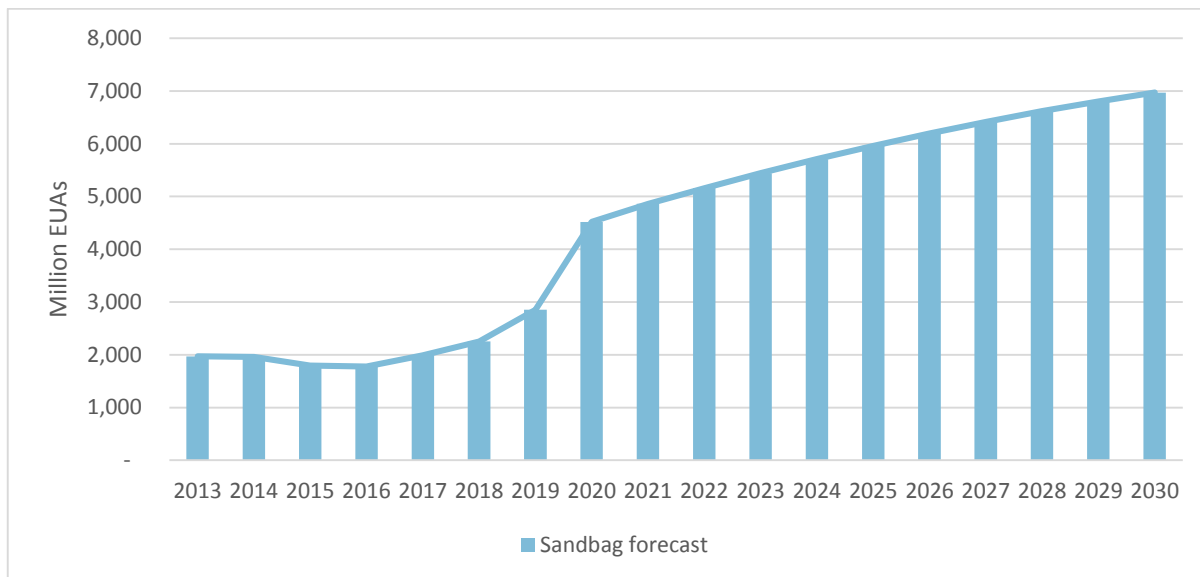


Observe how this amplifies the “rollercoaster effect” that already existed as a result of the backloading decision, creating an extreme “ski-jump” in the supply of allowances at the end of Phase 3.

In both of these adjusted scenarios we have conservatively assumed that net emissions stay the same, as generated by the Commission’s and UK government’s models; we note, however, that a high level of partial cessations and closures and reduced uptake of NER also signals that demand for allowances might be lower than these official sources originally expected, lending weight to Sandbag’s much larger surplus forecast, shown below. Indeed, all other things being equal, if net demand for allowances dropped by the amount we have indicated it has dropped for New Entrants and partial cessations, the Commission surplus forecast would climb to 3.4 billion by 2020, and the UK surplus forecast would climb to 4 billion, bringing them much

closer to Sandbag’s forecast of 4.5 billion by 2020. Note that Sandbag’s forecast already contains an adjustment for unused allowances.

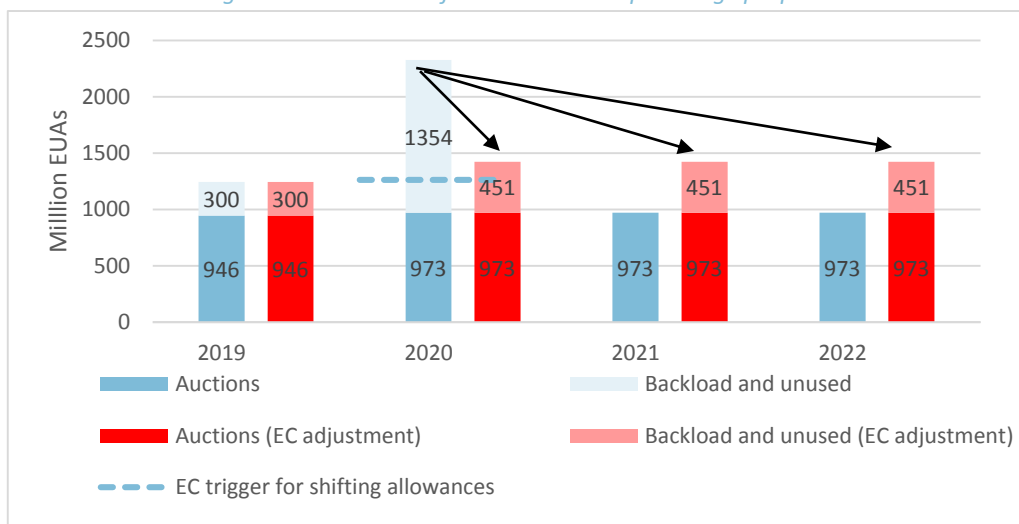
Figure 4 Sandbag expects much lower emissions and much larger surpluses than the UK and Commission forecasts, but already adjusts supply for unused allowances (No MSR and 2.2% cap, stationary installations only)



The Commission’s proposal to deal with unused allowances

It is important to acknowledge that the Commission proposal includes a mechanism that partly addresses this issue. As well as introducing a Market Stability Reserve, the Commission proposes a mechanism which spreads part of any excess auctions in the final year of each phase into the first two years of the next.⁹

Figure 5: Illustration of Commission’s “spreading” proposal



Source: DG Clima website, Sandbag calculations. For this illustration we assume auctions in 2021 and 2022 are the same as original 2020 levels (i.e. 973 million). In 2020, we assume 754 million unused free allowances are released at auction, on top of basic auction levels (973 million) and backloaded allowances (600 million).

⁹ Article 2 paragraph 3 of the Commission MSR proposal <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014PC0020>

However, as highlighted above, this flood of allowances presents a major setback in the MSR's efforts to regulate supply and restore incentives to the scheme, and smearing these allowances across three years instead of one does little to address this issue. It also seems inelegant and unnecessary for the Commission to introduce two separate and competing mechanisms to regulate supply when the MSR can easily be adapted to absorb this influx of allowances at the end of each phase.

Below we indicate how the Commission proposal would likely affect the supply in both the Commission forecast and the UK forecast once these have been modified to reflect unused allowances.

Figure 6 European Commission surplus forecast, adjusted for unused EUAs, with and without EC MSR proposal (1.74% cap)

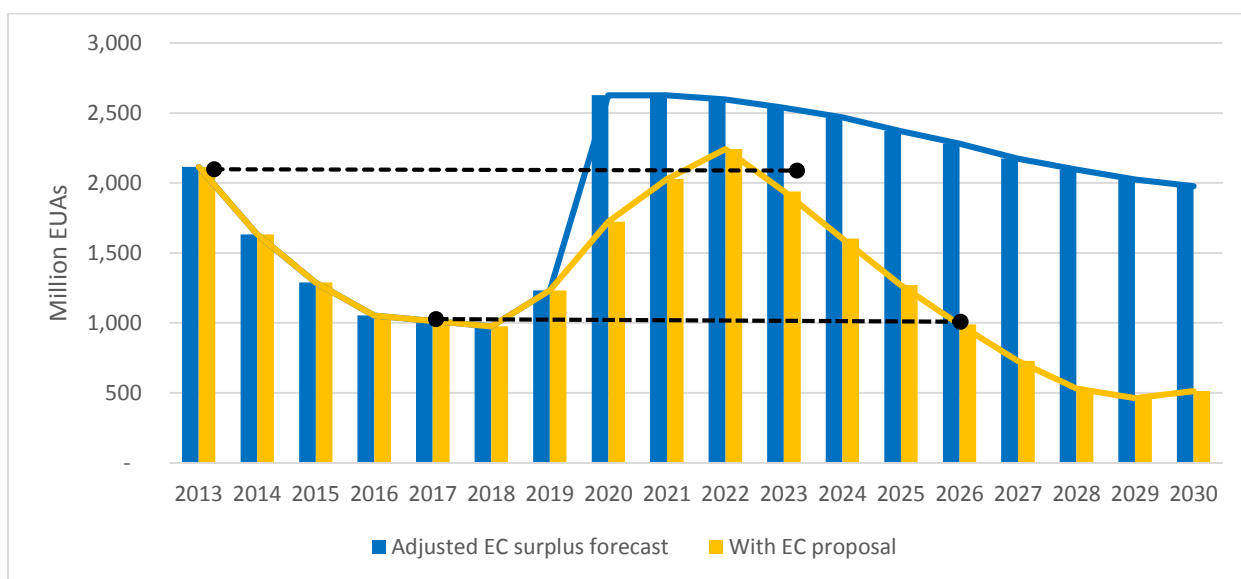
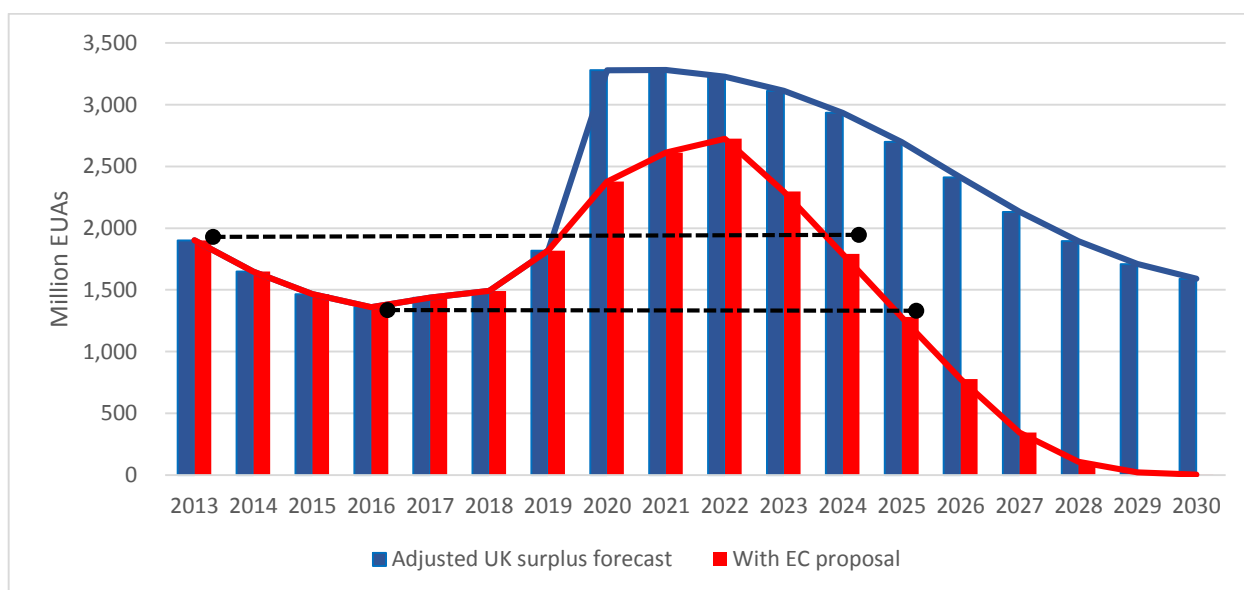


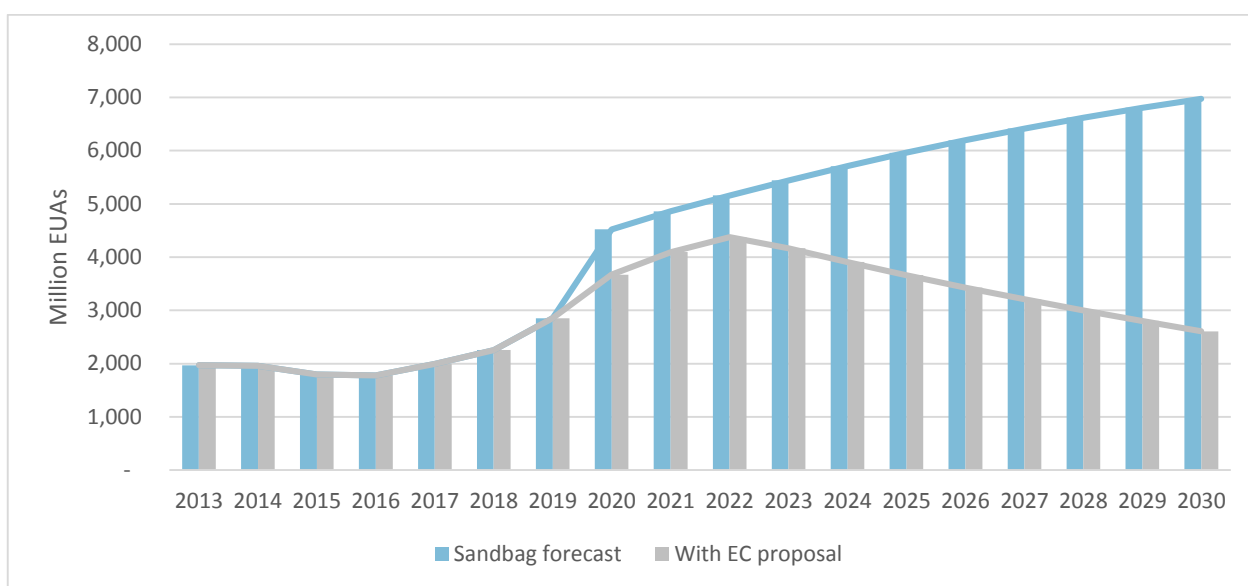
Figure 7 UK government surplus forecast, adjusted for unused EUAs, with and without European Commission MSR proposal (2.2% cap)



While the Commission proposal partly mitigates this spike in allowances, observe that in these adjusted forecasts it takes roughly a decade to start to get supply back below current levels.¹⁰ Alternatively measured, it would take at least nine years for the MSR to bring supply back down to where it is expected to fall in the mid-point of Phase 3.

And of course, in Sandbag’s view these forecasts vastly underestimate the scale of the surplus that the MSR will have to tackle. If emissions decline at the rate we expect, based on projections from more recent data,¹¹ the Commission’s MSR will take around 20 years to get supply below today’s levels. In short, the Commission proposal will not be worth the trouble unless we see a marked increase in its ambition.

Figure 8 Under the Sandbag emissions forecast, the Market Stability Reserve fails to get the surplus back down to current levels by 2030 (2.2% cap)



The fundamental decision facing policymakers: do we let things go backwards?

There seems to be broad agreement that the supply of allowance needs to be regulated by a Market Stability Reserve to address the build-up of large surpluses that are delaying investment and taking the EU off a cost-effective trajectory.

But in light of the adjusted projections described above, policymakers need to ask themselves the fundamental question: are they prepared to let the market imbalance worsen considerably before things start to improve? Are they prepared to wait a decade or more for the Market Stability Reserve to start reducing supply below current levels?

As this briefing goes to print, MEPs on the European Parliament’s lead committee on this file, the ENVI committee, are preparing to vote on their amendments to the Commission proposal. In that context, we

¹⁰ Here “current” means 2013 levels, as it is the most recent year we have data for. We say “at least”, because these are static emissions forecasts. In reality we could expect tighter supply to raise prices and lower emissions, this in turn would increase the time required to curb surpluses.

¹¹ Sandbag ETS surplus projection (October 2014) http://www.sandbag.org.uk/site_media/pdfs/reports/Briefing-2020surplusprojection.pdf

highlight the three key factors that are critical to prevent the market imbalance from worsening before it improves.

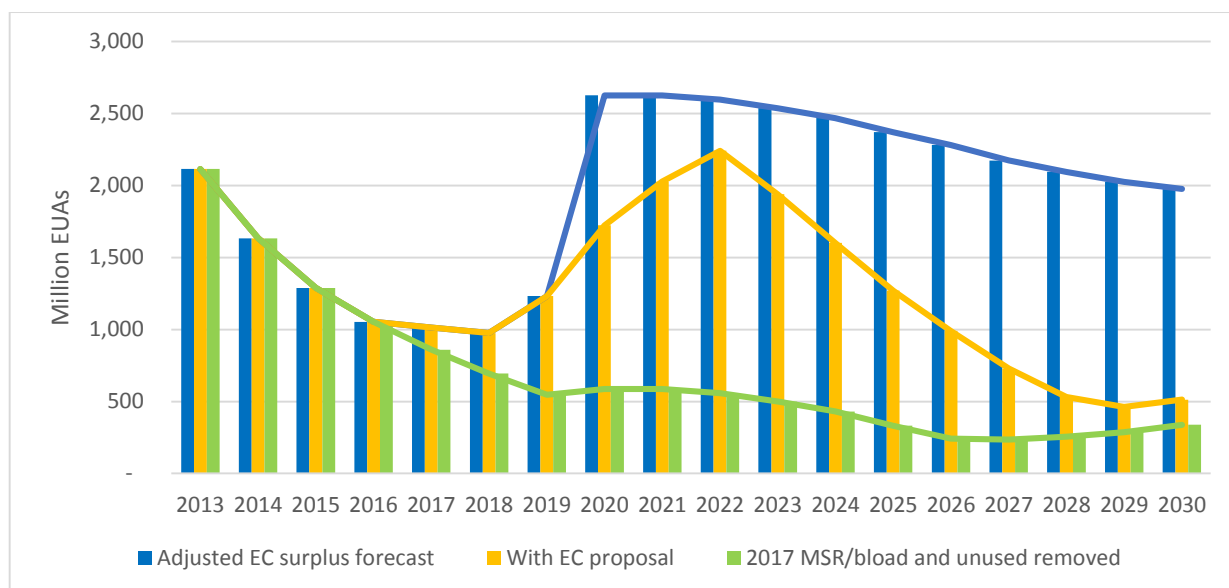
1. **Starting the MSR as early as possible**
2. **Preventing 900 million backloaded allowances from flooding the market**
3. **Preventing unused allowances from flooding the market**

It is technically feasible to implement the MSR as early as July 2016 with a one year time-lag or January 2017 with a two year time-lag, as both of these options rely on data that would not be published until May 2016, and we should certainly hope that an agreement on the MSR is reached before then.

We would advise that specific amendments separately address the backload and the unused allowances, noting that backloaded allowances are a unique problem affecting the final years of Phase 3, but that unused allowances are a recurring problem in the final year of every phase. These two sets of allowances could be addressed either by placing them directly into the Market Stability Reserve, or more ambitiously, by removing them from the market permanently. In December, we published a briefing providing the specific changes to the Commission’s legal text which we would recommend to achieve these outcomes.¹²

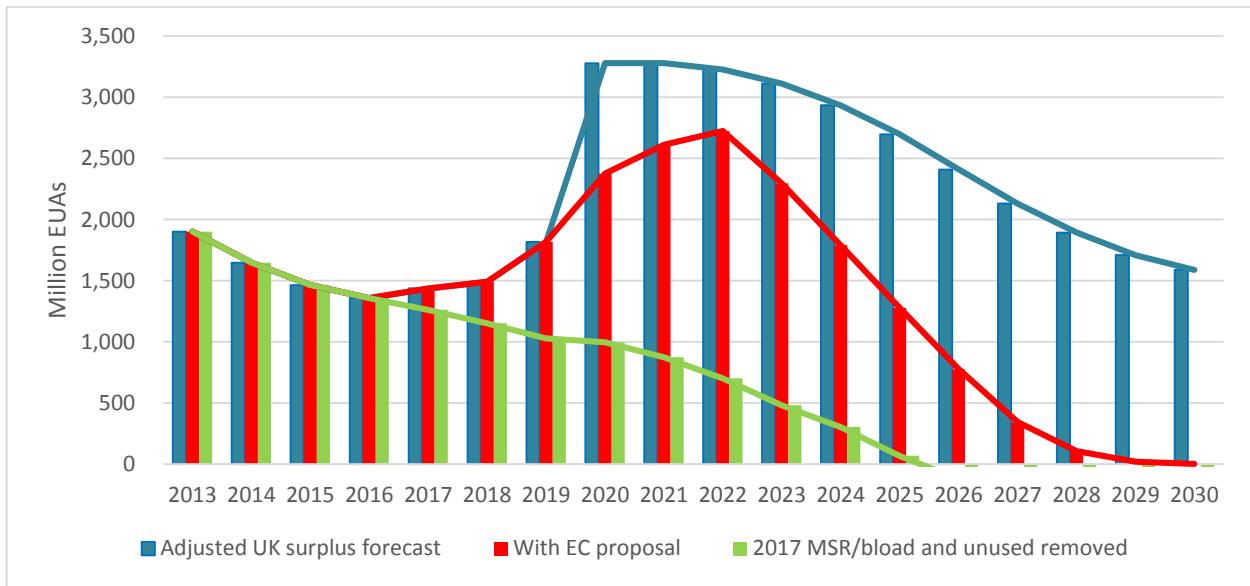
Implementing these three changes to the Commission proposal would have the following effect on the Commission’s and the UK’s supply forecast, as adjusted for unused allowances.

Figure 9 An improved MSR proposal can deliver a much smoother and more immediate reduction in the surplus against the Commission’s surplus forecast, adjusted for unused EUAs (1.74% cap)



¹² Sandbag, Consolidated Amendments to the MSR proposal
http://www.sandbag.org.uk/site_media/pdfs/reports/MSR_amendments_-_consolidated_1.pdf

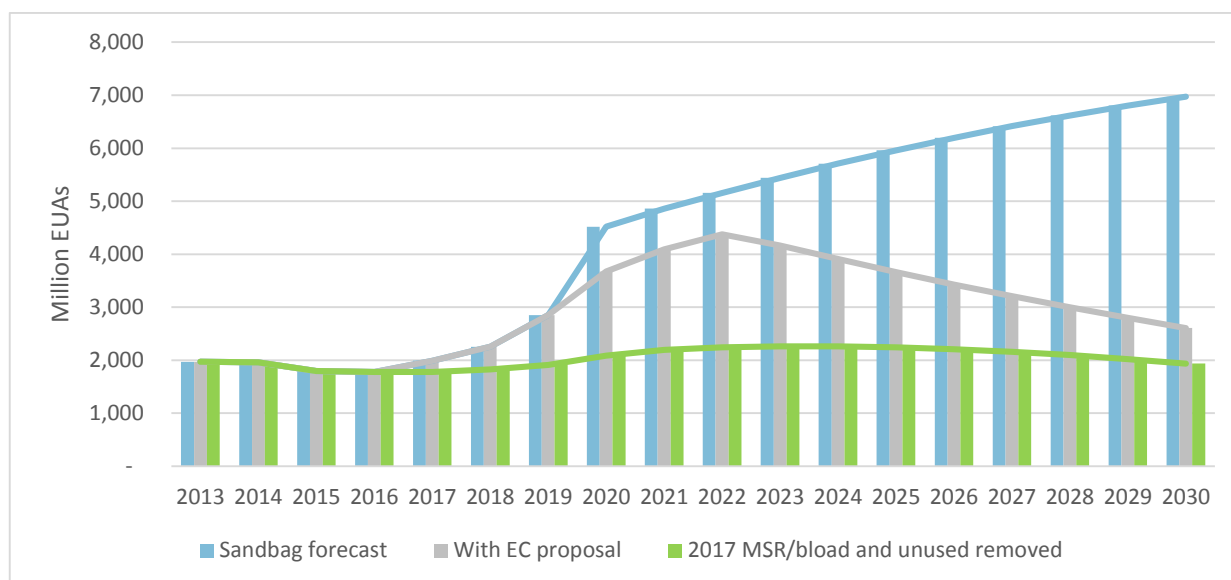
Figure 10 Surpluses are also addressed in a more linear and efficient manner under the UK forecast when the MSR starts early and backloaded and unused allowances are removed (2.2% cap)



We see a smoother and more immediate reduction in the surplus under both forecasts, preventing the market imbalance from deteriorating before the MSR can begin to get it under control. Note that the surpluses only run to zero in the UK scenario because these models apply static emissions scenarios. In reality, we would expect prices to rise and emissions to fall as supply starts to tighten, leaving more allowances on the market for longer.

But while these three measures might be sufficient to prevent things from going backwards, they might not yet be enough to actually take things forwards. If Sandbag’s surplus forecast proves to be more accurate, as early indications suggest it might be, the MSR will struggle to keep pace with new annual surpluses unless the annual adjustments are made considerably more aggressive than the 12% currently proposed. Even with an early start, and with backloaded and unused allowances removed, the oversupply on the market could almost indefinitely stay above the 2 billion allowances we have in 2013 – a volume widely perceived to represent an unacceptable imbalance between supply and demand.

Figure 11 In the Sandbag supply forecast, the MSR will struggle to reduce the surplus even with a 2017 start and the backload and unused allowances removed from the market. More aggressive annual adjustments may also be required.



Ending the tug of war over backloaded and unused allowances

While the issue of unused allowances has taken a backseat to the question of the start date and to what happens to backloaded allowances, it has not been entirely neglected, and has steadily gained in salience over the last 4 months.¹³ However, the amendments tabled in the ITRE and ENVI committees and the voting patterns in the ITRE committee show there is a tug of war between an effective Market Stability Reserve and new protections against carbon leakage in some sections of the parliament. In particular, there have been some tensions over whether some of the backload or unused allowances should go into an NER300-style innovation fund, or potentially go into some kind of allowance supply reserve, rather than being placed into the Market Stability Reserve or cancelled.

In light of the chronic oversupply we believe the scheme is facing, we are very wary of proposals which would return these allowances to market in the near term instead of removing them from circulation on a longer-term basis. This holds true whether they are auctioned as part of an innovation fund, or re-issued as free allowances to manufacturers.

Moreover, while Sandbag is supportive of efforts to protect best performers exposed to carbon leakage, to make free allowances more responsive to industrial output, and to dedicate more funding for industrial low-carbon innovation, these legislative changes seem to properly belong to a broader review of the ETS Directive and should not, in our view, be pre-empted within the Market Stability Reserve proposal. Indeed, these changes to the design of the scheme in Phase 4 have already been endorsed by the European Council in its October Council Conclusions.¹⁴ Until then the principle issue with free allowances has been that manufacturers have received far more than they needed to cover their emissions, not too few.¹⁵

¹³ See for example, ITRE Amendments 42 (S&D), 105 (Greens), 106 (CinqueStelle), 63 (ALDE), and Compromise 3A (S&D/ALDE/Greens/Dario Tamburrano); See ENVI amendments 55, 171, 172, 174 (S&D), 103 (ALDE), 170 (Greens).

¹⁴ 2030 Climate and Energy Package Council Conclusions (24th October 2014) http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/145356.pdf

¹⁵ Claims vs Facts on the Market Stability Reserve Proposal (3rd Feb 2014) <http://www.sandbag.org.uk/data/msr/facts>

About Sandbag

Sandbag is a UK-based not-for-profit think tank conducting research and campaigning for environmentally effective climate policies.

Our research focus includes reform of the EU Emissions Trading Scheme, the EU 2020 and 2030 climate & energy packages, Carbon Capture Storage & Utilisation, and the persistence of old coal in Europe. The International Centre for Climate Governance ranks us in the top twenty global climate think tanks.

For more information visit our website at www.sandbag.org.uk

About this briefing

Briefing Author: Damien Morris. Contact damien@sandbag.org.uk or on (+44) 02071 486377.

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