

Response to the public consultation on the revision of the Ambient Air Quality Directives

A Eurelectric response paper

December 2021

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:

- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

Dépôt légal:

Generation & Environment Committee
WG Environmental Protection
WG Thermal & Nuclear
WG Electrification & Energy Efficiency

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KEY MESSAGES

Eurelectric welcomes the European Commission's plan to review the Ambient Air Quality Directives. The power sector has, over the last decades, undertaken drastic efforts to reduce both its CO₂ and its non-CO₂ emissions and significantly limit its air pollution. Between 1990 and 2019, emissions of SO₂ and NO_x by the electricity industry fell by 95% and 72% respectively, while direct emissions of PM_{2.5} were reduced by 79%¹.

Furthermore, over the next decade, recently agreed source specific European legislation for the energy sector - namely the ongoing implementation of the Best Available Techniques Reference Document for Large Combustion Plants (BREF LCP) and the Medium Combustion Plant (MCP) Directive – and the ongoing phase out of thermal capacity (substituted by a sustained expansion of renewable electricity) will lead to further significant emission reductions.

Our sector intends to continue to pursue and even accelerate this contribution to improving air quality across Europe: the power sector is committed to accelerate the clean energy transition and to achieve carbon-neutral electricity mix in the EU well before mid-century, while ensuring that security of supply is maintained and recognising the increasing challenges for thermal generation. Therefore, additional emission reductions are expected in the decade and beyond, driven by the implementation of the climate and energy policy, the industrial emissions/air quality framework, and the continued desire to invest in carbon-free generation by European utilities.

Supporting the electrification of end use sectors (transport, heating & cooling)

The concept of electrification refers to the idea of broadening the use of electricity to satisfy an increasing proportion of final energy demand of a system. In other words, converting the energy needs of fossil fuel reliant systems with carbon-free electricity. In doing so, many sectors and communities will be able to profit from significant reductions in CO₂ emissions and of air pollutants, and improvements in energy efficiency.

Air pollution in Europe's urban centres and associated health risks will be significantly reduced if conventional vehicles and heating systems are replaced by electrified systems. Electrification of road transport, specifically in large cities and densely populated areas, means eliminating air

¹ European Environmental Agency (2021): [European Union emission inventory report 1990-2019](#); Report No 05/2021

pollutant emissions at source where they are most harmful. Similarly, European cities could see a significant improvement in air quality levels as a direct consequence of the electrification of heating.

Transport and residential and commercial heating systems are responsible for a sizeable share of PM 2.5, NO_x, and SO₂ emissions in urban settlements. These directly affect the human respiratory system leading to the development and exacerbation underlying medical conditions such as asthma. Electricity-based heating technologies such as heat pumps and smart electronic boilers produce zero emissions at source. Consequently, with increasing levels of electrification of heating in urban centres, an improvement of air quality would be observed.

In order to leverage the benefits of electrification, it is important to adopt an enabling regulatory framework removing barriers to the adoption of electric technologies and network digitalisation supporting sectorial coupling. In particular, Eurelectric wants to emphasise the need for an ambitious clean mobility policy (see Eurelectric position papers on the revised [Alternative Fuels Infrastructure Regulation](#) & [CO₂ emission performance standards for cars and vans](#)) and a transition enabling taxation (see Eurelectric position papers on the [revised Energy Taxation Directive](#)).

Coherence between policies and better implementation

Eurelectric fully understands the need for and supports an ambitious air quality policy in Europe. We support coherence with the EU's 2030 energy and climate policy and its implementation timeline to achieve better air quality in a cost-effective approach.

In this context, a gradual alignment with the recently revised WHO Air Quality Guidelines by 2040 shall be supported by measures facilitating the uptake of electric solutions in different sectors, and provide power companies and stakeholders with an adequate regulatory certainty. Furthermore, taking into account that many Member States are struggling and sometimes failing to respect the requirements of the current Ambient Air Quality Directives, we would like to highlight the need for a consistent and ambitious approach to air quality between the different governance levels in Member States.

Public consultation on "air quality - revision of EU rules"

Fields marked with * are mandatory.

Introduction

Background

Clean air is essential for our health and that of the environment. To this end, the EU – via the [Ambient Air Quality Directives](#) - sets air quality standards to avoid the build-up of excessive air pollutant concentrations (see an overview of the [EU air quality standards](#) below).

These Directives also define common methods to monitor, assess and inform on ambient air quality in the European Union. Furthermore, they require action, when standards are exceeded, in order to avoid, prevent or reduce harmful effects on human health and the environment as a whole.

As part of the [European Green Deal](#) and its [Zero Pollution Action Plan](#), the EU is revising these EU air quality standards, to align them more closely with the recommendations of the World Health Organization. Note that the World Health Organization publishes and updates [Air Quality Guidelines](#), most recently in 2021: these updated Air Quality Guidelines are considered in the ongoing revision of EU rules.

This revision also aims to improve overall EU legislation for clean air, including provisions on penalties in case of exceedances or requirements for public information, as well as propose means to strengthen air quality monitoring, modelling and plans to help local authorities achieve cleaner air.

<i>Pollutant</i>	<i>Concentration</i>	<i>Averaging period</i>	<i>Permitted exceedances each year</i>
Fine particulate matter (PM _{2.5})	25 µg/m ³	1 year	n/a
Particulate matter (PM ₁₀)	50 µg/m ³	24 hours	35
	40 µg/m ³	1 year	n/a
Sulphur dioxide (SO ₂)	350 µg/m ³	1 hour	24
	125 µg/m ³	24 hours	3
Nitrogen dioxide (NO ₂)	200 µg/m ³	1 hour	18
	40 µg/m ³	1 year	n/a
Lead (Pb)	0.5 µg/m ³	1 year	n/a
Carbon monoxide (CO)	10 mg/m ³	Max. daily 8 hour mean	n/a
Benzene (C ₆ H ₆)	5 µg/m ³	1 year	n/a
Ground-level ozone (O ₃)	120 µg/m ³	Max. daily 8 hour mean	25 averaged over 3 years
Arsenic (As)	6 ng/m ³	1 year	n/a
Cadmium (Cd)	5 ng/m ³	1 year	n/a
Nickel (Ni)	20 ng/m ³	1 year	n/a
Polycyclic Aromatic Hydrocarbons (expressed as Benzo(a)pyrene)	1 ng/m ³	1 year	n/a

Table 1: EU air quality standards (Pollutant; Concentration; Averaging period; Permitted exceedances each year)

Why are we consulting you?

The Commission has launched an [impact assessment](#) to support the Ambient Air Quality Directives revision.

In line with the Commission's [Better Regulation](#) agenda, this public consultation questionnaire will inform the revision process, and the views collected will be considered in the impact assessment, especially when designing potential (regulatory and non-regulatory) measures to reduce air pollution, strengthen air quality monitoring, modelling and plans, and reduce the related impacts on environment and society.

All citizens and organisations are welcome to contribute to this consultation. Contributions are particularly sought from national / regional / local authorities in the Member States, enforcement bodies, business and trade organisations' representatives and civil society organisations, academia, medical professionals, patient organisations, relevant international organisations, and the general public.

Guidance on the questionnaire

This survey is divided into the following parts:

- **Part 1: About you** – questions about yourself and why you are answering this questionnaire.
- **Part 2: General questions section** – on your views on air quality issues. This section does not require technical or expert knowledge of the Directives, and anyone can answer.
- **Part 3: Specialised questions section** – on your views on air quality measures and their impacts. This section focuses on more technical aspects of the topics/measures considered by the Directives' revision and may therefore require expert knowledge to answer. This section can be skipped, if preferred.
- **Part 4: Concluding questions & remarks** - share your thoughts on topics not covered by the questions and provide further information. This section invites you provide any additional comments or elaborate on relevant issues that have not been addressed by the questions.

We estimate that replying to all questions would take about 15 to 30 minutes. Please note that not all questions in the questionnaire need to be answered. In addition, all 'mandatory' questions include an "I do not know/not relevant" or "No opinion" option that you can use when you do not know the answer or do not have an opinion.

You are invited to respond to the best of your abilities or knowledge of the topic. Please use open fields only if there is information to be added that is strictly relevant to the related question.

The results of the questionnaire and a stand-alone summary of the results of the consultation will be produced (to be published [here](#)). The analysis of the responses will be included in the impact assessment supporting the revision of the Ambient Air Quality Directives. Please take note of the specific privacy statement for this consultation which explains how personal data and contributions will be dealt with.

In the interest of transparency, if you are replying on behalf of an organisation, please register with the [register of interest representatives](#) if you have not already done so. Registering commits you to complying with a Code of Conduct. If you do not wish to register, your organisation's contribution will be treated and published together with those received from individuals.

Your voice matters and we are grateful to you for taking the time to complete this consultation.

About you

* Language of my contribution

- ☐ Bulgarian
- ☐ Croatian
- ☐ Czech
- ☐ Danish
- ☐ Dutch
- ☒ English
- ☐ Estonian
- ☐ Finnish
- ☐ French
- ☐ German
- ☐ Greek
- ☐ Hungarian
- ☐ Irish
- ☐ Italian
- ☐ Latvian
- ☐ Lithuanian
- ☐ Maltese
- ☐ Polish
- ☐ Portuguese
- ☐ Romanian
- ☐ Slovak
- ☐ Slovenian
- ☐ Spanish
- ☐ Swedish

* I am giving my contribution as

- ☐ Academic/research institution
- ☒ Business association
- ☐ Company/business organisation
- ☐ Consumer organisation
- ☐ EU citizen
- ☐ Environmental organisation
- ☐ Non-EU citizen
- ☐ Non-governmental organisation (NGO)
- ☐ Public authority
- ☐ Trade union
- ☐ Other

* First name

Christian

* Surname

Gruber

* Email (this won't be published)

cgruber@eurelectric.org

* Country of origin

Please add your country of origin, or that of your organisation.

- | | | | |
|--------------------------------------|--|-------------------------------------|--|
| ☐ Afghanistan | ☐ Djibouti | ☐ Libya | ☐ Saint Martin |
| ☐ Åland Islands | ☐ Dominica | ☐ Liechtenstein | ☐ Saint Pierre and Miquelon |
| ☐ Albania | ☐ Dominican Republic | ☐ Lithuania | ☐ Saint Vincent and the Grenadines |
| ☐ Algeria | ☐ Ecuador | ☐ Luxembourg | ☐ Samoa |
| ☐ American Samoa | ☐ Egypt | ☐ Macau | ☐ San Marino |
| ☐ Andorra | ☐ El Salvador | ☐ Madagascar | ☐ São Tomé and Príncipe |
| ☐ Angola | ☐ Equatorial Guinea | ☐ Malawi | ☐ Saudi Arabia |
| ☐ Anguilla | ☐ Eritrea | ☐ Malaysia | ☐ Senegal |

- Antarctica
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Australia
- Austria
- Azerbaijan
- Bahamas
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan
- Bolivia
- Bonaire Saint Eustatius and Saba
- Bosnia and Herzegovina
- Botswana
- Bouvet Island
- Brazil
- British Indian Ocean Territory
- Estonia
- Eswatini
- Ethiopia
- Falkland Islands
- Faroe Islands
- Fiji
- Finland
- France
- French Guiana
- French Polynesia
- French Southern and Antarctic Lands
- Gabon
- Georgia
- Germany
- Ghana
- Gibraltar
- Greece
- Greenland
- Grenada
- Guadeloupe
- Guam
- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau
- Maldives
- Mali
- Malta
- Marshall Islands
- Martinique
- Mauritania
- Mauritius
- Mayotte
- Mexico
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Montserrat
- Morocco
- Mozambique
- Myanmar/Burma
- Namibia
- Nauru
- Nepal
- Netherlands
- New Caledonia
- New Zealand
- Nicaragua
- Serbia
- Seychelles
- Sierra Leone
- Singapore
- Sint Maarten
- Slovakia
- Slovenia
- Solomon Islands
- Somalia
- South Africa
- South Georgia and the South Sandwich Islands
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Svalbard and Jan Mayen
- Sweden
- Switzerland
- Syria
- Taiwan
- Tajikistan
- Tanzania
- Thailand

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|--|---|--|--|
| ☐ British Virgin Islands | ☐ Guyana | ☐ Niger | ☐ The Gambia |
| ☐ Brunei | ☐ Haiti | ☐ Nigeria | ☐ Timor-Leste |
| ☐ Bulgaria | ☐ Heard Island and McDonald Islands | ☐ Niue | ☐ Togo |
| ☐ Burkina Faso | ☐ Honduras | ☐ Norfolk Island | ☐ Tokelau |
| ☐ Burundi | ☐ Hong Kong | ☐ Northern Mariana Islands | ☐ Tonga |
| ☐ Cambodia | ☐ Hungary | ☐ North Korea | ☐ Trinidad and Tobago |
| ☐ Cameroon | ☐ Iceland | ☐ North Macedonia | ☐ Tunisia |
| ☐ Canada | ☐ India | ☐ Norway | ☐ Turkey |
| ☐ Cape Verde | ☐ Indonesia | ☐ Oman | ☐ Turkmenistan |
| ☐ Cayman Islands | ☐ Iran | ☐ Pakistan | ☐ Turks and Caicos Islands |
| ☐ Central African Republic | ☐ Iraq | ☐ Palau | ☐ Tuvalu |
| ☐ Chad | ☐ Ireland | ☐ Palestine | ☐ Uganda |
| ☐ Chile | ☐ Isle of Man | ☐ Panama | ☐ Ukraine |
| ☐ China | ☐ Israel | ☐ Papua New Guinea | ☐ United Arab Emirates |
| ☐ Christmas Island | ☐ Italy | ☐ Paraguay | ☐ United Kingdom |
| ☐ Clipperton | ☐ Jamaica | ☐ Peru | ☐ United States |
| ☐ Cocos (Keeling) Islands | ☐ Japan | ☐ Philippines | ☐ United States Minor Outlying Islands |
| ☐ Colombia | ☐ Jersey | ☐ Pitcairn Islands | ☐ Uruguay |
| ☐ Comoros | ☐ Jordan | ☐ Poland | ☐ US Virgin Islands |
| ☐ Congo | ☐ Kazakhstan | ☐ Portugal | ☐ Uzbekistan |
| ☐ Cook Islands | ☐ Kenya | ☐ Puerto Rico | ☐ Vanuatu |
| ☐ Costa Rica | ☐ Kiribati | ☐ Qatar | ☐ Vatican City |
| ☐ Côte d'Ivoire | ☐ Kosovo | ☐ Réunion | ☐ Venezuela |
| ☐ Croatia | ☐ Kuwait | ☐ Romania | ☐ Vietnam |
| ☐ Cuba | ☐ Kyrgyzstan | ☐ Russia | ☐ Wallis and Futuna |

- | | | | |
|--|-------------------------------|---|--------------------------------------|
| ☐ Curaçao | ☐ Laos | ☐ Rwanda | ☐ Western Sahara |
| ☐ Cyprus | ☐ Latvia | ☐ Saint Barthélemy | ☐ Yemen |
| ☐ Czechia | ☐ Lebanon | ☐ Saint Helena | ☐ Zambia |
| | | Ascension and | |
| | | Tristan da Cunha | |
| ☐ Democratic Republic of the Congo | ☐ Lesotho | ☐ Saint Kitts and Nevis | ☐ Zimbabwe |
| ☐ Denmark | ☐ Liberia | ☐ Saint Lucia | |

* Organisation name

255 character(s) maximum

Eurelectric

* Organisation size

- ☐ Micro (1 to 9 employees)
- ☒ Small (10 to 49 employees)
- ☐ Medium (50 to 249 employees)
- ☐ Large (250 or more)

* Scope

- ☒ International
- ☐ Local
- ☐ National
- ☐ Regional

Transparency register number

255 character(s) maximum

Check if your organisation is on the [transparency register](#). It's a voluntary database for organisations seeking to influence EU decision-making.

4271427696-87

* Please indicate the sector(s) you are active in

between 1 and 3 choices

between 1 and 3 answered rows

- ☐ air quality management
- ☐ air quality monitoring

- ☐ agriculture / food
- ☐ biodiversity and/or environment
- ☒ energy
- ☐ government
- ☐ health care
- ☐ investment and finance
- ☐ manufacturing
- ☐ public health
- ☐ raw materials extraction / primary processing
- ☐ scientific research
- ☐ transport
- ☐ none of the above sectors
- ☐ other
- ☐ I do not know, or I do not want to answer

The Commission will publish all contributions to this public consultation. You can choose whether you would prefer to have your details published or to remain anonymous when your contribution is published. **For the purpose of transparency, the type of respondent (for example, 'business association, 'consumer association', 'EU citizen') country of origin, organisation name and size, and its transparency register number, are always published. Your e-mail address will never be published.** Opt in to select the privacy option that best suits you. Privacy options default based on the type of respondent selected

* Contribution publication privacy settings

The Commission will publish the responses to this public 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 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.

☐ I agree with the [personal data protection provisions](#)

Part 2: General questions section

1. How important is having good air quality to you?

- ☒ Very important
- ☐ Important
- ☐ Of minor importance
- ☐ Not important at all
- ☐ No opinion

2. How concerned are you about the levels of air pollution to which you are usually exposed?

- ☐ Very concerned
- ☒ Concerned
- ☐ Slightly concerned
- ☐ Not concerned at all
- ☐ No opinion

3. Are you concerned about the following impacts that air pollution may have in your local area?

	Not at all	To some extent	To a large extent	Fully	No opinion
Impacts on health of the general population	☐	☐	☐	☒	☐
Impacts on my health or the health of my family members	☐	☐	☐	☒	☐

Impacts on health of vulnerable groups (including children, elderly, people with pre-existing health conditions)					
Impacts on businesses and small/medium enterprises (including lost work days due to air pollution)					
Impacts on agriculture and crops (including on plant growth and animal health)					
Impacts on natural environment (including pollution of water bodies, or reduced biodiversity)					
Impacts on buildings and infrastructure (including corrosion or discoloration of buildings)					

4. Which air pollutants are you concerned about?

- ☒ Fine particulate matter (PM_{2.5})
- ☒ Particulate matter (PM₁₀)
- ☒ Sulphur dioxide (SO₂)
- ☒ Nitrogen dioxide (NO₂)
- ☒ Ground-level ozone (O₃)
- ☐ Carbon monoxide (CO)
- ☐ Benzene (C₆H₆)
- ☐ Polycyclic aromatic hydrocarbons (including benzo(a)pyrene)
- ☐ Arsenic (As)
- ☐ Cadmium (Cd)

- ☐ Mercury (Hg)
- ☐ Nickel (Ni)
- ☐ Lead (Pb)
- ☐ Ultra-fine particles
- ☐ Black carbon and/or elemental carbon
- ☐ Ammonia (NH₃)
- ☐ Methane (CH₄)
- ☐ Non-methane volatile organic compounds (i.e. organic compounds capable of producing photochemical oxidants by reaction with nitrogen oxides in the presence of sunlight)
- ☐ None
- ☐ No opinion
- ☐ Other

5. Would you like to see more action to improve air quality? And if so, to what extent?

- ☐ Yes, a **significant** increase in action and ambition to tackle air pollution
- ☒ Yes, a **moderate** increase in action and ambition to tackle air pollution
- ☐ Yes, a **small** increase in action and ambition to tackle air pollution
- ☐ No, current action and ambition to tackle air pollution issues **is adequate**
- ☐ No opinion

6. At what level should further action be taken?

Please rank the following from 1 – where most action needs to be taken to 5 – where least action needs to be taken

	1	2	3	4	5
International	☐	☐	☒	☐	☐
European	☐	☐	☒	☐	☐
National	☐	☒	☐	☐	☐
Regional	☐	☐	☐	☐	☐
Local / city	☒	☐	☐	☐	☐

7. To what extent would you be willing to change your own way of living to contribute to improving air quality in your country / region / city?

	Not at all	To some extent	To a large extent	Fully	I do not know	N/A

Driving less by car, including in cities	☐	☐	☐	☒	☐	☐
Driving smaller or fuel-efficient cars	☐	☐	☐	☐	☐	☒
Using more public transport, walking, cycling	☐	☐	☐	☒	☐	☐
Changing my habits in residential heating	☐	☐	☐	☒	☐	☐
Investing in sustainable heating systems	☐	☐	☐	☒	☐	☐
Improving the energy efficiency of my home	☐	☐	☐	☒	☐	☐
Making conscious consumption choices to reduce emissions	☐	☐	☐	☒	☐	☐
Other	☐	☐	☐	☐	☐	☒

Policy area 1: Closer alignment of the EU air quality standards with scientific knowledge including the latest recommendations of the World Health Organization (WHO).

The Ambient Air Quality Directives set air quality standards for 13 air pollutants. For several air pollutants, these standards are not as stringent as recommended by the World Health Organization via their 'Air Quality Guidelines' (which themselves have recently been updated), in particular for the most harmful fine particulate matter (PM2.5). This revision of EU rules will consider and assess different policy options and scenarios to more closely align EU air quality standards with the latest scientific evidence.

8. Do you think that [EU air quality standards](#) should be made more stringent to bring them in line with the updated World Health Organization Air Quality Guidelines and latest scientific evidence?

- ☐ Yes – EU air quality standards should be made more stringent, fully aligned with the latest WHO recommendations
- ☒ Partly – EU air quality standards should be made more stringent, but only partially aligned with the latest WHO recommendations
- ☐ No – current air quality standards are sufficient

- ☐ No opinion

9. Where (at which locations) should EU air quality standards apply?

- ☐ Everywhere, including at locations to which members of the public do not have access, including industrial installations or motorways
- ☐ At all locations where there is fixed habitation or there are commercial facilities, as well as at all locations to which members of the public have access (including, for example, roads and sidewalks)
- ☐ At all locations where there is fixed habitation or there are commercial facilities
- ☒ Only at locations that are representative of the exposure to air pollutants of the general population
- ☐ No opinion

10. How quickly should any revised EU air quality standards be achieved?

- ☐ As soon as possible
- ☐ By 2025 at the latest
- ☐ By 2030 at the latest
- ☒ By 2040 at the latest
- ☐ By 2050 at the latest
- ☐ No opinion

11. Do you have any other comments regarding the consideration to amend the EU's air quality standards (this could capture existing achievement of or options to amend the standards, and the feasibility or impacts of such options)?

800 character(s) maximum

Measuring sites shall be placed in locations that are representative of the exposure to air pollutants of the general population, as:

- In many locations the background concentration is very high due to incoming long-range air pollutants from areas outside the EU.
- Despite diesel soot emissions will be greatly reduced over the course of the next years (due to tighter exhaust emission controls) achieving stricter PM values will remain challenging in measuring sites with significant road traffic as significant parts of direct PM emissions are stemming from brake, tyre and road wear emissions.

Policy area 2: improving the current air quality legislative framework (including aspects such as penalties and public information).

There have been substantial delays in taking appropriate and effective measures to meet all EU air quality standards throughout Member States. Improvements to the legislative framework, including related to access to justice in case of persistent exceedance, as well as to public information, may facilitate further air quality action. This revision of EU rules will consider and assess different policy options for amended provisions on sanctions and penalties to be established in national systems for non-fulfilment of relevant obligations deriving from the Directives. It will also consider options for a stronger harmonisation of public information.

12. Do you believe that the current provisions on penalties in the Ambient Air Quality Directives are sufficient for Member States to comply with EU air quality standards?

- ☐ Yes
- ☒ Partly
- ☐ No
- ☐ No opinion

13. Do you believe that the Ambient Air Quality Directives should facilitate access to justice, including compensation for health damages due to air pollution (suffered by groups and/or individuals)?

- ☐ Yes – both stronger facilitation of access to justice in general, as well as of compensation for health damages due to air pollution in particular
- ☐ Partly – stronger facilitation of access to justice related to air pollution
- ☐ Partly – compensation for health damages due to air pollution
- ☒ No
- ☐ No opinion

14. How well informed do you feel about air quality in your country / region / city?

- ☒ Very well informed
- ☐ Well informed
- ☐ Somewhat informed
- ☐ Little informed
- ☐ Not informed at all
- ☐ No opinion

15. Which of the following types of information would you want to have easier access to? (Multiple answers possible)

- ☐ (Real-time) air quality data / Up-to-date average concentrations
- ☐

- Annual reports specifically targeted to the general public
- ☒ Air pollution forecasts
- ☒ Air quality plans and measures the authorities are taking to improve air quality
- ☒ Air quality monitoring networks (e.g. location of monitoring stations, pollutants monitored, etc.)
- ☐ Information on whether air quality standards are respected
- ☒ Air quality benchmarks that allow comparison with other cities/regions
- ☐ Access to downloadable historical data sets
- ☐ Information on specific precautions and preventative actions
- ☐ General information on short term & long term health risks of air pollution
- ☐ Alert/ targeted messaging during high pollution events
- ☐ Information on citizens' rights and possible actions if air quality standards are not respected
- ☒ Other

If "other", please specify:

100 character(s) maximum

In Czechia, all required data and information are already publicly available on www.chmi.cz

16. Are there any other elements related to the legislative framework of the Ambient Air Quality Directives (i.e. around defining the types of air quality standards and actions exceedances trigger, governance and enforcement of actions at MS level, and around information provided to the public) that you would consider effective in facilitating the achievement of its objectives?

800 character(s) maximum

A stronger governance of air quality policies and a broader engagement of all actors are needed to implement effective actions enabling compliance with pollutant concentration limits. The EC should establish a reporting, reviewing and monitoring cycle, similar to the reinforced model set in the Regulation on the Governance of the Energy Union, including the provision on common templates. NECPs, Air Quality Action Plans and National Air Pollution Control Programs need to be coherent and their measures need to be better coordinated. Guidelines, benchmarks and best-practice should be provided to support Member States actions. Air quality co-benefits also in wider economic terms should be always taken into account when assessing any new policy with a direct or indirect impact on air quality.

Policy area 3: strengthening of air quality monitoring, modelling and plans.

The Ambient Air Quality Directives have guided the establishment of a robust system for air quality assessment and have framed competent authorities' action to achieve cleaner air via air quality plans (i.e. the action taken when and where exceedances occur). However, the criteria on air quality monitoring and

modelling could be refined to increase the comparability of air quality data. This revision of EU rules will explore solutions to improve, simplify and increase precision and coherence of requirements with regard to air quality monitoring and modelling, and options to facilitate further the effectiveness of air quality plans.

17. Do you see a need to strengthen further the assessment of air quality?

(Multiple answers possible)

- ☐ Yes, we need additional monitoring everywhere, whether high pollution or low pollution levels
- ☒ Yes, we need additional monitoring where pollution may be a concern
- ☒ Yes, we need additional monitoring of background concentrations (i.e. average pollution levels)
- ☐ Yes, we need additional monitoring at locations with pollution peaks due to industrial emissions
- ☐ Yes, we need additional monitoring at locations with pollution peaks due to traffic emissions
- ☒ Yes, we need to ensure detailed modelling of air quality across the EU
- ☐ Yes, we need to ensure detailed modelling of air quality at locations with pollution peaks (e.g. due to traffic or industry)
- ☐ Yes, we need to ensure detailed modelling and forecasting of air pollution episodes
- ☐ No, we have sufficient data on air quality
- ☐ No opinion

18. Do you see a need to improve air quality plans developed by local authorities to address exceedances of EU air quality standards? (Multiple answers possible)

- ☒ Yes, air quality plans need to be clearer on the specific sources and origin of air pollution
- ☐ Yes, air quality plans need to explain the health consequences of air pollution
- ☐ Yes, air quality plans need to assign responsibilities (i.e. who needs to act)
- ☒ Yes, air quality plans need to quantify the costs and benefits of action
- ☒ Yes, air quality plans need to spell out how each measure contributes to solving pollution problems
- ☒ Yes, air quality plans need to estimate by when action would have resolved the pollution problem
- ☐ Yes, air quality plans need to be followed-up by a regular assessment of their implementation

- ☐ No need to change air quality plans
- ☐ No need to change air quality plans, but they need to be better implemented
- ☐ No opinion

19. Do you have any comments regarding the improvements of monitoring, modelling and the content of air quality plans (e.g. existing effectiveness, options to improve these elements, and the feasibility or impacts of such options)?

800 character(s) maximum

In some EU Member States the air quality is good and the standards are practically met. For example, in Finland the limits are only occasionally exceeded in some towns and these exceedances are very temporary. The revision of the directive should take account the areas of good air quality. The monitoring requirement in these areas should not be set at all or not as demanding as elsewhere. This is important from the point of cost-effectiveness of the monitoring measures

Part 3: Specialised questions section

*** 20. Please indicate if you would like to answer this more specialised questions section on your views on air quality measures and their impacts. This section focuses on more technical aspects of the topics/measures considered by the Directives' revision**

- ☒ Yes, I would like to reply to this section with more specialised questions (to Part 3)
- ☐ No, I would like to skip ahead to the final section of this questionnaire (to Part 4)

21. How important are the following options for *policy area 1 to improve the effectiveness of the Ambient Air Quality Directives?**

*Closer alignment of the EU air quality standards with scientific knowledge including the latest recommendations of the World Health Organization (WHO).

	Of high importance	Of medium importance	Of low importance	Not at all important	No opinion
a) Ensure achievement of existing EU air quality standards	☒	☐	☐	☐	☐
b) Align EU air quality standards with World Health					

Organization recommendations					
c) Mandate that all air quality standards are met in general (i.e. based on the average exposure of the general population)					
d) Mandate that all air quality standards are met everywhere (i.e. including at 'pollution hotspots' such as roadside or downwind from industry)					
e) Establish legally enforceable limit values for all air pollutants					
f) Set aspirational long-term objectives to meet all World Health Organization (WHO) recommendations (i.e. as per updated WHO Air Quality Guidelines)					

Please explain your answer, if you wish

100 character(s) maximum

	<i>100 character(s) maximum</i>
a) Ensure achievement of existing EU air quality standards	The first priority should be air quality that is in accordance of the current directive at least in areas with high population density
b) Align EU air quality standards with World Health Organization recommendations	For some pollutants, EU standards are not adequate for protecting human health and the environment. This is particularly true for PM, NO2 and SO2. The European Energy Agency (EEA) reports that in 2018 15% of the EU urban population was exposed to concentrations of PM10 above the EU threshold, 4% in the case of PM2.5, and 4% in the case of NO2. Such percentages increase substantially if the World Health Organization thresholds are considered (48% for PM10 and 74% for PM2.5). Therefore a gradual alignment of EU standards to WHO guidelines is recommendable as well as a phased implementation which should go hand in hand with the timeframe of the Zero Pollution Action plan.
c) Mandate that all air quality standards are met in general (i.e. based on the average exposure of the general population)	
d) Mandate that all air quality standards are met everywhere (i.e. including at 'pollution hotspots' such as roadside or downwind from industry)	
e) Establish legally enforceable limit values for all air pollutants	
f) Set aspirational long-term objectives to meet all World Health Organization (WHO) recommendations (i.e. as per updated WHO Air Quality Guidelines)	Long-term objectives must be based on model calculations demonstrating the achievability of WHO recommendations
Other	

22. How important are the following options for *policy area 2 to improve the effectiveness of the Ambient Air Quality Directives?**

* Improving the current air quality legislative framework (including aspects such as penalties and public information).

	Of high importance	Of medium importance	Of low importance	Not at all important	No opinion
a) Make it easier to adjust EU air quality standards to the evolving technical and scientific progress	☐	☒	☐	☐	☐
b) Further define the different types of air quality standards and the actions their exceedances would trigger	☐	☒	☐	☐	☐
c) Expand requirements for action by national / regional / local authorities in case of exceedances	☐	☐	☐	☐	☒
d) Establish additional provisions for air quality plans, including on who to involve in their preparation	☐	☒	☐	☐	☐
e) Expand the provision on penalties related to air pollution	☐	☐	☒	☐	☐
f) Add provisions for access to justice and for compensation	☐	☐	☒	☐	☐

for health damage from air pollution					
g) Expand the requirements on the provision of information (e.g. on health impacts)					

Please explain your answer, if you wish

100 character(s) maximum

	<i>100 character(s) maximum</i>
a) Make it easier to adjust EU air quality standards to the evolving technical and scientific progress	
b) Further define the different types of air quality standards and the actions their exceedances would trigger	
c) Expand requirements for action by national / regional / local authorities in case of exceedances	
d) Establish additional provisions for air quality plans, including on who to involve in their preparation	
e) Expand the provision on penalties related to air pollution	
f) Add provisions for access to justice and for compensation for health damage from air pollution	
g) Expand the requirements on the provision of information (e.g. on health impacts)	
Other	

23. *How important* are the following options for *policy area 3* to improve the effectiveness of the Ambient Air Quality Directives?

* Strengthening of air quality monitoring, modelling and plans.

	Of high importance	Of medium importance	Of low importance	Not at all important	No opinion
a) Establish more detailed rules on the location of sampling points	☐	☒	☐	☐	☐
b) Expand monitoring requirements to broader set of harmful air pollutants	☐	☒	☐	☐	☐
c) Enable enhanced use of modelling for air quality assessment	☒	☐	☐	☐	☐
d) Further specify minimum elements required of air quality plans (e. g. cost-benefit analysis, projections, etc.)	☒	☐	☐	☐	☐

Please explain your answer, if you wish

100 character(s) maximum

	<i>100 character(s) maximum</i>
a) Establish more detailed rules on the location of sampling points	The more detailed rules concerning sampling points should also include rules when the monitoring is not necessary due to the good air quality.
b) Expand monitoring requirements to broader set of harmful air pollutants	The monitoring of the broader set of harmful air pollutants should be mandatory only in area where such pollutants are expected to occur in meaningful concentrations.
c) Enable enhanced use of modelling for air quality assessment	
d) Further specify minimum elements required of air quality plans (e.g. cost-benefit analysis, projections, etc.)	
Other	

24. How feasible (i.e. technically, politically, from a cost perspective, etc.) would the following policy measures related to *policy area 1 be to implement?**

*Closer alignment of the EU air quality standards with scientific knowledge including the latest recommendations of the World Health Organization (WHO).

	High feasibility	Medium feasibility	Low feasibility	Not at all feasible	No opinion
a) Ensure achievement of existing EU air quality standards	☒	☐	☐	☐	☐
b) Align EU air quality standards with World Health Organization recommendations	☐	☐	☒	☐	☐
c) Mandate that all air quality standards are met in general (i.e. based on the average exposure of the general population)	☐	☒	☐	☐	☐
d) Mandate that all air quality standards are met everywhere (i.e. including at 'pollution hotspots' such as roadside or downwind from industry)	☐	☐	☒	☐	☐
e) Establish legally enforceable limit values for all air pollutants	☐	☒	☐	☐	☐
f) Set aspirational long-term objectives to meet all World Health Organization (WHO) recommendations (i.	☐	☐	☒	☐	☐

e. as per updated WHO Air Quality Guidelines)					
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Please explain your answer, if you wish

100 character(s) maximum

	<i>100 character(s) maximum</i>
a) Ensure achievement of existing EU air quality standards	
b) Align EU air quality standards with World Health Organization recommendations	
c) Mandate that all air quality standards are met in general (i.e. based on the average exposure of the general population)	
d) Mandate that all air quality standards are met everywhere (i.e. including at ‘pollution hotspots’ such as roadside or downwind from industry)	
e) Establish legally enforceable limit values for all air pollutants	
f) Set aspirational long-term objectives to meet all World Health Organization (WHO) recommendations (i.e. as per updated WHO Air Quality Guidelines)	
Other	

25. How feasible (i.e. technically, politically, from a cost perspective, etc.) would the following policy measures related to *policy area 2 be to implement?**

* Improving the current air quality legislative framework (including aspects such as penalties and public information).

	High feasibility	Medium feasibility	Low feasibility	Not at all feasible	No opinion
a) Make it easier to adjust EU air quality standards to the evolving technical and scientific progress	☐	☒	☐	☐	☐
b) Further define the different types of air quality standards and the actions their exceedances would trigger	☐	☒	☐	☐	☐
c) Expand requirements for action by national / regional / local authorities in case of exceedances	☐	☐	☒	☐	☐
d) Establish additional provisions for air quality plans, including on who to involve in their preparation	☐	☒	☐	☐	☐
e) Expand the provision on penalties related to air pollution	☐	☐	☒	☐	☐
f) Add provisions for access to justice and for compensation for health damage from air pollution	☐	☐	☒	☐	☐

g) Expand the requirements on the provision of information (e.g. on health impacts)					
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Please explain your answer, if you wish

100 character(s) maximum

	<i>100 character(s) maximum</i>
a) Make it easier to adjust EU air quality standards to the evolving technical and scientific progress	
b) Further define the different types of air quality standards and the actions their exceedances would trigger	
c) Expand requirements for action by national / regional / local authorities in case of exceedances	
d) Establish additional provisions for air quality plans, including on who to involve in their preparation	
e) Expand the provision on penalties related to air pollution	
f) Add provisions for access to justice and for compensation for health damage from air pollution	
g) Expand the requirements on the provision of information (e.g. on health impacts)	
Other	

26. How feasible (i.e. technically, politically, from a cost perspective, etc.) would the following policy measures related to *policy area 3 be to implement?**

* Strengthening of air quality monitoring, modelling and plans.

	High feasibility	Medium feasibility	Low feasibility	Not at all feasible	No opinion
a) Establish more detailed rules on the location of sampling points	☐	☒	☐	☐	☐
b) Expand monitoring requirements to broader set of harmful air pollutants	☐	☒	☐	☐	☐
c) Enable enhanced use of modelling for air quality assessment	☒	☐	☐	☐	☐
d) Further specify minimum elements required of air quality plans (e. g. cost-benefit analysis, projections, etc.)	☒	☐	☐	☐	☐

Please explain your answer, if you wish

100 character(s) maximum

	<i>100 character(s) maximum</i>
a) Establish more detailed rules on the location of sampling points	
b) Expand monitoring requirements to broader set of harmful air pollutants	
c) Enable enhanced use of modelling for air quality assessment	
d) Further specify minimum elements required of air quality plans (e.g. cost-benefit analysis, projections, etc.)	
Other	

27. If you believe that some measures listed above are incoherent with EU strategies (e.g. the European Green Deal), incoherent with EU sectoral policies (e.g. on transport, energy or agriculture), or incoherent with national level policies, could you please briefly elaborate on your answer?

600 character(s) maximum

Part 4: Concluding questions & remarks

28. What is your level of knowledge of the following?

	Excellent knowledge / understanding	Good knowledge / understanding	Some knowledge / understanding	Little knowledge / understanding	None
Issue of air pollution in general	☒	☐	☐	☐	☐
Different pollutants and their sources	☒	☐	☐	☐	☐
Areas most affected by air pollution	☐	☒	☐	☐	☐
Detrimental impacts of exposure to air pollution	☐	☒	☐	☐	☐
International initiatives to tackle air pollution (including World Health Organization guidelines)	☒	☐	☐	☐	☐
European legislation to tackle air pollution	☒	☐	☐	☐	☐
Implementation of European legislation to tackle air pollution	☒	☐	☐	☐	☐

29. If you wish to expand on any of your answers or if you wish to add comments or information on anything else, which is relevant to the Impact Assessment, please do so in the box below.

800 character(s) maximum

The revised directive should have guiding/regulations of the payment policy of the general air quality monitoring. The monitoring done for the purpose of the general interest should not be paid unfairly by point source emitters. The payment policy should follow the rule that the share of the monitoring costs follows the share of emissions. In certain EU Member States - e.g. in Finland - the seldom occurring air quality limit exceedances are not caused by industrial emissions, but rather because of:

- 1) street dust during spring period
- 2) traffic in heavily loaded streets in town areas with poor air spreading conditions, or
- 3) in residential areas where fireplaces are common during cold winter days.

30. If you consider there are materials / publications available online that should be considered further in relation to this Impact Assessment exercise, please feel free to describe them (title and author) in the box below and include any relevant links

800 character(s) maximum

31. Do you have additional information that you would like to share in a concise document such as a position paper? (This is optional and will serve as additional background to better understand your position.)

The maximum file size is 1MB

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

Background Documents

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