

## The numbers

# 1.5billion

Permits carried over into Phase III

# 7 years

Length of time emissions could grow with no need for domestic abatement

# 1.4billion

Tonnes of carbon a 30% EU target would save in Phase III budget

# 2.3billion

Permits saved by basing Phase III caps on historical emissions rather than Phase II caps

# €18billion

The value of excess EUAs likely to be given to industry and select combustion plant over Phase II

### 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 deliver the deep cuts in carbon emissions the world so badly needs to prevent the worst impacts of climate change.

### Introduction

After running for 5 years, the EU Emissions Trading Scheme (ETS) has failed to constrain the annual supply of carbon across capped sectors for any year except 2008. In Phase I the carbon price collapsed due to the glut of carbon permits. Then, barely into Phase II, the recession savaged Europe's economy dragging emissions down 6% in 2008 and sending them plummeting a further 11.6%<sup>i</sup> in 2009, leaving the market long once again by some 233 million tonnes.<sup>ii</sup> The likely slow convalescence from this economic shock will further enfeeble Phase II caps which were already anaemic. Furthermore, likely carryovers of at least 1.5 billion permits from Phase II could allow emissions to grow with no further need for domestic abatement until as 2017 or later.<sup>iii</sup>

With key nations vacillating on introducing their own emissions trading legislation, and with atmospheric carbon levels careening towards critical levels, it is imperative that Phase III of the EU ETS demonstrate the emissions trading is an effective and efficient means of delivering significant carbon reductions.

To give it a fighting chance, policy makers must address the shortcomings which are ruining its prospects long before it begins.

**Problem 1: Inappropriate targets**

The traded sector, which accounts for just under half of the greenhouse gases in the European economy, currently aims to cut emissions 21% against 2005 levels by 2020 as part of a wider programme to achieve economy wide reductions of 20% against 1990 levels by 2020.

These midterm targets, ill become Europe as the world’s second largest developed emitter, and fail to adequately represent the head start Europe has achieved towards these goals – with 8.74% reductions being reached as early 1994 as a consequence of economic and technological changes which had nothing to do with climate policy.<sup>iv</sup>

Ambitious midterm targets are critical both in terms of alleviating climate risk through reduced emissions on the way to our 2050 targets and also in terms of avoiding steeper, more expensive cuts to reach our long term targets further down the line.

**Solution 1: Redraw ETS cap in line with 30% targets**

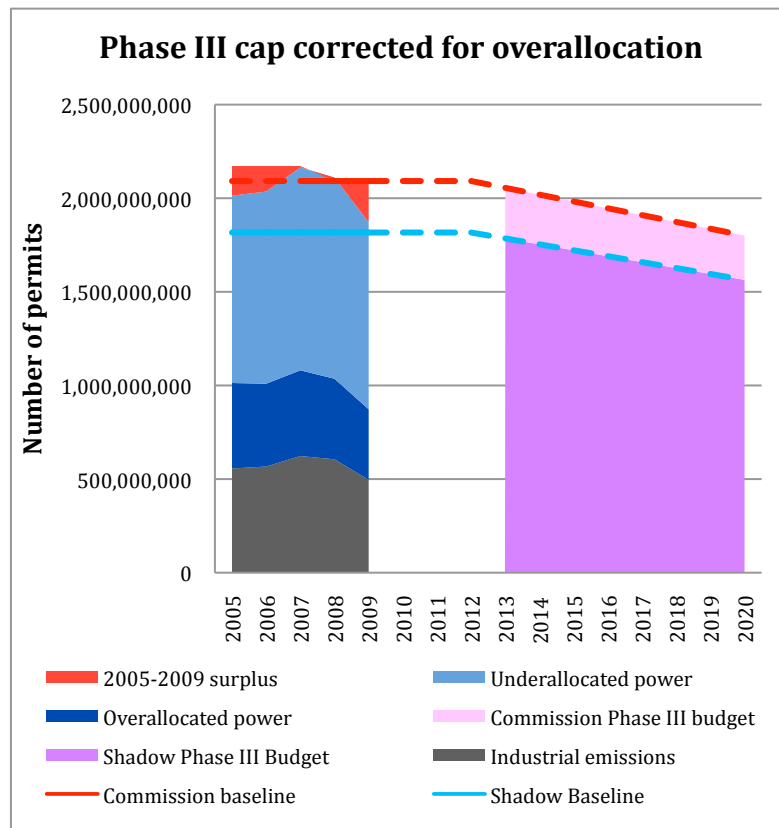
Europe has already proposed shifting to a 30% midterm target if comparable effort is shouldered by other countries, and is beginning to look more closely at the costs and benefits of moving to a 30% position unilaterally. Leaked copies of a European Commission paper suggest that this would be reflected in a 34% target for the traded sector (against 2005 levels) saving over 1.4 billion tonnes of emissions over the course of Phase III.<sup>v</sup>

It would also put Europe in position to claim a sizeable stake in the emerging clean energy economy estimated to be worth some \$2.3 trillion by 2020.<sup>vi</sup>

**Potential carbon saving = 1.4 billion tonnes**

**Problem 2: Sectoral overallocation**

The 233 million tonne long<sup>vii</sup> net position of the market disguises profound asymmetries in the effort required by different sectors under the cap. While it is appropriate that the power sector faces more stringent caps than industrial sectors, owing to its captive domestic market and its access to a range of



abatement technologies, heavy industry sectors and a significant number of manufacturing plant are currently failing to shoulder any of the load and instead find themselves with large surpluses. Our interactive map comparing emissions with allowances illustrates shows that in 2009 70% of participants in the scheme were given more allowances than needed to cover their emissions.

While most power installations face challenging caps, lobbyists for heavy industry have successfully secured generous allocations based on high growth predictions and fears of carbon leakage. These growth targets leave them this year holding some 200 million spare EUA permits. Similar surpluses of 175 million have been achieved by parts of the combustion sector which includes many manufacturing plant alongside centralised power stations. If current patterns continue these sectors can expect to be awarded some 1.2 billion tonnes of superfluous carbon allowances across Phase II, unnecessarily weakening the environmental integrity of the scheme while delivering them potential windfalls of €18 billion at today’s prices. This cost will be principally borne by electricity consumers and breaks down to some €36 for each EU citizen.<sup>viii</sup>

Worryingly, this pattern of lopsided overallocation currently threatens to be built into the Phase III caps,

which the Directive currently defines in relation to allocations in 2010.

**Solution 2: Derive Phase III caps from historic emissions**

Rather than deriving Phase III caps from Phase II allocations which are distorted by overallocation to some sectors, we propose calculating the Phase III cap against recent historical *emissions* in these overallocated sectors. A baseline drawn from a generous estimate of average 2005-2009 emissions delivers a Phase III budget some 2.3 billion smaller than the one currently proposed in the current Directive while delivering 2020 emissions 33% below 2005 levels.<sup>ix</sup> Such an approach to setting the overall cap would ensure tough benchmarks applied in industry did not simply take the pressure of the electricity sector.

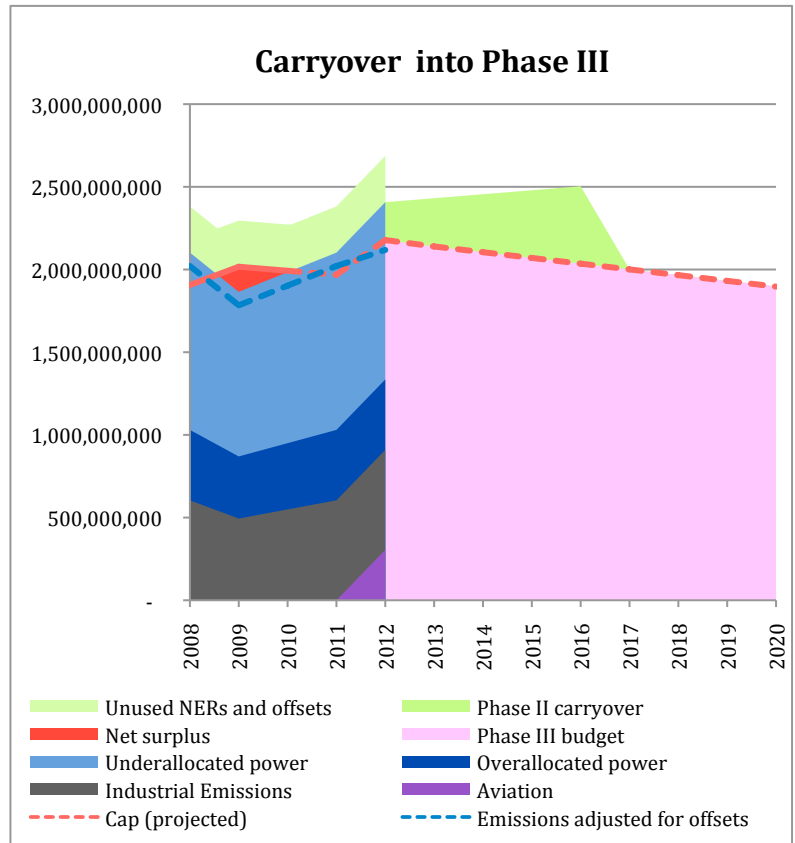
**Potential carbon saving = 2.3 billion tonnes**

**Problem 3: Carbon lock-in**

One of the few potential benefits of economic downturn is the prospect of reduced emissions, indeed the recession has delivered emissions reductions that dwarf the best efforts of policymakers to date.

Perversely, though, the current design of the ETS prevents us from capturing any environmentally beneficial side-effect of the recession within the traded sector. This is because the ETS currently lacks any mechanism to reduce the supply of permits in the event of rapidly falling demand, and any permits unused during Phase II can be banked forward indefinitely across future Phases. That means that the 233 million spare emissions rights built up this year will be used to allow future emissions to take place. Modelled over the whole phase we estimate some 123 million net are likely to still be available for use against future targets in the phase 2013-20 even after taking into account the need to buy in the power and aviation sectors.

The carbon budgets intended to place a ceiling on pollution levels, now perversely guarantee that this pollution will take place at some point in the future. The carbon cap has become a carbon trap.



**Solution 3: A strategic carbon reserve**

Phase III could be insulated from future unexpected falls in demand in a variety of ways. One suggestion is to create a strategic reserve by holding back a quantity of permits. A reserve could protect the scheme from excessive surpluses in the event of a repeat recession, with an annual share of the reserve released into the market after each year which passes without incident. A strategic reserve would also allow the scheme to respond more quickly to new scientific assessments of climate risk.

Lastly, the reserve would present an opportunity to reflect downstream voluntary action affecting the traded sector, by cancelling permits from the reserve in response to proven additional measures undertaken by energy consumers underneath the cap.

An alternative idea often proposed by industry is for a reserve to be created that adjusts allocations to industry *ex post*, after taking into account actual production levels. This would prevent windfalls accruing to participants whose emissions decline through reduced output, as they would be required to hand back permits to the reserve. Sites increasing production would be allowed to claim permits from the same reserve. In the event of a recession with

large fall offs in demand across the board the reserve would see net growth with the excess being cancelled at the end of the period.

#### **Problem 4: Unused offsets and New Entrants Reserve**

The carryover of 123 million surplus Phase II permits, combined with weak 2020 targets, already threaten to undermine the effectiveness of Phase III, but a further 1.4 billion credits are likely to be introduced into the scheme. This consists of some 192 million unused permits from the New Entrants Reserve which are likely to be released into the market at the end of Phase II, some 830 million unused offset credits remaining unused from the phase II allowance and a further 375 million offset credits which are expected to be made available in Phase III.<sup>x</sup> Together with the Phase II surpluses, a 1.5 billion permit carryover could allow emissions to grow unabated until 2016 under the current 21% cap, and would effectively cancel out the benefits of the 1.4 billion set aside the Commission is expected to propose as a potential means to deliver a 34% target.

*“Permits carried over from Phase II could allow emissions levels to grow unabated until 2016”*

#### **Solution 4: An EU wide agreement to control the quantity and quality of offsets and to cancel unused NER permits**

There are existing clauses in the Emissions Trading Directive which allow offset a rule to be set governing the quality criteria for offset credits that can be used in the ETS. The EU should seize the opportunity these present to ensure that only the highest calibre of offsets have access to the EU market. Over time a review of the volume of offsets allowable in Phase III should also be undertaken to adjust for the now decreased requirement for additional domestic effort.

This would reduce the huge supply that is currently available relative to demand while incentivising best social and environmental practice.

An additional measure to deter the practice of swapping in cheaper CERs to release EUAs would be to peg the limit on the use of offsets to the level of effort required under the caps. This would provide

access to offsetting to those that most needed it and discourage rent seeking amongst participants with generous surpluses.

France, Ireland and Malta have already declared their intention to cancel unused NER permits at the end of Phase II. An EU wide agreement to cancel the remaining 192 million would reduce supply and shore up the 2012 carbon price.

#### **Other measures to restrict future supply**

A variety of other policy measures are available that could begin reducing supply. These should be fully considered and debated.

- **Reserve price on permits sold at auctions**

≈Member States who plan to release more permits via auction could introduce a reserve price to limit volumes entering the market in the event of a sustained low price signalling too much supply in the market. Any unsold permits as a result of the price floor could be rolled over and then cancelled at the end of the period. In Phase III, when the auctions become more centralised, this could become a harmonised policy essentially choking off supply if low demand causes prices to fall below the auction floor price.

- **Incentives for permit cancellation**

Once companies are given a legal property right to pollute the vast majority of permits in circulation can then only be removed through voluntary cancellation. This could be incentivised through the granting of tax incentives against cancelled permits, or by allowing companies to retire permits as an alternative to offsetting their emissions in sectors such as transport which lie outside the scheme.

#### **Conclusion**

The ETS is vulnerable to being rendered irrelevant if emissions continue to fall and there is no corresponding adjustment to the supply of emissions permits. At present the effect of oversupply in the system, compared to targets for the future, is to remove any need for additional domestic abatement until 2017 at the earliest. This assumes a relatively quick recovery from the recession returning emissions to 2008 levels by 2012. If this does not come to pass then the period in which European industry can carry on avoiding any investment in low carbon solutions will grow ever longer and Europe will miss out on a much needed opportunity to

improve resource efficiency, build new infrastructure, create new jobs and corner valuable future export markets. The ETS needs rescuing now more than ever. For example 2.3 billion tonnes of emissions permits can and should be safely removed from the next phase thereby tightening caps. Other measures must also be introduced to tighten supply and redirect the flow of offset finance to transform energy systems both here in Europe and in the developing countries where it is most needed.

### More information

The information and analysis in this briefing will form part of a longer report to be published shortly. Please do not hesitate to contact us ([info@sandbag.org.uk](mailto:info@sandbag.org.uk)) about anything contained here and visit [sandbag.org.uk](http://sandbag.org.uk) for details of the report.

### Endnotes

<sup>i</sup> This is the 2009 decline given by the Commission, as found in their May 18<sup>th</sup> press release.

<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/576>

<sup>ii</sup> This 233Mt calculates the distance between the 2009 allocations (1,951 million tonnes) adjusted upward to include auctions (66 million tonnes), and 2009 emissions (1,865 million tonnes) adjusted downwards to include offsets (81 million tonnes).

<sup>iii</sup> This presumes a steep rebound in emissions back to 2008 levels by 2011 and continued emissions growth at 1% a year from 2013.

<sup>iv</sup> UNFCCC online GHG register <http://unfccc.int/di/FlexibleQueries/Event.do?event=go>

<sup>v</sup> Leaked draft of forthcoming Commission communiqué

<sup>vi</sup> Centre for American Progress, "Out of the Running" [www.americanprogress.org/issues/2010/03/out\\_of\\_running.html](http://www.americanprogress.org/issues/2010/03/out_of_running.html)

<sup>vii</sup> See endnote ii above for full breakdown

<sup>viii</sup> At the time of writing the EUA spot price stands at €14.54. The per capita divides our €18bn figure by 499.8 million, the EU27 population as of Jan 2009 [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-QA-09-031/EN/KS-QA-09-031-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-QA-09-031/EN/KS-QA-09-031-EN.PDF)

<sup>ix</sup> Our budgets are drawn from a 1.74% from an emissions baseline of 1.776bn (adjusted for closures) rather than the commission allocation baseline, which we have approximated as 2.092bn.

<sup>x</sup> We anticipate a steep rise in offset usage at the end of Phase II up to 290 million from the 80 million across the 2008-2011. Our figures for NER and Offsets were obtained from Deutsche Bank.