

Briefing: New analysis shows impacts of Member States' push to weaken air quality laws

- New figures show impact of big Member States and agricultural lobby push to weaken EU laws to clean up air pollution in December's Environment Council
- Analysis shows proposals would cause approximately **130,000 extra deaths across the EU by 2030** (on top of the 4.3 million in the original proposal from the European Commission)
- **Around 30,000 of these additional deaths will come from weaker ammonia limits**, after strong lobbying from the industrial farming sector.
- Italy, Spain, France and the UK among countries which pushed for targets which would lead to more additional deaths
- EU institutions meeting in Brussels on February 25th to begin the process of turning proposals into law through the National Emissions Ceilings (NEC) Directive

What is the NEC directive?

The National Emissions Ceilings (NEC) Directive is one of the main tools at EU level to fight air pollution. It sets caps on the amount of pollution that EU countries can emit in a given year. Currently, the EU is looking at setting new caps for 2020, 2025 and 2030.

The new caps will look to limit emissions of the most dangerous pollutants for human health and the environment. These are fine particulate matter (PM2.5), nitrogen oxide (NOx), sulphur dioxide (SO₂), volatile organic compounds (NMVOCs), ammonia (NH₃), and methane (CH₄).

The NEC Directive is the main tool to tackle cross-border air pollution. Air pollution can travel large distances and cause damage in areas which are thousands of kilometres away. To tackle it, EU member states must reduce their national emissions which, in turn, reduces cross-border pollution.

What do the Member States' proposals mean for the EU as a whole?

Our calculations show that the weaker limits proposed in the December Environment Council would result in approximately **130,000 extra people dying prematurely across the EU by 2030**, compared to the European Commission's original proposal.

Approximately a quarter of these deaths will be caused by weaker limits for ammonia, a pollutant released almost exclusively by industrial farming processes.

Ammonia is involved in the formation of secondary particulate matter (PM_{2.5}) which causes harmful effects on health. A [recent article published in Nature](#) shows that ammonia emissions from agriculture are the leading source of mortality from air pollution in Europe, contributing to more than 40% of the air pollution-related deaths in many European countries.

These figures are on top of an estimated 4.3 million deaths across the EU due to air pollution by 2030, accounted for by the European Commission's original proposal.

Which Member States are the biggest offenders?

- **German proposals** would cause approximately 6,000 extra deaths in Germany by (on top of the 690,000 in the original proposal from the European Commission). **These extra premature deaths are due to relaxed emission limits for ammonia.**
- **French proposals** would result in approximately **8,500 extra deaths in France by 2030** (on top of the 460,000 in the original proposal from the European Commission). **The large majority – 83% – of these additional deaths come from weakened ammonia limits.**
- **UK proposals** would cause approximately **11,000 extra deaths in the UK by 2030** (on top of the 375,000 in the original proposal from the European Commission) Around 4,000 of these additional deaths will come from weaker ammonia limits.
- **Spanish proposals** would cause approximately **10,000 extra deaths in Spain by 2030** (on top of the 285,000 in the original proposal from the European Commission). Approximately 2,000 of these deaths will come from ammonia.
- **Italian proposals** would cause approximately **15,000 extra deaths in Italy by 2030** (on top of the 650,000 in the original proposal from the European Commission)

What happens next?

Representatives from the three EU institutions – the Council, European Parliament and Commission - will meet on Thursday February 25th to for the first of a number of meetings which will turn the proposals into law, a process which is expected to be finalised by the summer.

Methodology

Environment and Fisheries Commissioner Karmenu Vella noted in December's Environment Council that the European Council position on the NEC Directive would lead to 16,000 'extra' deaths EU-wide in 2030. These numbers are approximations based on the available data. We encourage and would welcome the European Commission and/or national governments to release official figures.

Our calculations compare the most recent EEA data on death rates for air pollution from PM in 2012 [1] with the European Commission's death rate data for its own proposal for 2030 [2]. Estimations of extra deaths in the year 2030 from the Council proposal come from calculating PM-equivalents for the pollutants [3]. Data for Greece and Malta was not available.

We then assumed linear decreases in death rates between 2012 and the relevant Commission and Council proposals for 2030, and used these to calculate the cumulative extra deaths for the Council position between 2016 and 2030.

The same method was used to calculate extra deaths due to ammonia emissions, based on ammonia PM equivalent.

This method is based on best available data we could find. It should be noted that:

- The PM equivalent factors used for estimating premature deaths are EU-average ones, not country-specific. The relationship between emissions and premature deaths varies depending on countries.
- The Commission's premature deaths figures for 2030 come from its December 2013 proposal while the Council's emission reduction commitments are based on updated Commission data [4].
- The 2012 PM-death figures taken from the EEA report are based primarily on monitoring (as well as some modelling), and are not fully comparable with the COM IA figures which are based solely on modelling.
- We assume linear emission reductions between 2016 and 2030.

We therefore call upon EU Member States and/or the European Commission to publish more accurate estimates of the Council general approach's impacts for people's health, although we present these figures as the best available estimates and believe them to be representative of the overall picture of the submissions from December's council.

References:

[1] European Environment Agency (2015). Air Quality in Europe – 2015 Report (p.44)
<http://www.eea.europa.eu/publications/air-quality-in-europe-2015>

[2] These data are compiled in the EEB's air-o-meter website (<http://www.eeb.org/air-o-meter>). All original data in the Air-O-Meter comes from the European Commission's impact assessment (including reports by the Commission's consultants IIASA and EMRC) which are available here:
http://ec.europa.eu/environment/air/clean_air_policy.htm

[3] Estimates to calculate PM equivalents can be found in IIASA's TSAP15 report, page 7 ("On average, 1 ton of primary PM2.5 emissions cause the same premature mortality as 3.36 tons of SO2, or 14.9 tons of NOx, or 5.15 tons of NH3, or 111 tons of VOC."). Available here: <http://ec.europa.eu/environment/air/pdf/TSAP-15.pdf>

[4] Adjusted historic emission data, projections and optimised reduction targets for 2030 - TSAP 16 A and B, January 2015, available here: http://ec.europa.eu/environment/air/review_air_policy.htm