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HEALTH PARLIAMENT**

EUROPE'S NEXT GENERATION OF HEALTH

COMMITTEE ON HUMAN HEALTH & THE ENVIRONMENT

LETTING EUROPE BREATHE

A Vision for Improving Air Quality in Europe

#WeRun4Health

2018-2019

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ENDORSEMENTS

The Committee would like to thank the following individuals and organisations for the continuous support, guidance, comments, and invaluable suggestions throughout the past six months. This policy brief is a result of collaboration, hard work, and dedication from the team members.

A big thank you to:

- › **Transport & Environment**
- › **European Public Health Alliance** (EPHA)
- › **Clean Air and Environmental Protection Associations** (EFCA)

Petra de Sutter, MD, PhD

*Senator – Parliamentary Assembly Council of Europe
Head of list 2019 European Elections*

"I am very happy to endorse the European Health Parliament's recommendation on air pollution. The air quality directive should urgently be updated in line with WHO guidelines. Environmental issues are not only a matter of health but also of social justice and need to be addressed as a top priority in European policy making."



Biljana Borzan

Member of the European Parliament (S&D, Croatia)

"I commend the Committee on Environment and Human Health for these comprehensive recommendations. The air we breathe, as EU citizens, is so closely connected to so many aspects of our health – from our everyday wellbeing, all the way to preventing longer term conditions related to non-communicable diseases. I congratulate the Committee on tackling this topic by taking into account the different dimensions it encompasses, from city planning to improved cross-policy cooperation. I hope these recommendations mark the beginning of a bigger debate on air quality and human health in Europe."



Pascal Smet

Brussels Minister of Mobility and Public Works

"The airways of our lungs are more important than the highways for our cars. I wholeheartedly subscribe to the recommendations of the European Health Parliament. It's high time our cities and the EU make this a top priority."



EXECUTIVE SUMMARY

The threats to human health posed by air pollution are undeniable, both for current and future generations. Improving the quality of the air we breathe needs to be a priority on the political agenda and it is necessary to deal with it through a holistic approach.

Our recommendations tackle the cross-cutting issue of air pollution, focusing on five pillars:

- 1. The update of the EU Regulatory Framework considering the standards set by the WHO, mainly focusing on the current Ambient and Air Quality Directive.**
- 2. The upgrade of EU monitoring systems and campaigns to raise awareness among citizens.**
- 3. Transport systems and urban planning focusing on reducing pollution from vehicles, tackling both emissions from goods and people transportation.**

- 4. Heating systems, building efficiency and renewable energy. In some countries, pollution due to household heating with solid fuels is one of the main causes of air pollution and can be tackled successfully by investing in renewables and clean technologies.**

- 5. Policies, fiscal systems and incentives aimed at ensuring a coherent approach among EU policies, budgets and national financing schemes.**

Improving air quality is a cross-silo competence in which many issues are at stake. Our policy recommendations aim to involve citizens as well as various stakeholders, from policymakers to doctors, academics and businesses.



INTRODUCTION

Air pollution is the first environmental cause of death in Europe, resulting in more than 400,000 preventable premature deaths per year¹, contributing to a significant proportion of mortality due to chronic obstructive pulmonary disease, lower respiratory illness, ischaemic heart disease, lung cancer, and cerebrovascular disease.^{2,3} As a result, the financial cost of the health effects of air pollution in the region amounts to approximately €1.2 trillion yearly.⁴ Tackling air pollution would not only bring immense health and financial benefits, but it would also contribute to achieving the Sustainable Development Goals (SDGs) while reducing global warming.⁵

Growing scientific evidence and countless climate protests stress the urgency of implementing a sustainable agenda in line with the 2015 Paris Agreement, the Katowice implementing act and the vision for a climate-neutral Europe by 2050.^{6,7,8} On the other hand, social protests like the yellow vests movement triggered by raising fuel tax point to the need to grant specific attention to socially vulnerable groups when taking measures to improve air quality.⁹ Additionally, the recent alarming results of both the European Court of Auditors and the European Environmental Agency suggest that the European region is divided by double standards and demonstrate that the poorer and most vulnerable groups are most affected by air pollution.^{10,11} Hence, reducing social inequalities across Europe and protecting the most vulnerable groups should underpin any efficient environmental and sustainable development policy and vice versa.

The three major causes of outdoor air pollution are (1) burning of fossil fuels, with transport and heating being the most significant, (2) industrial processes and agriculture, and (3) waste treatment.¹² To allow a more focused analysis, these recommendations prioritise mainly transport, heating and policies related to agriculture. We are however aware that this approach has some limitations since it neglects indoor air pollution estimated to cause 4.3 million deaths globally every year, out of which 120,000 are in the European region.¹³

The Committee has developed these recommendations based on comprehensive literature search and feedback from more than 30 experts and policymakers from intergovernmental organisations, EU institutions, national and local authorities, NGOs, the business sector, academia and patient organisations.

"Air pollution is the first environmental cause of death in Europe, resulting in more than 400,000 preventable premature deaths per year."



RECOMMENDATIONS

Review the EU Regulatory framework according to the latest World Health Organisation (WHO) standards

The concentrations of the three most harmful pollutants – particulate matter, nitrogen dioxide and ground-level ozone – are still too high, especially in comparison to the WHO standards. **The current Ambient (Outdoor) and Air Quality Directive fitness check offers an excellent opportunity to adapt the EU standards to the latest recommended by the WHO.**¹⁴

The National Emissions Ceiling Directive (NEC), should set mid-term targets to assure the gradual achievement of 2030 targets.¹⁵ Member States (MS) that are developing their National Air Pollution Control Programmes should, in addition to consulting the public as foreseen by the NEC Directive, also publicly submit a cost-benefit analysis of their programmes featuring a health impact assessment of these plans, which includes health benefits.¹⁶

In order to accelerate compliance, the EU should optimise Members States' accountability and adopt *Implementing Acts* that improve monitoring and clarify the structure of air quality plans (including a timeframe), holding them accountable in a more efficient and timely way when breaching occurs.

In cooperation with the WHO and healthcare professionals, the EU Commission should develop policy proposals, as well as finance guidelines and tools for engagement of other sectors, such as agriculture, transport,



energy and urban planning, and highlight the health and economic benefits that could be achieved by better policy choices. In terms of prevention, citizens should be informed on how to protect their health from air pollution (caused both by traffic and domestic heating). Such guidelines should be widely distributed (schools, hospitals etc.), for example in the form of educational sessions.

Strengthen air quality monitoring to implement targeted policies, raise awareness and guarantee the protection of the most vulnerable groups

Information should be based on an efficient and granular monitoring system critical in providing correct information; it should also hold public authorities accountable (from Member States to cities) and optimise efforts towards improving air quality. To this end, **the current system of EU-authorised monitoring stations needs to be harmonised, improved and enlarged. Additionally, it should be integrated into traffic management systems and information campaigns.**

Clear rules should be established for data transparency, data interpretation, and the number and locations of monitoring stations:

- › Place quality sensors around health facilities, schools and other public places and street canyons (avoiding parks to not distort the real pollution values) that are connected to a warning system^{17,18};
- › Establish new parameters to optimise traffic from the environmental and health perspective (e.g. see Potsdam traffic flow management scheme);
- › **Harmonise cities' air quality warning systems to reduce health inequalities within the EU and avoid double standards.** For example, according to the European Court of Auditors' report, the air considered 'poor' in Brussels is believed 'sufficient' in Krakow¹⁹;
- › **Improve the transparency of apps** and impose them to set conditions on disclosing where information originates from, especially in light of their relation to m-Health;
- › **Educate citizens about the correct usage and interpretation of wearable Personal Exposure Monitoring devices** (that quantify an individual's PM2.5 exposure²⁰) and about the possibility of getting lab-certified results in real time.^{21,22} Citizens should be frequently exposed to air pollution information through billboards in high traffic hubs, comparing the current pollution level to other tangible negatives (e.g. comparing smoked cigarettes as equivalent to the levels of air pollution).

To raise awareness, **the EU should launch an EU campaign/award linked to the Mobility Week (car-free day) and Clean Air Forum** that target national audiences, by putting the spotlight on the actors that work the most toward improving air quality (including cities).^{23,24}

Improve the transport system and implement sustainable and healthy urban planning

Transport accounts for 27% of total EU greenhouse gases (GHG) emissions.²⁵ **Road transport** is estimated to be responsible for 30% of the particulate emissions in European cities – mostly due to diesel traffic.²⁶ Heavy duty vehicles (HDVs), like trucks, buses and coaches, are responsible for 27% of road transport emissions, accounting for ca. 6% of the EU total GHG emissions and it is projected to increase by 56% between 2010 and 2050.²⁷ However, the most carbon-intensive mode of transport is aviation. Between 1995 and 2050, passenger transport in the EU, including aviation, is expected to grow by around 70%.²⁸

"Road transport is estimated to be responsible for 30% of the particulate emissions in European cities – mostly due to diesel traffic." ²⁶

It does not come as a surprise that cities are most affected by air pollution.²⁹ This is why **adopting a holistic approach in transport multimodality and sustainable urban planning is strategic to reduce air pollution.** All stakeholders need to work towards the creation of future-proof cities that implement sustainable transport systems and ease the uptake of sustainable technologies to improve the quality of life and health of their citizens (including the most vulnerable groups).

In light of these considerations, the following recommendations are proposed:

- › **Fix highly polluting vehicles on roads and reform periodic technical inspection.** EU standards should measure pollutants in on-road conditions, ensuring lifetime compliance, and covering harmful pollutants (e.g. ultrafine particles and ammonia). The possibility should be considered of spotting the most polluting vehicles on roads thanks to remote sensing technology linked with automatic number plate recognition.³⁰
- › **Reduce emissions from goods transportation.** While CO₂ emission standards are on the way for new HDVs, **diesel efficiency standards are required for the 'old' circulating HDVs** (98% of lorries are powered on diesel) including hardware upgrades should these vehicles be exported elsewhere.^{31,32} Companies must adopt zero-emission fleets by 2040. Since rail and water transport **(with clean fuel)** are more efficient than road transport, industry should invest in the extension of rail and canal infrastructure in Europe through projects like TEN-T.³³ Investments can be repaid by offering a discount for the use of such infrastructure.
- › **Reduce emissions from personal transportation.** National Air Pollution Control Programmes should include concrete targets related to mobility, like setting a minimum number of electric charging points, car-sharing provisions based on the current number of cars, and access to clean public transport within less than 200 meters in urban areas.
- › **Introduce a "mobility manager" in companies.** This person coordinates employees' commutes and encourages car-sharing also among neighbouring companies.
- › **Increase European cooperation on train transport, including night trains and ensuring fair pricing**

"Funds collected through this taxation scheme must be earmarked to finance clean air initiatives exclusively, such as rail networks and research that accelerates innovation in fuel efficiency of aircrafts and housing."

(EU Mobility Card for the young, elderly and most disadvantaged). The EU Emissions Trading System (EU ETS) should reflect the unfair advantage of aviation over other means of transport in terms of CO₂ emission contribution.³⁴ The amount of **aviation** emissions allowances in circulation set in Directive 2008/101/EC should be auctioned at least 50%, not 15% as it stands.³⁵ Additionally, similarly to the levy on carrier bags to reduce plastic waste, a levy per flight per adult should be introduced on airlines to reduce use of low-cost flights (supported already by the Belgian, Dutch and French governments).^{36,37} **Funds collected through this taxation scheme must be earmarked to finance clean air initiatives exclusively, such as rail networks and research that accelerates innovation in fuel efficiency of aircrafts and housing.**³⁸

- › **Reward citizens and encourage soft/shared mobility schemes.** Many public authorities like the Netherlands or the cities of Bari and Bologna are rewarding their cyclists for keeping themselves active and healthy, while not creating pollution.^{39,40,41} **This strategy could be expanded by rewarding citizens that use public transport or shared mobility schemes:** users' cards and app subscriptions could be linked to their fiscal number to receive tax incentives proportional to the use.
- › **Triple the number of cyclists in Europe by 2025.** To this end, a revision of the EU Regulation 78/2009 regarding the protection of pedestrians and other vulnerable road users should extend its scope to cyclist protection⁴² (by making it compulsory to create separate bike lanes and guaranteeing their trajectory).⁴³ This target can be achieved also by strengthening the Pan-European Master Plan for Cycling Promotion currently under implementation.⁴⁴
- › **Make better use of empty facilities** by allowing residents to park their cars and bikes at night in companies' parking garages, facilitating reallocation of parking spaces for the benefit of bike lanes/pedestrian areas.
- › **Favour land use policies towards city compactness and the reallocation of space by prioritising pedestrians** and ensuring that the existing legislation, such as the Urban Vehicle Access Regulations⁴⁵, is properly implemented considering the benefits this

can bring to human health. Widening, expanding and improving the pedestrian walkways network, including strategies of cooling and shading with green space by **setting a European standard of a minimum square meters of green zones for every citizen** would improve air quality and reduce health inequalities. This includes increasing the green and pedestrian spaces in schools and their surrounding areas, combined with school walking-bus schemes, all of which could lead to fewer cars in use near schools and consequently abate exposure to pollution. In order to focus on protecting health and wellbeing of vulnerable groups and pedestrians in general, a **revision of speed limits in urban areas** should be encouraged (30km/h speed limit instead of 50km/h).⁴⁶

- › **Further encourage national policymakers and other stakeholders to implement best practices in urban planning and sustainable mobility solutions** (walking and cycling infrastructure) via projects like CIVITAS.⁴⁷

Improve heating systems, boost buildings' efficiency and increase uptake of renewables

The heating and cooling of buildings consumes half of the EU's energy and 75% of energy comes from fossil fuels.⁴⁸ Investing in energy efficiency is cheaper than producing renewable energy. The public sector must play a crucial role **by phasing out primary heating from coal and oil fuel by 2030** (or sooner) **and upgrading the infrastructure to exploit renewable energy** in regions where phasing out is not yet feasible.⁴⁹ However, it is important to note that 45% of energy in heating and cooling in the EU is used in the residential sector and 36% in industry.⁵⁰ In some European countries, up to three-quarters of outdoor fine particulate matter pollution is due to household solid fuels heating (e.g. coal and biomass).⁵¹

The EHP acknowledges the European Commission strategy adopted in February 2016 as part of the Energy Union Package in order to increase awareness about the health, environmental and long-term financial benefits of investing in energy efficiency.⁵²

- › The **Eco-design Directive** sets minimum requirements for environmental standards of domestic heating products, but Member States remain responsible for **providing incentives to accelerate the uptake of the latest and cleanest technology for renewable energy**.⁵³ Member States should pay particular attention to **vulnerable groups** (for example tenants), who often do not have a say in improving the housing quality

but have to bear the health and financial burden of such deficiencies. If a fast adoption of clean heating is impossible, best practices on the current use of systems like the Clean Heat Project should be encouraged.⁵⁴

- › All businesses (SMEs included) should make the surplus of renewable energy they create available for the market

Adapt policies, fiscal systems and incentives

'Health in all policies' is set by the Lisbon Treaty, the WHO in collaboration with the Finnish Presidency and more recently in the SDGs.^{55,56,57} We recommend a **coherent approach among all EU policies, budgets and national financing schemes**, with a requirement to protect and promote public health.

- › The next European Parliament should strive to secure cleaner air for its citizens, asking DG SANTE to educate policymakers and to request that a systematic air quality-focused health impact assessment is carried out for all relevant policies. Different taxation mechanisms should be compared in terms of their cost-effectiveness to deliver on health benefits. The environmental impact of fossil fuels should be considered in countries' taxation policies to avoid under-taxing diesel in comparison to gasoline, and the **EU rules on energy taxation should be revised accordingly**. Similarly, EU schemes such as **Cohesion funds, EFSI, Horizon Europe, the EU Urban Agenda, and funding from the European Investment Bank** should be instruments to achieve the objectives of the air quality legislation (e.g. by encouraging the creation of **geothermal implants/district heating in cities**).
- › With 37% of the EU budget allocated to the Common Agricultural Policy (CAP),⁵⁸ EU citizens expect the CAP to make a stronger contribution to the environment. The agricultural sector accounts for 10% of the EU's total greenhouse gas (GHG) emissions.⁵⁹ Agricultural emissions

of ammonia and methane continue to exceed air quality thresholds.⁶⁰ The proposed CAP Strategic Plan beyond 2020 must **set EU-specific GHG targets on ammonia and methane emission reductions** that translate into an ambitious conditionality and associated **subsidies ring-fenced on air quality improvement**.

- › Monitoring and evaluation of performance should use indicators that would not be offset by emissions from other parts of the world.⁶¹ With nearly 72% of CAP fund income support for farmers⁶², GHG reduction beyond targets can be further **incentivised with attractive top-up payments** on additional clean air-specific interventions implemented under voluntary Eco-schemes (Pillar I) and Environment Management Commitment (Pillar II). Overall, the public sector must set an example and accelerate progress towards better public health through better air quality. To this end, sustainable and strategic public procurement criteria in the tendering process should be mandatory to create market demand and speed up suppliers' capability to innovate and deliver more on sustainably.⁶³
- › Similar to the Framework Convention on Tobacco Control, the EC should actively engage those who work in health and other relevant policies in tackling air pollution by stepping up on the global stage and **calling for a binding instrument on Air Quality**.

"We recommend a coherent approach among all EU policies, budgets and national financing schemes, with a requirement to protect and promote public health."



CONCLUSIONS

Health Committee on Environmental & Human

- Arianna Gamba

SPEAKERS

- François Wakenhut, Head of Unit for Clean Air, DG Environment, European Commission
- Yoann Le Petit, Clean Vehicles & New Mobility Officer, Transport & Environment
- Susanna Palkonen, Director, European Federation of Allergy and Airways Disease Associations

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Air pollution remains a global pandemic, with low-income individuals suffering the highest risk of the associated consequences in terms of health. The Committee has developed recommendations focusing on regulatory policies, transportation and urban planning, heating and renewables, and economic incentives.

Air pollution is by definition a pan-European, cross-border issue: an improvement of air quality in one city or country is often neutralised by an industrial zone outside of the city or across the border. Best practices that inspired these recommendations have proven that it is possible to improve air quality and reduce the related mortality and morbidity rates via implementation of the European regulatory framework. Hence, the determinant factors to make all of the puzzle pieces fit together and bring positive results at all levels are political will, as well as a collaborative cross-sector approach integrating the health, social and environmental outcomes of any activity. It is time to act in order to let Europe breathe again.

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