

Drifting toward disaster?

The ETS adrift in Europe's climate efforts



The 2013 Environmental Outlook for the EU ETS

About Sandbag

Sandbag is a UK based not-for-profit campaigning organisation dedicated to achieving real action to tackle climate change and focused on the issue of emissions trading. Our view is that if emissions trading can be implemented correctly, it has the potential to help deliver the deep cuts in carbon emissions the world so badly needs to prevent the worst impacts of climate change

Through producing rigorous but accessible analysis we aim to make emissions trading more transparent and understandable to a wider audience than those already involved in the market. In particular, we hope to shed light on the challenges the EU Emissions Trading System (EU ETS) faces in becoming a truly effective system for cutting emissions and to advocate the solutions that can help it to work better.

About this report

Drifting Towards Disaster is Sandbag's 5th annual report on the Environmental Outlook for the EU ETS – following on from *ETS S.O.S.* (2009), *Cap or Trap?* (2010) *Buckle Up!* (2011) and *Losing the lead* (2012). This report again looks in detail at how the ETS is performing on the ground and makes recommendations for urgent reforms. The report uses 2012 emissions and compliance data released in May 2013. This data provides a complete picture of how the scheme performed over the second trading Phase. Back in *Cap or Trap?* (2010) we highlighted the danger that the recession might make Phase 2 accumulate hot air allowances that would cancel out effort in Phase 3 and beyond. Now at the end of Phase 2 we identify a much greater danger, that over 2008-2020 the ETS cap might deliver negative net emissions reductions, cancelling out abatement from other policies in the Climate and Energy package and damaging Europe's credibility as it seeks to negotiate a new climate agreement.

We are always interested to receive feedback on our work and would welcome any reactions, comments or corrections. Please email us at info@sandbag.org.uk.

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Lead author:

Damien Morris

Supporting research:

Louise Crow, Rob Elsworth, Phil MacDonald and Laurence Watson

Cover image:

Kerry Hyndman www.kerryhyndman.co.uk

The numbers

2.8 billion

The tonnes of carbon dioxide emissions the EU ETS was originally expected to reduce in Europe's power stations and factories

-0.7 billion

The *negative* tonnes of abatement the ETS is now delivering, cancelling out emissions reductions achieved by other policies in the Climate and Energy package.

-27%

The estimated distance Europe's net emissions fell below 1990 levels in 2012 as offsets flooded into the market before a ban on environmentally questionable credits took effect.

2033 AD

The year from which Europe's domestic emissions must be 100% offset as its equitable emissions budget is used up under the current 2020 package and the milestones in the 2050 Roadmap.

Abstract

The climate change conference in 2015, might well be the world's last chance to strike a deal that can avert dangerous climate change. This is precisely the time that Europe should be seen to be pulling hardest on the oars of climate ambition, but instead it plans to comfortably sail under the 2020 target it set itself back in 2008. If this idleness weren't bad enough, it also currently intends to use the EU ETS to smuggle forward around a year's worth of emissions rights into the post-2020 climate framework to weaken its commitments there.

The pioneering policy instrument that was supposed to be the single largest driver of emissions reductions under the EU Climate Package is now its weakest link: catastrophically damaged by the recession, the EU ETS now finds itself *cancelling out* around 700 million tonnes of abatement from other European policies by storing this as banked carbon allowances. It also finds itself the global dumping ground for the most dubious offsets projects under the Kyoto protocol.

At this juncture European politicians find themselves caught between their desire to rescue the policy before it capsizes completely under the weight of these surpluses, and the claims from industry that the scheme already presents an impossible burden. But European manufacturing lobbies have been disingenuous, for it is precisely in their sectors where the surplus allowances are accumulating, not just in Phase 2, but right out to 2020.

As politicians grapple over whether to temporarily stave off new allowances through a "backloading" decision, we invite them to look up and remind themselves of what the policy was supposed to achieve: the EU ETS was meant to help Europe cost-effectively *reduce emissions* to help fight global warming. The ingredient missing from the policy's design was a provision to ensure that some minimum level of ambition was maintained in the scheme if economic or other factors compromised the cap.

They still have the opportunity to redress that oversight. A backloading decision should serve as the stepping stone to a separate political decision to remove Phase 3 allowances accumulated against other climate policies after the recession, and also correct for the non-additional offset credits that have been surrendered into the scheme, further compromising its environmental integrity.

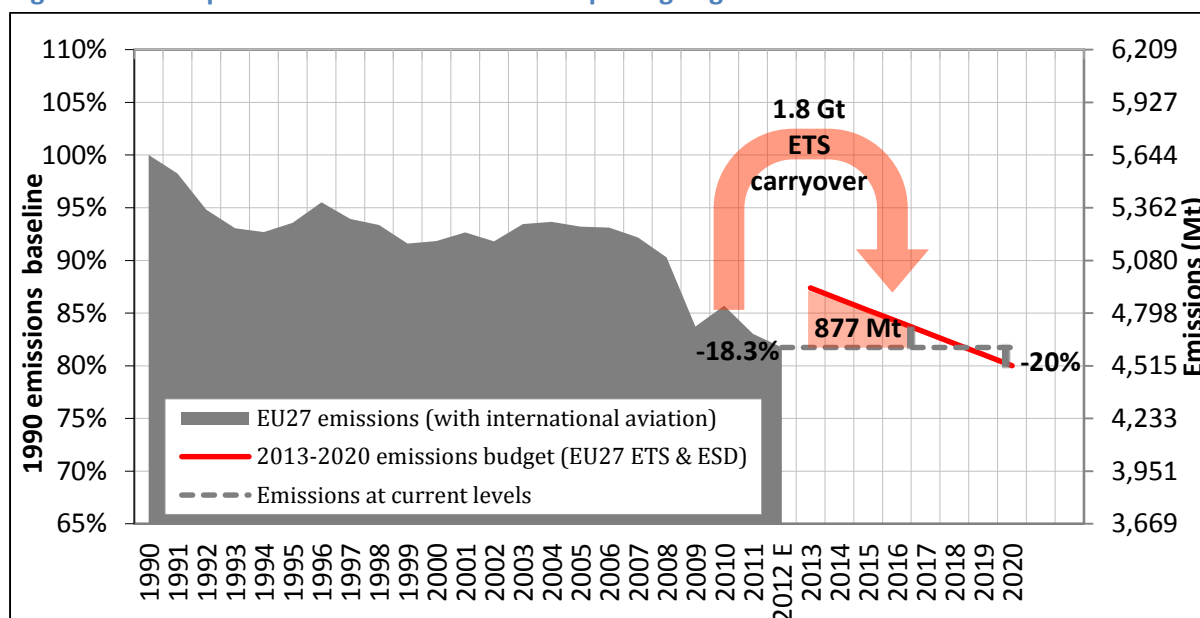
This cancellation in turn should be reflected in a deepening of Europe's climate targets in time to leverage the international ambition critical for a successful climate deal in 2015.

Executive Summary

As Europe prepares its 2030 framework and its negotiating position for a new international agreement in 2015, it must do so conscious that the window is rapidly closing to avoid dangerous levels of global warming, and closing even faster on the opportunity to avoid it cost-effectively. The latest Emissions Gap report from the United Nations Environment Programme finds an 8-13 billion tonne gap between current pledges in 2020 and the cost-effective global pathway for staying under 2°C of global warming.¹

Presently, instead of helping to bridge that emissions gap, Europe is leaving itself billions of tonnes of headroom in the budgets it set itself to meet that target. Even if emissions stayed flat (i.e. at current levels) for the next eight years, Europe would still have 877 million tonnes of headroom under the 2013-2020 economy wide carbon budgets apportioned between the Effort Sharing Decision and the EU Emissions Trading Scheme (ETS). On top of this it can draw from a further 1.8 billion surplus allowances banked forward from Phase 2 (2008-2012) of the EU ETS.

Figure ES1: Europe's headroom under the 2020 package against current emissions levels



Worst of all, the surpluses accruing in the in the EU ETS don't simply increase the headroom to reach our 2020 target, any that are unused by then will be banked forward to weaken our commitments under any *future* climate framework. Given the manner in which they arose, these ETS surpluses risk damaging Europe's credibility in the international negotiations. The surpluses that have accrued under the EU ETS are essentially the product of two things:

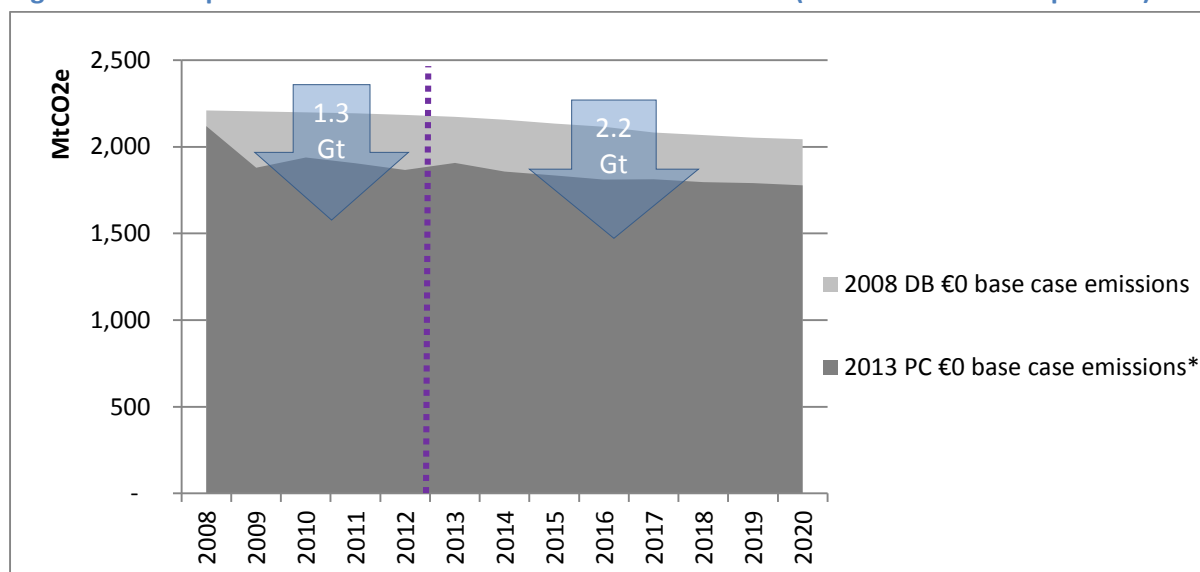
- Firstly, following the recession, the ETS cap is now set too high to deliver emissions *reductions* and is instead *cancelling out* the abatement that is being delivered by other policies such as the Renewable Energy Supply Directive and the Energy Efficiency Directive.
- Secondly, despite the lack of demand for *domestic* allowances, the ETS has become the biggest market for cheap carbon offset credits under the Kyoto Protocol and has essentially

¹ UNEP Emissions Gap report 2012 UNEP 2012 Emissions Gap report
<http://www.unep.org/publications/ebooks/emissionsgap2012/> (Accessed 23rd June 2013)

become the dumping ground for the most environmentally questionable credits generated by projects under that scheme.

When the Phase 3 caps were being devised, the EU ETS was originally expected to deliver some **2.8 billion tonnes** of emission reductions against business-as-usual emissions over and above the abatement delivered by the renewables and energy efficiency targets. This would have made it the single biggest driver of emissions reductions over the thirteen years of the 2020 climate package (2008-2020). But now, following the recession, emissions in the power stations and factories policed by the scheme have fallen by as much as **3.5 billion tonnes** across this thirteen year horizon, driving emissions below the level set by the ETS cap. This now threatens to make the EU ETS an anti-climate policy, cancelling out over a billion tonnes of emissions reductions delivered by other climate policies over this thirteen year time horizon.

Figure ES2: Comparison of 2008 and 2013 “base case” emissions (BAU minus non-ETS policies)²



Europe could potentially justify banking this slack in its carbon budgets if it was pulling its weight on climate change, but it is currently very far from doing so. Our effort sharing model, outlined in Section 1 of this report, finds the EU nearly 60% of the way through its fair share of the global 1990-2050 carbon space already.³ Indicatively, without extensive international effort, Europe will exhaust the remainder of this nominal budget by 2033 even if it adopts it the post 2020 milestones under the Low Carbon Roadmap.

Meanwhile, as the EU ETS banks forward emissions reductions delivered by other parts of the climate package, the environmental integrity of the scheme has been further compromised by the huge volume of potentially environmentally non-additional offset credits surrendered into it. Despite being oversupplied with domestic allowances, ETS installations have rushed to exploit the cheapest international credits on the market and have specifically *prioritised* surrendering those credits facing bans over additionality concerns.

² Taken from Deutsche Bank “It takes CO₂ to contango” (2008) and April 2013 analysis from Point Carbon. Note that the Point Carbon analysis uses verified emissions for 2008-2012 which may contain some trace emissions reductions prompted by the carbon price.

³ In summary we divide the 1990-2050 CO₂e compatible with a >66% chance of avoiding 2°C between nations based on their 1990 population. Similar to the “Budgets Approach” proposed by the WBGU in 2009.

1.1 billion offsets have been surrendered over Phase 2 (2008-2012). 85% of those are from projects that have been since been blocked from the scheme on the basis of environmental concerns. A further 7% of these are facing close ongoing scrutiny.

Indeed, so desperate were ETS installations to beat a 2013 ban on industrial gas credits and Russian and Ukrainian joint implementation projects, that in 2012 they surrendered enough offsets to take Europe's net emissions **27% below 1990 levels**.⁴ This frontloading of the offsetting budget is so extreme that it jeopardises EU Member States' compliance with the First Commitment Period of the Kyoto Protocol (also running from 2008-12). The Protocol specifies that flexible mechanisms must be supplemental to domestic action to reduce emissions (i.e. deliver less than half of the reductions to meet the Kyoto targets), yet some 633 million offsets surrendered by the EU15, Poland and Slovenia exceed that supplementarity threshold.

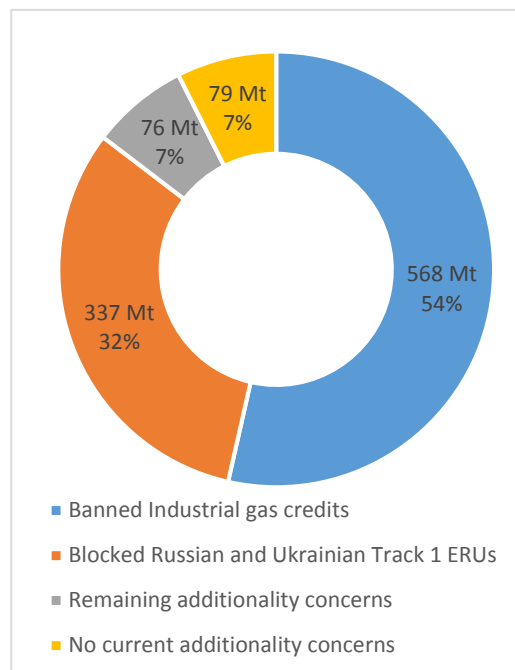


Table ES1: Total flexible mechanisms used towards EU Kyoto compliance over 2008-2012 (Mt CO₂e)

Country/region	ETS offsets In Phase 2	Intended state use of CDM, JI and IET	Total intended flex-mechs	Gap between KP baseline and CP1 target	Supplementarity threshold for flex mechs (½ of Kyoto gap x 5)	Offsets exceeding supplementarity threshold
EU15	1,049	419	1,468	341.2	853	615
Poland	96	0	96	33.8	84.5	12
Slovenia	6	5	11	1.7	4.25	7

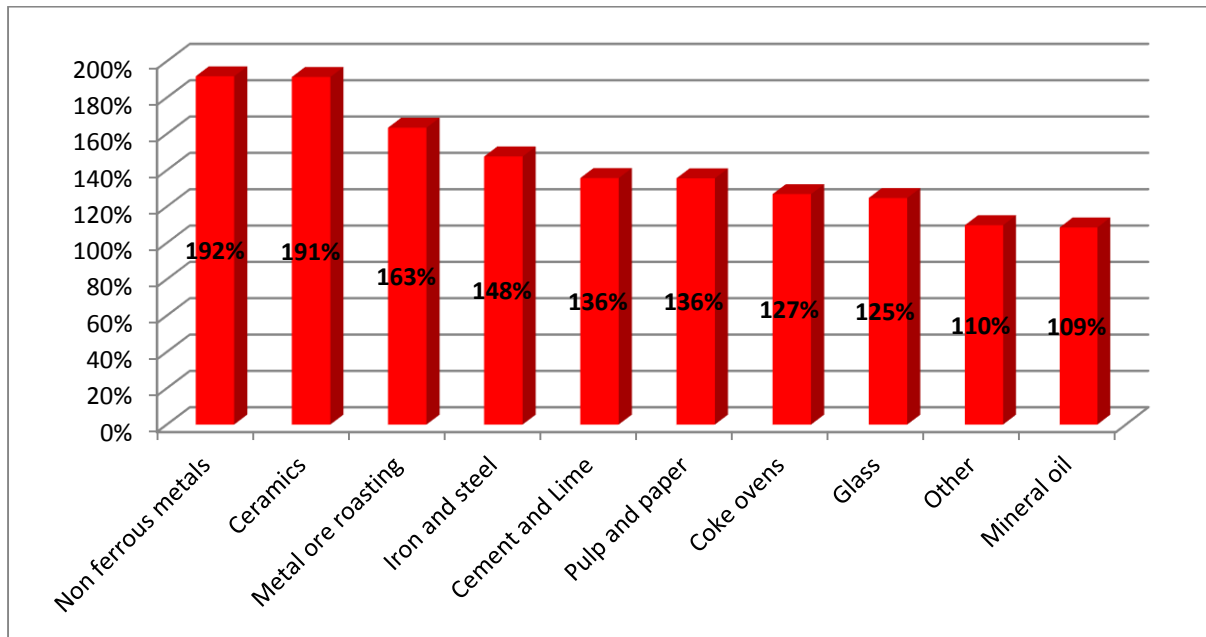
- ETS offsets from EUTL
- Intended state units are taken from the EEA's 2012 Greenhouse Gas Emissions Trends report
- KP baseline and 1990-2011 emissions from EEA. 2012 emissions estimates apply Eurostat estimates to 2011 EEA data

Within Europe, the large surpluses and low carbon prices under the scheme are putting its political credibility at stake, threatening to destroy a policy that could, in principle be Europe's most affordable means of reducing its emissions. Yet policymakers remain loathe to return even a minimum level of ambition to the scheme for fear of putting additional pressure on their struggling manufacturing sectors. These fears are misplaced. It is precisely in these sectors that spare carbon allowances are accumulating both in Phase 2 and in Phase 3.

Firstly, we note that *without exception* each of the manufacturing sectors are oversupplied allowances in Phase 2. This should immediately put to bed claims by each of the European manufacturing sector lobbies that, the EU ETS has *on the whole*, harmed their industries in Phase 2. On the contrary, it has afforded them spare allowances to be sold as a potential revenue stream or to afford them additional protections going into Phase 3.

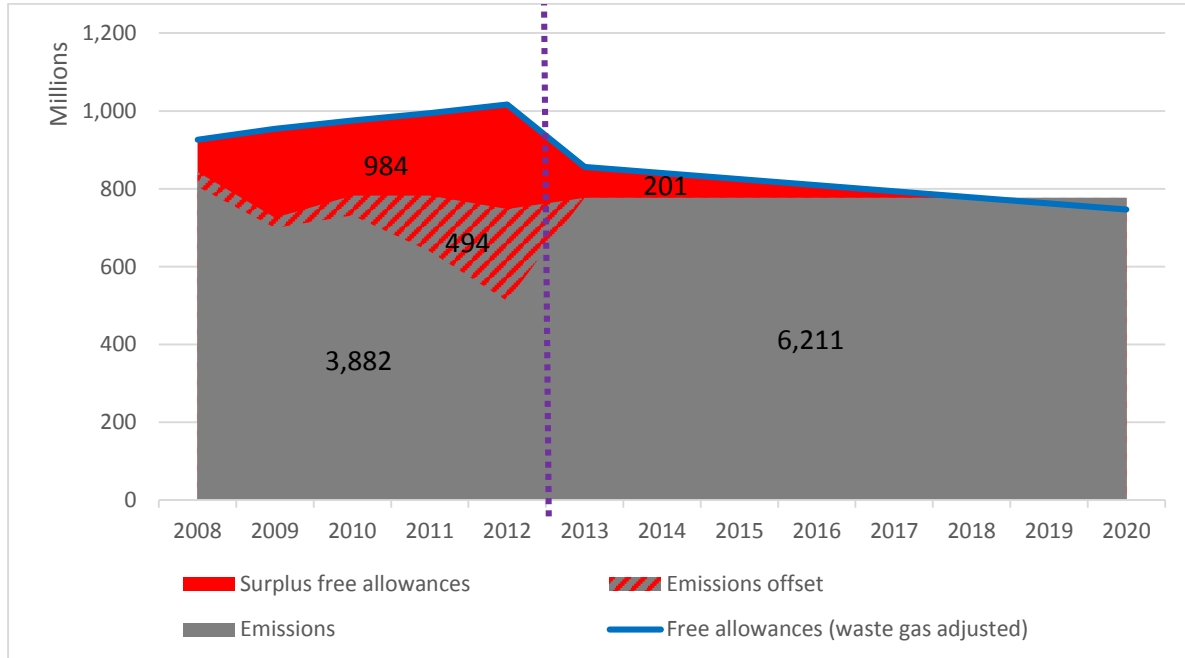
⁴ Using data submitted by the European Environment Agency to the UNFCCC (May 29, 2013). 2012 emissions are early estimates based on Eurostat figures (May 29). ETS offsets taken from the EU transaction log (May 15).

Figure ES4: Free allowances compared against verified emissions by sector (2008-2012)



Secondly, we note that, as a group, manufacturing sectors are likely to continue accruing surpluses across Phase 3. If manufacturing emissions stayed at average Phase 2 levels across 2013-2020, not only will they fail to exhaust their accumulated Phase 2 surpluses, they will accrue *new* surpluses that can be sold on to electricity generators at a profit or can be banked against their obligations in a future climate framework.

Figure ES5: Surpluses for stationary ETS installations under 2013 base case-case (Phase 2 scope)



With manufacturer’s holding more free allowances than they are collectively likely to need to cover their emission out to 2020, policymakers should be sceptical of their claims that a reduction in the supply of auctioned Phase 3 allowances would be unacceptably punishing to them over that timeframe. They should also be sceptical of industries requests to appropriate more of government’s dwindling ETS auction receipts as part of a “low carbon transition fund”. Industry already has a low

carbon transition fund in the form of excess Phase 2 and Phase 3 free allowances already awarded them by governments.

Reducing the supply of allowances in the Phase 3 auctions will increase the value of these allowances, which can then be sold on to electricity generators in order to fund new industrial abatement technologies. It should not be forgotten that the free allowances awarded industry are public assets and represent forfeited revenues that were gifted to manufacturers. Politicians should not be tempted to forfeit yet more government revenues so that industry can increase its profits while continuing to defer abatement.

Finally, we note that some commentators are predicting that as the European economy returns to growth in the latter half the decade, emissions will once again rise, re-introducing demand to the ETS. This is by no means certain, as we show, economic growth is already decoupled from emissions at an EU and Member State level. Emissions are very unlikely to climb back to pre-recession levels but instead to continue to fall throughout the decade, further exacerbating the structural imbalance in the ETS.

Recommendations

In light of the above findings, we argue that at least **1.7 billion allowances** should be permanently removed from auctions in Phase 3 of the EU ETS. This cancellation is advised on the basis of the following two recommendations:

- **Recommendation 1: Cancel at least 0.7 billion allowances from Phase 3 auctions to ensure the ETS delivers a minimum level of domestic emissions reductions in each of the sectors that it covers**

Given the new business-as-usual emissions after the recession, the ETS risks cancelling out emissions reductions delivered by other policies in the climate package and storing them up to waylay Europe's future climate efforts. A significant share of the surpluses the ETS will accrue are likely to be a result of this cancelling effect, beyond any contributed by surrendered offsets. While the ETS is expected to deliver some shortfalls to the aviation sector over 2012-2020, we note that for stationary installations the cap is currently poised to cancel out up to **0.7 billion** tonnes of emissions reductions delivered by the Renewables and Energy Efficiency targets, and that this volume should be removed from the scheme as an absolute minimum.

- **Recommendation 2: Cancel 1 billion allowances from Phase 3 auctions to prevent non-additional Phase 2 offsets from damaging the environmental integrity of the scheme.**

Establishing a fixed ETS offset budget against projected business as usual emissions that did not materialise was, with hindsight, a very bad idea. Instead of providing a cost adjustment mechanism to guard against high prices the flood of offsets into the ETS has further exacerbated the lack of demand for domestic abatement driven by the ETS. The ban on industrial gas offsets was too late to stop **550 million** of these credits from entering Phase 2. Similarly the block on Track 1 ERUs was too late to stop **340 million** hot air allowances from Russia and the Ukraine from entering into the system. A further **80 million** credits still have serious questions hanging over them. The offsets surrendered by ETS installations need to be honoured under the existing rules, therefore the only way to correct for this questionable abatement is to remove equivalent allowances from the Phase 3 auctions

We emphasise that any allowances thus cancelled from Phase 3 auctions should be used to strengthen Europe's 2020 target and leverage maximum international ambition ahead of the 2015 climate conference. Any allowances removed from Phase 3 should be reflected in a change to Europe's carbon budget under the Second Commitment Period of the Kyoto Protocol rather than freeing up more space for the non-traded sectors of the economy under the Effort Sharing Decision budgets (ESD). We note that the ESD budgets are already carrying 1.1 to 2.2 billion tonnes of headroom and do not need to be further enlarged.⁵ To move from its current 20% target in 2020 to a 30% target, Europe only needs to lower its economy wide emissions by 560Mt in the year 2020. Any allowances removed from the Phase 3 cap, should therefore be removed as a deepening wedge from the final years of the trading period, so that Europe can declare it has achieved a higher target in the international negotiations.

Finally, we make a recommendation regarding future cap setting to ensure that the ETS does not face a repeat of the difficulties it has currently experienced.

- **Recommendation 3: Protect Europe's post 2020 framework by ensuring future ETS caps automatically self-adjust to deliver a minimum level of abatement**

Until such a time as the ETS caps are set within economy-wide commitments that reflect an equitable share of the "safe" global carbon space, Europe cannot afford for its most cost-effective tool for reducing emissions to lie idle, or worse, to cancel out its other climate policies. Going forward, we propose that, independently of the political decision about the level of each cap, policymakers should agree a minimum level of abatement that will be driven by each trading period, and install mechanisms within the scheme to ensure it self-adjusts to deliver this. We argue that the minimum volume of abatement under each cap should be in the billions of tonnes. A politically fixed minimum level of guaranteed abatement under the EU ETS will ensure that it does not again serve to cancel out the effects of other climate policies. In the recommendations section at the end of this report, we tentatively propose some design elements for a strategic reserve of allowances which might serve this purpose.

⁵ Höhne, N., et al. (May 2013) The next step in Europe's climate action: Setting targets for 2030 *Ecofys* http://www.greenpeace.org/eu-unit/Global/eu-unit/reports-briefings/2013/ecofys_PolicyPaper.pdf