

Honouring Paris

A response to the Commission Communication on the Paris Climate Agreement

In a new communication responding to the Paris Climate agreement¹, the European Commission has signalled that it does not intend to increase the level of its climate ambition until after 2030. This applies the weakest possible reading of the ambition ratchet agreed in Paris and ignores the clear mandate it provided to increase EU ambition from current levels at the 2018 facilitative dialogue and/or the 2023 stocktake.

Research from Sandbag highlights that Europe is set to massively over-deliver against its 2020 climate target. We project that domestic emissions will fall 30% below 1990 levels by 2020, creating a clear opportunity to step up the 2020 climate target (which is currently 20% below 1990, with offsets) after Paris.

Moreover, we also find that the ambition of the current 2020 climate target and the proposed 2030 targets remain inadequate to deliver the 2050 goals agreed under a 2 degree temperature goal, let alone the more ambitious temperature goals agreed in Paris (well below 2 degrees with an aspirational goal of 1.5 degrees).

Europe could increase its 2020 target with minimal impact on the European economy by a) allowing spare allowances in the EU Effort Sharing Decision to expire in 2020, and b) by cancelling a significant portion of the carbon allowances that are already off the market in the newly constructed Market Stability Reserve. The persistently low carbon prices in the EU ETS also provide an opportunity to increase the ambition of the 2030 target by adopting a stronger ETS cap.

The EU's relatively unambitious targets contribute to the "emissions gap" that currently exists between the aggregate effect of all the INDCs submitted to the Paris talks and what is needed to stand a good chance of staying below 2 degrees global average temperature increase. **The EU should therefore look to increase its targets as soon as possible.** Europe has been a world leader on climate action, now is not the time to relinquish that mantle when the rest of the world is finally joining the climate charge.

Key statements in the Commission Communication

The Commission takes pains to ensure that the "medium term milestones" under the Paris agreement such as the 2018 facilitative dialogue and the 2023 stocktake, are tied to 2050 greenhouse gas targets rather than addressing more immediate targets. This neglects clear opportunities to address the 2020 target and the 2030 target. The Commissions states:

"The EU should participate in the first "facilitative dialogue", which will take place in 2018 to take stock of the collective ambition and progress in implementing commitments. In this respect, the EU will take part in the first global stocktake in 2023, which is relevant for considering progressively more ambitious action by all Parties for the period beyond 2030. In this sense, the EU, alongside the other

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 the phase-out of old coal in Europe; deep decarbonisation of industry through technologies including Carbon Capture Utilisation & Storage; reform of the EU Emissions Trading Scheme; and increasing ambition in the EU 2020 and 2030 climate & energy packages.

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¹ <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-110-EN-F1-1.PDF>

parties, is invited to communicate, by 2020, their mid-century, long-term low greenhouse gas emission development strategies”.² (emphasis added)

The Commission is keen to stress that the 2030 energy and climate package needs to be “swiftly completed in line with the European Council conclusions of October 2014”, but fails to draw attention to the “at least” part of the 40% domestic target, agreed in those conclusions, on which the climate movement has placed much hope.

The communication concludes by saying:

“All Parties will need to be ready to fully participate in the review processes under the Paris Agreement designed to ensure the achievement of the goal of keeping climate change well below 2°C and pursuing efforts towards 1.5°C.”³

However this fails to acknowledge the significant role that Europe’s inflated carbon targets play in contributing to the substantial “emissions gap” that remains between the current global trajectory and the one required to avoid dangerous climate change.

The EU is on track to massively over-deliver on its 2020 target

On 20th October 2015, the European Environment Agency (EEA) stated that Europe had already cut emissions in 2014 to 23% below 1990 levels, and that Member States expect European emissions to fall 25% below 1990 levels by 2020.⁴ This is great news that Europe is substantially beating its target to be 20% below by 2020. But we believe Europe is on track to do even better than this.

Additionally, our modelling shows that by 2020, Europe is on track for a 30% cut in economy-wide emissions relative to 1990 – see figure 1. Looking at the ETS alone, by 2020 emissions will be down 38% against the ETS’s 2005 baseline. Our modelling only adjusts emissions under the EUETS, keeping emissions under the Effort Sharing Directive (ESD) unchanged. If the same over-estimation bias also applies to the ESD, then Europe is on track for emissions cuts even greater than 30%.

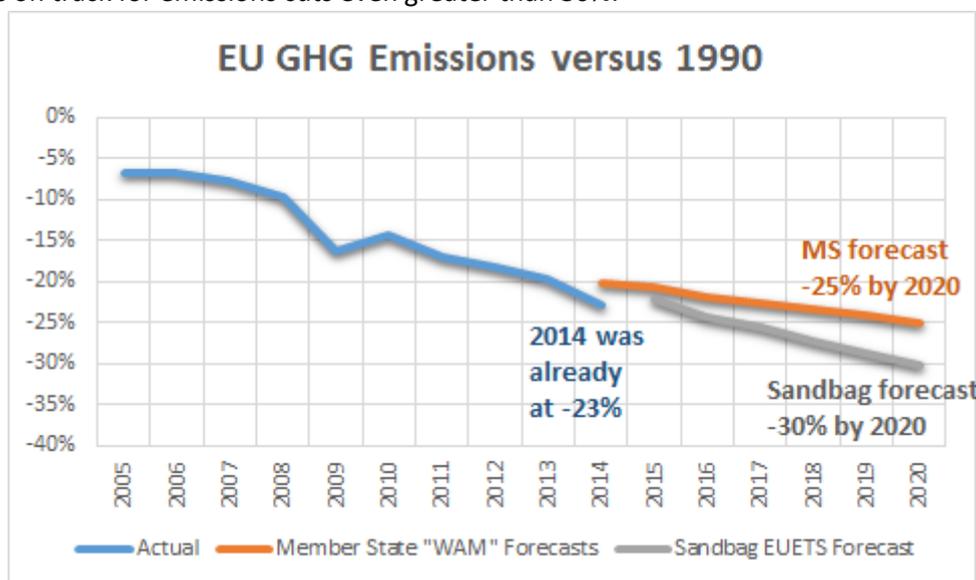


Figure 1 Progress on cutting emissions: Member State and Sandbag forecasts compared

² p.4 <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-110-EN-F1-1.PDF>

³ p.10 <https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-110-EN-F1-1.PDF>

⁴ Member State forecast “With Additional Measures”. See “EU shows leadership ahead of Paris with 23% emissions cut” <http://www.eea.europa.eu/media/newsreleases/climate-change-eu-shows-leadership>

Moreover, we are given confidence in our ETS forecast for 2020 relative to Member States, insofar as verified 2014 emissions were already lower than projected 2020 emissions in half of all EU member states.

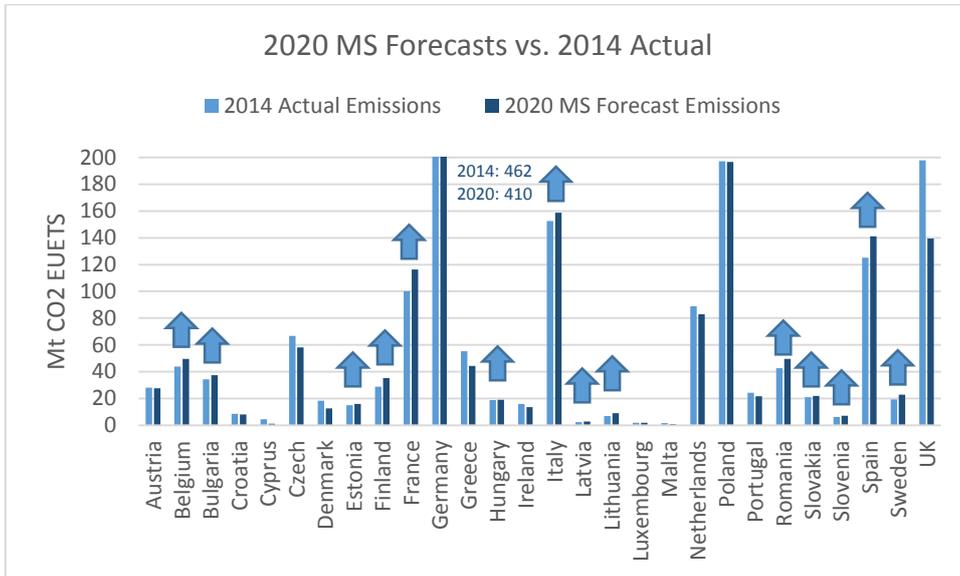


Figure 2 EEA breakdown of Member States forecasts

The Member States collectively forecast that ETS emissions will fall by only 0.8% per year from 2014 actuals to their 2020 forecast. It is hard to fathom any scenarios whereby ETS emissions will fall by only 0.8%/year from 2014 to 2020: gas and renewable electricity will displace huge amounts of coal generation reducing capacity as a result of tightening air quality standards and some carbon pricing impacts⁵; electricity consumption will continue to fall as existing sources of demand are replaced with higher efficiency products and services; and heavy industry output is continuing to fall, as demand falls and imports rise.

The EU's current and proposed targets are not aligned with 2°C, let alone a 1.5°C goal. Even before accounting for the new global context, the ETS remains out of alignment with Europe's pre-Paris commitments. In 2011 the European Commission published the 2050 Low Carbon Roadmap, laying out the cost-effective pathway to cut domestic emissions by 80% in 2050 relative to 1990 levels.

Firstly, the Roadmap indicated that the first milestone on that Roadmap was to cut European emissions by 25% in 2020 relative to 1990 levels. Europe's 2020 climate targets were never aligned with that milestone.

Secondly, the Roadmap indicated that Europe's ETS emissions would need to be roughly 90% below 1990 levels by 2050, for sectors covered by the scheme to deliver their contribution towards the 2050 climate goal. A linear trajectory consistent with that goal would require a 2.4% linear reduction factor in the ETS from 2021, not the 2.2% currently proposed by the European Commission. This has been confirmed by the Commission firstly in the white Paper for the 2030 Energy and Climate Framework, and more recently in a confidential note to MEPs on the Environment Committee.⁶ This weaker trajectory would imply a further 2 billion tonnes of emissions between 2021 and 2050.

⁵ This mainly owes to the Carbon Price Support in the United Kingdom.

⁶ <http://www.theguardian.com/environment/2016/feb/29/eu-set-to-emit-2bn-tonnes-more-co2-than-paris-climate-pledge>

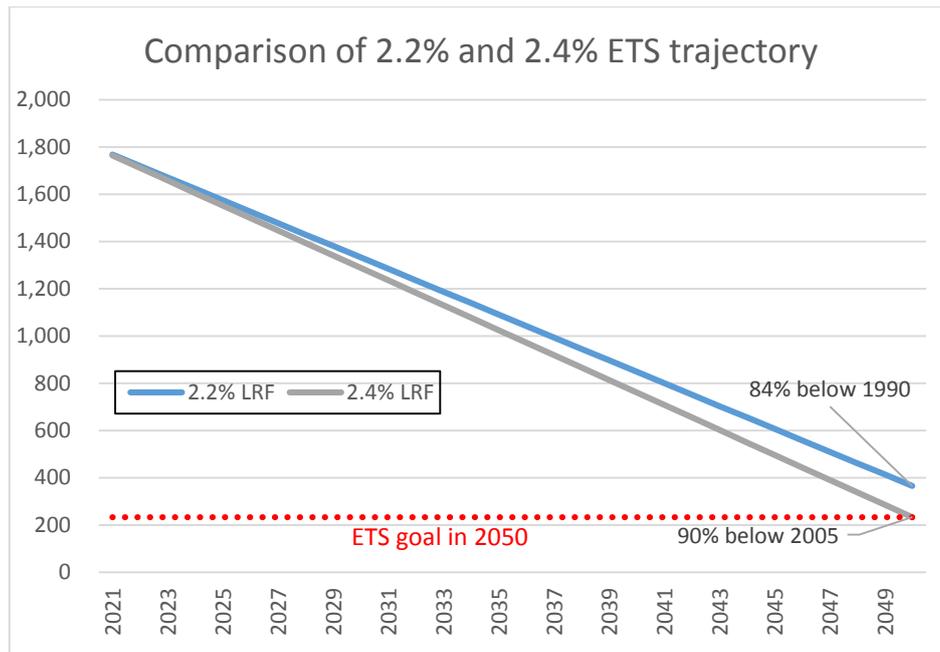


Figure 3: A 2.4% ETS trajectory needed to reach 2050 goal

Some have argued that the introduction of a Market Stability Reserve (MSR) represents a *de facto* increase in the ambition of the European cap, that brings Europe closer to a Paris-compatible trajectory than its current targets and carbon budgets indicate. We reject this argument.

The MSR changes the timing of allowances, not the total volume in the legal cap. There have been several preceding interventions on the timing of auction, and these have not been interpreted as a change to the cap: the early auction of Phase 3 allowances (for the NER300 and for power sector hedging) created hundreds of millions of tonnes of additional supply at the end of Phase 2, but this was not interpreted as a weakening of Europe's obligations under the first commitment period of the Kyoto Protocol. Similarly, the backloading decision increased the volume of ETS allowances due for auction in 2020 by 600 million, but this was not interpreted as weakening Europe's 2020 target, despite representing a volume equivalent to more than 10% of Europe's 1990 emissions.

There are no guarantees that the MSR parameters will not be relaxed in a review down the line or that allowances won't be released under a future political decision. Indeed, the Commission has already proposed removing allowances from the MSR to populate the Phase IV New Entrants Reserve. In short, if Europe wants political credit internationally for extra ambition, it needs to cancel the allowances stored in the MSR, not save them up for potential use in the future.

It is difficult to calculate the appropriate contribution for Europe and the EU ETS under the Paris agreement for two reasons. First, this requires a complex ethical judgement about the fair contribution of Europe towards a stronger temperature goal; second, it also requires a cost-effective calculation about the contribution the ETS should make under that stronger economy-wide trajectory. It's therefore difficult for us to provide a precise statement on what a Paris compatible ETS should look like, except to say it will be considerably stronger than what Europe has currently adopted or proposed.

Recommendations: How Europe should step up ambition after Paris

Europe has several obvious options for stepping up its ambition after the Paris agreement.

- Allow excess allowances from the current Effort Sharing Decision to expire in 2020.
- Cancel 1.5 billion allowances from the Market Stability Reserve at the end of 2020
- Adopt a stronger 2030 target through a stronger EU ETS cap.

First, under Member State forecasts 1,543 to 1,724 million spare allowances are expected to accumulate in the Effort Sharing Decision by 2020. These are currently set to expire at the end of that year. A clear commitment that these allowances will not be carried forward, broadly equates to increasing the 2020 target by 7%.⁷

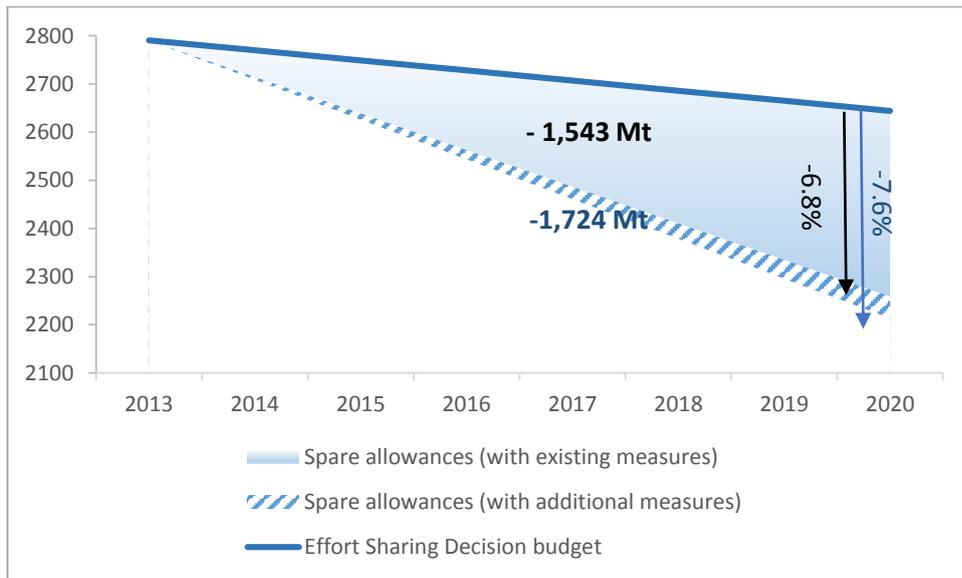


Figure 4: Retiring spare ESD allowances can deliver an additional 7% of ambition economy-wide

Second, Sandbag expects around 2 billion tonnes of ETS allowances to have accumulated in the Market Stability Reserve by 2020. These will consist of Member State allowances that have been put aside from their auction volumes. The excess allowances placed in the Market Stability Reserve are off the market indefinitely, and are therefore of no immediate value to Member States. It will have minimal effect on Member State auction revenues or the market price of carbon if allowances in the MSR are cancelled. Cancelling 1.5 billion allowances from the MSR would be broadly equivalent to increasing the 2020 climate target by 5%⁸, with minimal impact on the European economy. By our estimates several hundred million allowances would still be left in the Market Stability Reserve to alleviate future shocks if allowances suddenly became scarce.

⁷ If we translate 1,543 into a wedge of allowances removed from the ESD budget, this removes 386 Mt from the ESD budget in 2020. For 1,724 Mt this removes 431 Mt from the 2020 budget. According to UNFCCC data, Europe's 1990 emissions baseline (including aviation but excluding LULUCF) amounts to 5.7 billion tonnes of CO₂e. 386Mt corresponds to a 6.8% fall in emissions vs 1990 levels, and 431 Mt corresponds to a fall of 7.6%.

⁸ For the ETS which starts in 2013 but has a 2010 baseline the calculation for the impact of removing a similar volume from the cap has a different (slightly muted) effect on the 2020 target. Removing 1.5 billion translates to 261 Mt off the 2020 cap, which roughly equates to 5% of 1990 emissions.

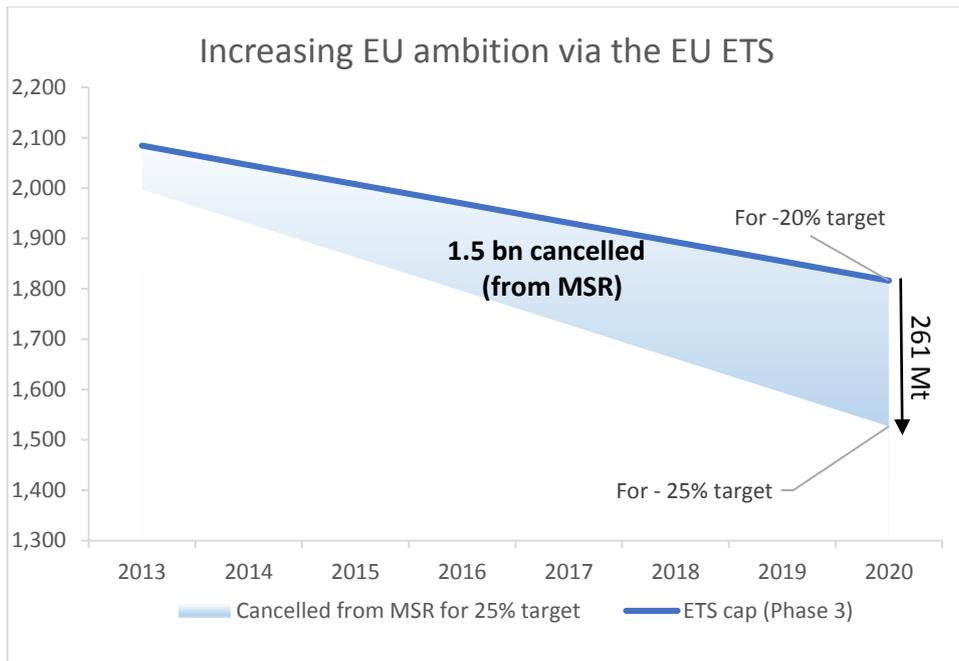


Figure 5: Retiring spare allowances in the ETS can deliver an additional 5%+ ambition economy-wide

Third, Europe should look to strengthen its 2030 target, primarily through increasing the ambition of the EU ETS. As a minimum, the ETS trajectory should be aligned with the 2050 Low Carbon Roadmap through a 2.4% Linear Reduction Factor, however this would have a minimal effect of increasing the 2030 target, equivalent to around 0.8% in 1990 terms⁹. More ambitiously, Europe should seek to adopt a 50% climate target in 2030. This is more consistent with Europe’s fair contribution, according to effort sharing experts at Ecofys and also according to analysis published by the UK government.¹⁰ It is also more consistent with a cost-effective trajectory to 2050 according to economists at the Potsdam institute.¹¹ This would involve a much larger contribution from the EU ETS, and might also require the reconsideration of using offset credits towards a stronger goal, our July 2015 report *Harder, Better, Faster, Stronger* explores one option by which offsets might be reintroduced to the 2030 framework.¹²

Again, this is a fair and cost-effective contribution against Europe’s current 2050 goal, which was adopted with a 2 degree temperature target in mind. It therefore represents the absolute minimum that Europe should consider under the new global temperature goals adopted in Paris.

Conclusion

Europe has outperformed its 2020 targets and could strengthen these at minimal cost by committing to retire excess allowances in its ETS and ESD carbon budgets. Low carbon prices also mean that Europe is well placed to step up 2030 ambition using the ETS cap. After the recent optimism of Paris, it would be deeply cynical for Europe to keep banking the overachievement of its 2020 targets against future targets, and leaving its so-called flagship climate policy to lay idle. Rather than kicking the problem of higher ambition into the long grass, Europe should be seizing this moment to reassume the mantle of climate leadership.

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⁹ A 2.4% cap provides only an additional 44 Mt of ambition in 2030, which is 0.8% of the 1990 baseline of 7 billion.

¹⁰ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/253209/UK_Analysis_of_EU_2030_GHG_Targets_FINAL_TO_WEBSITE.pdf &

<http://www.ecofys.com/en/blog/what-is-a-fair-contribution-of-the-eu-to-the-2c-limit>

¹¹ p.26 https://www.pik-potsdam.de/members/knopf/publications/Knopf_EMF28_overview_final.pdf

¹² <https://sandbag.org.uk/reports/harder-better-faster-stronger-easy-route-increased-eu-climate-ambition/>