A fresh start for the ETS
Setting the Phase 4 starting point at actual emissions
Executive Summary

While climate targets are the numbers which tend to grab the headlines, what matters to the climate are the cumulative emissions that are released into the atmosphere. The global emission budget we have left if the world is to remain below dangerous levels of global warming is very small.1 The Paris Agreement calls on all countries to reduce emissions to keep temperature rise well below 2°C and pursue efforts to limit it to 1.5°C.

The European Commission proposed in its draft legislation for the reform of the EU Emissions Trading Scheme (ETS) that the ETS budget should be calculated as a straight line drawn between the minus 21% ETS target set for 2020 and the minus 43% ETS target set for 2030 (both below 2005 emissions). EU’s emissions, however, are expected to be much lower than the ETS cap in 2020: at about 38% below 2005 emissions. If the 2020 target is used as the starting point, the new cap will start at a considerably higher level than emissions will be in 2021, building oversupply into the new carbon budget right from the start.

To avoid a new surplus CAN Europe is calling for the ETS starting point to be set at actual emissions (average of 2017-2019 emissions) instead of the 2020 target. Lowering the starting point in that way would reduce a potential new surplus by at least 300 million tonnes. Similar provisions already exist for the EU Effort Sharing Decision over 2013-2020 and have been proposed again for the period 2021-2030.

Lowering the starting point will not be enough to make the EU ETS fit for purpose: in addition, a much steeper Linear Reduction Factor is required for a stronger 2030 climate target; surplus accumulated in the past needs to be cancelled, and regular reviews on ambition are needed that ensure the ETS target is strengthened in line with the Paris Agreement.

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1 See Carbon Brief Analysis: Only five years left before 1.5°C carbon budget is blown
Why the starting point matters just as much as the 2030 target

This paper looks at the EU Emissions Trading Scheme (ETS) starting point in 2021 and how it affects the ETS Phase 4 emissions budget (for a paper on the starting point in the non-ETS sectors, see here). The EU is currently discussing how it should revise its ETS for the post-2020 period. In July 2015, the European Commission published its proposal on the ETS revision.2

What matters to the climate are the cumulative emissions that are emitted into the atmosphere. The global emission budget we have left if the world is to remain below dangerous levels of global warming is very small.3 The Paris Agreement calls on all countries to reduce emissions to keep temperature rise well below 2°C and pursue efforts to limit it to 1.5°C.

In October 2014, EU Heads of State and Government set a binding economy-wide domestic emissions reduction target of at least 40% by 2030, compared to 1990. This target is to be achieved by reductions in the ETS by 43% and in the non-ETS sectors by 30% by 2030 compared to 2005 emissions.

Both these targets are translated into 10-year emissions budgets for 2021-2030. These emissions budgets are determined by the end targets as well as the emissions levels at the starting point. The lower the emissions levels are at the starting and the end point the smaller the EU’s total emissions budget will be and the more emissions reductions will be achieved.

Stronger targets in 2030: CAN Europe has been calling for raising the EU’s overall 2030 target to at least 55%, with correspondingly higher targets for the EU ETS.

A lower starting point in 2021: The emissions budget of the ETS sectors for the 4th trading period is the sum of emissions emitted over the 2021-2030 period. Lowering the starting point for 2021 to actual emissions will be vital if the EU is to turn the ETS into a functioning mechanism.

FIGURE 1: Impact of lowering starting point or lowering target

2 http://ec.europa.eu/clima/policies/ets/revision/documentation_en.htm
3 See Carbon Brief Analysis: Only five years left before 1.5°C carbon budget is blown
The proposed starting point will lead to a new surplus

Under the Commission’s proposal the new carbon budget will be drawn from the ETS target (minus 21%) in 2020 where the previous carbon budget ends.4

But the 2020 target will be considerably outperformed due to the increase of renewables and the economic crisis. Emissions forecasts from Sandbag, a think tank focused on emission trading show that by 2020 ETS emissions will be 38% below 2005 emissions (at 1,432Mt as compared to the legislated cap of 1,816Mt).5

Setting the cap as proposed by the Commission will therefore create a new surplus (see darker green triangle in Figure 2). The lower the emissions will be in 2020, the larger that new surplus will be. This new surplus can be avoided, if the starting point is set at actual emissions. Because data on actual emissions for 2020 will only become available later, we propose that the starting point should be based on average emissions from 2017-2019.6 Similar provisions already exist for the EU Effort Sharing Decision over 2013-2020 and have been proposed again for the period 2021-2030.

While lowering the starting point will help to address a new surplus, additional measures are needed to correct for the surplus that is currently accumulating. Between 2.6 and 4.4 billion ETS allowances will have accumulated by 2020.7 This surplus can, under current rules, be fully carried over to the 4th trading period (see dark blue triangle in graph). This is why, in addition to raising the 2030 target, both the permanent cancellation of surplus allowances from the 3rd trading period and lowering the starting point for the 4th trading period are necessary to turn ETS into a mechanism that effectively reduces emissions.

FIGURE 2: Phase 4 ETS emissions budget including carry over and 2020 target starting level

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6 The draft Effort Sharing Regulations use a baseline of average 2016-2018 emissions to define the starting level of the new carbon budget in the non-ETS sectors, however, we note that the time-lag for emissions data to be published is a year longer than for the ETS sectors. The reference period could therefore be moved a year closer to the start of the Phase 4 ETS budget ensuring it fits more closely with recent emissions. EC (2014), SWD(2014)17, Impact Assessment accompanying the Proposal for a Decision concerning the establishment of a market stability reserve (see http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014SC0017&from=EN) UK government: 3.1 billion, (see https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/364992/UK_MSR_position_gov.uk.pdf); estimates by Sandbag: 4.4 billion, (see https://sandbag.org.uk/site_media/pdfs/reports/EU_on_track_for_30_cuts_by_2020_9Dec15.pdf)
How much smaller would the Phase 4 emissions budget be with a lower starting point?

How much the Phase 4 emissions budget is reduced by lowering the starting point depends on what the average emissions from 2017-2019 will be. The lower they will be, the lower the starting point and the smaller the emissions budget.

There are several projections for emissions for 2017-2019 available which differ significantly. In this briefing we will use Member State forecasts assembled by the EEA to form an upper-bound estimate, and emissions projections from Sandbag as a lower-bound estimate.8

If the starting point is set against average emissions over 2017-2019 and the current 2.2% Linear Reduction Factor is maintained, the cap would be 316 to 2,398 million tonnes lower than the Commission proposal, depending on whether Member State or Sandbag emissions forecasts are used (see Figure 3).9 That translates to a 2% or 15% reduction in the size of the Phase 4 emissions budget. Moreover, if emissions in 2020 will be as Sandbag predicts, this will strengthen the EU’s economy wide climate target for 2030 target to minus 44%. Under Member State forecasts there would be no significant effect on the target (roughly half a percent).

In our view, a trajectory truly compatible with the Paris Agreement, however, would ensure that the ETS cap would reach zero before 2050. To reliably achieve that against a starting level based on average Member State emissions forecasts from 2017-2019 would require a Linear Reduction Factor of 2.8% (62 million tonnes per year). This would reduce the Phase 4 cap by 1,024 million tonnes (7%) under Member State forecasts and by 3,123 million tonnes (20%) if emissions developed according to Sandbag’s forecast (see Figure 4). Moreover that would increase Europe’s 2030 climate target by 3% and 6% respectively.

FIGURE 3: Phase 4 ETS emissions budget change if starting point set against average 2017-2019 emissions but current 2.2% Linear Reduction Factor is kept (Member State WEM projections)

FIGURE 4: Change to the Phase 4 ETS budget if starting point set against average 2017-2019 emissions and trajectory aligned with reaching zero emissions before 2050 (Member State WEM projections)

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9 The Member State forecasts have consistently been higher than actual emissions, Sandbag’s 2020 emissions forecasts are significantly lower than other analysts’.
The European Parliament needs to set the starting point at actual emissions

The revision of the ETS is currently being discussed both by the European Parliament and the Council. Both the ITRE Committee and the ENVI Committee in the European Parliament have tabled their initial amendments to the Commission’s proposal, including key amendments which seek to redefine the starting point of the cap, strengthen the Linear Reduction Factor, and review ambition to ensure the ETS target is strengthened in line with the Paris Agreement.

We urge members of each committee to support these amendments.

There are two important innovations that have been unevenly captured in the amendments tabled so far which we present here in the hope that they can be captured in compromise amendments in the ITRE and ENVI Committees.

1 Set the reference period for the starting point one year later, i.e. 2017-2019: many of the amendment to redefine the starting level have applied the same reference years proposed in the Effort Sharing Regulation. As noted earlier in this briefing, there is a shorter time-lag on emissions reporting under the EU ETS compared to the Effort Sharing Regulations. Under the EU ETS emissions data from 2019 will already be available by May 2020 in time to set the Phase 4 cap in advance. This will allow the cap to be set on more immediate and relevant information. Moreover, as emissions are expected to be lower later in Phase 3, this is likely to lower the starting point further and thereby increase the ambition of the Phase 4 cap.

2 Use clear language to ensure the starting point is lowered while the Linear Reduction Factor is calculated based on the same baseline as in Phase 3: Currently the tonnes reduced each year by the Linear Reduction Factor are based on average Phase 2 allocations. The legal drafting of some amendments potentially implies that the tonnes reduced each year by the Linear Reduction Factor are calculated based on the new starting point instead. As emissions will be lower in 2017-2019 than average allocations in Phase 2, this would weaken the absolute reductions required by the Linear Reduction Factor. On the basis of these principles, and taking inspiration from the best amendments tabled in both the ITRE and ENVI committees, we recommend a compromise amendment as worded below.

Proposal for a directive / Article 1 – point 3
Directive 2003/87/EC
Article 9 – paragraphs 2 and 3

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<td>Starting in 2021, the linear factor shall be 2.2%.</td>
<td>Starting in 2021, the linear factor shall be 2.8% of the Union-wide quantity defined in paragraph 1, and the quantity of allocations shall decrease from the year 2021 onwards compared to the level of the average annual verified emissions for the period 2017 to 2019. The Commission shall review the linear factor and submit a proposal, where appropriate, to the European Parliament and to the Council within six months of the facilitative dialogue to be convened under the UNFCCC in 2018, within six months of the global stocktake in 2023 and after all subsequent global stocktakes thereafter.</td>
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Justification

The EU ETS proposal is currently inconsistent with the Paris Agreement’s objective to hold the temperature increase well below 2°C and furthermore to pursue efforts to limit it to 1.5°C. The proposed 2.2% Linear Reduction Factor does not even put emissions on a path consistent with 80% reductions, which is the low end of the EU’s longstanding 2050 objective. In order to be more consistent with the Paris Agreement’s objective it is proposed to adjust the linear factor to 3.3% for the 2021-2030 period.

Furthermore the 2021 starting level should be based on actual emissions not the 2020 reduction target which will be significantly overshoot.
Climate Action Network (CAN) Europe is Europe’s largest coalition working on climate and energy issues. With over 130 member organisations in more than 30 European countries – representing over 44 million citizens – CAN Europe works to prevent dangerous climate change and promote sustainable climate and energy policy in Europe.

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