

Rome, 23 May 2023

Italian Prime Minister

Italian Minister of Health

Italian Minister of Environment and Energy Security

Italian Minister of Universities and Research

Presidents of Italian Regions

Secretaries of Italian Political Parties

Environment and Health Committees of the Italian
Chamber of Deputies and the Italian Senate.

Open letter: We oppose the attack from the Regions of the Po Valley on the proposed revision to the Ambient Air Quality Directives (AAQD) as presented by the European Commission, and we ask for the immediate withdrawal of this opposition.

The position of the Po Valley regions

On 17 May, ANSA reported that four Italian regions were ready to counterattack the revision of the AAQD as proposed by the European Commission. "With a common position, Lombardy, Piedmont, Veneto, and Emilia-Romagna, together with other European regions such as Catalonia, Community of Madrid, Styria, and some Dutch provinces, are requesting ambitious yet realistic objectives with feasible deadlines and measures, flexibility that takes into account the specific characteristics of the regions, and better integration among all EU policies that affect air quality. The joint document will be presented to the European Parliament on May 24th in the presence of the three presidents Attilio Fontana, Alberto Cirio, and Luca Zaia."

Our position

In summary, the governors of the Po Valley regions are requesting less stringent pollutant limit values than those proposed by the European Commission, a temporary derogation, and a sharing of responsibilities that they do not want to bear. In effect, the governors believe that health protection measures could constitute a threat to the economy and industry.

As medical professionals and experts in environmental and health disciplines, we believe this is a disrespectful initiative towards the European context and the ongoing technical discussion on the proposed Directive. This opposition presumes to rely on better and more up-to-date data than that of the Commission and is misleading when it claims to protect the common good but instead attempts to maintain the level of the inadequacy of actions taken so far - by boycotting the legislative process at both national and European levels.

Any further flexibility and derogation in the implementation of measures, even radical ones, if necessary, for reducing pollutant emissions only exacerbate the health damages to citizens in terms of illness and death, intensifies the environmental crisis, and unsustainably increases healthcare costs (including pandemics) and the damages caused by extreme events such as floods, droughts and landslides. It is important to emphasise that the impact assessment, on which the European Commission's proposal is based, clearly demonstrates that for all the potential options considered,

"the overall net benefits of the initiative (between 29 and 38 billion EUR) are significantly higher than the costs"¹.

We therefore call for the end to this opposition to the Commission's proposal.

The facts and scientific data in context

The effects of climate change are dramatically evident and currently affecting Italy, with the country experiencing both droughts and floods, as predicted long ago by the Intergovernmental Panel on Climate Change (IPCC). National and regional Italian institutions are called upon to provide appropriate responses to protect the health and lives of citizens, bearing in mind the complexity of the response and the urgency of actions to be taken. In April 2023, the National Federation of Italian Medical Boards (FNOMCeO) and numerous other medical-scientific associations and societies called for political authorities to listen to the voice of the scientific community and take urgent action to reduce air pollution and mitigate climate change². The reduction of pollutant emissions and, therefore, ambient concentrations of air pollutants is an integral part of climate policy and has profound and immediate health benefits.

In Italy, air pollution causes over 50,000 premature deaths each year³. Adverse outcomes for pregnancy (low birth weight and spontaneous abortion), childhood diseases (bronchial asthma and respiratory infections), and adult diseases (cardiorespiratory diseases, diabetes, dementia, and lung cancer) all have known associations with air pollution. According to numerous scientific studies, there is a high incidence of these diseases associated with environmental exposure.

Italy's response to air pollution-related issues is entirely unsatisfactory, to the point that Italy (particularly due to the failures of the regions in the Po Valley, but also Lazio, Tuscany, Liguria, and Sicily) has been repeatedly condemned by the European Court of Justice for violating the air quality directive (whose minimum standards were supposed to be achieved by 2010) and still has an ongoing infringement procedure.

The most polluted area in the country, and one of the most polluted in Europe, is the Po Valley. While meteorological and geographical conditions are certainly contributing factors, recent studies conducted as part of the [Life-Prepair project](#) confirm that there are three factors responsible for fine particulate pollution in the Po Valley: the combustion of fossil fuels for heating (especially wood and pellets), road transport (emitting NO_x, precursors to particulate matter), and intensive agriculture and livestock farming (emitting ammonia, also precursors to particulate matter)⁴.

¹ Working document of the European Commission services, summary of the impact assessment report: <https://eur-lex.europa.eu/legal-content/IT/TXT/HTML/?uri=CELEX:52022SC0345>

² Appeal of the Associations and Medical-Scientific Societies and FNOMCEO (National Federation of Orders of Surgeons and Dentists) participating in the Italian Medical Days for the Environment (GIMA), Pisa, April 21-22, 2023. <https://www.isdenews.it/le-societa-medico-scientifiche-e-la-federazione-nazionale-degli-ordini-dei-medici-chirurgici-e-degli-odontoiatri-fnomceo-sostengono-lappello-per-adottare-misure-urgenti-contro-linquinamento>

³ European Environmental Agency <https://www.eea.europa.eu/publications/air-quality-in-europe-2022/health-impacts-of-air-pollution>

⁴ Marongiu, A., Angelino, E., Moretti, M., Malvestiti, G. and Fossati, G. (2022) Atmospheric Emission Sources in the Po-Basin from the LIFE-IP PREPAIR Project. *Open Journal of Air Pollution*, 11, 70-83. <https://doi.org/10.4236/ojap.2022.113006>

Of course, the contribution of industrial facilities powered by fossil fuels should also be added to this list.

The reduction of emissions of such pollutants is immediately possible through the following radical interventions:

1. Radical enhancement of public transportation by increasing the frequency of services, implementing regular schedules, and upgrading the rolling stock. This includes prioritising a modal shift to existing railway lines (which should be improved and made more efficient) by investing in park-and-ride facilities. However, the increase in public transportation must be accompanied by strict policies to reduce road traffic and a halt to any funding for new roads and highways.
2. Radical changes to mobility within urban areas by implementing low-emission zones (LEZs), establishing 30 km/h zones, and creating safe cycling and pedestrian paths (such as home-to-school routes and bike lanes), while simultaneously reducing the number of roads for vehicles and urban parking spaces.
3. Replacement of wood heating systems with sustainable energy sources and technologies.
4. Technological solutions for reducing ammonia emissions from agriculture and livestock farming, such as reducing the protein component of animals' diets and promoting a reduction in humans' consumption of meat.

The scientific data from the Life-Prepair project emphasises that interventions aimed at drastically reducing emissions of pollutants, especially in the transportation and agriculture/livestock sectors, have a synergistic effect, with the greater impact the more radical they are⁵.

In summary, the issue of air pollution in the Po Valley has a clear diagnosis, the consequences and costs of inaction are well known, and solutions have been identified. It is simply a matter of not wasting any more time.

In October 2022, the European Commission presented a proposal to revise the AAQD. Now, the European Parliament, national governments, and environmental and health protection associations are engaged in the process of discussing this Directive with the aim of approving it in the coming months. This Directive serves as the fundamental instrument that regulates the protection of European citizens from air pollutants and the actions of member states. Health scientists have considered this proposal to be a significant step forward in aligning European legislation with the [World Health Organization's Air Quality Guidelines \(2021\)](#) on pollutant concentration levels deemed harmful to human health. However, there have also been criticisms of its relative timidity in fully adhering to the WHO recommendations⁶.

It is within this context that the aforementioned opposition from the Po Valley regions, scheduled to be announced on May 24, 2023, arises.

⁵ Veratti, G.; Stortini, M.; Amorati, R.; Bressan, L.; Giovannini, G.; Bande, S.; Bissardella, F.; Ghigo, S.; Angelino, E.; Colombo, L.; et al. Impact of NO_x and NH₃ Emission Reduction on Particulate Matter across Po Valley: A LIFE-IP-PREPAIR Study. *Atmosphere* 2023, 14, 762.

<https://doi.org/10.3390/atmos14050762>

⁶ Boogaard H, Andersen ZJ, Brunekreef B, Forastiere F, Forsberg B, Hoek G, Krzyzanowski M, Malmqvist E, Nieuwenhuijsen M, Hoffmann B. Clean air in Europe for all: A call for more ambitious action. *Environ Epidemiol.* 2023 Mar 9;7(2):e245. doi: 10.1097/EE9.000000000000245. PMID: 37064425; PMCID: PMC10097564.

This initiative has already received strong criticism from scientific organizations and citizens⁷. We echo the words of Anna Gerometta, President of the Citizens for Air Association: "These demands are irresponsible, both regarding the health of citizens and in terms of commitments to reduce emissions in the context of climate change. The impact of pollution in Italy is the highest in Europe, not only due to the geographic conditions of the Po Valley but also because daily choices are made to invest in actions that generate pollution instead of those that reduce it. Transport should enable citizens to move within metropolitan areas using public transportation, wood combustion should be eliminated rather than incentivised as is currently happening, and agriculture, especially intensive livestock farming, needs to be scaled back and made sustainable. If Italy does not adhere to an ambitious new AAQD, it could score a resounding own goal and lose the most important match for the future of its citizens."

We, scientists, researchers, doctors, and public health practitioners, therefore request the immediate withdrawal of this request.

Francesco Forastiere, medical epidemiologist, Scientific Director of the *Epidemiologia e Prevenzione* journal.

Anna Gerometta, President of the Citizens for Air Association.

Carla Ancona, biologist, President of the Italian Association of Epidemiology.

Lucia Bisceglia, medical doctor, Head of the Epidemiology and Care Intelligence Unit at AReSS - Regional Strategic Agency for Health and Social Care, Puglia.

Maria Grazia Petronio, public health doctor, former member of CT VIA-VAS, Ministry of the Environment. Vice President of the Physicians for the Environment Association (ISDE-Italy).

Fabrizio Bianchi, epidemiologist, Institute of Clinical Physiology, CNR, Pisa.

Giovanni Viegi, medical epidemiologist, retired Research Director, National Research Council (CNR), IFC Pisa and IRIB Palermo. Former President of the European Respiratory Society (ERS).

Paolo Crosignani, medical doctor, former Director of the Environmental Epidemiology Unit and Cancer Registry, National Cancer Institute, Milan.

Lorenzo Pagliano, physicist, Associate Professor of Building Physics, Politecnico di Milano.

Sandra Vernerio, medical doctor, Co-founder of Slow Medicine ETS and Coordinator of Choosing Wisely Italy.

Rosella Ferraris Franceschi, former Professor of Business Economics, University of Pisa.

Maria Angela Vigotti, epidemiologist, formerly at the University of Pisa.

Daniele Menniti, engineer, lecturer in Electrical Systems for Energy, University of Calabria.

Tiziana Sampietro, medical doctor, former director of the center for inherited dyslipidemia, Monasterio Foundation, Pisa.

Palo Barberi, agronomist, Scuola Superiore Sant'Anna. Former Coordinator of the International PhD Program in Agrobiodiversity.

Simona Agger, architect, Member of the Board of SIAIS (Italian Society of Architecture and Engineering for Healthcare).

Tommaso Luzzati, Associate Professor, Department of Economics and Management, University of Pisa.

Roberto Romizi, medical doctor, President of the Physicians for the Environment Association (ISDE-Italy).

Gianni Tamino, biologist, former professor at the University of Padova.

⁷ <https://www.isdenews.it/regioni-padane-alla-carica-a-bruxelles-per-affossare-la-nuova-direttiva-sulla-qualita-dellaria/>

Paolo Lauriola, medical epidemiologist, coordinator of the Italian network of sentinel physicians (RIMSA).

Mauro Valiani, medical doctor, former Director of the Prevention Department, ASL 11 Empoli.

Liliana Cori, environmental communication expert, Institute of Clinical Physiology, CNR, Pisa.

Luigi Montano, medical doctor, coordinator of the EcoFoodFertility project, past president of the Italian Society of Human Reproduction (SIRH).

Federico Zanfi, architect, Associate Professor in Urban Planning, DASTU/Department of Architecture and Urban Studies, Politecnico di Milano.

Alfonso Senatore, engineer, Department of Environmental Engineering, University of Calabria.

Eduardo Missoni, medical doctor, professor of global health and development, Bocconi University, Milan.

Marco Talluri, scientific journalist, director of "Ambientenonsolo."

Maria Teresa Maurello, medical doctor, President of the ISDE Arezzo section.

Miriam Levi, medical doctor, epidemiologist.

Antonio Bonaldi, medical doctor, former medical director of hospital/university institutions in Bergamo, Verona, Milan (ICP), and Monza.

Pio Russo Krauss, doctor, former head of the Health and Environmental Education Department of ASL Napoli 1 Centro.

Francesco Gonella, professor of Physics, Department of Molecular Sciences and Nanosystems, Ca' Foscari University of Venice.

Luigi Boeri, engineer, former President of the VIA-VAS Commission at the Ministry of the Environment.

Paolo Vineis, medical doctor, Chair in Environmental Epidemiology at the MRC Centre for Environment and Health, School of Public Health, Imperial College London.

Paolo Pileri, professor of Environmental Territorial Planning at DASTU, Politecnico di Milano.

Vitalia Murgia, medical doctor, Lecturer in the Inter-University Master's Degree in Clinical Pharmacy at the Universities of Milan, Cagliari, and Granada. Lecturer in the Master's Degree in Nutrition and Nutraceuticals in the Evolutive Age at the University of Pavia.

Ugo Bardi, chemist, former professor of Physical Chemistry at the University of Florence.

Carlotta Fontana, professor of Architecture Technology at the School of Architecture Urban Planning Construction Engineering, Politecnico di Milano.

Alberto Mantovani, Toxicologist, former research director at the Italian National Institute of Health.

Angela Pasinato, paediatrician, president of the Italian Society of Primary Pediatric Care (SICuPP) Veneto.

Paola Michelozzi, biologist, Director of the Environmental and Occupational Epidemiology Unit and Cancer Registry, Department of Epidemiology, Lazio Regional Health Service - ASL Roma 1.

Umberto Agrimi, veterinarian.

Lucia Miligi, epidemiologist, voluntary collaborator providing professional support for research projects, ISPRO Florence.

Francesco Romizi, environmental journalist, communications manager of ISDE (Doctors for the Environment Association).

Aldo Di Benedetto, medical doctor, former official of the Ministry of Health.

Lucia Toniolo, Professor of Materials Science and Technology at Politecnico di Milano.

Maria Luisa Clementi, Editor-in-Chief of Epidemiologia e Prevenzione.

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