
# The air quality challenge

Air quality has improved in the European Union (EU) over the last decades, thanks to joint efforts by the EU and the national, regional and local authorities. As a result, since 2000, the EU's GDP grew by 32% while emissions of the main air pollutants decreased by 10% to 70% depending on the pollutant[[1]](#footnote-1).

However, in most Member States, the quality of life of EU citizens remains hampered, as air quality standards are still not being met. The situation is especially severe in urban areas, where a majority of Europeans live.

Air pollution is a cause of both chronic and serious diseases such as asthma, cardiovascular problems and lung cancer. According to the latest data by the World Health Organisation[[2]](#footnote-2), air pollution levels remain dangerously high in many parts of the world, with 9 out of 10 people breathing air containing high levels of pollutants. Air pollution continues to be the number one environmental cause of early death in the EU, with estimates of more than 400,000 premature deaths per year[[3]](#footnote-3). This all comes at a high price to society with high external health-related costs[[4]](#footnote-4).

Public awareness about air pollution is high and citizens expect authorities to act. In a recent opinion poll on the environment in the EU, air pollution was cited as the issue of most concern for citizens after climate change[[5]](#footnote-5). They have legitimate expectations that effective action will be taken at all levels to reduce air pollution and protect them from its harmful effects.

To address this, the EU has set, by means of legislation agreed by the Member States and the European Parliament, the goal to achieve levels of air quality that do not give rise to negative impacts on, and risks to, human health and the environment. To meet this objective, effective air quality policies require action and cooperation at global, European, national and local levels.

In line with the principle of subsidiarity, implementation largely relies on national, regional and local measures tailored to specific needs and circumstances.

This Communication sets out wide-ranging policy efforts of the EU to support and facilitate the necessary measures of the Member States to meet their targets, and the enforcement action being taken to help ensure that the common objective of clean air for all Europeans is achieved and maintained across the EU.

# EU clean air policy

The EU has been working for decades to improve air quality by controlling emissions of harmful substances into the atmosphere, improving fuel quality, and by integrating environmental protection requirements into the transport, industrial and energy sectors. The aim is to reduce air pollution to levels which minimise harmful effects on human health and the environment over the EU territory. Air pollution travels across national boundaries so coordination at EU level is important. EU law leaves the choice of means to comply with limit values agreed at EU level to the Member States. For key sources of pollution, EU-level standards are applied to ensure efficient internal market functioning.

The 2013 Clean Air Programme for Europe[[6]](#footnote-6) reconfirmed the objective to achieve full compliance with existing air quality standards across the EU as soon as possible and set objectives for 2020 and 2030. As such, EU policy efforts rest on three main pillars.

**The first pillar comprises the** **ambient air quality standards** set out in the Ambient Air Quality Directives[[7]](#footnote-7) for ground level ozone, particulate matter, nitrogen oxides, dangerous heavy metals and a number of other pollutants[[8]](#footnote-8). These air quality standards were to be attained by all Member States across their territories from – depending on the pollutant – 2005 or 2010 onwards[[9]](#footnote-9). If the set limit values are exceeded, Member States are required to adopt air quality plans detailing measures apt to keep the exceedance period as short as possible.

**The second pillar consists of** **national emission reduction targets** established in the National Emissions Ceiling Directive for the most important trans-boundary air pollutants: sulphur oxides, nitrogen oxides, ammonia, volatile organic compounds and particulate matter[[10]](#footnote-10). The national emission reduction targets were recently revised to include new limits that need to be met in 2020 and 2030, and an additional pollutant – fine particulate matter (PM2.5). Member States have to develop National Air Pollution Control Programmes by 2019 with a view to complying with their emission reduction commitments.

**The third pillar comprises** **emissions standards for key sources of pollution**, from vehicle and ship emissions to energy and industry. These standards are set out at EU level in legislation targeting industrial emissions[[11]](#footnote-11), emissions from power plants[[12]](#footnote-12), vehicles[[13]](#footnote-13) and transport fuels[[14]](#footnote-14), as well as the energy performance of products[[15]](#footnote-15).

Moreover, in the aftermath of the vehicles emissions scandal in 2015, the package of Real Driving Emissions rules[[16]](#footnote-16) was put in place to ensure air pollutant emissions standards are properly implemented and type approval requirements are reinforced. This package includes tests for nitrogen oxides and particulate matter emissions as well as upcoming new in-service conformity rules to improve testing of vehicles already in service. Latest changes were adopted on 3 May to further reduce margins of technical uncertainty in Real Driving Emissions testing, increase emissions checks of cars already in circulation and introduce testing by independent and accredited third parties. Moreover, since September 2017 new types of light-duty vehicles types have to comply with a new test procedure for type approval laboratory testing which is closer to real driving conditions[[17]](#footnote-17).

The European Commission has also proposed new CO2 emission standards for cars and vans to help manufacturers to further embrace innovation and supply significantly more low- and zero-emission vehicles to the market[[18]](#footnote-18). The first ever European Commission’s legislative proposal on CO2 emissions standards for new heavy-duty vehicles presented as part of the third Mobility Package is also expected to have long-term indirect effects on air quality by further improving fuel efficiency and greenhouse gas emissions in this segment, and by providing incentives for the placing on the market of low- and zero-emission heavy-duty vehicles, including buses, with positive knock-on effects on air pollutant emissions.

Furthermore, the EU has been protecting the health and safety of workers across Europe through its legislation establishing minimum requirements for the quality of air in the workplaces[[19]](#footnote-19), which includes the establishment of occupational exposure limit values for a number of dangerous chemical substances. This Commission has been particularly active with a series of proposals amending the Carcinogens and Mutagens Directive by setting limit values aimed at improving protection for millions of workers against occupational cancer – the first killer at workplaces[[20]](#footnote-20).

# Examples of measures to reduce air pollution

Different sets of measures have been taken throughout the years at EU, Member State and local levels to successfully reduce emissions of air pollutants, including from large combustion plants, industrial installations, and transport, including road vehicles (e.g. via fuel quality improvements and the successive Euro emission standards). This shows that cost-effective solutions exist and can support innovation and have a positive net impact on EU competitiveness, in line with broader European Commission priorities on sustainable growth and job-creation[[21]](#footnote-21).

## Measures to reduce emissions from the transport sector

Based on latest available data, the transport sector is the largest contributor to nitrogen oxide emissions, and a significant contributor to particulate matter emissions[[22]](#footnote-22).

Measures to further reduce emissions can aim at technical improvements, behaviour change and demand management (promoting cleaner modes of transportation via urban planning or car-sharing options), or at infrastructure investment (e.g. for alternative fuelling or public transport).

To support authorities in taking these measures, the European Commission presented two Mobility packages last year. In the first Mobility Package, the European Commission proposed updating the EU rules on road pricing and extending their scope to buses, vans and passenger cars[[23]](#footnote-23), promoting proportionate distance-based road charging differentiated according to the environmental performance of both heavy and light vehicles with a view to internalising the real cost of their use. The second Mobility Package included measures for promoting better integrated and cleaner public transport, for shifting long-distance freight from road to rail, inland waterways, or short-sea shipping, and for accelerated shifting to low- and zero-emissions vehicles through the new CO2 emission standards for cars and vans and via public procurement[[24]](#footnote-24), including in particular for zero-emission city buses. The European Commission also presented an action plan[[25]](#footnote-25), supported by additional finance, for the trans-European deployment of infrastructure for alternative fuels, including charging points for electric vehicles. In addition, in the context of the Third Mobility Package, the European Commission proposed CO2 emission standards for heavy-duty vehicles, including incentives for zero- and low-emission vehicles. It also presented a strategic action plan to create a competitive and sustainable battery eco-system in Europe with a major focus on cell manufacturing. Europe-based, competitive production of batteries will be key for the EU automotive industry to build its competitive advantage for low- and zero-emissions vehicles.

Finally, the European Commission is preparing non-binding guidance with recommendations and best practices that can support local administrators in addressing aspects concerning urban vehicle access restrictions. For example, there are different ways in which low emission zones can be enforced, beyond using manual stickers, such as through modern information technologies. The European Commission is engaging with stakeholders and with national and local authorities to foster consistency and information on access regulations and is supporting cities in the provision of information/data related to them. In any event, it is important that any plans for access restrictions are not designed in isolation but are part of a comprehensive Sustainable Urban Mobility Plan and duly integrated in local air quality plans established under Directive 2008/50/EU.

Events such as the European Mobility Week campaign, often culminating in a car-free day, can be a useful tool to raise awareness of the benefits of clean air through walking and cycling.

## Measures to reduce emissions from power and heat

Fuel combustion by power plants, industries and households for generating power and heatis the largest contributor to particulate matter and sulphur dioxide emissions[[26]](#footnote-26).

Measures to reduce air pollutant emissions from power and heat generation often go hand in hand with efforts to reduce greenhouse gas emissions. They include an increased use of renewable combustion-free power sources (such as solar, wind or hydropower), cogeneration of heat and power, distributed energy generation (e.g. mini-grids and rooftop solar power generation), schemes, including fiscal incentives, to replace older and less efficient boilers in households, district heating and cooling, or – in some cases – solid fuel bans. These measures are highly effective in reducing particulate matter emissions. The EU State aid rules provide a framework that allows Member States to facilitate investments in such measures.

## Measures to reduce emissions from industry

Measures to reduce emissions from industry – the second largest contributor of particulate matter emissions and the largest contributor to volatile organic compounds – are mainly achieved through the implementation of ‘Best Available Techniques’ (BAT) established under the EU Industrial Emissions Directive[[27]](#footnote-27). In practice, EU-based large industrial installations – including large combustion power plants – must apply the most effective techniques for preventing or reducing emissions that are technically feasible and economically viable within the sector.

Such measures are already delivering important benefits for air quality and the implementation of the new EU environmental standards for large combustion plants adopted in 2017 will further reduce sulphur dioxide and nitrogen dioxide emissions across Europe.

## Measures to reduce emissions from the agricultural sector

The agricultural sector is an important source of air pollutants such as ammonia, which is a key precursor to particulate matter, with significant impacts at urban level. Measures to mitigate such emissions include agronomic measures (aiming at reducing the need for nitrogen fertilisers), livestock measures (closed storage of manure, improved application of manure and urea fertiliser, improved livestock feeding strategies so that animals produce less ammonia-rich manure, as well as anaerobic digestion for large farms), or energy measures (such as developing photovoltaic installations or reducing fuel consumption).These measures are already available and technically and economically viable and should be applied more widely.

# Working together to deliver clean air for all Europeans

Air quality standards were agreed by both the Member States in the Council and the European Parliament, to address the legitimate concerns of citizens for their health. Common air quality standards ensure that each person enjoys a minimum level of air quality anywhere in the EU, and create a level playing field for industry across the EU. A precondition for their efficient implementation is to build effective action at national, regional and local level across administrative boundaries between public authorities. When lack of action leads to non-compliance with EU air quality legislation, the national courts have jurisdiction to rule on the matter, as recently illustrated by decisions taken by courts in a number of Member States[[28]](#footnote-28).

EU financial support and close co-operation between Member States' authorities and the European Commission are also indispensable. The European Commission has therefore intensified engagement with Member States to facilitate their efforts through various initiatives and measures. The European Commission is ready to further step up this co-operation, including on the basis of the National Energy and Climate Plans.

## Stepping up cooperation with Member States via Clean Air Dialogues

The European Commission has already held several Clean Air Dialogues with Member States to support their implementation efforts. It is also seeking synergies with Energy Union and Climate Change policies, including the Clean Mobility Package, as well as with dialogue initiatives, such as the Platform for Coal Regions in Transition set-up under the 'Clean Energy for All Europeans' framework[[29]](#footnote-29).

In addition, the European Commission is ready to engage in further discussions with the Member States, including through a tour of capital cities to carry out 'Clean Air Dialogues' with Member States that face significant implementation gaps. The goal is to facilitate full implementation of EU and national air pollution policies across all economic sectors, whilst raising awareness and allowing citizens to directly engage on the steps being taken to improve their air quality. It will ensure high-level political representation at these dialogues, and calls on Member States to make use of these dialogues for developing an integrated approach to addressing the air quality challenge, across levels of governance and across economic sectors.

This will complement existing co-operation which is taking place in the context of the Environmental Implementation Review and the "Peer-to-Peer tool" which were both launched in 2017 to improve implementation of environmental legislation in the EU. With the same purpose, and in order to foster action at Member States' level for tackling air quality exceedances, the European Commission will make use of the newly established Compliance and Governance Forum[[30]](#footnote-30).

## Bringing together Member States, regions and cities

The EU Urban Agenda and Urban Innovative Actions will further facilitate the cooperation with and among city actors across the EU to address air pollution in urban areas, with an associated budget of EUR 372 million over the current financing period[[31]](#footnote-31). This seeks to support concrete measures to address urban challenges ranging from fighting pollution, to mobility and sustainable urban development.

The Clean Air Forum launched by the European Commission in November 2017 in Paris, as well as the 2018 Green Week[[32]](#footnote-32) devoted to urban challenges, provide a basis for exchanges of good practices across all public and private actors whilst enhancing the capacity of relevant stakeholders to improve air quality. This will also strengthen the cohesiveness of action across all governance levels.

To facilitate investment in sustainable projects in European cities – including those supporting the clean air agenda – the European Commission and the European Investment Bank put in place URBIS, a new dedicated advisory initiative for urban authorities[[33]](#footnote-33). URBIS has been established to improve cities' access to technical and financial advice needed to develop urban investment projects, programmes and innovative financing/investment platforms. It is already clear that there is significant demand from the urban authorities for this type of service.

Synergies could also be looked for with the Global Covenant of Mayors, successfully contributing to reducing greenhouse gas emissions and promoting a low-carbon economy transition and resilience at urban level.

## Making available EU funding to support measures to improve air quality

EU funding under various financial streams has been made available and successfully used by Member States to address the air quality challenge, by either directly supporting air quality projects, or effectively mainstreaming air quality objectives in other investments (e.g. infrastructure, agriculture and rural and regional development). The European Commission will step up its work with Member States to help them make optimal use of the remaining funds available under this programming period.

In the current programming period 2014-2020, Member States have allocated EUR 1.8 billion to support air quality measures under the European Structural and Investment Funds. In addition, further indirect contributions potentially beneficial to clean air are expected to come from the 2014-2020 European Structural and Investment Funds' investments in the low-carbon economy (EUR 45 billion), environmental protection and resource efficiency (totalling EUR 63 billion) and network infrastructure (totalling EUR 58 billion), notably supporting vulnerable regions and citizens.

As of now, a third of all the investments under the European Fund for Strategic Investments (around EUR 80 billion) went into energy, transport and environment. All this has indirect positive effect on air quality. In addition, the EU's research and development programme Horizon 2020 indirectly benefits emission reductions and air quality. Funding includes research components for cleaner transport solutions.

The European Commission recently proposed to invest EUR 1 billion in 39 clean transport projects to upgrade Europe's rail network, further develop alternative fuels infrastructure and pave the way for zero emission water transport. The Commission’s contribution will unlock a total of EUR 4.5 billion of public and private co-financing under the Connecting Europe Facility. In the context of the recently closed Blending call for alternative fuels infrastructure and cleaner mobility, 69 project proposals have been submitted requesting three times the available grant amount of EUR 350 million, for a total investment value of EUR 4.2 bn. Results are expected by October 2018. These investments will help promote cleaner transport in Europe, and thus further reduce emissions.

The LIFE programme has also been instrumental in delivering clean air benefits. For example, the LIFE Integrated Project ‘Małopolska in a healthy atmosphere’ – which had an initial budget of around EUR 16 million and leveraged more than EUR 800 million – facilitated the implementation of the Małopolska region's air quality plan and improved quality of life for some 20 million citizens, in Malopolska and in Silesia in Poland but also in other Member States such as Slovakia and the Czech Republic. Integrated air quality projects under the LIFE programme will be particularly encouraged in upcoming calls.

The Multiannual Financial Framework for 2021-2027, as proposed by the European Commission[[34]](#footnote-34), will continue to support measures to improve air quality, including through the target of 25% of EU expenditure contributing to climate objectives, a strengthening of the LIFE programme, which will also support measures promoting clean energy, energy efficiency and a reformed Common Agricultural Policy.

## State aids to facilitate domestic investments in low and zero emission mobility

To facilitate domestic funding schemes, the EU State aid rules provide a framework that allows Member States to facilitate investments in low and zero emission mobility, for the benefit of clean air and fighting climate change, while promoting the competitiveness of our industry. Member States (at national, regional or local level) can make use of these rules to effectively tackle emissions, for example from road transport. The state aid scheme in Germany approved in February 2018 gives just one among many examples of how EU rules help Member States facilitate investments in the purchase of electric and plug-in-hybrid buses and the associated recharging infrastructure to limit air pollution[[35]](#footnote-35).

## Continued enforcement action

The European Commission has worked intensively with national authorities throughout the past years, even before limit values entered into force, to steer progressive changes and to help them deliver compliance with air quality legislation. This has led to improvements, but some core problems remain. The European Commission is particularly concerned that persistent exceedances of limit values continue for two key pollutants with significant health impacts – nitrogen dioxide, which is mostly a result of road traffic[[36]](#footnote-36) and industry, and particulate matter, which is mainly present in emissions from industry, traffic, domestic heating and agriculture. The European Commission is committed to continue working in partnership with the Member States to achieve the agreed air quality standards alongside the use of its legal powers to enforce the relevant EU legislation.

### **Excessive air pollution due to particulate matter and to nitrogen dioxide**

#### *State of play*

For **particulate matter**, compliance with EU limit values was due as of 1 January 2005. Concentrations of particulate matter continue to exceed these values in large parts of Europe – with exceedances reported[[37]](#footnote-37) in 19 out of 28 Member States. Based on the latest available data, 19% of the urban population in the EU has been exposed to particulate matter levels above the EU daily limit value and about half was exposed to concentrations exceeding the stricter recommendations by the World Health Organisation[[38]](#footnote-38).

The European Commission has been pursuing infringement procedures for persistent excessive particulate matter (PM10) levels against 16 Member States (Belgium, Bulgaria, the Czech Republic, Germany, Greece, Spain, France, Hungary, Italy, Latvia, Portugal, Poland, Romania, Sweden, Slovakia and Slovenia).

In 2017[[39]](#footnote-39) and 2018[[40]](#footnote-40), respectively, the Court of Justice of the EU has already handed down judgments on two of the most severe particulate matter exceedances in Europe, namely in Bulgaria and Poland. These judgments confirm the European Commission’s view that persistent exceedances require more effective measures to be taken by the Member States concerned to limit the exceedances to the shortest possible period[[41]](#footnote-41).

In addition, an infringement procedure related to the exceedances of the sulphur dioxide limit value was launched against Bulgaria. As pollution by sulphur dioxideis mainly caused by industry, progress made on reducing particulate matter would have positive effects for sulphur dioxide as well.

For **nitrogen dioxide**, compliance with EU limit values was due as of 1 January 2010. The annual limit value continues to be widely exceeded across Europe – with exceedances reported[[42]](#footnote-42) in a total of 22 out of 28 Member States. Based on the latest available data, 9% of the urban population in the EU has been exposed to nitrogen dioxide levels above the annual limit value[[43]](#footnote-43).

To date, infringement procedures for persistent exceedances of nitrogen dioxide levels have been launched against 13 Member States (Austria, Belgium, the Czech Republic, Germany, Denmark, France, Spain, Hungary, Italy, Luxembourg, Poland, Portugal, and the United Kingdom).

#### *Further action*

On 30 January 2018, the European Commission invited nine Member States (the Czech Republic, Germany, France, Spain, Hungary, Italy, Romania, Slovakia and the United Kingdom) concerned by pending infringement procedures regarding excessive air pollution due to particulate matter or nitrogen dioxide and for which the next procedural step would be a referral to the Court of Justice of the EU to an air quality summit in Brussels.

The purpose of this meeting was to call upon the Member States concerned to present additional binding commitments for timely, effective and credible measures to address the sources of the current exceedances and bring forward compliance as soon as possible in all agglomerations.

Having assessed the additional information provided by these Member States following this meeting, the European Commission concludes that the measures adopted or planned by six of these Member States[[44]](#footnote-44) would not keep exceedance periods as short as possible, as required by the case-law of the Court of Justice of the EU. Consequently, the Commission has decided to refer these Member States to the Court of Justice of the EU[[45]](#footnote-45).

In addition to the above, ensuring proper monitoring of air quality throughout the whole territory of Member States is essential. This includes, for instance, placing sampling points in areas where the highest pollutant concentrations occur to which the population is likely to be exposed for a significant period in relation to the relevant limit value(s). In that respect, where there was evidence that the monitoring and reporting is not done properly and measures to put in place adequate systems have not been taken, such as in Romania, Slovakia, Belgium and Luxembourg, the Commission addressed this in infringement procedures. Should appropriate measures not be taken by the Member States concerned, the Commission will proceed to the next step in these infringement procedures.

### **Ensuring full compliance with vehicle pollutant emission standards**

#### *Member State compliance with existing rules*

In the aftermath of the diesel vehicles emissions scandal in 2015, the European Commission asked Member States to take action and, in particular, enforce EU legislation. EU action was taken in light of in particular a) the insufficient rate of recalls of cars equipped with defeat devices prohibited by EU legislation; and b) the lack of administrative fines – namely penalties – towards car manufacturers as a result of the breach of EU law following cheated emissions tests.

In this respect, the European Commission asked EU Member States to conduct mandatory and/or voluntary recalls across the EU. The European Commission further asked Member States to investigate the option of additional hardware fixes on top of software updates in order to make sure that emissions of the concerned cars are fully in line with EU legislation.

The European Commission is also taking decisive action against EU Member States on the grounds of failing to fulfil the obligations under EU vehicle type approval legislation. Three types of concerns have been addressed regarding, on the one hand, the penalties for use of illegal defeat devices and, on the other hand, the corrective measures to be taken by the Member States. A number of infringement procedures are still on-going[[46]](#footnote-46). One set of infringements procedures concerns the absence of penalty systems in the respective national legislations. The second set concerns the Member States that issued type approvals for a car manufacturer in the EU and is based on the suspected non-application of their national provisions on penalties despite the company's use of illegal defeat device software. The third enforcement procedure against one Member State concerns the emission control strategies employed by a car manufacturer, including the absence of imposed penalties[[47]](#footnote-47).

The European Commission, jointly with the Member States, is addressing the phenomenon of second-hand trade of vehicles subject to recall actions.

#### *Further action*

With respect to the pending infringement procedures mentioned above, and in the context of the on-going dialogue with the Member States concerned, the European Commission has now decided to send two sets of complementary letters of formal notice. A set, addressed to three Member States[[48]](#footnote-48), seeks additional clarifications on the reasons for the absence of final decisions on penalties in light of one car manufacturing group’s use of illegal defeat device software. A complementary letter of formal notice is sent[[49]](#footnote-49) to one Member State to seek clarifications on the recent steps taken by that Member State regarding the emission control strategies employed in certain vehicles of one car manufacturer including the absence of a final decision on penalties. The information to be submitted by the Member States in response to these complementary letters of formal notice will be assessed by the European Commission in view of the next steps, as appropriate.

#### *New rules to strengthen market surveillance*

Looking forward, the EU agreed new rules to raise the quality and independence of vehicle type-approval and testing, increase checks of cars that are already on the EU market, and strengthen the overall system with European oversight. The rules will become mandatory in September 2020 and will ensure that vehicles on the EU market, including those with diesel engines, comply with the Euro vehicle emission standards (Euro 5/6)[[50]](#footnote-50). The new rules will allow the European Commission to take direct enforcement actions against manufacturers who do not respect EU legislation, including on emissions, if Member States fail to act. In particular, the European Commission would be able to initiate EU-wide recalls and impose penalties on manufacturers or technical service providers of up to EUR 30,000 per non-compliant car. Member States would also be obliged to perform mandatory (pollutant emission) checks of cars that are already on the EU market.

# The Way Forward

There is an urgent need to improve air quality in Europe through the full implementation of the air quality standards agreed by the Member States and the European Parliament more than a decade ago. This requires action at all levels (national, regional, local) and the European Commission is supporting such action by means of all the tools at its disposal.

Improving air quality remains a challenge for Europe also in the long-term. This requires a comprehensive approach across different sectors, from transport, energy, to local planning, bringing together all the different actors concerned. For its part the European Commission will continue to support Member States such as via the Clean Air Dialogues.

Poor air quality reduces quality of life and is of great cost to the economy. There is no time to waste. Cost-effective solutions to improve air quality exist and are widely available. There is a need to act now to scale them up and implement them without delay across the EU to the benefit of the half a billion European citizens.

1. EEA (2017) Air Quality in Europe – 2017 Report: between 2000 and 2015 emissions decreased in the EU between 8% (ammonia) and 72% (for sulphur oxides). [↑](#footnote-ref-1)
2. <http://www.who.int/news-room/detail/02-05-2018-9-out-of-10-people-worldwide-breathe-polluted-air-but-more-countries-are-taking-action> [↑](#footnote-ref-2)
3. EEA (2017). Air Quality in Europe – 2017 Report. European Environment Agency. [↑](#footnote-ref-3)
4. Estimated in the range of EUR 330-940 billion per year (Impact Assessment underpinning the Clean Air Programme for Europe, SWD(2013)532). [↑](#footnote-ref-4)
5. Special Eurobarometer 468: Attitudes of European citizens towards the environment. [↑](#footnote-ref-5)
6. COM(2013)918. [↑](#footnote-ref-6)
7. Directives 2004/107/EC and 2008/50/EC. [↑](#footnote-ref-7)
8. Altogether, 12 pollutants are covered by this legislation: sulphur dioxide, nitrogen dioxide and nitrogen oxides, particulate matter (PM10 and PM2.5), ozone, benzene, lead, carbon monoxide, arsenic, cadmium, nickel, and benzo(a)pyrene. [↑](#footnote-ref-8)
9. Postponing the deadline (until 2015 for nitrogen dioxide and benzene and until June 2011 for particulate matter) was possible under specific circumstances. [↑](#footnote-ref-9)
10. Directive 2001/81/EC as replaced by Directive 2016/2284/EU. [↑](#footnote-ref-10)
11. Industrial Emissions Directive 2010/75/EU. [↑](#footnote-ref-11)
12. Industrial Emissions Directive 2010/75/EU and EU Medium Combustion Plant Directive 2015/2193/EU. [↑](#footnote-ref-12)
13. Regulation (EC) No 443/209 setting CO2 emission standards for new passenger cars and Regulation (EC) No 510/2011 setting CO2 emission standards for new light commercial vehicles, Regulations on CO2 emission standards for new cars and light duty vehicles. [↑](#footnote-ref-13)
14. Fuel Quality Directive 97/70EC [↑](#footnote-ref-14)
15. Ecodesign Directive 2009/125/EC. [↑](#footnote-ref-15)
16. **Regulation (EU) 2016/427,** Regulation (EU) 2016/646, Regulation (EU) 2017/1154. [↑](#footnote-ref-16)
17. The so-called Worldwide harmonised Light vehicles Test Procedure (WLTP). [↑](#footnote-ref-17)
18. Proposal for a Regulation setting emission performance standards for new passenger cars and for new light commercial vehicles (COM(2017)676. [↑](#footnote-ref-18)
19. Framework Directive 89/391/EEC (OJ L 183, 29.06.89, p.1), supplemented in particular by Directive 89/654/EEC on workplaces (OJ L393, 30.12.89, p.1), Directive 98/24/EC on chemical agents (OJ L 131, 05.05.1998, p.11) and Directive 2004/37/EC on carcinogens and mutagens at work (OJ L 158, 30.04.2004, p.50). [↑](#footnote-ref-19)
20. So far, three proposals have been submitted (COM(2016) 248, COM(2017) 11 and COM (2018) 171), the first meanwhile adopted by the European Parliament and the Council as Directive (EU) 2017/2398, OJ L, 27.12.2017, p. 8. [↑](#footnote-ref-20)
21. Impact Assessment underpinning the Clean Air Programme for Europe, SWD(2013)532, Annex 9). [↑](#footnote-ref-21)
22. EEA (2017). Air Quality in Europe – 2017 Report. European Environment Agency. [↑](#footnote-ref-22)
23. Proposal for a Directive of the European Parliament and of the Council amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures (COM(2017)275). [↑](#footnote-ref-23)
24. Proposal for a review of Directive on the promotion of clean and energy-efficient road transport vehicles - COM(2017)653. [↑](#footnote-ref-24)
25. COM(2017)652. [↑](#footnote-ref-25)
26. EEA (2017). Air Quality in Europe – 2017 Report. European Environment Agency. [↑](#footnote-ref-26)
27. Directive 2010/75/EU. [↑](#footnote-ref-27)
28. In detailing how national courts should address legal challenges from individuals and associations, the Commission's Notice on access to justice in environmental matters (C2017)2616 final) refers to important case-law of the Court of Justice on EU air quality requirements (C-237/07 *Janecek*, C404/13 *Client Earth*). [↑](#footnote-ref-28)
29. <https://ec.europa.eu/info/news/no-region-left-behind-launch-platform-coal-regions-transition-2017-dec-08_en>. [↑](#footnote-ref-29)
30. C(2018)10.- Commission Decision of 18.1.2018 setting up a group of experts on environmental compliance and governance. [↑](#footnote-ref-30)
31. In the area of air quality the relevant Air Quality Action Plan was already adopted: https://ec.europa.eu/futurium/en/air-quality. [↑](#footnote-ref-31)
32. <https://www.eugreenweek.eu/>. [↑](#footnote-ref-32)
33. http://eiah.eib.org/about/initiative-urbis.htm. [↑](#footnote-ref-33)
34. COM(2018)321 [↑](#footnote-ref-34)
35. <http://europa.eu/rapid/press-release_IP-18-1222_en.htm> [↑](#footnote-ref-35)
36. Road traffic is responsible for around 40% of nitrogen oxides emissions in the EU. Of the total emitted nitrogen oxides from traffic, around 80% comes from diesel powered vehicles. [↑](#footnote-ref-36)
37. Through at least one monitoring station. [↑](#footnote-ref-37)
38. EEA (2017). Air Quality in Europe – 2017 Report. European Environment Agency. [↑](#footnote-ref-38)
39. Judgment of the Court of Justice of 5 April 2017 in C-488/15, Commission v Bulgaria. [↑](#footnote-ref-39)
40. Judgment of the Court of Justice of 22 February 2018 in C‑336/16, Commission v Poland. [↑](#footnote-ref-40)
41. <http://curia.europa.eu/juris/liste.jsf?num=C-488/15> and <http://curia.europa.eu/juris/liste.jsf?num=C-336/16> [↑](#footnote-ref-41)
42. Through at least one monitoring station. [↑](#footnote-ref-42)
43. EEA (2017). Air Quality in Europe – 2017 Report. European Environment Agency. [↑](#footnote-ref-43)
44. France, Germany, and the United Kingdom – for NO2, as well as Italy, Hungary and Romania – for PM10, [↑](#footnote-ref-44)
45. See press release http://europa.eu/rapid/press-release\_IP-18-3450\_en.htm. [↑](#footnote-ref-45)
46. Procedures launched in December 2016 against Czech Republic, Germany, Greece, Lithuania, Luxembourg, Spain and the United Kingdom. <http://europa.eu/rapid/press-release_IP-16-4214_en.htm>. The case against Lithuania was closed in July 2017. With respect to five Member States, these procedures were followed-up in July 2017 in the form of a complementary letter of formal notice (<http://europa.eu/rapid/press-release_MEMO-17-1935_EN.htm>). [↑](#footnote-ref-46)
47. In May 2017, the Commission initiated infringement procedures against Italy (<http://europa.eu/rapid/press-release_IP-17-1288_en.htm>). [↑](#footnote-ref-47)
48. Second complementary letters of formal notice addressed to Germany, Luxembourg and the United Kingdom. See press release http://europa.eu/rapid/press-release\_IP-18-3450\_en.htm. In view of the developments which have taken place in the Czech Republic, Greece and Spain which aim to address Commission's concerns, the three procedures do not require taking next steps within the infringement process at this stage. [↑](#footnote-ref-48)
49. Complementary letter of formal notice to Italy, see press release http://europa.eu/rapid/press-release\_IP-18-3450\_en.htm. [↑](#footnote-ref-49)
50. <http://europa.eu/rapid/press-release_IP-17-5131_en.htm> [↑](#footnote-ref-50)