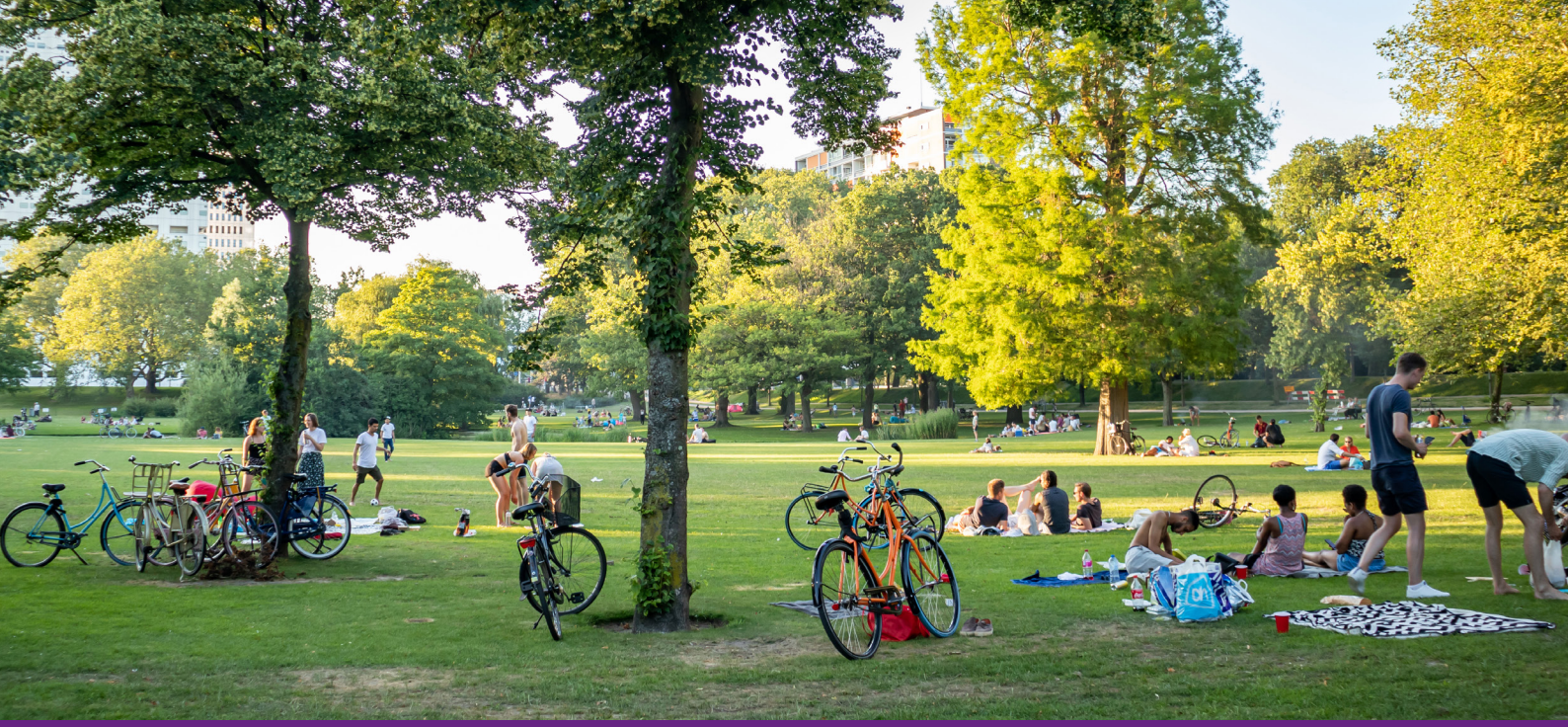

All Policies for a Healthy Europe

Improving citizens' well-being

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#Wellbeing4All #HealthyEurope

Unlocking Cleaner Air for All Citizens

A more Ambitious EU Air Quality Directive

The interlinkage between air pollution, climate change and health, as well as the global challenges it gives rise to, have long been recognised by academia[1], international bodies, such as the World Health Organisation (WHO)[2], and European Union (EU) institutions. For EU citizens, awareness of the impact of climate change on their health, to which air pollution contributes significantly, is also growing[3]. With its EU clean air policy, tools and instruments, the EU is well-placed to take the lead and address air pollution-related challenges.

Addressing air pollution is a critical necessity as well as a win-win solution to both reduce its burden on the health of EU citizens as well as mitigate climate change by reducing greenhouse gas emissions[4].

71%

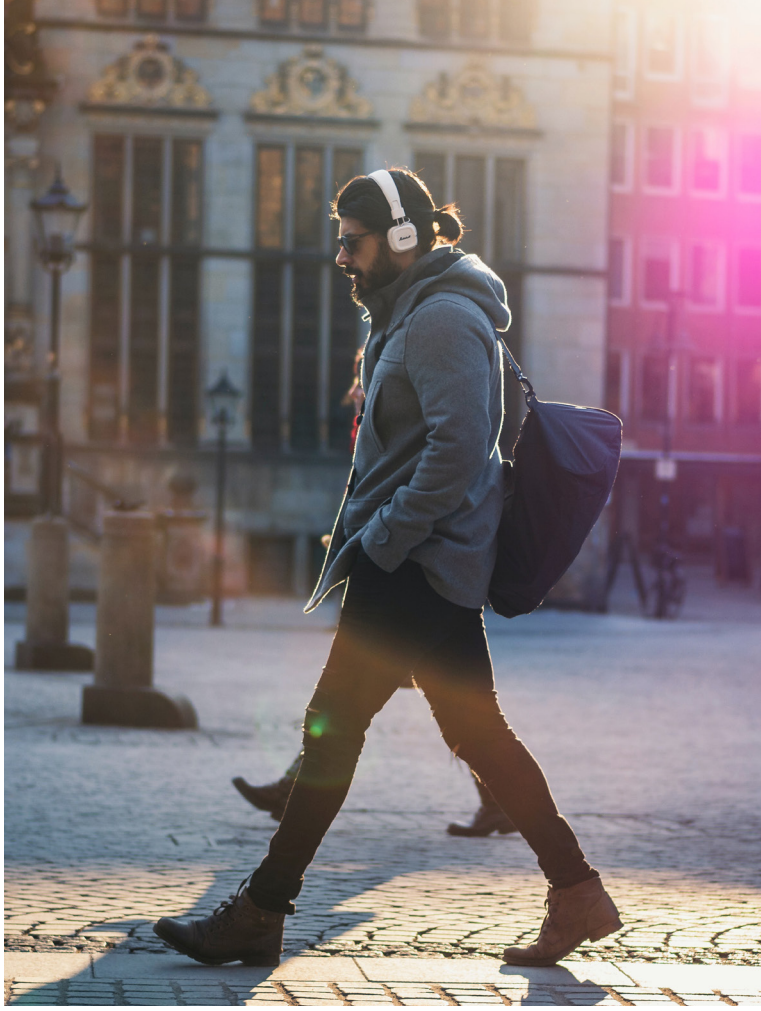
of Europeans think the EU should propose additional measures to address air quality-related problems in Europe[5]

Air pollution is indeed the principal environmental threat to health, with chronic exposure to air pollution, and especially particulate matter, such as fine particulate matter (PM2.5), increasing the risk of heart diseases, stroke, lung cancer and respiratory diseases such as asthma, bronchitis, chronic obstructive pulmonary disease (COPD) and respiratory infections[7].

Actions taken by the European Commission such as the adoption of its Clean Air Package in 2013[8], including its directives on the reduction of national emissions of certain atmospheric pollutants[9] and on limitation of emissions of certain pollutants into the air from medium combustion plants[10] , have shown their effectiveness in tackling the adverse effects of air pollution on health to some extent, notably by leading to a 33% decrease in premature deaths attributed to exposure to fine particulate matter between 2005 and 2019 in the EU[11]. Yet, in this last year, 307,000 premature deaths still resulted from exposure to PM2.5. The Covid 19 pandemic shed new light on the impact of air pollution reduction on health in the short term, showcasing how a temporary and partial reduction in common deadly pollutants can save lives, with an estimated 832 lives saved in the first half of 2020 alone[12].

88%

of the respondents want to see an increase in action and ambition to tackle air pollution[13]

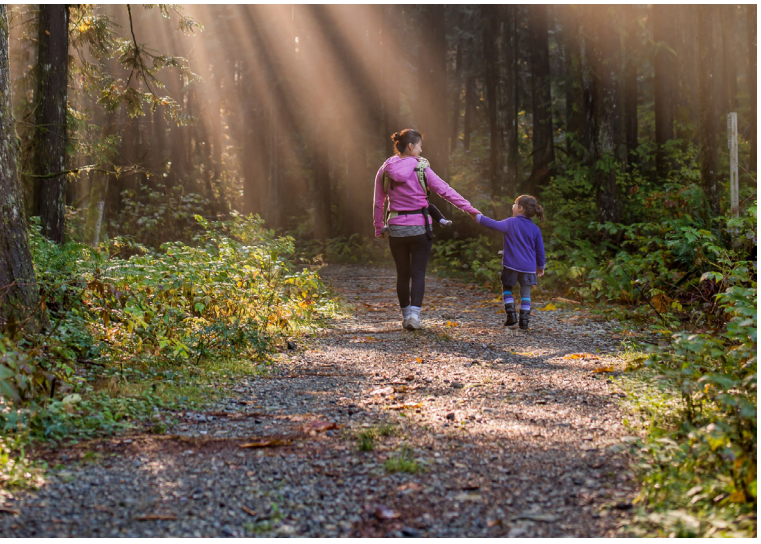


Further action has been taken. With the adoption of the European Green Deal (2019)[14], and its subsequent Zero Pollution Action Plan (2021)[15], the EU aims to reduce the health impacts (premature deaths) of air pollution by (more than 55%) by 2030 compared to 2005 levels through the revision of ambient air quality directives and PM2.5 emissions reduction. Air pollution is intrinsically linked to Climate and Energy independency goals. As Europe is addressing the current climate and energy crisis, through initiatives such as the EU Methane Strategy (2020)[16], the Global Methane Pledge (2021)[17], and the RePowerEU ambition (2022)[18], it is important to take into consideration the impact of these actions on air quality and the health of European citizens. These ambitions are welcomed and their link with the objective of reducing air pollution and its impact on health must be valued.

All Policies for a Healthy Europe welcomes the initiatives of the Commission, notably aligning on the World Health Organisation (WHO) global air quality guidelines as recommended in *All Policies for a Healthy Europe's* Zero-Pollution Ambition: Prioritising citizens' health & well-being Paper[19]. According to a Lancet Planetary Health study, this could indeed prevent 50,000 deaths each year across European cities[20]. Furthermore, the publication concluded that a reduction beyond these levels could prevent the deaths of more than twice that figure.

Scientific evidence shows that there is no safe level of air pollution[21]. However, these results point out that lowering exposure levels has a positive impact on the health of European citizens.

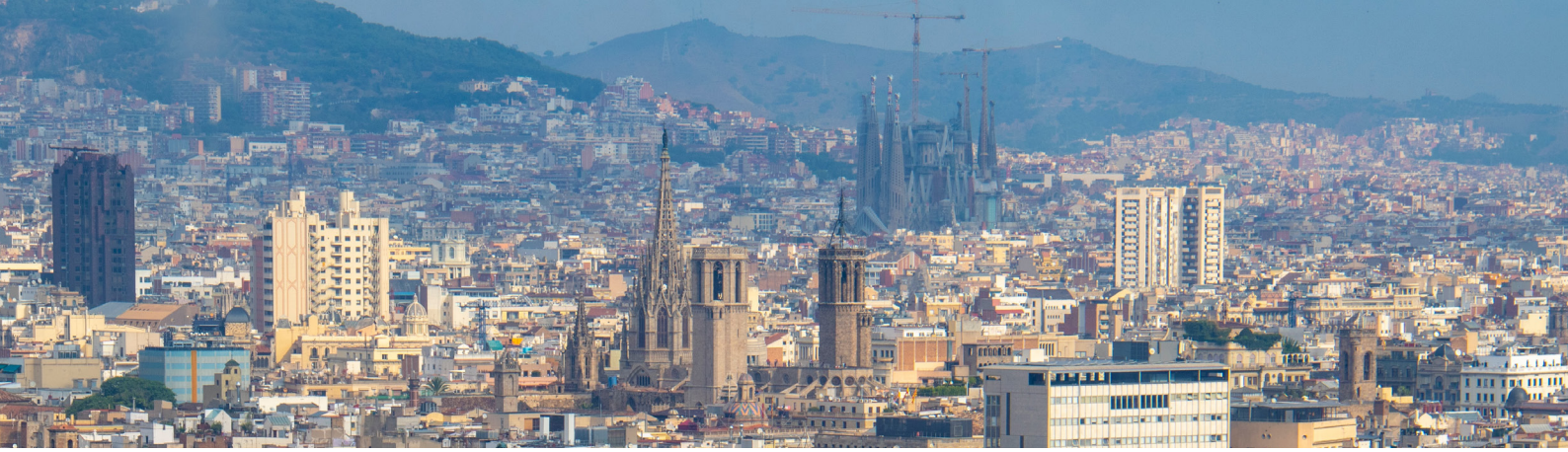
Thus, additional action must be taken to further reduce air pollution in the EU to a minimum[22]. *All Policies for a Healthy Europe* is keen to support the European Commission in its actions towards this objective. To that end, the Coalition has developed the following recommendations building on the expertise of its cross-sectoral and transversal membership and concrete case studies.



All Policies for a Healthy Europe's recommendations

Since there can be no safe level of exposure to air pollution, *All Policies for a Healthy Europe* believes that preventive measures and reduction of emissions at source must be prioritised. The coalition thus supports the adoption of stricter EU standards in regard to air quality, taking WHO guidelines as a minimum reference point. Furthermore, *All Policies for a Healthy Europe* calls for the inclusion in the Air Quality directive of a mechanism allowing systematic lowering of standards based on the latest published WHO guidelines and scientific data.

Setting long-term emissions reductions targets is a necessity, both from an air quality and climate change perspective. EU standards should be more stringent in this regard, and the corresponding system of penalties reinforced to ensure these requirements are met. However, complementary action should also be taken immediately to lower the health impact of harmful air pollutants concentrations that citizens are currently exposed to. This cannot be done without adequate tools to identify and monitor sources of pollution in real time and empowering us to react in a timely manner and be effective immediately.

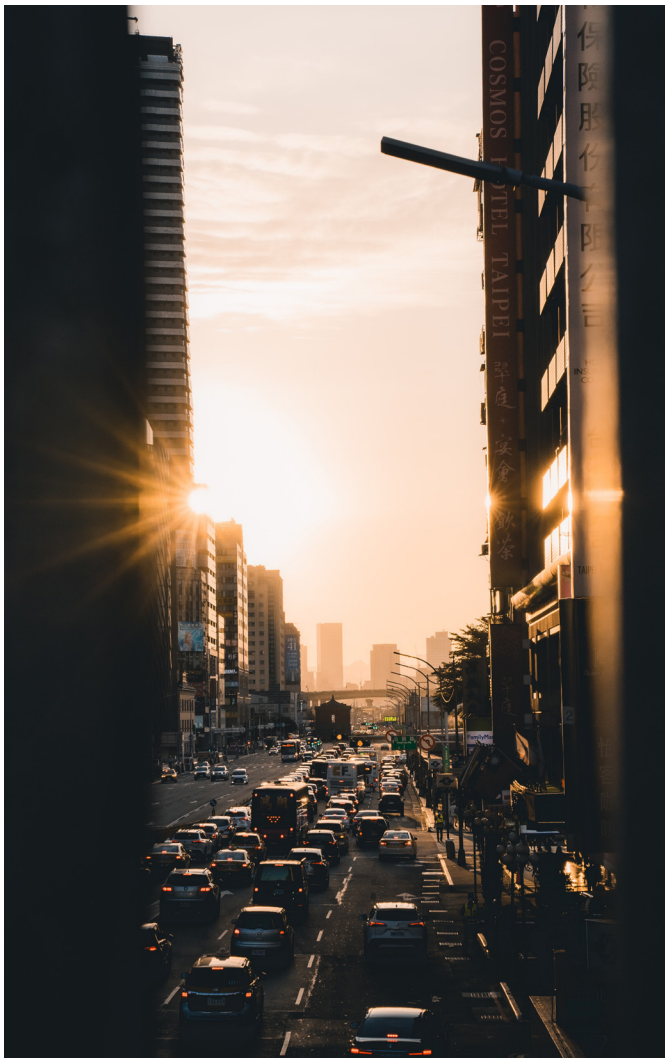


1. Promote the use of existing innovative solutions and technologies to drive short-term air pollution levels reduction

More than 75% of Europeans live in urban areas[23], which still represent hotspots for pollution. In 2021 alone, air quality standards have been breached in more than 100 cities in the EU[24].

Lockdown measures taken in 2020 have shown that even temporary and partial reductions of NO2 air pollution by reducing its generating activities - i.e., road transport and local mobility, can save lives[25].

These findings strengthen the case for the adoption of further measures to reduce these activities' emissions. Such measures may include ambitious Euro 7 standards, a low and zero emission zone framework, as well as the inclusion of mandatory zero-emission targets in the Sustainable Urban Mobility Plans (SUMPs) guidance documents, for instance. Furthermore, these findings also show just how impactful short-term reduction can be. Such decreases should also be an integral part of the EU's strategy to improve air quality. This is all the more true as innovative solutions already exist to achieve such reductions.



CASE STUDY:
Improving air quality in schools using innovative and available digital solutions

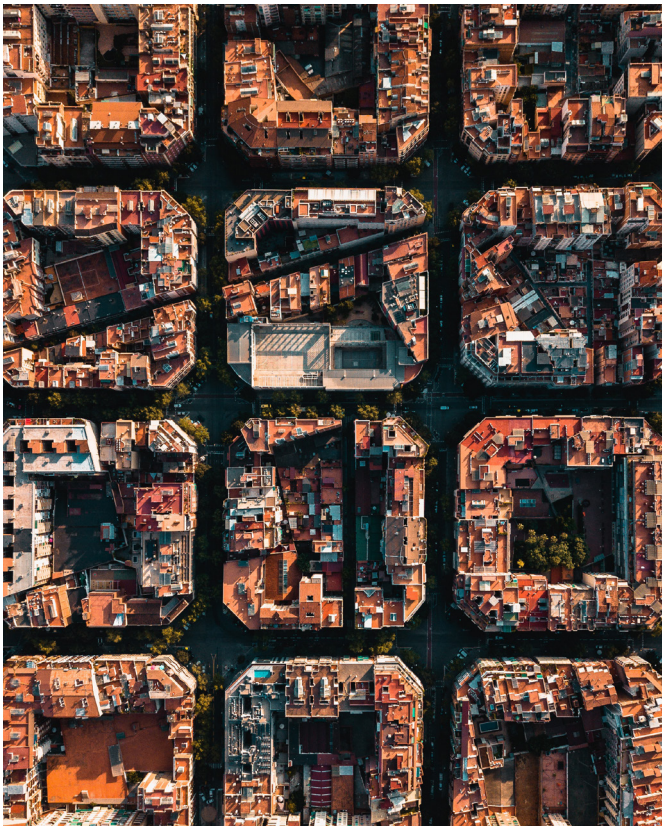
In France, 75% of children breathe polluted air[26]. A figure corroborated internationally since 91% of the world's population breathes air that contains a "high level of pollutants". Because children have a less mature respiratory system than adults, they are particularly sensitive to air quality and must be protected as a priority.

As part of its regional plan "Changeons d'air" aiming at improving air quality, the French Ile-de-France region decided to advance technological progress and rely on science to find innovative solutions to improve air quality, notably in schools. Building on public/private partnerships between the region, SUEZ and Fermentalg, an innovative device creating a "bubble of clean air", with a broad spectrum of treatment (PM10, PM2.5, NO2, VOCs as a priority) by combining several cutting-edge technologies such as micro-algae, was placed in the schoolyard of a school in the city of Poissy.

All Policies for a Healthy Europe supports the development and implementation of innovative screening, quantification, capture and treatment solutions (e.g. natural pollution sinks using micro-algae) to control point and diffuse emissions of contaminants to the air, but emphasises the need to tackle pollution at the source.

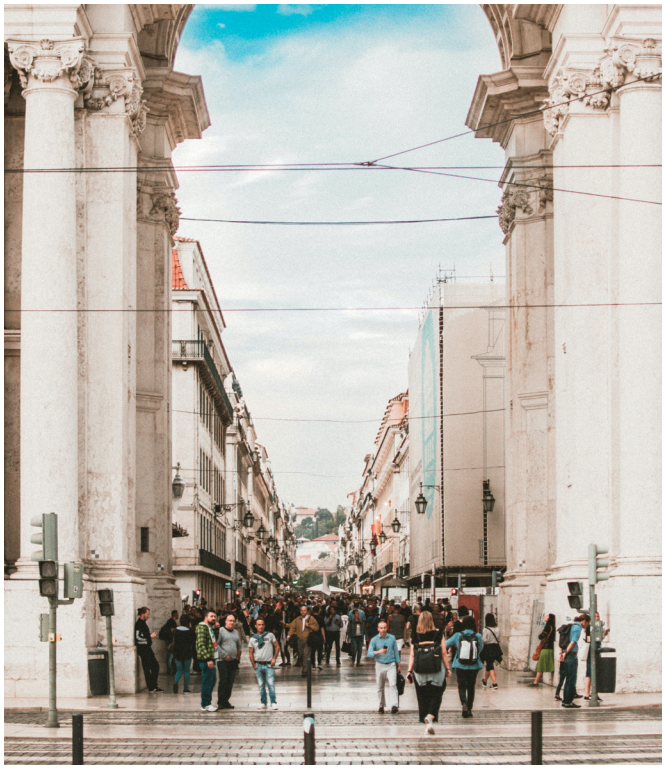
2. Raise further awareness on the impact of indoor air quality on health

In 2019, 54% of questioned European citizens did not feel well-informed about EU air quality problems in their country[27]. Awareness is critical to enhance citizens' cleaner air choices and support the success of EU measures by improving their acceptance across the population.



In that regard, *All Policies for a Healthy Europe* welcomes the creation of the European Air Quality Index application as a powerful and accessible tool to improve citizens' awareness of outdoor air pollutants concentrations and share health recommendations with them. This app could be leveraged to provide further crucial information to citizens. First, by exposing the associated health risks of each pollutant through easily available dedicated sections in the app. Second, by ensuring sufficient data is available in all stations at all times. Finally, by integrating data on the air pollution that also affects the health of EU citizens and which is critically missing from both the Index and the EU framework and laws on air pollution: indoor air quality. Citizens spend 80-90% of their time indoors[28], whether at home, school, or work for instance. Indoor environments are considered by some to be 4–5 times more polluted than the outdoors[29].

Action must be taken to effectively raise awareness and address the impact of indoor air quality on health. Inspiration on ways to do so can be taken from WHO guidelines for indoor air quality such as on household fuel combustion[30], as well as existing projects.



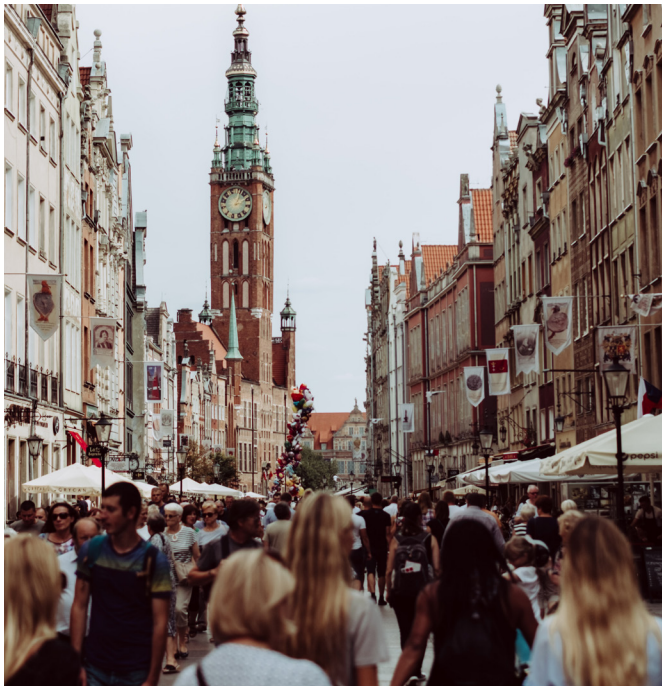
CASE STUDY:
Improving awareness on indoor air quality impact on health

The Philips Foundation, University of Manchester (UoM) and Global Action Plan have published new modelling demonstrating that maintaining lower indoor and outdoor air pollution (PM25 & NO2) levels could improve a child's ability to learn. The model finds that maintaining lower air pollution levels in and around school grounds by 20% could enhance the development of a child's working memory by 6%, the equivalent of four weeks extra learning time per year.

The findings are part of the Clean Air for Schools Programme, a year-long research project which looked at how air pollution and its effects on children can be tackled in 19 schools across the UK & Ireland. As part of this program, the Clean Air for Schools Framework was developed. This free online tool improves awareness of the importance of clean air in schools, and offers free, accessible and adaptable solutions to improve air quality in and around schools. The tool gives teachers, headteachers, parents and local authorities a bespoke blueprint of actions such as reducing polluting traffic around the schools, campaigning for national action on air pollution, installing air purifiers in schools, and improving facilities to encourage walking or cycling.

3. Ensure the deployment of smart solutions, reporting and modelling, which meet local needs and demands by engaging public authorities, citizens, academics, start-ups and businesses

Enough data and evidence is already available to strengthen air quality requirements today. However, as highlighted by Commissioner Virginijus Sinkevičius during the EU Green Week Event Towards Zero Pollution: Measuring Citizens' Health and Well-Being[31], setting up adequate pollution measuring mechanics is necessary to better understand, manage and implement measures and achieve more integrated action. All Policies for a Healthy Europe welcomes and supports the European Commission's objective to promote the use of cutting-edge technologies to improve the availability of data by boosting national capacities for monitoring and compliance as outlined in its Zero Pollution Action Plan.



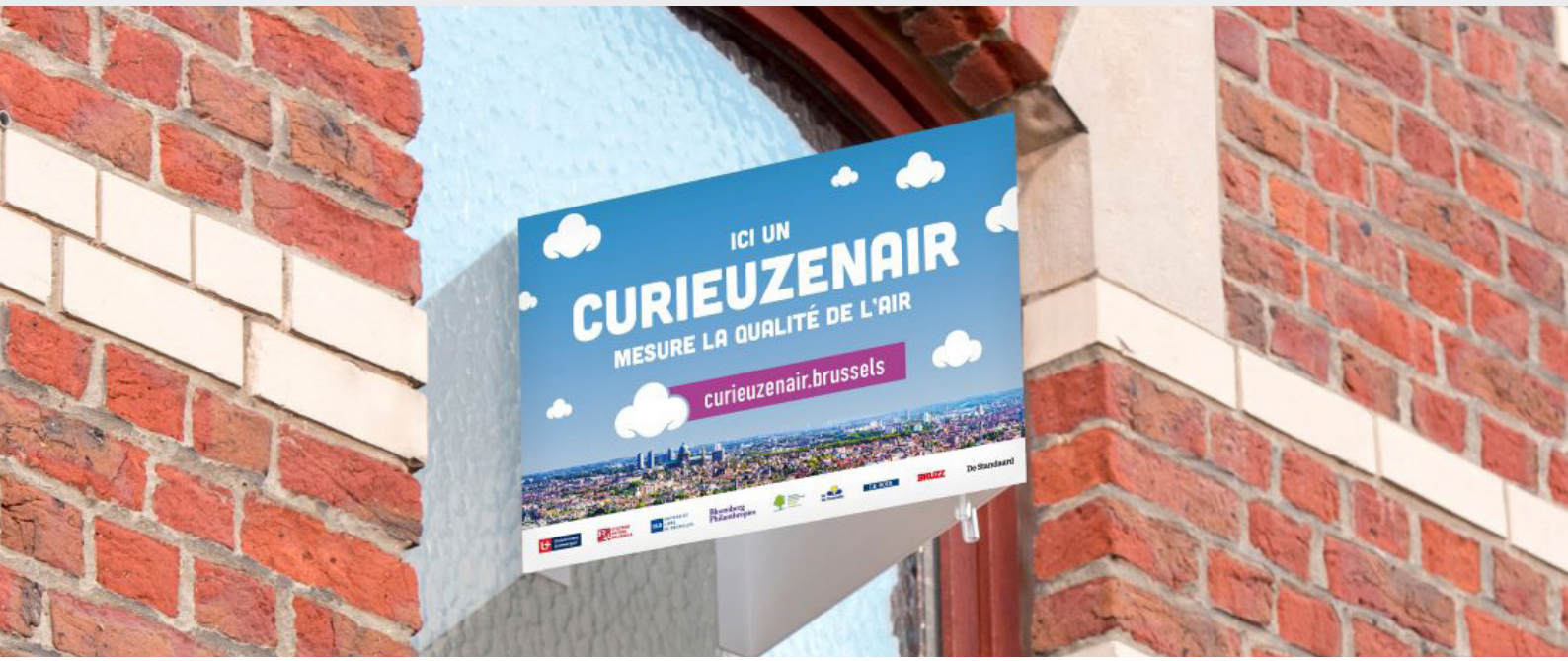
Better data delivery can already be achieved through the active involvement of citizens and the use of existing digital technologies. Both can provide real-time and on-the-ground data enabling public authorities to take the necessary corrective actions immediately, as well as in the medium and long term. This could make it possible to i) measure, in real time, the effect of action plans such as the implementation of a low emission zone and then ii) improve such plans while demonstrating to the population the direct positive impact on air quality. Data specifically linking environment and health also has the potential to drive the right type of investment into both remediation and cause.

CASE STUDY:

Improving the availability of data on air pollution through the active involvement of civil society and use of existing digital, on-ground and live measuring solutions

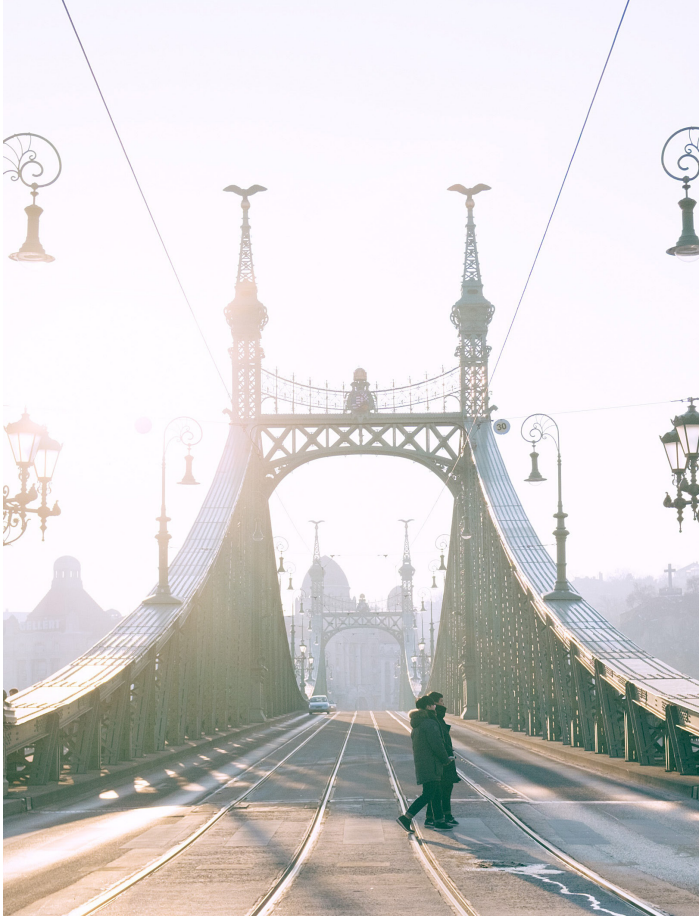
From 25 September to 23 October 2021, 3,000 Brussels residents took part in CurieuzenAir, a large-scale citizens' research study on air quality in Brussels. The aim of this project was to draw up a very detailed map of the air quality in Brussels by measuring the concentration of nitrogen dioxide (NO2). All of this, with the help of citizens, individuals, associations, schools and companies equipped with measuring devices placed on their facades. This innovative and collaborative project with high added value aims to serve as an example for other European cities in the future.

Indeed, thanks to the large volume of data collected, CurieuzenAir has revealed disparities in air quality between socio-economically vulnerable neighbourhoods and green, affluent neighbourhoods. This large-scale study also revealed that 1.4% of Brussels citizens – 17,000 people – are exposed to air quality exceeding the European air quality standards of 40 µg/m3. In addition, 98.4% of the population – 1,200,000 inhabitants – live or work in areas exposed to pollution above the new World Health Organisation threshold value. However, the data also showed that air quality in Brussels has improved in recent years!



Conclusion

Air Pollution is a silent killer with costly consequences that European citizens cannot continue to bear. It is thus crucial to maintain a high ambition for the revision of the Ambient Air Quality Directive as part of a strong and ambitious legislative framework, which ensures communication with citizens, strengthens monitoring tools and supports the financing of measures by implementing the Polluter Pays Principle in line with TFEU 191.2 and the Council conclusions regarding the European Court of Auditors' report on the implementation of the principle[32]: At the same time, *All Policies for a All Policies for a Healthy Europe* emphasises the need to tackle air pollution at its source by engaging the whole of society in order to achieve cleaner air for all citizens.



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