

Targeted consultation on the evaluation of the National Emission Reduction Commitments Directive

Fields marked with * are mandatory.

Introduction

This targeted consultation is part of the evaluation of the [National Emission Reduction Commitments](#) (NEC) Directive (2016/2284/EU) undertaken by the European Commission. This Directive sets national emission reduction commitments for the Member States' anthropogenic emissions of nitrogen oxides (NO_x), non-methane volatile organic compounds (NMVOCs), sulphur dioxide (SO₂), ammonia (NH₃) and fine particulate matter (PM_{2.5}) into air. These pollutants worsen air quality, leading to significant negative impacts on human health and the environment. For example, these pollutants are linked to asthma, heart disease and stroke; they damage vegetation and ecosystems and affect water and soil quality, thus also our crops.

The Directive requires Member States to develop and implement national air pollution control programmes (NAPCP), and mandates monitoring and reporting of the pollutants' emissions and their impacts. The Commission is evaluating the Directive to understand whether it is effective, efficient, relevant, whether it is coherent internally and with other EU policy, and provides EU added value. This fulfils the commitment taken in Article 13 of the Directive. This consultation aims to collect your views on:

- whether and how the NEC Directive has contributed to reduction in emissions of the five air pollutants (SO₂, NO_x, NMVOC, NH₃, PM_{2.5}) in the EU;
- whether the provisions of the NEC Directive continue to be relevant, effective, efficient and coherent with other EU policies, as well as whether the Directive provides added value beyond national or regional action alone.

Your responses, along with those from other citizens and stakeholders, will be considered in the evaluation. Some questions require more in-depth knowledge of the Directive's provisions, and you are welcome to answer only some of the questions included, depending on how familiar you are with the topic.

Responses can be provided **until 26 November 2024**.

Please be advised that this questionnaire has been issued alongside an [open public consultation](#) which is designed to gather opinions from a wider audience. This targeted consultation contains more technical and detailed questions. It is targeted at stakeholders with more in-depth knowledge of the Directive and the

application of its provisions.

It should take about 30 minutes to complete this questionnaire and you may pause and save your replies at any time and continue later. Once you have submitted your answers, you can download a copy of your completed responses. The questionnaire will be available online for twelve weeks starting from [date].

Background and wider context

Air pollution is the greatest environmental cause of premature mortality, cardiovascular diseases and respiratory conditions, and it is among the main reasons for the loss of biodiversity. The EU has been addressing air pollution since the 1970s, developing various instruments to improve air quality and protect ecosystems.

The **NEC Directive** is one of the three pillars of [EU clean air policy](#). It implements the [UNECE Gothenburg Protocol](#), to which all EU Member States and the EU itself are signatories, and also sets more ambitious commitments for the period as from 2030.

The Directive targets five air pollutants (SO₂, NO_x, NMVOC, NH₃ and PM_{2.5}) with the aim to reduce the impact of air pollution on human health and the environment. It includes (mandatory and voluntary) reporting of emissions of further pollutants, without requiring their reduction over time. It complements the [Ambient Air Quality Directives](#) (Directive 2008/50/EC and Directive 2004/107/EC) as well as emission standards for key sources of air pollution.

Examples of sources of the main pollutants include:

- SO₂ – fossil fuel combustion (especially coal), petrochemical refining
- NO_x – road transport, fossil fuel combustion, other transport
- NMVOC – fossil fuel combustion (road transport), solvent use
- NH₃ – fertiliser application, manure management PM₅ – fossil fuel combustion, wood combustion, transport

The NEC Directive came into force on 31 December 2016 (replacing earlier legislation (Directive 2001/81/EC) and features:

- National commitments to reduce emissions of each pollutant for the period 2020-2029, and more ambitious reductions for 2030 and beyond, expressed as percentage of reduction relative to 2005 levels. This is a shift from the fixed emission limits expressed in kilotonnes per year in Directive 2001/81/EU;
- A requirement for Member States to produce and regularly update **National Air Pollution Control Programmes** (NAPCPs), demonstrating the **Policies and Measures** (PaMs) by which the emission reduction commitments would be achieved, including a series of both optional and mandatory measures to control emissions from agriculture; and
- Member State reporting of:
 - Air pollutant emission inventories per sector (annually)
 - Emission projections, i.e. estimates on the future evolution of emissions (every two years)

- Spatially disaggregated (i.e. per grid point) emission inventories and large point sources (e.g. power plants) (every four years)
- Updated NAPCPs (every four years, or more frequently in specified circumstances)
- Ecosystem impact monitoring data (sites and data on a staggered four-year cycle)

Information on compliance of Member States with emission reduction commitments is available based on the most recent emission data, reported for 2022. In 2022, 16 Member States met their respective 2020-2029 national emission reduction commitments for each of the five main air pollutants, while 11 Member States failed to do so for at least one of five main air pollutants. Specifically:

- For NH₃, nine Member States need to cut their 2022 emission levels to fulfil their 2020-2029 reduction commitments;
- For both PM_{2.5} and NO_x, two Member States need to cut their 2022 emission levels to fulfil the respective 2020-2029 reduction commitments;
- For both NMVOC and SO₂, one Member State needs to cut its 2022 emission levels to fulfil the respective 2020-2029 reduction commitment.

For more details, check the [briefing of the European Environmental Agency](#). Above situation may still change, subject to the ongoing review of Member States' inventories (as well as of flexibility applications made in accordance with Article 5 of the NEC Directive). Final compliance assessments [will be available here](#) by the end of 2024.

In May 2021, the Commission adopted the EU Action Plan “[Towards a Zero Pollution for Air, Water and Soil](#)” (COM(2021)400), referred to as the Zero Pollution Action Plan (ZPAP). It sets out EU-wide targets for 2030 (relative to 2005) to reduce the number of premature deaths caused by air pollution by 55% and by 25% the EU ecosystems where air pollution threatens biodiversity.

According to Article 13(1) of the NEC Directive, the European Commission has the obligation to review the Directive no later than 31 December 2025 with a view to safeguarding progress towards achieving its objectives since its adoption in 2016, in particular, by taking into account scientific and technical progress, and the implementation of Union climate and energy policies.

The evaluation is expected to provide evidence on whether the Directive is meeting its objectives and is still fit for purpose, in the context of the ZPAP and the Ambient Air Quality Directive and [its recent revision](#). It will also explore the potential for simplification and savings in regulatory costs (including unnecessary administrative costs).

[A note on Annex III Part 2 of the Directive](#)

Some questions in the survey make reference to Annex III Part 2 of the Directive. A brief summary of this is provided below for context.

Annex III, Part 2 of the NEC Directive includes measures to reduce agricultural emissions, divided into three parts: ammonia control, fine particulate matter and black carbon reduction, and considerations for small farms. To control ammonia emissions, Member States must create an advisory code of good

agricultural practice, covering nitrogen management, livestock feeding strategies, low-emission manure techniques, and limits on ammonia emissions from mineral fertilisers, including banning urea-based fertilisers. For fine particulate matter and black carbon, Member States may ban open field burning of agricultural and forest residue, with exceptions for preventing wildfires, pest control, or biodiversity protection. Additionally, they can develop practices to improve soil structure and nutrient status through the incorporation of harvest residue and manure. Measures must also consider the impact on small and micro farms, potentially including exemptions where appropriate.

Personal information

Throughout this questionnaire, an asterisk * denotes a question that requires an answer before the consultation response can be submitted.

* 1 Please select the statement that best applies to you:

- ☐ You are an interested citizen or representative of an organisation with a general interest in the NEC Directive
- ☒ You have specific knowledge about, and an interest in, the NEC Directive

* 2 In the analysis of responses, we list organisations/ individual experts responding and, where useful, might quote the name of the organisation or expert. Below you can specify the information you consent to publish in the analysis:

- ☒ You consent to us publishing any information in your completed form, including your identity (your name / the name of your organisation; your e-mail will not be published)
- ☐ Anonymously - you consent to us publishing any information in your completed form – apart from your name / the name of your organisation and your email

3 In what capacity are you replying to this questionnaire?

Other

Respondents should not include personal data in documents submitted in the context of the consultation if they opt for anonymous publication. Please note: regardless of the option chosen, your contribution may be subject to a request for access to documents under Regulation 1049/2001 on public access to European Parliament, Council and Commission documents. In such cases, the request will be assessed against the conditions set out in the Regulation and in accordance with applicable data protection rules.

4 Please provide your email address in case further details on the submitted information are required and you are happy to be contacted.

ersinfo.brussels@ersnet.org

5 Would you be happy to be contacted by the consultancy RPA for a follow up interview (approx. 60 minutes, held virtually e.g. Microsoft Teams)?

Our experience shows that supporting a questionnaire with a short telephone interview is a very efficient way of providing clarifications and obtaining key messages from industry.

We politely request the opportunity to contact you for a follow-up interview.

- ☒ Yes
☐ No

* 6 Is your organisation registered in the EU Transparency Register? If your organisation is not registered, you have the opportunity to register now.

- ☒ Yes
☐ No
☐ I don't know

In the interests of transparency; organisations, networks, platforms or self-employed individuals engaged in activities aimed at influencing the EU decision making process have been invited to provide the public with relevant information about themselves, by registering in the Transparency Register and subscribing to its Code of Conduct.

Please note: If an organisation is not registered, its submission will be published separately from those which are. During the analysis of replies to this consultation, contributions from respondents who choose not to register will be treated as individual contributions (unless the contributors are recognised as representative stakeholders through Treaty provisions, European Social Dialogue, Art. 154-155 TFEU).

7 Please provide your EU Transparency Register ID number

38091528151-27

8 Please provide your full name

European Respiratory Society

9 Please provide the name of the organisation that you represent

European Respiratory Society

* 10 Please specify in which country you reside, or — if you are business or an organisation — in which country you operate.

Belgium

11 Please specify which sector you represent?

Human Health and Social Work Activities

* 13 **Contribution publication privacy settings**

The Commission might publish the responses to this consultation. You can choose whether you would like your details to be made public or to remain anonymous

☐ **Anonymous**

Only organisation details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of * 10 origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself if you want to remain anonymous.

☒ **Public**

Organisation details and respondent details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published. Your name will also be published.

14 Please review the **Personal Data Protection** provisions

[Targeted consultations_privacy_notice_NECD.pdf](#)

☒ I agree with the **Personal Data Protection** provisions.

Awareness of air quality issues and the Directive

This section of the questionnaire seeks to gather information on the general awareness and level of knowledge of air quality issues due to the pollutants regulated by the NEC Directive and their evolution over time. It seeks to also gather information about knowledge of the NEC Directive and NAPCPs.

Please note that questions in this survey are numbered, but some questions only appear depending on the answer provided to previous questions. Therefore, question numbers may not be consecutive.

1 To what extent do you agree or disagree with the following statements?

	Completely agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Completely disagree	Don't know
Emissions of one or several of the pollutants NOx, NMVOCs, SO2, NH3 and PM2.5 are an issue of concern in the EU	☒	☐	☐	☐	☐	☐
Emissions of one or several of these five pollutants are an issue of concern in my country/ where the organisation operates	☒	☐	☐	☐	☐	☐
Emissions of one or several of these five pollutants are an issue in the area where I live/ where the organisation operates	☒	☐	☐	☐	☐	☐

2 To what extent are you aware of and informed about ...

	Highly aware of and informed	Somewhat aware of and informed	Not aware of or informed
...the NEC Directive's national emission reduction commitments applicable from 2020 to 2029 and from 2030 onwards?	☒	☐	☐
...the reporting requirements for Member States set by the NEC Directive?	☒	☐	☐
...the measures set by the National Air Pollution Control Programme (NAPCP) in your country?	☒	☐	☐
...the measures set by the NAPCPs of countries other than your own?	☒	☐	☐
...the need to specifically consider agricultural measures as set out in in Annex III of the NEC Directive?	☒	☐	☐
... the requirement of Member States to monitor the impacts of air pollution on terrestrial and aquatic ecosystems?	☒	☐	☐
... flexibilities from the revised Gothenburg Protocol that have been incorporated into the NEC Directive under Articles 5(1) - 5(4)?	☒	☐	☐
... wider EU environmental legislation?	☒	☐	☐

The following sections focus on gathering more in-depth views about the functioning of the NEC Directive. The questions are structured around the five evaluation criteria: relevance, effectiveness, efficiency, coherence, and EU added value.

Effectiveness

The questions seek to gather views on the degree to which the NEC Directive and implementation tools (e. g. reporting obligations) helped reduce emissions of the five air pollutants for which emission reduction commitments are set.

Please note that questions in this survey are numbered, but some questions only appear depending on the answer provided to previous questions. Therefore, question numbers may not be consecutive.

1 To what extent has the NEC Directive contributed to the achievement of better air quality, and a consequent reduction in risks for human health and the environment?

- ☐ Large impact
- ☒ Moderate impact

- ☐ Neutral or no impact
- ☐ Not applicable
- ☐ Don't know

2 In your opinion to what extent has the NEC Directive contributed to reducing emissions of the following pollutants?

	Large impact	Moderate impact	No impact	Don't know
SO ₂	☒	☐	☐	☐
NO _x	☐	☒	☐	☐
NM ₁₀	☐	☒	☐	☐
NH ₃	☐	☐	☒	☐
PM _{2.5}	☐	☒	☐	☐

3 Where emission reduction commitments have not yet been achieved in certain Member States, what do you think the reason for this is?

450 character(s) maximum

The commitments are target values rather than binding applications until 2030. This undermines the trajectory for lowering emissions and points to a lack of implementation of effective control and reduction programs. Because the target values are not binding, there is limited to no enforcement for Member States to lower emissions, as the Commission will only be able to enforce the Directive when the breaches are reported in 2032.

4 To what extent have the following requirements in the NEC Directive helped achieve the Directive's objectives?

	Greatly hindered	Somewhat hindered	Neutral	Somewhat helped	Greatly helped	Don't know
Definition of national emission reduction commitments	☐	☐	☐	☒	☐	☐
Development and submission of NAPCPs	☐	☐	☐	☒	☐	☐
Requirement for transboundary consultations as part of NAPCP development	☐	☐	☒	☐	☐	☐
Agricultural measures in Annex III part 2 of the Directive (see details in Introductory Section)	☐	☐	☒	☐	☐	☐

Submission of emission inventories	☐	☐	☐	☒	☐	☐
Submission of emission projections	☐	☐	☐	☒	☐	☐
Ecosystem monitoring and reporting	☐	☐	☒	☐	☐	☐

5 Please provide more details on your answer

	Please provide details
Development and submission of NAPCPs	Overall, the Directive provided improvements on the National Air Pollution Control Programme (NAPCP), which required MS to detail the policy options they considered for attaining their 2020 and 2030 ERCs and 2025 trajectory. However, there are also major shortcomings with the NAPCP and the level of detail provided by the MS in relation to their Policies and Measures (PaMs). The NAPCPs have not been sufficiently effective in reducing emissions sufficiently to meet the modest pre-2030 ERC targets.
The NAPCP template	
Requirement for transboundary consultations as part of NAPCP development	In many cases transboundary effects can negate any positive efforts made nationally or at local levels. The NEC directive is the only tool available to cut transboundary air pollution. However, this requirement had limited impact on achieving the Directive's objectives, because the legislation states that Member States shall conduct transboundary consultations "where appropriate", making this provision weak. Air pollution is transboundary by nature, making collaboration and consultation between Member States paramount to achieve the reduction commitments. However, the use of transboundary consultations is not sufficient at all.
Agricultural measures in Annex III part 2 of the Directive	While the agricultural measures in Annex III part 2 of the Directive may have contributed to reduction of emissions, they are not quantified. The uptake of the measures vary significantly between Member States and raises ambiguity about the added value these measures and the question of the extent to which these measures have added to the reduction of emissions is cannot be answered. Increasing the uptake through compulsory requirement to implement the most cost-effective measure would be a way forward.
Submission of emission inventories	The emission inventories are an essential element of the NECD. Independent validation and auditing of the inventories is key.

Submission of emission projections	Submission of emission projections is essential to adequately follow the reductions and for Member States to be able to adjust their NAPCPs accordingly. Transparency is a significant issue in the majority of Member States where insufficient information is provided on the methodologies, input datasets, and assumptions used for the emission projections. Additionally, accuracy is an issue due to the use of very simple methodologies for projections and the use of poor quality input data. Transboundary impacts were only reported by a few NAPCPs.
Ecosystem monitoring and reporting	Ecosystem monitoring and reporting is an important part of the NEC Directive to obtain an understanding of the environmental changes that occur with the reductions made by Member States. Particularly for NH₃, this is important due to the atmospheric interactions that can occur leading to an increase in NH₃ concentrations despite Member States reductions. There were varying discrepancies between Member States in terms of their 2023 data submission and the parameters submission in 2022, with differences in monitoring frequencies.

6 To what extent has the NEC Directive helped to improve the information and data available around air pollution and its impacts (e.g. reporting of emissions, ecosystem monitoring)?

	Significantly improved	Somewhat Improved	Neutral or no impact	Somewhat Worsened	Significantly worsened	I don't know
Emissions of the five pollutants	☒	☐	☐	☐	☐	☐
Contribution of source sectors to emissions of the five pollutants	☒	☐	☐	☐	☐	☐
Spatially disaggregated inventory data (emissions reported on a grid defined by geographical coordinates to show the distribution of emissions)	☒	☐	☐	☐	☐	☐
Pollution linked to large point sources (source of emissions that is precisely localised, e.g. power plants)	☒	☐	☐	☐	☐	☐
Effects of air pollutants on ecosystems	☐	☒	☐	☐	☐	☐
National policies and measures to reduce air emissions e.g. those reported in the NAPCPs	☒	☐	☐	☐	☐	☐

7 To what extent has the information and data made available around air pollution and its impacts been used to improve policy making at national, regional or local level (in particular for prioritising action and defining policy measures)?

	Significantly improved	Somewhat Improved	Neutral or no impact	Somewhat worsened	Significantly worsened	I don't know
Development and submission of NAPCPs	☐	☒	☐	☐	☐	☐
Submission of emission inventories	☐	☒	☐	☐	☐	☐
Submission of inventories for spatially disaggregated national emission inventories	☐	☒	☐	☐	☐	☐
Submission of inventories for large point source inventories	☐	☒	☐	☐	☐	☐
Submission of emission projections	☐	☒	☐	☐	☐	☐
Ecosystem monitoring and reporting	☐	☒	☐	☐	☐	☐

8 Do you feel the frequency in reporting the following items is appropriate?

	Not frequent enough	Frequency is appropriate	Too frequent	Don' t know
Development and submission of NAPCPs	☐	☒	☐	☐
Submission of emission inventories	☐	☒	☐	☐
Submission of inventories for spatially disaggregated national emission inventories	☐	☒	☐	☐
Submission of inventories for large point source inventories	☐	☒	☐	☐
Submission of emission projections	☐	☒	☐	☐
Ecosystem monitoring and reporting	☐	☒	☐	☐

9 Please provide explanation

Member State reporting is essential to observe the changes made and analyse the trend of air pollution over time. The frequency needs to be high enough to allow meaningful analysis of progress over time, for which 2 years is appropriate.

10 To what extent has the NEC Directive facilitated greater policy coordination...

	Significantly improved	Somewhat improved	Neutral or no impact	Somewhat worsened	Significantly worsened	Don't know
... between Member States	☐	☐	☒	☐	☐	☐
... between national and regional/local level authorities	☐	☒	☐	☐	☐	☐

11 To what extent did inter-ministry discussions and coordination between national, regional and local action take place, including when preparing NAPCPs and identifying PaMs.

- ☐ To a great extent
- ☐ To some extent
- ☐ They have not taken place
- ☐ I don't know

12 To what extent did consultation on transboundary air pollution issues take place when preparing NAPCPs and identifying PaMs

- ☐ To a great extent
- ☐ To some extent
- ☐ They have not taken place
- ☐ I don't know

14 To what extent have NAPCP reviews by the Commission affected a) the quality and b) effectiveness of the programmes

	Greatly improved	Somewhat improved	Neutral/no change	Somewhat deteriorated	Greatly deteriorated	Don't know
Quality	☐	☒	☐	☐	☐	☐
Effectiveness	☐	☒	☐	☐	☐	☐

15 Do you think other EU policies and strategies have affected emissions of the five main pollutants addressed by the NEC Directive? If so, how?

	Significantly reduced emissions	Reduced emissions	Increased emissions	Significantly increased emissions	Not affected	Not applicable	Don't know
Ambient Air Quality Directives	☐	☒	☐	☐	☐	☐	☐
Industrial Emissions Directive	☐	☒	☐	☐	☐	☐	☐
Zero Pollution Action Plan	☐	☐	☐	☐	☐	☐	☒
Common Agricultural Policy	☐	☐	☒	☐	☐	☐	☐
Nitrates Directive (see also this link)	☐	☒	☐	☐	☐	☐	☐
Methane Strategy (see also this link)	☐	☐	☐	☐	☐	☐	☒
Ecodesign Directive (see also this link)	☐	☒	☐	☐	☐	☐	☐
Renewable Energy Directive (see also this link)	☐	☐	☒	☐	☐	☐	☐
Energy Efficiency Directive (see also this link)	☐	☒	☐	☐	☐	☐	☐
REPowerEU	☐	☐	☒	☐	☐	☐	☐
Biodiversity Strategy	☐	☒	☐	☐	☐	☐	☐
Euro vehicle emission standards (see also this link)	☐	☒	☐	☐	☐	☐	☐
CO2 standards for cars and vans (see also this link)	☐	☒	☐	☐	☐	☐	☐
Non-Road Mobile Machinery legislation (Regulation (EU) 2016/1628 , see also this link)	☐	☒	☐	☐	☐	☐	☐
Other EU legislation (not covered above) – for example, European Climate law, Governance Regulation, Effort Sharing Regulation, or others?	☐	☐	☐	☐	☐	☐	☐
Other EU Strategy (not covered above)	☐	☐	☐	☐	☐	☐	☐

17 The NEC Directive sits alongside the Ambient Air Quality Directive and source specific legislation as part of the EU's clean air policy to deliver emission reductions and improved air quality. Please indicate your view as to what extent the NEC Directive ...

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
... is an important component of the overall clean air policy	☒	☐	☐	☐	☐
... has played a key role in delivering air pollutant emission reductions, alongside the wider clean air policy	☐	☒	☐	☐	☐
.... Has driven additional reductions in air pollutant emissions, over and above those delivered by the wider clean air policy	☐	☐	☐	☒	☐
... has helped ensure coherence within the clean air policy	☐	☒	☐	☐	☐
... has improved the efficiency of air pollutant emission reductions achieved by the clean air policy	☒	☐	☐	☐	☐

18 Please provide details

	Free text response
... is an important component of the overall clean air policy	The NEC Directive has been an important player in reducing some pollutants, particularly SO ₂ . However, there are important shortcomings of the Directive that need to be addressed. Specifically, the low reduction requirement for NH ₃ , flexibilities, and exclusion of important pollutants (i.e. methane)
... has played a key role in delivering air pollutant emission reductions, alongside the wider clean air policy	The NEC Directive specifies the percentage emission reduction for 27 Member States and 5 pollutants, relative to 2005 emissions. While this is key to deliver air pollutant reductions, these have not been used to model EU-wide air quality impacts. There is a need to quantify the emissions and their impact on air pollutant concentrations. These trends will show the impact of emission reduction on clean air.
.... has driven additional reductions in air pollutant emissions, over and above those delivered by the wider clean air policy	While there have been significant reductions in SO ₂ there is limited added value in terms of NH ₃ and other pollutants.
... has helped ensure coherence within the clean air policy	The fact that several MS were non-compliant with the 2008 AAQD standards in the last decade shows that the NEC Directive has not been coherent with the 2008 AAQD and its attainment deadlines.
... has improved the efficiency of air pollutant emission reductions achieved by the clean air policy	There is a NAPCPs play a role in improving air pollutant emission reductions and the requirement for monitoring and reporting is essential.

19 To what extent has additional action been taken **to date** at Member State level (over and above actions to implement the wider EU clean air policy) to meet emission reduction commitments (ERCs) for respectively 2020 to 2029, and 2030 and beyond, as defined in the NEC Directive?

	Significant additional effort	Some additional effort	Little additional effort	No additional effort	Don't know
2020-29 SO2 ERC	☐	☐	☐	☐	☐
2020-29 NOx ERC	☐	☐	☐	☐	☐
2020-29 PM2.5 ERC	☐	☐	☐	☐	☐
2020-29 NH3 ERC	☐	☐	☐	☐	☐
2020-29 NMVOC ERC	☐	☐	☐	☐	☐
2030+ SO2 ERC	☐	☐	☐	☐	☐
2030+ NOx ERC	☐	☐	☐	☐	☐
2030+ PM2.5 ERC	☐	☐	☐	☐	☐
2030+ NH3 ERC	☐	☐	☐	☐	☐
2030+ NMVOC ERC	☐	☐	☐	☐	☐

20 Please explain your responses above

	Please explain your responses above
2020-29 SO2 ERC	
2020-29 NOx ERC	
2020-29 PM2.5 ERC	
2020-29 NH3 ERC	
2020-29 NMVOC ERC	
2030+ SO2 ERC	
2030+ NOx ERC	
2030+ PM2.5 ERC	
2030+ NH3 ERC	
2030+ NMVOC ERC	

21 To what extent has the NEC Directive supported Member States to meet their international commitments under the [Gothenburg Protocol](#)

- ☒ Greatly supported
- ☐ Somewhat supported
- ☐ No effect
- ☐ Somewhat counterproductive
- ☐ Very counterproductive
- ☐ Don't know

22 Please explain your response above.

450 character(s) maximum

The Gothenburg protocol is not legally binding, so having a directive that mandates the reduction of emissions greatly supports Member States in achieving their international commitments.

23 In your opinion, are the Gothenburg Protocol (<https://unece.org/gothenburg-protocol>) related documents (guidelines, templates etc.) beneficial to the effective implementation of the NEC Directive? (see <https://www.ceip.at/reporting-instructions/annexes-to-the-2023-reporting-guidelines> and <https://www.eea.europa.eu/publications/emep-eea-guidebook-2023>)

	Very beneficial	Somewhat beneficial	Not beneficial	Not applicable	Don't know
EMEP Guidelines	☐	☒	☐	☐	☐
EMEP reporting templates	☐	☒	☐	☐	☐
EMEP/EEA Guidebook	☐	☒	☐	☐	☐
Guidance document on integrated sustainable nitrogen management	☐	☒	☐	☐	☐
Code of good practice for wood burning and small combustion installations	☐	☒	☐	☐	☐
Guidelines for estimation and measurement of emissions of volatile organic compounds	☐	☒	☐	☐	☐
Guidance Document on Emission Control Techniques for Mobile Sources	☐	☒	☐	☐	☐
Guidance document on control techniques for emissions of sulphur, NO _x , VOC, and particulate matter (including PM ₁₀ , PM _{2.5} and black carbon) from stationary sources	☐	☒	☐	☐	☐
Guidance document on economic instruments to reduce emissions of regional air pollutants	☐	☒	☐	☐	☐

Guidance document on national nitrogen budgets					
Guidance document for preventing and abating ammonia emissions from agricultural sources					
Guidance document on health and environmental improvements using new knowledge, methods and data					
United Nations Economic Commission for Europe Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions					

24 Please provide additional details, particularly if you indicated ‘not beneficial’

	Free text
EMEP Guidelines	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
EMEP reporting templates	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
EMEP/EEA Guidebook	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
Guidance document on integrated sustainable nitrogen management	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
Code of good practice for wood burning and small combustion installations	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
Guidelines for estimation and measurement of emissions of volatile organic compounds	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
Guidance Document on Emission Control Techniques for Mobile Sources	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.

Guidance document on control techniques for emissions of sulphur, NOx, VOC, and particulate matter (including PM10, PM2.5 and black carbon) from stationary sources	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
Guidance document on economic instruments to reduce emissions of regional air pollutants	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
Guidance document on national nitrogen budgets	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
Guidance document for preventing and abating ammonia emissions from agricultural sources	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
Guidance document on health and environmental improvements using new knowledge, methods, and data	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.
United Nations Economic Commission for Europe Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions	Since these are just guidelines and not a harmonised, binding document, Member States did not have to use them. Their effectiveness can therefore be questioned. These would be more effective if they were used by all Member States.

25 How have the following flexibilities under Articles 5(1) – 5(4) of the Directive affected emission reductions?

	Greatly hindered	Somewhat hindered	Neutral	Somewhat helped	Greatly helped	Don't know	Not applicable / not used
Inventory adjustments (Article 5.1)	☐	☐	☒	☐	☐	☐	☐
Extreme weather events (Article 5.2)	☐	☐	☐	☐	☐	☐	☒
Compensation of non-compliance with emission reduction of another pollutant (Article 5.3)	☐	☐	☐	☐	☐	☐	☒
Unforeseen disruption of energy supply or production (Article 5.4)	☐	☐	☐	☐	☐	☐	☒

26 Please add additional details to your response above.

	Free text
Inventory adjustments (Article 5.1)	As of yet, this is the only flexibility under Article 5 that we are aware has been used. Adjustment of inventories is necessary when improved methods are used. However, this should be monitored to ensure Member States apply the most cost-effective reductions to reduce emissions as a result.
Extreme weather events (Article 5.2)	
Compensation of non-compliance with emission reduction of another pollutant (Article 5.3)	
Unforeseen disruption of energy supply or production (Article 5.4)	

27 Are the measures included in Annex III Part 2 of the NEC Directive effective for achieving the emission reduction commitments for NH₃?

	Very effective	Somewhat effective	Not effective	Don't know
A1 - Member States shall establish a national advisory code of good agricultural practice to control ammonia emissions	☐	☒	☐	☐
A2 - Member States may establish a national nitrogen budget to monitor the changes in overall losses of reactive nitrogen from agriculture, including ammonia, nitrous oxide, ammonium, nitrates and nitrites, based on the principles set out in the UNECE Guidance Document on Nitrogen Budgets	☐	☒	☐	☐
A3 - Member States shall prohibit the use of ammonium carbonate fertilisers and may reduce ammonia emissions from inorganic fertilisers by using the specified approaches	☐	☒	☐	☐
A4 - Member States may reduce ammonia emissions from livestock manure by using the specified approaches	☐	☒	☐	☐

28 Please provide any further commentary to support your answer (in particular, if you selected “not effective” for any of the above).

	Free text
A1 - Member States shall establish a national advisory code of good agricultural practice to control ammonia emissions	While this has been effective by providing guidelines for good agricultural practice, many Member States have difficulty with ammonia emissions, showing that there wasn't enough ambition for this reduction.
A2 - Member States may establish a national nitrogen budget to monitor the changes in overall losses of reactive nitrogen from agriculture, including ammonia, nitrous oxide, ammonium, nitrates and nitrites, based on the principles set out in the UNECE Guidance Document on Nitrogen Budgets	Understanding nitrogen flows helps identify the policies that are needed to mitigate these. However, the national nitrogen budgets were not mandatory and had to be coupled with further action, disincentivizing action.
A3 - Member States shall prohibit the use of ammonium carbonate fertilisers and may reduce ammonia emissions from inorganic fertilisers by using the specified approaches	Ammonium carbonate was not a common fertiliser in 2016. Regarding the other fertiliser approaches the uptake varies significantly between member states.
A4 - Member States may reduce ammonia emissions from livestock manure by using the specified approaches	There are significant variations in uptake between Member States.

29 Have the national measures that have been taken to reduce emissions from the agriculture sector, been effective to achieve the emission reduction commitments for NH3?

- ☐ Very effective
- ☐ Somewhat effective
- ☒ Not effective
- ☐ Don't know

30 Please provide any further commentary to support your answer (in particular, if you selected “not effective” above). This can include a short description of national measures.

450 character(s) maximum

Many Member States have not reached with ERCs, showing that the national measures have not been sufficiently effective in reducing emissions from the agriculture sector in terms of NH3.

31 To what extent have other external factors (other than the wider EU policy landscape) been supportive or counterproductive to the achievement of the NEC Directive's objectives?

	Greatly supportive	Somewhat supportive	No effect	Somewhat counterproductive	Greatly counterproductive	Don't know
UNFCCC	☐	☒	☐	☐	☐	☐
Global biodiversity strategy	☐	☐	☐	☐	☐	☐
WHO revised global air quality guidelines	☒	☐	☐	☐	☐	☐
Invasion of Ukraine and change in energy markets	☐	☐	☐	☒	☐	☐
Diesel gate	☐	☐	☐	☐	☒	☐
Increased knowledge (e.g. on the condensable part of particulate matter, on black carbon, on soil emissions, on the interactions between ozone and black carbon)	☒	☐	☐	☐	☐	☐
Low Emission Zones	☐	☒	☐	☐	☐	☐
Increased awareness among population on air pollution impacts, including thanks to apps, citizen science	☐	☒	☐	☐	☐	☐
Economic growth	☐	☐	☐	☐	☐	☐
COVID-19 pandemic	☐	☒	☐	☐	☐	☐
High inflation	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐

Efficiency

This section gathers your views on whether the NEC Directive is achieving its objectives in a cost-efficient manner.

Please note that questions in this survey are numbered, but some questions only appear depending on the answer provided to previous questions. Therefore, question numbers may not be consecutive.

1 What have been the most significant costs associated with the NEC Directive to date?

	High costs	Moderate costs	Low /minimal costs	Not applicable	Don't know
Administrative costs for the development of NAPCPs (Member States)	☐	☐	☐	☐	☐
Administrative costs of other reporting obligations (Member States, e.g. emission inventories and projections)	☐	☐	☐	☐	☐
Administrative costs of monitoring and reporting ecosystem effects (Member States)	☐	☐	☐	☐	☐
Administrative costs for business	☐	☐	☐	☐	☐
Abatement costs (emission reduction measures) – Member States	☐	☐	☐	☐	☐
Abatement costs (emission reduction measures) – business	☐	☐	☐	☐	☐
Other (please specify)	☐	☐	☐	☐	☐

3 How significant is the administrative cost associated with each requirement under the Directive (relative to other requirements)?

	Very high	High	Moderate	Small	Negligible	Don't know
Development and submission of emissions inventories and informative inventory reports	☐	☐	☐	☐	☐	☐
Development and submission of spatially disaggregated national emission inventories	☐	☐	☐	☐	☐	☐
Development and submission of large point source inventories	☐	☐	☐	☐	☐	☐

Development and submission of emissions projections	☐	☐	☐	☐	☐	☐
Development and submission of NAPCPs	☐	☐	☐	☐	☐	☐
Monitoring of ecosystems impacts	☐	☐	☐	☐	☐	☐
Development of Code for Agricultural Practice to control ammonia emissions (Annex III Part 2, A, point 1)	☐	☐	☐	☐	☐	☐
Participation in Expert Groups	☐	☐	☐	☐	☐	☐
Other (please specify)	☐	☐	☐	☐	☐	☐

5 Do you have an estimate of the number of person days or euro spent (e.g. in case activity is outsourced) per action it takes to comply with each requirement for your Member State?

- ☐ Yes
☐ No

8 Did the PaM tool have an influence on the cost/ effort of providing information on policies and measures?

- ☐ Yes, it greatly reduced the burden
☐ Yes, it somewhat reduced the burden
☐ Yes, it increased somewhat the burden
☐ Yes, it increased the burden greatly
☐ No
☐ I don't know

9 Are other entities (i.e. other than the Competent Authorities, e.g. businesses, citizens) involved in activities to meet these requirements of the NEC Directive (i.e. non-ERC obligations)? If so, who is engaged and how, and how significant is the administrative burden on these other entities?

10 How significant were any one-off costs associated with implementing these administrative requirements following revisions to the which entered into force in December 2016 for your Member State (relative to the ongoing burden)? Please describe what action or activity the costs were associated with, an indication of their significance, and if possible quantitative estimates of costs (in terms of person time or Euros)

450 character(s) maximum

11 Where Member States have taken additional action to date (over and above action to implement wider EU clean air policy) to meet ERCs, how significant were the associated costs of this additional effort to date (relative to the costs of implementing the EU clean air policy)?

	Very high costs	High costs	Moderate costs	Low costs	No / Negligible costs	Don't know

2020-29 ERCs	☐	☐	☐	☐	☐	☐
2030+ ERCs	☐	☐	☐	☐	☐	☐

12 Please provide explanatory comments for your answer above

450 character(s) maximum

13 To what extent have the total costs of measures taken to abate emissions fallen on different stakeholder groups?

	Very high costs	High cost	Moderate cost	Low cost	No /negligible cost	Don't know
Large businesses	☐	☐	☐	☐	☐	☐
SMEs	☐	☐	☐	☐	☐	☐
Citizens	☐	☐	☐	☐	☐	☐
Vulnerable citizens	☐	☐	☐	☐	☐	☐
National government	☐	☐	☐	☐	☐	☐
Regional government	☐	☐	☐	☐	☐	☐
Local government	☐	☐	☐	☐	☐	☐
Other public authorities	☐	☐	☐	☐	☐	☐
NGOs	☐	☐	☐	☐	☐	☐
Other (please specify)	☐	☐	☐	☐	☐	☐

15 Do you have any information on costs of abatement measures?

- ☐ Yes
☐ No

18 To what extent has the NEC Directive delivered the following benefits?

	To a large extent	To some extent	To no extent	Not applicable	Don't know
Protecting human health	☐	☒	☐	☐	☐
Protecting the environment (e.g. ecosystems)	☐	☒	☐	☐	☐

Reducing economic costs linked to air pollution (e.g. health costs, lost working days, crop losses)	☐	☒	☐	☐	☐
Reduction in emission of greenhouse gases	☐	☒	☐	☐	☐
Energy or fuel cost savings	☐	☒	☐	☐	☐
Other (please specify)	☐	☐	☐	☐	☐

20 What has been the overall impact of the NEC Directive on air quality for the following groups?

	Greatly benefited	Somewhat benefited	No benefit	Somewhat detrimental	Greatly detrimental	Not applicable	Don't know
All citizens	☒	☐	☐	☐	☐	☐	☐
Vulnerable citizens (e.g. elderly, children, people with disabilities)	☒	☐	☐	☐	☐	☐	☐
Citizens living in urban areas	☒	☐	☐	☐	☐	☐	☐
Citizens living in rural areas	☒	☐	☐	☐	☐	☐	☐

21 Overall, how have the benefits of the NEC Directive compared to the costs of its implementation to date?

- ☒ Benefits greatly outweigh the costs
- ☐ Benefits somewhat outweigh the costs
- ☐ Costs somewhat outweigh the benefits
- ☐ Costs greatly outweigh the benefits
- ☐ Don't know

22 How will the benefits of the NEC Directive compare to the costs of its implementation once the 2030+ ERCs are achieved?

- ☒ Benefits will greatly outweigh the costs
- ☐ Benefits will somewhat outweigh the costs
- ☐ Costs will somewhat outweigh the benefits
- ☐ Costs will greatly outweigh the benefits
- ☐ Don't know

23 The NEC Directive requires Member States to develop NAPCPs and policies and measures (PaMs) to reach their emission reduction commitments. To what extent have these requirements supported the identification of the most cost-effective actions to reduce emissions and prioritised their uptake?

- ☐ Greatly supported
- ☒ Somewhat supported
- ☐ Somewhat impeded
- ☐ Greatly impeded
- ☐ Don't know

24 To what extent has the NEC Directive helped Member States to deliver on their international commitments under the Gothenburg Protocol more efficiently?

	Large efficiency improvements	Some efficiency improvements	No / neutral effect	Some additional inefficiency	Large additional inefficiency	Not applicable	Don't know
Planning and design of policy to abate emissions	☒	☐	☐	☐	☐	☐	☐
Cost of measures to abate emissions	☒	☐	☐	☐	☐	☐	☐
Development of emissions inventories	☒	☐	☐	☐	☐	☐	☐
Development of emissions projections	☒	☐	☐	☐	☐	☐	☐
Reporting of emissions inventories and projections	☒	☐	☐	☐	☐	☐	☐

25 Do you believe any of the requirements of the NEC Directive carry unnecessary administrative costs or are too complex or difficult to apply? If so, please select the requirement and the reason for why it is overly burdensome.

	Costs of action are higher than necessary and could be streamlined to reduce inefficiency	The benefit of the action (in terms of supportive the achievement of the overall NEC Directive objectives) taken is not justified by the administrative cost incurred (i.e. it is not cost-effective)	Actions do not capture potential synergies with actions required by other legislation
Development and submission of emissions inventories and informative inventory reports	☐	☐	☐
Development and submission of spatially disaggregated national emission inventories	☐	☐	☐
Development and submission of large point source inventories	☐	☐	☐
Development and submission of emissions projections	☐	☐	☐
Development and submission of NAPCPs	☐	☐	☐
Monitoring of ecosystems impacts	☐	☐	☐
Development of Code for Agricultural Practice to control ammonia emissions (Annex III Part 2)	☐	☐	☐
Participation in Expert Groups	☐	☐	☐

Other (please specify)	☐	☐	☐
------------------------	-----------------------	-----------------------	-----------------------

27 Where you have identified that any of the requirements of the NEC Directive carry unnecessary administrative costs or are too complex or difficult to apply, please indicate the significance of the additional burden associated

	Very high additional burden	High additional burden	Moderate additional burden	Small additional burden	Very small additional burden
Development and submission of emissions inventories and informative inventory reports	☐	☐	☐	☐	☐
Development and submission of spatially disaggregated national emission inventories	☐	☐	☐	☐	☐
Development and submission of large point source inventories	☐	☐	☐	☐	☐
Development and submission of emissions projections	☐	☐	☐	☐	☐
Development and submission of NAPCPs	☐	☐	☐	☐	☐
Monitoring of ecosystems impacts	☐	☐	☐	☐	☐
Development of Code for Agricultural Practice to control ammonia emissions (Annex III Part 2)	☐	☐	☐	☐	☐
Participation in Expert Groups	☐	☐	☐	☐	☐
Other (please specify)	☐	☐	☐	☐	☐

29 Where you have identified that any of the requirements of the NEC Directive carry unnecessary administrative costs or are too complex or difficult to apply, please describe why costs are unnecessary or requirements are overly burdensome and how costs or burden could be reduced

	Free text
Development and submission of emissions inventories and informative inventory reports	
Development and submission of spatially disaggregated national emission inventories	
Development and submission of large point source inventories	
Development and submission of emissions projections	
Development and submission of NAPCPs	
Monitoring of ecosystems impacts	
Development of Code for Agricultural Practice to control ammonia emissions (Annex III Part 2)	
Participation in Expert Groups	
Other (please specify)	

30 If you answered "other" above, please specify

450 character(s) maximum

31 To what extent have other external factors (other than the wider EU Policy landscape) influenced the cost of achieving the NEC Directive's objectives

	Significantly increased costs	Somewhat increased costs	Neutral /no influence	Somewhat decreased costs	Significantly decreased costs	Don't know
UNFCCC	☐	☐	☐	☒	☐	☐
Global biodiversity strategy	☐	☐	☐	☐	☐	☐
WHO revised global air quality guidelines	☐	☐	☐	☐	☐	☐
Invasion of Ukraine and change in energy markets	☐	☒	☐	☐	☐	☐
Diesel gate	☐	☒	☐	☐	☐	☐
Increased knowledge (e.g. on the condensable part of particulate matter, on black carbon, on soil emissions, on the interactions between ozone and black carbon)	☐	☐	☐	☐	☐	☐
Low Emission Zones	☐	☐	☐	☒	☐	☐
Increased awareness among population on air pollution impacts, including thanks to apps, citizen science	☐	☐	☐	☐	☐	☐
Economic growth	☐	☐	☐	☐	☐	☐
COVID-19 pandemic	☐	☐	☐	☒	☐	☐
High inflation	☐	☐	☐	☐	☐	☐

Coherence

This section explores the coherence of the Directive with other EU policies. It looks at ‘internal coherence’ on how the various components of the Directive operate together to achieve its objectives, as well as ‘external coherence’ in relation to other EU policies or international agreements.

Please note that questions in this survey are numbered, but some questions only appear depending on the answer provided to previous questions. Therefore, question numbers may not be consecutive.

1 Please comment on internal coherence/clarity of the Articles of the NEC Directive

	Is coherent /clear	Is not coherent /clear	Don't know
Article 1 - Objectives and subject matter	☐	☐	☐
Article 2 - Scope	☐	☐	☐
Article 3 - Definitions	☐	☐	☐
Article 4 - National emission reduction commitments	☐	☐	☐
Article 5 - Flexibilities	☐	☐	☐
Article 6 - National air pollution control programmes	☐	☐	☐
Article 7 - Financial support	☐	☐	☐
Article 8 - National emission inventories and projections, and informative inventory reports	☐	☐	☐
Article 9 - Monitoring air pollution impacts	☐	☐	☐
Article 10 - Reporting by Member States	☐	☐	☐
Article 11 - Reports by the Commission	☐	☐	☐
Article 12 - European Clean Air Forum	☐	☐	☐
Article 13 - Review	☐	☐	☐
Article 14 - Access to information	☐	☐	☐
Article 15 - Cooperation with third countries and coordination within international organisations	☐	☐	☐
Article 18 - Penalties	☐	☐	☐

2 Please provide comments if you selected “is not coherent/clear”

	Free text
Article 1 - Objectives and subject matter	
Article 2 - Scope	
Article 3 - Definitions	
Article 4 - National emission reduction commitments	
Article 5 - Flexibilities	
Article 6 - National air pollution control programmes	
Article 7 - Financial support	
Article 8 - National emission inventories and projections, and informative inventory reports	
Article 9 - Monitoring air pollution impacts	
Article 10 - Reporting by Member States	
Article 11 - Reports by the Commission	
Article 12 - European Clean Air Forum	
Article 13 - Review	
Article 14 - Access to information	
Article 15 - Cooperation with third countries and coordination within international organisations	
Article 18 - Penalties	

3 Do you agree that the reporting deadlines (for the reporting of different datasets and information) are structured in a way that allows Member States to report high quality and up to date information?

- ☒ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

4 To what extent do you think the NEC Directive is coherent with the following policies or initiatives? Please also consider reporting requirements in this context.

	Highly coherent	Somewhat coherent	Somewhat incoherent	Highly incoherent	Not applicable	Don't know
Ambient Air Quality Directives	☐	☒	☐	☐	☐	☐
Industrial Emissions Directive	☐	☐	☒	☐	☐	☐
Zero Pollution Action Plan	☐	☐	☒	☐	☐	☐
Common Agricultural Policy	☐	☐	☐	☒	☐	☐
Nitrates Directive (see also this link)	☐	☐	☒	☐	☐	☐
Methane Strategy (see also this link)	☐	☐	☐	☒	☐	☐
Ecodesign Directive (see also this link)	☐	☒	☐	☐	☐	☐
Renewable Energy Directive (see also this link)	☐	☐	☐	☐	☐	☐
Energy Efficiency Directive (see also this link)	☐	☒	☐	☐	☐	☐
REPowerEU	☐	☐	☐	☐	☐	☐
Biodiversity Strategy	☐	☐	☒	☐	☐	☐
Euro vehicle emission standards (see also this link)	☐	☒	☐	☐	☐	☐
CO2 standards for cars and vans (see also this link)	☐	☒	☐	☐	☐	☐
Non-Road Mobile Machinery legislation (Regulation (EU) 2016/1628 , see also this link)	☐	☒	☐	☐	☐	☐
Other EU legislation (not covered above) – for example, European Climate law, Governance Regulation, Effort Sharing Regulation, or others?	☐	☐	☐	☐	☐	☐
Other EU Strategy (not covered above)	☐	☐	☐	☐	☐	☐

6 Where you have identified a potential area of incoherence, please elaborate on the nature of the incoherence between the NEC Directive and the identified legislation or policy.

Agriculture is a sector that lacks EU comprehensive policy to prevent air pollution, despite being a large contributor to emissions. Only poultry and pig facilities are included in the Industrial Emissions Directive (IED). Cattle contributes to 60% of the total EU ammonia emissions. Its exclusion from the clean air policy is completely incoherent.

Additionally, the CAP direct payments do not include instruments to reduce ammonia emissions. Continuing to allow coupled support to livestock and higher livestock numbers increases ammonia emissions.

A significant incoherence between the NEC Directive and the IED is that NEC Directive emissions ceilings exceedances are not explicitly required to be taken into account when setting permit conditions including emission limit values for individual IED installations. Given the contribution of industry emissions this is a missed opportunity. National air pollution control programmes should also rely more heavily on the outcomes of IED Best Available Techniques conclusions.

7 Has coherence with wider EU legislation changed over time? If yes has this improved or worsened? If so, how?

In your answer, please reflect on any recent revisions of the policies above that influenced coherence with the NEC Directive.

450 character(s) maximum

The Industrial Emissions Directive and the Ambient Air Quality Directive were updated in 2023 and 2024 respectively. While they form distinct parts of the air quality aquis, they have several points of complementarity. Therefore, the ambitious but pragmatic revision of the AAQD and IED should be supplemented by an ambitious but pragmatic review of the NEC Directive, to ensure that levels of ambition are coherent.

8 Has the Common Agricultural Policy supported the implementation of the measures for the agriculture sector in Annex III Part 2 of the NEC Directive and achieving the emission reduction commitments for NH3?

- ☐ Significant positive influence
- ☒ Somewhat positive influence
- ☐ No influence
- ☐ Somewhat negative influence
- ☐ Significant negative influence
- ☐ Don't know

9 Please elaborate on the answer you provided above

450 character(s) maximum

Fertiliser use has been reduced in some Member States using eco schemes. Additionally measures in Annex III part 2 are supported by rural development programmes. The CAP also has provisions to support Member State investment in reduction of ammonia emissions, but since actions are voluntary their uptake are limited.

10 To what extent do you think that EU funding (e.g. grants) has contributed to the objectives of the NEC Directive? The question refers to EU funding only.

	Significant positive influence	Somewhat positive influence	No influence	Somewhat negative influence	Significant negative influence	Don' t know
LIFE Programme	☒	☐	☐	☐	☐	☐
Horizon	☒	☐	☐	☐	☐	☐
Recovery and Resilience Facility	☐	☐	☐	☐	☐	☐
Funding under regional policy (e.g. regional development and cohesion funds)	☐	☐	☐	☐	☐	☐
Connecting Europe Facility funding (transport infrastructure)	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐

12 Please elaborate on your answer, specifying which EU funding stream you are commenting on

450 character(s) maximum

The LIFE, Horizon, and preceding framework programmes have funded research on modelling, monitoring, impacts and policy implementation of air pollution, particularly in support of the development of the AAQD and the NECD.

13 Did you benefit from EU funding to reduce air emissions?

- ☐ Yes
☐ No
☒ Not applicable

17 In your opinion, which air pollutant or sector requires the most support from public funding to reach the objectives of the NEC Directive?

450 character(s) maximum

18 Has the non-inclusion of methane in the NEC Directive...

	yes	no	maybe	don't know
... limited the reduction of methane emissions from agriculture?	☒	☐	☐	☐
... limited the reduction of methane emissions from waste?	☒	☐	☐	☐
... limited the reduction of methane emissions from energy?	☒	☐	☐	☐
... limited the reduction of ozone levels?	☒	☐	☐	☐

19 Please provide details

450 character(s) maximum

Methane advances global warming and climate change and affects eco-systems. 50% of EU methane emissions come from farming. It is a precursor of ozone, causing health harm. The EC originally included agricultural NH3 and methane in its proposal, but the agriculture lobby succeeded in removing methane and limit NH3 reductions. Around 80% of EU NH3 comes from 5% of farms. Excluding methane in the NECD has led to an inadequate reduction in the EU.

20 Has the non-inclusion of methane into the NEC Directive ensured greater or lesser coherence of the NEC Directive with other policies? Please specify the policies concerned

450 character(s) maximum

Not including methane in the NEC Directives lead to less coherence with the Zero Pollution Action Plan, as it hinders Member States from reaching low ozone levels.

21 To what extent does the NEC Directive align with the EU's and Member State's commitments under the Gothenburg Protocol?

- ☐ Complete alignment

- ☐ High alignment
- ☒ Moderate alignment
- ☐ Low alignment
- ☐ Complete misalignment
- ☐ Don't know

22 Are there any areas of divergence between the NECD and Gothenburg Protocol that create ambiguity, unnecessary burden and/or a risk that the EU's commitments will not be met?

	High divergence	Moderate divergence	Low divergence	No divergence	Don' t know
Scope of sources	☐	☐	☐	☒	☐
Geographical boundaries	☐	☐	☐	☒	☐
Flexibilities (i.e. inventory adjustments and other flexibilities)	☐	☐	☐	☒	☐
Reporting obligations	☐	☐	☐	☒	☐
Target dates	☒	☐	☐	☐	☐
Definitions and terminology	☐	☐	☐	☒	☐
Other	☐	☐	☐	☐	☐

23 Where you have identified areas where NECD and Gothenburg Protocol diverge, please elaborate the nature of the divergence and its importance

	Free text
Scope of sources	
Geographical boundaries	
Flexibilities (i.e. inventory adjustments and other flexibilities)	
Reporting obligations	
Target dates	While NECD have targets 2030 and beyond this is still not decided in GP.
Definitions and terminology	
Other	

24 Have the requirements for ecosystem monitoring under Article 9 of the NEC Directive proved coherent with other monitoring programmes?

- ☐ Fully coherent
☒ Somewhat coherent
☐ Somewhat incoherent
☐ Highly incoherent
☐ Don't know

25 Please elaborate on your answer above, specifying the monitoring system concerned

450 character(s) maximum

Linking NECD ecosystem monitoring with the requirements of the Habitats Directive (HD) can be difficult. Article 11 HD mandates monitoring the conservation status of habitat types in Annex I. While the NEC Directive imposes mandates monitoring and reporting, the structure of monitoring networks, including size, location, type and the data collected and reported remains non-mandatory. Some ecosystem types continue to be underrepresented under NECD

Relevance

This section explores whether the NEC Directive's objectives and requirements are still relevant considering changes in needs and context.

Please note that questions in this survey are numbered, but some questions only appear depending on the answer provided to previous questions. Therefore, question numbers may not be consecutive.

1 The emission reduction commitments for the five pollutants in my country are ...

	Too ambitious	Appropriate	Too lenient	I don't know
NOx	☐	☐	☒	☐
NMVOCs	☐	☐	☒	☐
SO2	☐	☐	☒	☐
NH3	☐	☐	☒	☐
PM2.5	☐	☐	☒	☐

2 The policies and measures introduced in my country to reduce emissions of the following air pollutants are ...

	Too ambitious	Appropriate	Too lenient	I don't know
NOx	☐	☐	☒	☐
NMVOCs	☐	☐	☒	☐
SO2	☐	☐	☒	☐

NH3	☐	☐	☒	☐
PM2.5	☐	☐	☒	☐

3 The agricultural measures listed in Annex III part 2 of the Directive are...

- ☐ Too ambitious
- ☐ Appropriate
- ☒ Too lenient
- ☐ Don't know

4 Do you agree with the following statements?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Don't know
Air pollution is still having a significant detrimental effect on human health and the environment in the EU	☒	☐	☐	☐	☐	☐
The level of emission reduction commitments is still appropriate	☐	☐	☐	☐	☒	☐
The range of air pollutants covered by emission reduction commitments is still appropriate	☐	☐	☐	☐	☒	☐
The range of air pollutants included for reporting only is still relevant (e.g. heavy metals, black carbon, persistent organic pollutants, etc. – see Annex I of the Directive)	☐	☐	☐	☒	☐	☐
The NEC Directive is still a relevant tool to comply with EU and Member State international commitments (Gothenburg Protocol)	☐	☒	☐	☐	☐	☐
There is still insufficient coordination between	☐	☒	☐	☐	☐	☐

Member States to effectively design and deliver air pollution policy						
There is still insufficient coordination between national, regional, and local levels within Member States to effectively design and deliver air pollution policy						
There is still insufficient capacity at regional and local level to effectively design and deliver air pollution policy						
Emissions reporting is still appropriate and relevant						
Ecosystem monitoring and reporting under the NEC Directive is still appropriate and relevant						

5 Have any other needs emerged which should be addressed by the NEC Directive?

450 character(s) maximum

Revise and strengthen the ERCs for 2030, and add new ERCs for additional pollutants, especially for methane in line with new scientific evidence on methane as ozone precursor and ozone impact on health and ecosystems. The general lack of compliance (11 MS in 2022) suggests that better enforcement mechanisms are needed. For example, an access to justice provision such as that in the AAQD, and a clarified and enhanced penalty provision.

6 Have there been any changes in the following areas since the NEC Directive was implemented that have impacted on its objectives?

	Significantly undermined	Undermined	Neutral	Strengthened	Significantly strengthened	Don't know
Changes in understanding of risks of air pollution	☐	☐	☐	☐	☒	☐
Changes in methodologies to assess risks for human health	☐	☐	☐	☐	☒	☐
Changes in data or approaches to assess emissions and sources	☐	☐	☐	☐	☒	☐
Emission abatement techniques (range, cost, feasibility, availability, etc)	☐	☐	☐	☒	☐	☐
Related policy	☐	☐	☐	☐	☒	☐
Other (please specify)	☐	☐	☐	☐	☐	☐

8 Please elaborate on your answer

450 character(s) maximum

9 Is the range of air pollutants covered by emission reduction commitments still relevant?

- ☐ Yes
- ☒ No
- ☐ I don't know

10 Please expand on your answer if you selected 'no'

450 character(s) maximum

Pollutants such as methane should be added. Also, mercury should be added with ERCs.

11 the range of air pollutants (e.g., heavy metals) mandatorily reported still relevant?

See [this link to Annex I](#) for more information

- ☐ Yes
- ☒ No
- ☐ I don't know

12 Please expand on your answer if you selected 'no'

450 character(s) maximum

Methane should be added.

13 Is the range of voluntarily reported air pollutants still relevant?

450 character(s) maximum

Legally binding levels are more effective than voluntary action.

14 With regard to the measures set out for the agriculture sector in Part 2 of Annex III of the NEC Directive, are the measures still relevant in light of regulatory, technical and scientific developments?

	Yes	No	Don't know
A1 - Member States shall establish a national advisory code of good agricultural practice to control ammonia emissions	☒	☐	☐
A2 - Member States may establish a national nitrogen budget to monitor the changes in overall losses of reactive nitrogen from agriculture, including ammonia, nitrous oxide, ammonium, nitrates and nitrites, based on the principles set out in the UNECE Guidance Document on Nitrogen Budgets	☒	☐	☐

A3 - Member States shall prohibit the use of ammonium carbonate fertilisers and may reduce ammonia emissions from inorganic fertilisers by using the specified approaches			
A4 - Member States may reduce ammonia emissions from livestock manure by using the specified approaches			

15 Please provide more details

	Free text
A1 - Member States shall establish a national advisory code of good agricultural practice to control ammonia emissions	The national advisory code of good agricultural practice are a good baseline for the action, however more ambition is needed.
A2 - Member States may establish a national nitrogen budget to monitor the changes in overall losses of reactive nitrogen from agriculture, including ammonia, nitrous oxide, ammonium, nitrates and nitrites, based on the principles set out in the UNECE Guidance Document on Nitrogen Budgets	The measure is still relevant, but one point to note is the article states that “Member States *may* establish a national nitrogen budget”. This led to many Member States not applying this measure. This is a need in order to reduce the nitrogen emissions in alignment with other reduction commitments and reduce overall air pollution.
A3 - Member States shall prohibit the use of ammonium carbonate fertilisers and may reduce ammonia emissions from inorganic fertilisers by using the specified approaches	A stronger regulation of urea is needed
A4 - Member States may reduce ammonia emissions from livestock manure by using the specified approaches	Livestock manure is a major source of NH3 emissions, making this provision integral to control ammonia emissions. This needs to be strengthened for meaningful impact. It is important to note that this article states that “Member States *may* reduce ammonia” from livestock instead of “should”.

16 Is the split of mandatory and optional measures set out for the agriculture sector in Part 2 of Annex III of the NEC Directive still relevant?

- ☐ Yes
☐ Maybe
☒ No
☐ Don't know

17 Please provide details (in particular if you replied “no” in the previous question)

450 character(s) maximum

Legally binding provisions need to be added to the agricultural sector in part 2 of Annex III of the Directive. Additionally, to align with the update of the Gothenburg Protocol, which is updating guidance on agricultural ammonia emission reduction/measures, the NEC Directive needs to be revised accordingly.

18 Certain sources of emissions are not counted towards achieving emission reduction commitments. Has this undermined achieving the objectives of the NEC Directive?

(please note that the questionnaire contains a section dedicated to these sources of emissions)

	Significantly undermined	Somewhat undermined	No impact	Not applicable	Don't know
NOx, NMVOC emissions during manure management	☒	☐	☐	☐	☐
NOx, NMVOC emissions from agricultural soils (for example from fertiliser application)	☒	☐	☐	☐	☐
Aviation at cruise level (beyond take-off and landing)	☒	☐	☐	☐	☐
International maritime traffic	☒	☐	☐	☐	☐

19 Do you consider that the scope of ecosystem types identified for monitoring air pollution impacts (see Article 9 of the NEC Directive, which refers to freshwater, natural and semi-natural habitats and forest ecosystem types) is still relevant and complete?

450 character(s) maximum

Yes, but the make-up of the monitoring networks (number, location, type, data collected) and actual reported data remain non-mandatory. Although the total number of cropland, wetland, and heathland/shrubland sites has grown since 2018, these ecosystem types are still under-represented. To enhance the network's representativeness, additional sites from these ecosystems are needed.

20 Do you consider that the list of key ecosystem impacts associated with air pollution and the related indicators (see Annex V of the NEC Directive) is still relevant and complete?

450 character(s) maximum

Regions with high deposition and significant critical load exceedance lack adequate monitoring or have very limited coverage. Monitoring ozone effects on non-woody species seems concentrated in areas with low to moderate ozone levels, where high ozone fluxes are typically observed. A risk-based and cost-effectiveness

approach is crucial to improve the representation of sensitive habitats and ecosystem types in monitoring efforts.

21 How has the 'optional' nature of the ecosystem monitoring requirements under Annex V affected the provision of useful information to policy makers?

- ☒ Significantly undermined
- ☐ Somewhat undermined
- ☐ Neutral/no impact
- ☐ Somewhat supported
- ☐ Greatly supported

EU added value

Please note that questions in this survey are numbered, but some questions only appear depending on the answer provided to previous questions. Therefore, question numbers may not be consecutive.

1 To what extent do you agree or disagree with the following statements?

	Completely agree	Somewhat agree	Neutral	Somewhat disagree	Completely disagree
Transboundary pollution remains a significant source of air pollution across EU Member States.	☒	☐	☐	☐	☐
EU level legislation is necessary to effectively reduce emissions of the air pollutants addressed in the NEC Directive.	☒	☐	☐	☐	☐
Significant variation in air pollution and the associated damage costs (to health etc.) across Member States could occur in the absence of the NEC Directive.	☐	☒	☐	☐	☐
Significant variation could occur in the absence of the NEC Directive across EU Member States in the adjustment costs associated with complying with emission reduction commitments	☐	☒	☐	☐	☐
The risk of EU Member States not complying with their commitments under the					

Gothenburg Protocol would be higher in the absence of the NEC Directive.	☒	☐	☐	☐	☐
The cost of compliance with International commitments would be higher in the absence of the NEC Directive.	☒	☐	☐	☐	☐
National legislation could have achieved the same results in the absence of the NEC Directive.	☐	☐	☐	☒	☐

2 Considering your answers above, could you explain your viewpoint in more detail?

	Free text
Transboundary pollution remains a significant source of air pollution across EU Member States.	
EU level legislation is necessary to effectively reduce emissions of the air pollutants addressed in the NEC Directive.	
Significant variation in air pollution and the associated damage costs (to health etc.) across Member States could occur in the absence of the NEC Directive.	While it is true that there would be variation in air pollution and the associated damage costs (to health etc) in the absence of the NEC Directive, it does not
Significant variation could occur in the absence of the NEC Directive across EU Member States in the adjustment costs associated with complying with emission reduction commitments	
The risk of EU Member States not complying with their commitments under the Gothenburg Protocol would be higher in the absence of the NEC Directive.	
The cost of compliance with International commitments would be higher in the absence of the NEC Directive.	
National legislation could have achieved the same results in the absence of the NEC Directive.	Without EU pressure member states tend to relax their policies more

Thematic questions related to certain emissions from agriculture and aviation not included in the NEC Directive

The following questions relate to the reporting of certain emissions that are not included in the national totals for compliance under the NEC Directive (NO_x and NMVOC emissions from manure management and agricultural soils, and all pollutants from aviation cruise (both domestic and international) and international maritime navigation).

These questions are targeted only at **National Inventory Agencies, Technical Users of Data**, and/or **Policymakers**. **Should you wish to skip this section**, please scroll to the bottom of the page and click "next".

Please note that questions in this survey are numbered, but some questions only appear depending on the answer provided to previous questions. Therefore, question numbers may not be consecutive.

1 How do you rate the quality of your reporting for the following sources?

Please consider transparency, accuracy, completeness, consistency, and comparability.

	Very good	Good	Acceptable	Poor	Very poor	Don't know
NO _x emissions from 3B Manure Management	☐	☐	☐	☐	☐	☐
NMVOC emissions from 3B Manure Management	☐	☐	☐	☐	☐	☐
NO _x emissions from 3D agricultural soils	☐	☐	☐	☐	☐	☐
NMVOC emissions from 3D agricultural soils	☐	☐	☐	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐	☐	☐	☐
International maritime emissions	☐	☐	☐	☐	☐	☐

2 Please provide comments on your response above.

	A
NOx emissions from 3B Manure Management	
NMVOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NMVOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

3 If you do not estimate emissions from aviation cruise or international maritime navigation, but the activity still occurs within your country, please describe ...:

	Free text
... the challenges that prevent their estimation.	
... the additional effort that would be required to report these emissions under the NEC Directive.	

4 Who are the main users of data on these emission sources?

	Free text
NOx emissions from 3B Manure Management	
NM VOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NM VOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

5 What do your projections for these emission sources show?

	Large increases	Moderate increases	No change	Moderate decreases	Large decreases	Don' t know
Aviation cruise emissions (domestic and international)	☐	☐	☐	☐	☐	☐
International maritime emissions	☐	☐	☐	☐	☐	☐

6 Please provide details on these projections, for example indicate whether you use a tier 1, 2, or 3 calculation methodology, and whether policies and measures are accounted for.

	Free text
Aviation cruise emissions (domestic and international)	
International maritime emisssions	

7 Do you have plans to improve the quality of the current emissions calculations for any of these sources within the next 3 years?

	Yes	No	Don't know
NOx emissions from 3B Manure Management	☐	☐	☐
NM VOC emissions from 3B Manure Management	☐	☐	☐
NOx emissions from 3D agricultural soils	☐	☐	☐
NM VOC emissions from 3D agricultural soils	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐
International maritime emissions	☐	☐	☐

8 If yes, please provide a short description of the planned improvement

	Free text
NOx emissions from 3B Manure Management	
NM VOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NM VOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

9 To what extent does exclusion of these sources from the national total for compliance under the NEC Directive affect their prioritisation for methodological improvements (e.g. moving from Tier 1 to Tier 2/3 where available)?

	More likely to be prioritised for improvements	Less likely to be prioritised for improvements	No change	Don't know
NOx emissions from 3B Manure Management	☐	☐	☐	☐
NM VOC emissions from 3B Manure Management	☐	☐	☐	☐
NOx emissions from 3D agricultural soils	☐	☐	☐	☐
NM VOC emissions from 3D agricultural soils	☐	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐	☐
International maritime emissions	☐	☐	☐	☐

10 Please provide details

	Free text
NOx emissions from 3B Manure Management	
NMVOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NMVOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

11 How well do you think the current methodology for your historical emission estimates captures the effect of EU or national PaMs on emissions from these sources?

	Very well captured	Moderately well captured	Moderately poorly captured	Very poorly captured	Don't know
NOx emissions from 3B Manure Management	☐	☐	☐	☐	☐
NMVOC emissions from 3B Manure Management	☐	☐	☐	☐	☐
NOx emissions from 3D agricultural soils	☐	☐	☐	☐	☐
NMVOC emissions from 3D agricultural soils	☐	☐	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐	☐	☐
International maritime emissions	☐	☐	☐	☐	☐

12 Please provide details

	Free text
NOx emissions from 3B Manure Management	
NM VOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NM VOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

13 How do you think this will change in the next three years?

	Will greatly improve	Will somewhat improve	No change	Will somewhat worsen	Will greatly worsen	Don't know
NOx emissions from 3B Manure Management	☐	☐	☐	☐	☐	☐
NMVOC emissions from 3B Manure Management	☐	☐	☐	☐	☐	☐
NOx emissions from 3D agricultural soils	☐	☐	☐	☐	☐	☐
NMVOC emissions from 3D agricultural soils	☐	☐	☐	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐	☐	☐	☐
International maritime emissions	☐	☐	☐	☐	☐	☐

14 Please provide details

	Free text
NOx emissions from 3B Manure Management	
NM VOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NM VOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

15 Are you aware of recent or likely future developments in methods, models or datasets (either national or international) which could contribute to improving the accuracy of national estimates for these sources?

	Yes	No	Don't know
NOx emissions from 3B Manure Management	☐	☐	☐
NM VOC emissions from 3B Manure Management	☐	☐	☐
NOx emissions from 3D agricultural soils	☐	☐	☐
NM VOC emissions from 3D agricultural soils	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐
International maritime emissions	☐	☐	☐

16 Please provide details

	Free text
NOx emissions from 3B Manure Management	
NM VOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NM VOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

17 Do you have datasets that would allow you to reliably report shipping emissions separately for the following categories:

	Yes	No	Don't know
Emissions in ports (domestic)	☐	☐	☐
Emissions in territorial waters (domestic)	☐	☐	☐
Emissions in international waters (domestic)	☐	☐	☐
Emissions in ports (international)	☐	☐	☐
Emissions in territorial waters (international)	☐	☐	☐
Emissions in international waters (international)?	☐	☐	☐

18 Please provide details

	Free text
Emissions in ports (domestic)	
Emissions in territorial waters (domestic)	
Emissions in international waters (domestic)	
Emissions in ports (international)	
Emissions in territorial waters (international)	
Emissions in international waters (international)?	

19 Do you use data on emissions from these certain sources in air pollution modelling?

- ☐ Yes
☒ No

21 If not, please explain why not.

450 character(s) maximum

22 Is the quality of reported data sufficient for your needs?

	Yes	Sometimes	No
NOx emissions from 3B Manure Management	☐	☐	☐
NM VOC emissions from 3B Manure Management	☐	☐	☐
NOx emissions from 3D agricultural soils	☐	☐	☐
NM VOC emissions from 3D agricultural soils	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐
International maritime emissions	☐	☐	☐

23 Please comment on each source, considering transparency, accuracy, completeness, consistency and comparability in your response

	Free text
NOx emissions from 3B Manure Management	
NM VOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NM VOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

24 Are other data sources available to substitute for national reporting of these sources under the NEC Directive? If so, please indicate which data sources.

450 character(s) maximum

25 For the memo items involving international transport (international maritime navigation and/or international aviation cruise), do you agree it would improve inventories if emission estimates were calculated in a consistent manner for all Member States by a single institution?

	Strongly agree	Somewhat agree	Neither agree not disagree	Somewhat disagree	Strongly disagree	Don't know
International aviation cruise emissions	☐	☐	☐	☐	☐	☐
International maritime emissions	☐	☐	☐	☐	☐	☐

26 Please provide explanatory comments

	Free text
International aviation cruise emissions	
International maritime emissions	

27 How would your work be impacted if emission inventories reported shipping emissions data (both national and international) that was resolved into: in-port activities, within territorial waters, and domestic shipping activities (e.g. fishing) in international waters?

450 character(s) maximum

28 To what extent have emissions from these sources been affected by national policies and measures since 2005?

	No mitigation	Moderate mitigation	High mitigation
NOx emissions from 3B Manure Management	☐	☐	☐
NMVOC emissions from 3B Manure Management	☐	☐	☐
NOx emissions from 3D agricultural soils	☐	☐	☐
NMVOC emissions from 3D agricultural soils	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐
International maritime emissions	☐	☐	☐

29 Please provide additional comments

	Free text
NOx emissions from 3B Manure Management	
NMVOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NMVOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

30 To what extent has exclusion of these sources from compliance assessment under the NEC Directive affected the relevance and effectiveness of national policies in controlling emissions from these sources? Please answer for each source separately.

	No impact	Moderate impact	High impact
NOx emissions from 3B Manure Management	☐	☐	☐
NM VOC emissions from 3B Manure Management	☐	☐	☐
NOx emissions from 3D agricultural soils	☐	☐	☐
NM VOC emissions from 3D agricultural soils	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐
International maritime emissions	☐	☐	☐

31 Please provide additional comments

	Free text
NOx emissions from 3B Manure Management	
NM VOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NM VOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

32 Do you think the reasons for excluding these sources from the national totals for compliance are still valid?

Original reasons for exclusion: i) NO_x and NMVOC emissions from Manure management and agricultural soils – perceived high uncertainty in the methods available at the time, and low photochemical ozone creation potential for NMVOC from manure management; ii) Aviation cruise emissions – contribution to surface air pollutant concentrations was thought to be insignificant; iii) International maritime navigation – not clear that national governments have responsibility for emissions, and emissions away from land have low impact on land-based concentrations.

	Yes	Maybe	No
NO _x emissions from 3B Manure Management	☐	☐	☐
NMVOC emissions from 3B Manure Management	☐	☐	☐
NO _x emissions from 3D agricultural soils	☐	☐	☐
NMVOC emissions from 3D agricultural soils	☐	☐	☐
Aviation cruise emissions (domestic and international)	☐	☐	☐
International maritime emissions	☐	☐	☐

33 Please provide additional comments

	Free text
NOx emissions from 3B Manure Management	
NM VOC emissions from 3B Manure Management	
NOx emissions from 3D agricultural soils	
NM VOC emissions from 3D agricultural soils	
Aviation cruise emissions (domestic and international)	
International maritime emissions	

34 Do you think EU and national policies are relevant for effectively controlling emissions from international maritime navigation and aviation cruise?

450 character(s) maximum

Concluding questions

1 Please provide any other comment or suggestion you would like to share regarding the evaluation of the NEC Directive.

450 character(s) maximum

2 Please upload a position paper or further evidence to support your feedback.

869de157-7bf5-4b5a-86dd-8823be7db7c0/ERS_NEC_additional_comments.pdf

Contact

[Contact Form](#)