

# Recommended parameters to model ETS2 in the context of the update of NECP

Dear Colleagues,

During the joint meeting of the Energy Union Committee Working Group 2 and the Ad-Hoc Working Group of the Climate Change Committee on the National Energy and Climate Plans on 05 December 2022, some of you asked clarification on how to include the new ETS (“ETS2”) for buildings, road transport and fuels combusted by industry not covered by the existing ETS (“ETS1”) in the modelling exercise in view of the update of NECPs. As a provisional agreement on establishing ETS2 in the described scope has been reached by co-legislators on 17 December 2022, we are now in a position to provide recommendations on this point.

On 25/05/2022 the Commission shared with Member States recommendations on the parameters to use under Article 18 of the Governance Regulation. In the guidance on the update of the NECPs, the Commission recommended to use the same parameters for oil, gas, and coal import prices, as well as carbon prices under the EU emission trading system..

Key relevant features of ETS2 for modelling purposes are the following:

- It will cover road transport (GHG inventory sector 1A3b), buildings (1A4a and 1A4b) & the fuels combusted by industry not covered by ETS1 (non-ETS parts 1A1 and 1A2, except waste fuels).
- It will be operational as of 2027.
- The emission cap is set to achieve an emissions reduction of 42% EU-wide by 2030 compared to 2005. In case needed for analytical purposes, a rounded preliminary upper estimate of the EU-wide ETS2 emission cap is 1047.5 Mt in 2027, 985 Mt in 2028, 922.5 Mt in 2029 and 860 Mt in 2030. This is a rough estimate based on the MIX scenario underpinning the Fit for 55 modelling, without any prejudice to the emission cap to be published by 1 January 2025, as it notably does not take account of the municipal waste incineration exclusion.
- A smooth start is planned, e.g. through front-loading (auctioning of an additional 30%) for Year 1 of ETS2. A mechanism to address excessive price increases via releases of additional allowances will also be in place, including for 2027 to 2029 an additional release trigger if ETS2 carbon prices exceed for two months €<sub>2020</sub> 45.
- Member States with national carbon taxes in place can opt out their regulated entities until 2030 for the years in which effective national carbon taxes paid are higher than average ETS2 prices.
- Generation of significant auction revenues to be used for climate and social purposes. A part of them enables the financing of a Social Climate Fund to support vulnerable households, micro-enterprises and transport users, and address negative impacts resulting from ETS2. Additional auction revenues accruing directly to Member States are estimated to be more than €<sub>2020</sub> 100 billion for the period 2027 to 2030, distributed based on Member States shares of relevant EU 2016-18 emissions.
- In 2031, the Commission should assess the feasibility of integrating ETS2 into the existing ETS.

The recommended harmonized values for key supra-nationally determined parameters included, for the carbon price of the existing ETS1, a unique ETS carbon price trajectory for 2018-2030 based on historical data for 2018-2021, and estimates up to 2030 consistent with the 55% objective of GHG emission reduction. For the post-2030 trajectory, both WEM and WAM scenario recommendations were proposed: first, a WEM trajectory reflecting the ETS ambition level prior to the recent ETS revision, not compatible with the 2050 climate neutrality objective; secondly, a WAM trajectory compatible with the Commission FF55 analysis and the climate neutrality objective. It is important to recall that the carbon value of the WAM trajectory is intrinsically different from the explicit ETS carbon price for the trajectory up to 2030. The WAM carbon values after 2030 represent the shadow cost of GHG mitigation, i.e. a theoretical price (or “dual value”) driving the GHG abatement in the absence of further sectoral policies beyond 2030.

The parameters recommended on 25/05/2022 are based on 5 years intervals. If Member States use a model producing results at the same frequency, the impact from ETS2 would be visible in the 2030 projections. More specifically, for 2030, Member States can assume an ETS2 carbon price of €<sub>2020</sub> 50 / tCO<sub>2</sub>, in line with the 2030 ETS price modelled in the MIX scenario for the new ETS sectors, as published in [ETS revision impact assessment](#), Annex 4, Table 36 (here expressed in EUR 2020).

If the models used by Member States allows for yearly results, they could assume ETS2 carbon prices of €<sub>2020</sub> 25 in 2027, €<sub>2020</sub> 40 in 2028 and €<sub>2020</sub> 45 in 2029, broadly reflecting assumptions on the price profile underpinning the Social Climate Fund, as well as the politically agreed price stability mechanism for these years in case carbon prices reach €<sub>2020</sub> 45.

For long-term values beyond 2030, Member States can assume in their WAM scenarios for ETS2 sectors carbon values in line with climate neutrality. ETS2 carbon values can be the same as those recommended for ETS1 in the WAM scenario, i.e. the strengthened ETS1 in line with the climate neutrality objective, or those ETS carbon values modelled in national scenarios to reflect the climate neutrality objectives. The Commission may come back with updated recommendations in preparation of the final NECPs.