

The carbon budgets set to help deliver Europe’s climate targets risk becoming an accounting fudge that allows these targets to be exceeded. There are now enough spare carbon allowances in the EU emissions trading scheme and the EU Effort Sharing Decision to allow Europe’s emissions to climb back to near 1990 levels by 2020. Europe must urgently adjust its carbon budgets to ensure its intended climate targets are actually met, be they in 2020, 2030 or beyond.

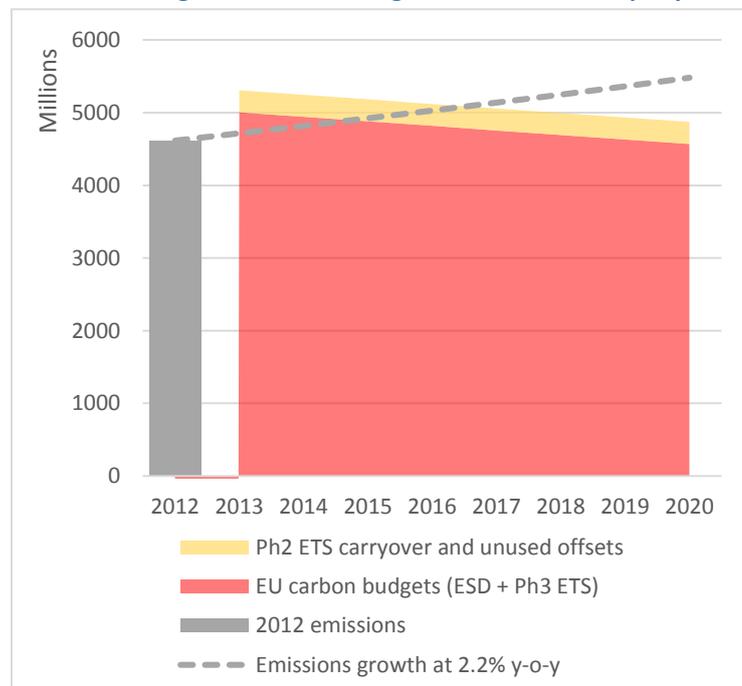
Europe’s progress towards meeting its 2020 climate target is usually measured in the distance emissions have fallen below 1990 levels, with latest estimates from the European Environment Agency placing them at 18% below 1990 levels in 2012, just 2% shy of the 20% target with eight years to spare.

Unfortunately, this presents an incomplete picture of how compliance with the Greenhouse Gas Target is actually determined in European law. That 2020 target has been subdivided into two eight year carbon budgets that allow that target to be met more flexibly across 2013-2020. They are:

- Phase 3 of the EU Emissions Trading Scheme (ETS) – covering factories, power stations and airlines), and
- The EU Effort Sharing Decision (ESD) – covering the remaining sectors, such as transport, heating, waste and agriculture).

As long as the EU keeps within these two carbon budgets it is technically deemed to have met its 2020 greenhouse gas target, even if emissions exceed the official target in the actual year 2020. **Perversely, these budgets are currently so large, they allow Europe room to grow its emissions by as much as 2.2% each year.ⁱ That trajectory would see domestic emissions return to roughly 98% of 1990 levels by 2020.ⁱⁱ**

EU Carbon budgets leave room to grow emissions 2.2% per year



There are two main reasons that these budgets are large enough to allow this to happen:

Firstly, EU emissions enter this budget period at a much lower level than was expected when the budgets were set. The carbon budget starts at 5 billion tonnes in 2013 before ratcheting down gradually to 4.5 billion in 2020. Emissions in 2012 are already down to 4.6 billion.

Secondly, this oversized budget has been swelled further by 2 billion surplus allowances banked forward from Phase 2 of the EU emissions trading scheme.

In short, Europe’s carbon budgets are no longer commensurate with the 2020 targets they were designed to deliver, and threaten to take Europe dangerously off its intended course.

So far, this has not been a cause for outrage, perhaps because Europe’s emissions are currently expected to continue falling despite the massive carbon space available to them. The European Environment Agency projects emissions will fall 24% below 1990 if planned policies are implemented.ⁱⁱⁱ But far from sidestepping this problem, this only stores it up for the future. **While allowances from the Effort Sharing Decision expire at the end of 2020, the surplus allowances accumulating in the EU emissions trading scheme can be banked forward, threatening to drag Europe’s targets off course in 2030, 2040 or beyond.**

Conclusion and recommendations

It is essential that policymakers recognise the disconnect that now exists between the greenhouse gas targets and carbon budgets and move to correct this. Below we describe several avenues by which this could be addressed:

- **Adjust the 2030 climate target**

The Commission has proposed that the EU should commit to a 40% cut in domestic emissions by 2030 relative to 1990 levels^{iv} in keeping with the cost-effective trajectory described by the 2050 Low Carbon Roadmap. A report Greenpeace commissioned from Ecofys^v, however, finds that surpluses in the ETS effectively shave 7% off of the 40% target. One way to ensure that cost-effective milestone is still met would be to adjust the 2030 target to 47% to course correct for these surplus allowances. More recent surplus estimates could imply an even larger course correction would be required to maintain a cost-effective emissions trajectory, possibly of the order of 50%.^{vi}

- **Cancelling allowances from auction in Phase 4 of the EU ETS.**

If “course correcting” the 2030 greenhouse gas target is politically unpalatable, an alternative measure that would also protect the 2030 targets from being dragged off course by ETS surpluses would be to correct for these when setting the Phase 4 ETS budget. Once the overall trajectory of the cap was agreed (e.g. 2.2%), and the volume of auctions under that cap is determined, a one-off, ex ante adjustment to those auctions could be made to reflect the surplus reported in 2020.

- **Upgrade the Linear Reduction Factor to 2.4%**

The Commission have proposed that changing the Linear Reduction Factor to 2.2% from 2021, is sufficient for the ETS to deliver its share of the effort towards a 40% greenhouse gas target in 2030. They acknowledge however, that this is still short of the 2.4% trajectory that would be needed to fully align the ETS with the 2050 climate goal in the Roadmap. Comparing the two trajectories, a 2.4% yields a cap 2 billion tonnes smaller than the 2.2% trajectory. One way to adjust for the current surplus, then, would be to put the ETS on course for 2050 right from 2021, a move which would also have the advantage of reducing the likelihood of future revisions.

ⁱ Full calculations and sources provided in this spreadsheet:

http://www.sandbag.org.uk/site_media/uploads/2020_budgets_vs_2020_target.xlsx

ⁱⁱ This cannot be translated exactly back into 1990 emissions because we have excluded aviation (its future in the ETS is not yet resolved), and also because the ETS includes three non-EU Member States (Norway, Iceland and Lichtenstein). We reach this indicative figure by applying our 19% increase against 2012 levels to the EEA’s estimation that EU28 emissions are 82% of 1990 levels in 2012 (119% x 82% =98%)

ⁱⁱⁱ European Environment Agency *Trends and Projections in Europe 2013* <http://www.eea.europa.eu/publications/trends-and-projections-2013>

^{iv} COM(2014) 15 final http://ec.europa.eu/clima/policies/2030/docs/com_2014_15_en.pdf

^v Ecofys (2013) *The Next Step in Europe’s Climate Action: setting targets for 2030*

<http://www.ecofys.com/files/files/greenpeace-ecofys-2013-next-step-in-eu-climate-action.pdf>

^{vi} Latest Commission estimates put the ETS surplus at 2.5 billion tonnes in 2020, rather than the 2.15 billion assumed by Ecofys. Under the Ecofys methodology this would take 8% off the 2030 target. Furthermore, Table 1 of the 2050 Roadmap actually specifies a target *range* of 40-44% in 2030 as the cost-effective pathway for EU emissions (see <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2011:0288:FIN:EN:PDF>)