PUBLIC CONSULTATION RESPONSE – Evaluation of the National Emission reduction Commitments Directive (NECD)

Strengthening health and economic benefits from more ambitious implementation by member states, addressing the shortcomings of the law

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KEY MESSAGES

To increase health and economic benefits which can be achieved through the National Emission reduction Commitments Directive (NECD), it is key to:

1- **Step up on EU member states implementing the directive (which has major shortcomings):** Follow the latest science, increase the level of ambition by accelerating the pace of mandatory emissions reduction, as well as strengthen enforcement. This will result in more effective public health protection and set member states on track for compliance by 2030.

2- **Strive for greater coherence in the EU legal framework**: Stronger linkages between the NECD and Ambient Air Quality Directive (AAQD), especially through aligning the calculation of annual national reduction obligations with the attainment of AAQD limit and target values by 2030. This will result in the NECD becoming a key instrument to contribute to the success of the revised AAQD and prepare the EU's clean air framework for the post 2030 period.

3- **Strengthen health prevention efforts to reduce emissions of key air pollutants and precursors**: Close the loopholes by including reduction obligations for methane (CH4) emission, ending subsidies of ammonia (NH3) emitting practices, withdrawing the labelling of biomass burning as a renewable source of energy. This will result in decreased concentrations of PM2.5, ozone and ammonia and reduce the corresponding health burden.

HEAL HEALTH AND ENVIRONMENT ALLIANCE

INTRODUCTION

The unacceptably high health burden from air pollution

Air pollution is the greatest environmental threat to health in the European Union and beyond. The 2023 World Health Organisation (WHO) Budapest Declaration, signed by ministers and representatives responsible for health and the environment from all the countries of the WHO European Region — including all 27 EU member states — emphasises the harmful and costly effects of pollution throughout people's lives.

EU member states urgently need to reduce emissions of air pollutants at all sources in order to bring concentrations down to the levels recommended by the World Health Organization (WHO) across the EU. However, decisive preventative action at national level— both in scope and pace— has been lacking in recent years. This inaction has led to widespread suffering and a health economic cost that is unacceptably high.

Everyone is vulnerable to the health impacts of air pollution, which causes hundreds of thousands of premature deaths and costs hundreds of billions of euros every year in the EU. As evidenced by the latest science, air pollution can be harmful even at “low” levels, beyond current and future (revised) EU limit values. Due to dynamic population factors such as age and developmental stage, health conditions, population size and density, and given that both acute and chronic exposure are relevant for health, significant cuts in air pollutant emissions are urgently needed.

Complementary to the Ambient Air Quality Directive (AAQD) that regulates maximum concentrations of key air pollutants for our health and the environment in ambient air across the EU, the National Emission reduction Commitments Directive (NECD), is a critical instrument to reduce emissions of key air pollutants by 2030 at member state level.

The EU's global leadership role on clean air

The current NECD aligns emission reduction commitments under EU law with international reduction commitments following the revision of the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (“Gothenburg protocol”) in 2012. This alignment is about to become obsolete as in 2023 the UNECE announced the revision of the Gothenburg Protocol stating that, "in addition to further reductions needed in emissions of nitrogen oxides (NOx), volatile organic compounds (VOCs) and methane (CH4) within the region, global CH4 reductions are also needed to further reduce ground-level ozone (O3) in the region.”

The revision of the Gothenburg Protocol is a major opportunity for the EU to show regional and global leadership on reducing air pollutant emissions. More ambitious commitments by the EU and its member states will demonstrate this commitment and will also strengthen health resilience across the bloc.

The NECD aims to limit transboundary air pollution between different countries, contributing to improving ambient air quality locally with benefits for human health and biodiversity. Achieving emission reductions under the NECD therefore has the potential to deliver significant socio-economic benefits and savings while addressing the existential triple climate, pollution and biodiversity crisis.

Weak ambition level for emission reductions

Yet, stemming from a political compromise reached back in 2016, this NECD has been criticised from the onset by health groups for its lack of ambition: the policy objectives on emission reductions are too weak, leading to avoidable health and economic costs. The unacceptably high health burden from air pollution we are faced with today is largely preventable through firm political will expressed via legislation. Unfortunately, member states are falling short, even on implementing the weak commitments from the current NECD.

The Health and Environment Alliance (HEAL) welcomes the opportunity to contribute to the Commission's public consultation on the evaluation of the current NECD and identifies major effectiveness, coherence and compliance gaps that will be presented in this paper. These gaps should be urgently addressed to remedy several shortcomings in health prevention, close loopholes and tackle new pollution developments (inclusion of methane, intermediate binding targets, stronger action on black carbon, biomass burning etc...). We also consider it key to set the EU on the path for ambitious emission reductions after 2030, as part of the zero-pollution objective.

1. Effectiveness gap: current NECD obligations fall short on the urgency to act to protect health

1.1. Outdated scientific base

The health impacts due to current poor air quality are unacceptable and require urgent science-based policy action. The 2021 updated WHO air quality guidelines considerably tightened recommended maximum concentrations for fine particulate matter (PM2.5), nitrogen dioxide (NO2) and particulate matter (PM10), compared to the 2005 guidelines that were available when the current NECD was negotiated. Since 2021 there has been a clear understanding that no safe level of air pollution exists and that adverse health effects can occur even at low levels. The current NECD entered into force years before the new WHO guidelines were published. The current NECD is therefore based on outdated science, which clearly creates an effectiveness gap.

Moreover, when it was adopted by policy makers in 2016, the current NECD was already a weakened directive compared with what was needed already at that time, due to weak commitment requirements, loopholes and flexibilities. During the negotiations HEAL and other health organisations repeatedly pointed out the shortcomings, highlighting that the directive needed a higher level of ambition to deliver clean air and health benefits.

1.2. Methane loophole

In the original 2013 legislative proposal, methane (CH4) was proposed for inclusion by the European Commission in the scope of the current NECD. Methane is a major precursor for ozone pollution, as well as a powerful climate forcer. Unfortunately, the co-legislators at that time decided to exclude any emission requirements for methane from the current legislation.

Ozone pollution is a major concern for health: in a study published in the British Medical Journal in 2020, the researchers underline the health benefits of ozone (O3) pollution reductions (in addition to reaching WHO air quality guidelines). Exposure to ozone can lead to more hospital admissions and a higher number of deaths from heart and respiratory diseases. Elevated levels of ozone can also damage plants, leading to reduced agricultural crop yields and decreased forest growth. With the

increase in the severity and number of heatwaves due to climate change, ozone pollution has already increased in the EU.

Reduction of methane emissions in the EU urgently needs to accelerate, as evidenced by the EEA. Since CH4 emissions need to be tackled globally in order to have long-term benefits for O3 reduction, the EU needs to contribute its share. In Europe the ozone pollution curve needs to be inverted. Scientific data on the health impacts of ozone is growing and according to the results of the EU-funded Exhaustion project, exposure to ozone and heat leads to increased mortality in cities.

2. Coherence gap: NECD implementation is being hampered by several other EU sectoral policies, the current NECD is falling short of the AAQD ambition level

2.1. Climate and Energy policy: classification of wood burning as renewable energy incentivises air emissions

Certain aspects of the EU's climate and energy policies have unfortunately led to an increase in emissions of particulate matter PM2.5 and need to be addressed without delay.

In recent years, the burning of wood in private homes and in power or heating plants has increased and is hailed by many as a climate-friendly alternative. Wood burning is classified by the EU as a renewable energy source, despite major concerns about the air pollution and CO2 emitted. Wood burning – especially in single room furnaces – is a large and growing source of black carbon ultrafine particles and PAHs emissions which negatively impact health. According to the German Environment Agency, PM emissions from wood combustion in heating systems and power plants are already surpassing the well-documented high levels of PM emissions from the combustion of fossil fuels.

Biomass burning is a false solution, it is fueling the climate crisis and harms health. With high fossil energy prices and rising energy poverty, biomass burning is set to become even more prominent, and is actively subsidised by governments as a renewable energy form. Boosting energy efficiency and spurring investment in non-combustible, renewable energy sources instead of incentivising wood burning would contribute to the successful implementation of the NECD and yield clean air co-benefits.

2.2. Air policy: current lack of integration of NECD with AAQD results in missed emissions reductions

Policy effectiveness will only be fully achieved when the health effects of air pollution are prevented in accordance with the latest science. The NECD is a major instrument to help maintain the air quality limits set in the EU's Ambient Air Quality Directive. Greater coherence between the key instruments of the EU's clean air framework is urgently needed.

Emission reductions obligations for each member state in the NECD should be calculated in order to at least achieve the (revised) AAQD maximum concentrations limit or target values across the EU. This coherence goal seems however to have been overlooked. In fact, poor application of the AAQD in almost 60% of member states resulted in no less than 25 infringement cases still being open in February 2024.

Once a tool for translating international commitments on tackling transboundary pollution into EU legislation, the NECD should be more than that. The adoption of the new AAQD means new national emission reduction commitments for both primary pollutants and precursors should be directly derived from the new limit and target values that will enter into force in 2030. Before that date, it is essential for the EU to firmly embark on a trajectory of bringing emission reductions to lower concentrations across the Union, in order to align with the WHO guidelines by 2035 at the latest. This was the negotiating position of the European Parliament for the AAQD revision, the position of health groups was full alignment by 2030.

Alongside the coherence gap with climate, energy and air policy, there is a widely recognised coherence gap with current agricultural and industrial policy. According to the EEA, the agricultural sector is responsible for some 94% of EU ammonia (NH3) emissions. Clearly, although the Common Agricultural Policy (CAP) receives a substantial share of the overall EU budget, at one third, it is currently failing to shift incentives away from NH3 emitting practices. This major air pollutant is primarily and persistently emitted, (see part 3), both from certain livestock management practices and the cultivation of crops. However, large cattle farms are not included in the EU's Industrial Emissions Directive (IED), another key piece of legislation for cutting air pollutant emissions at source.

3. Compliance gap: none of the reduction commitments are fully met

The obligations under the current NECD are too weak to achieve the required emissions reduction and don't provide sufficient incentives to member states for preventing delays or non-compliance. Back in 2016, the EU co-legislators failed to show the appropriate level of political will to respond to the health emergency caused by air pollution by not including a 2025 binding target. This decision was taken despite a 2014 Complementary Impact Assessment by the European Parliament which underlined that such a target would have been cost effective, "even in the most conservative assessment of health benefits". Civil society has also repeatedly called for an interim 2025 binding target.

In the absence of an interim binding target, in 2022 there were 19 cases of non-compliance in 14 member states that concerned all pollutants regulated under the NECD, with most cases relating to ammonia. A year later, on the basis of reviewed data from 2021, the Commission's compliance assessment found that most non-compliance cases had not been resolved, and even that a few additional breaches had occurred. In 2023 as well, the EEA underlined that 13 member states were failing to meet their emission reduction commitments in 2021 for at least one of the five main air pollutants.

Those who bear the highest costs of coherence gaps and non-compliance are the patients whose health is affected by polluted air. In the Third Clean Air Outlook, the Commission estimated that in 2025, the benefits of reduced air pollution for health, ecosystems and materials by far outweigh the investments needed into emission reduction measures. In its 2024 report on progress made on the NECD implementation, the Commission reminds us that "in the *baseline* scenario, the total health damage due to air pollution in 2025 is conservatively estimated at around EUR 173 billion per year, whereas non-health damage (materials, crops, forests, ecosystems) is estimated at between EUR 33 and 41 billion per year (based on 2015 prices), depending on the valuation method used to calculate ecosystem damage. The modelling results show that scenarios with more ambitious clean air policies systematically provide net direct benefits (i.e. benefits minus costs) compared to the baseline. More ambitious clean air policies also positively affect EU GDP in 2030, which would increase by 0.26 to 0.28% compared to the baseline." The failure to accelerate pollutant emission reductions is therefore economically irrational.

Unfortunately, the current NECD does not require member states to report information on the estimated benefits or required investments of the policies that they select for their NAPCPs, including behavioural, non-technical measures.

In the future, such reporting should be made compulsory and publicly accessible, as this information is key for efficiency comparability between policy measures. It also ensures that member states are accountable to the public on their commitment to clean air for health.

3.1. 2030 non-compliance prospect

In 2030, new and more stringent AAQD limit and target values will enter into force. For that very year, non-compliance with NH3 emission reduction obligations is predicted, according to the latest projections submitted by 22 member states. This is also the case for NMVOC, NOx and PM2.5. It is high time that member states adopted additional measures to prevent the health and economic costs that would result from the projected non-compliance. Despite this, there have been substantial delays in providing NAPCPs, resulting in the opening of a high number of infringement procedures in 2020 (36 in February, 37 in July). It is unacceptable that member states have shown so little commitment to address the urgency to cut air pollution.

3.2. Ammonia (NH3) emissions persistent stagnation

Time and time again, emissions of fine particulate matter's (PM2.5) precursor ammonia (NH3) have not decreased enough and constitute the biggest enforcement gap of the modest reductions prescribed in the current NECD. Currently 97% of EU's urban population is exposed to PM2.5 levels that are higher than those recommended by the WHO. Part of this exposure is due to contributions from non-urban emissions, thereby limiting the scope of what local urban authorities can do to prevent exposure. To cut PM2.5 secondary formation at source, it is vital to reduce NH3 emissions.

According to the EEA in 2023, "10 Member States will have to further reduce NH3 emissions by up to 10% to meet their 2020-2029 national emission reduction commitments. In many member states, NH3 emissions have decreased only slightly since 2005 or in some cases increased, highlighting the challenge of tackling these emissions. NH3 emissions impact biodiversity and contribute to the formation of secondary PM2.5, the main air pollutant driving premature death in EU member states. Reducing NH3 emissions is critical to achieving the zero pollution action plan target of reducing by 25% the EU ecosystems where air pollution threatens biodiversity."

3.3. Mercury

At the same time, reductions in mercury (Hg) emissions are at risk due to political delays on rapid coal phase out. Mercury is a global air pollutant which has severe adverse impacts on human health and the environment. At EU level, the main source of mercury emissions to air is the burning of coal, but significant emissions also come from non-ferrous metal industries, cement production, and crematoria. With the slow pace of the coal phase out in certain member states, mercury exposure continues in the EU and may reduce children's IQ and consequently decrease their educational and professional achievements over a lifetime. Clearly, this has implications for society and the economy. Overall efforts on reducing mercury pollution need to be strengthened.

4. Improved information base and emerging concerns

Currently, EU law does not require the monitoring of pesticides in outdoor air, which contributes to an important knowledge gap on the hazards to health and the environment. The French ANSES

however has been pioneering in this field and in 2020 the Agency identified "32 top priority substances for which further investigation is required to guide this monitoring activity."

In contrast to the above, the NECD did at least deliver on an improved information base, mandating and providing a wealth of public information on member states' (lack of) intended policies and measures to reduce emissions at national level. Also, in accordance with Article 12 of the directive, several editions of a European Clean Air Forum were organized by the Commission in various member states and were instrumental for structuring and informing the EU's policy debate on clean air. This was particularly thanks to the involvement of scientific health experts, representatives of the affected groups as well as other stakeholders such as healthcare insurance funds.

CONCLUSION

The current NECD presents severe gaps in effectiveness, coherence and compliance that need to be addressed up to 2030 and beyond. Tackling air pollution at source is a public health priority for health groups and constitutes a major primary prevention opportunity. It also is an important driver of economic sustainability, as the benefits of investing into clean air action by far outweigh the high cost of air pollution.

There is a clear urgency to see greater science-based efforts by member states, with proper enforcement by the European Commission, to swiftly cut air pollution emissions at all sources, not only through technical solutions but also thanks to policies and measures supporting behavioral change. In the EU's clean air efforts, the protection of vulnerable groups should be prioritised, including people who face socio-economic inequalities. Achieving clean air is not a lifestyle choice but a question of political will.

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The Health and Environment Alliance (HEAL) is the leading not-for-profit organisation addressing how the environment affects human health in the European Union (EU) and beyond. HEAL works to shape laws and policies that promote planetary and human health and protect those most affected by pollution, and raise awareness on the benefits of environmental action for health.

HEAL's over 80 member organisations include international, European, national and local groups of health professionals, not-for-profit health insurers, patients, citizens, women, youth, and environmental experts representing over 200 million people across the 53 countries of the WHO European Region.

As an alliance, HEAL brings independent and expert evidence from the health community to EU and global decision-making processes to inspire disease prevention and to promote a toxic-free, low-carbon, fair and healthy future.

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