

Additional input to the Zero Pollution Action Plan public consultation

This paper aims to provide additional information mainly to clarify some of the answers to the public consultation.

Part 1: comments related to the European Commission's questionnaire - numbers are referring to the question's number

1.2 (a) - Pollution is an issue of concern primarily outside of the EU

The EU has made steps forward in addressing pollution within the region, possibly progressing further compared to other countries and regions. But given the pollution's transboundary nature and in order to maintain its leadership role to combat pollution worldwide, it is essential to be promoting action outside the EU while further tackling pollution inside.

For example, historically, Europe's mercury use and emissions have been high. However, recent decades have seen measures taken to minimise these through, for example, limiting or banning the use of mercury and imposing limits on emissions i.e. on the industrial point sources. Unfortunately, on a global scale, emissions have been increasing from activities such as coal burning and gold mining. These emissions have an impact on the European environment because of the global nature of mercury pollution: around 50 % of the anthropogenic mercury deposited annually in Europe originates from outside Europe, with 30 % originating from Asia alone.

Air pollution has been reduced in the past decades in the EU, but this is not enough: with around 400,000 premature deaths per year, with many health issues and environmental damages being caused by it, the EU needs to intensify its effort while also leading the development of still missing global initiatives (such as the negotiation of a global Air Quality Convention). International action will also help in reducing the air pollution imported, while domestic action will contribute to reducing exported air pollution.

EU has been tackling water pollution for nearly 50 years. Gross chemical pollution, exemplified by 'dead rivers', has been reduced in many water bodies across the EU. However, based on data from Member States on the implementation of the Water Framework Directive only 38 % of EU surface water bodies are in good chemical status. 46 % are failing to achieve good chemical status and 16 % are in unknown chemical status. A UNEP assessment of the water quality situation in rivers in Latin America, Africa and Asia, A Snapshot of the World's Water Quality, estimates that severe pathogenic pollution affects around one third of all rivers, severe organic



pollution around one seventh of all rivers, and severe and moderate salinity pollution around one-tenth of all rivers in these regions.

The EU must ensure that it does not export pollution problems to other regions of the world. In this regard, the EU initiative on mandatory due diligence will be essential. By establishing binding rules that require companies operating on the internal market to identify and prevent the negative impact of their operations and value chains, the EU can help tackle environmental adverse impacts globally and ensuring products that are placed on the EU market are sustainably sourced and produced.

Noise pollution is a growing concern in the EU and outside the EU, with more than half of the global population and three quarters of the EU now living in urban areas (European Environment Agency, 2017; World Health Organization, 2017) and consequently being exposed to high levels of noise emissions. Noise pollution is therefore an issue both within and outside the EU.

Overall the assessment and benchmarking of efforts made within Europe to prevent pollution at source (and also from used and imported products) is currently not feasible due to bad reporting infrastructure and not fit for purpose data access tools. Crucial information, such as resource consumption (water, energy) is withheld based on confidential business information excuses, making a benchmarking exercise impossible. More information here <https://meta.eeb.org/2020/10/22/industrial-pollution-its-time-to-enter-the-digital-age/>

1.2 (b) - Pollution has been reduced in the last decade where I live

Different assessments about EU's capacity to reduce pollution can be made, depending on the kind of pollution considered:

- For air pollution, progresses had been made in the last decade, as highlighted in the previous set of comments; but with a number of premature deaths related to it still very high, and the many health issues and environmental damages caused, action to reduce it cannot stop; on the contrary, should accelerate and encompass in its objectives also the reduction of pollutants which are at the moment not covered by horizontal and/or source legislation (e.g. ammonia, methane, black carbon, ultra-fine particles). The EEA 'Air Quality in Europe - 2020 report'¹, considering 2018 data, highlights that significant reduction in air emissions had been achieved, but with residential, commercial and institutional sectors and the agricultural sector showing the smallest reduction in emissions. These are sectors in which quick and firm action is needed.

¹ [European Environment Agency 'Air Quality in Europe - 2020 report'](#);

- Most failures in the chemical status of surface waters can be attributed to three groups of substances, all of which are persistent and widely distributed: mercury and its compounds, PAHs (polycyclic aromatic hydrocarbons) and pBDEs (polybrominated diphenylethers). For example, for mercury, the most recent data, provided as part of the second river basin management plan reporting, indicate that nearly 46 000 surface water bodies in the EU (out of a total of approximately 111 000) (almost 42%) exceed the mercury concentration set to protect fish-eating birds and mammals. In some countries, mercury levels measured in biota cause failures in almost all surface water bodies (Austria, Belgium, Germany, Luxembourg, Slovenia and Sweden)². Implemented measures seem to have been effective in preventing the entry of several priority substances into surface waters. This is welcome, however, there are many more chemicals in the environment about which we know little including pollutants of emerging concern.
- Noise pollution remains a major health and environmental issue in the EU, with its burden being the second one, after air pollution. The European Commission concluded the Fitness Check of the Environmental Noise Directive in 2016: 'some progress has been made towards a common approach throughout the EU, but effects materialised only partially due to the delays in adopting common assessment methodologies'. In addition, the need for source policies has been highlighted. In 2018 the WHO has published the updated Environmental Noise Guidelines for the European Region³: it recommends reducing noise exposure to levels below those associated with adverse health effects, recommending noise limits for road (53dB Lden, 45dB Lnight)⁷, rail (54dB Lden, 44dB Lnight), and aviation (45dB Lden, 40dB Lnight), as well as including suggestions for wind turbines and leisure noise.

If we look at emerging pollution, such as plastics pollution or PFAS pollution the reality is that the level of pollution has actually risen in the last decade. In the case of plastics, the expectations are that plastic pollution will increase 10-fold in the next 5 years⁴.

Since data on resource consumption per unit of outputs (service or product) is not transparently available, it is not possible to assess whether real progress has been made on pollution reduction to the maximum feasible levels, if not brought in context.

² [European Environment Agency 2018 Mercury report](#);

³ [Environmental Noise Guidelines for the European Region \(2018\)](#);

⁴ [European Parliament, 2020](#);

It is difficult to conclude that the pollution levels have either increased or decreased in the last decade, in particular if the benchmarking is to be done per unit of service and product provided, the shortcoming is due to missing metrics for (environmental / health) footprint indicators e.g. per capita, per product/service output etc).

2.3 To what extent do you agree or disagree with the following statements?

The questionnaire has investigated through this question how much consumers feel responsible for pollution generated in different geographical areas. The same question should have been asked to investigate how respondents feel that the industry sector is responsible for pollution in different geographical areas. This would have provided a fair representation about the responsibility of different actors towards pollution, without putting consumers under the spotlight.

3.1 In your opinion, how effective would the following ways of tackling pollution be?

The role of the polluter-pays principle is key in the context of the Zero-Pollution Action Plan development as well as in the implementation of the legislation where the principle has been included (e.g. the Water Framework Directive). This question correctly highlights the need for developing financial instruments (“*heavier fines for breaches of pollution-related legislation and taxes and subsidies favouring less-polluting activities by industry and consumers*”) to keep polluters accountable, but with a formulation which leaves space for interpretation: the ‘less polluting activities’ formula is not enough to encompass the meaning of the ‘do not harm oath’ and the role of the polluter-pays principle. The objective is to make the polluter pay and to only support clean alternatives. Money gathered through fines and penalties should be re-invested in pollution prevention, reduction monitoring, enforcement promotion and remedy. At the same time, the polluter-pays principle also implies that it should be polluters, instead of the public-, who should pay for pollution related costs.

Some illustrations can be made here: e.g. 1) for air damage costs different methods exist (VOLY versus VSL) which make a factor 3 difference, in the US the air damage cost is priced at least 3 times higher in both cases. E.g. 2) The scientific community and industry all agree that the cost of climate change is at least in the order of 100€/t CO₂eq whilst the EU ETS price is far below this level, meaning that this system fails to recover the polluter pays principle. E.g. 3) the recent [EEB report Mind the Gap: Mapping hidden subsidies for the coal and lignite industry](#) highlighted the failure to properly apply the polluter pays and cost recovery principles in Germany, Poland and Czech Republic thus failing to address significant pressures lignite mining puts on water bodies. The EU environmental liability directive does not require a full recovery of external liabilities (e.g. climate damage, biodiversity restoration etc) and would exempt in part damage occurring due to “permitted” activities despite causing harm (e.g. lignite mining means

fueling coal power plants and hence leading to high CO₂ emissions, the EU environmental liability directive would only require liabilities to address lignite mine restoration activities, not the associated harms due to the effects of that activity).

4.1 What is your opinion about the following statements?

We know enough to act: in our responses to this question, we completely/mostly agree that there are major data gaps with regard to pollution monitoring and linkages as well as existing communication deficits. However, we would like to clarify that we know enough to act and, the lack of data should not be used as an excuse by policy makers not to take urgent regulatory action. The massive costs of inaction should not be dismissed.

We know today that chemical pollution has already reached the most remote corners of the globe, from the deepest oceans to the highest mountains. Industrial chemical pollutants are everywhere: in the water that we drink, the air that we breathe and the food that we eat. Our bodies harbour some 700 [industrial chemicals](#) of which 300 were unknown to our grandparents' generation, and researchers describe babies born today as "[pre-polluted](#)" by a cocktail of unquestionably toxic substances.

Chemical pollution also threatens the ecological balance of the entire planet and also impact our climate and biodiversity. In fact, [six of the nine planetary boundaries](#) have a close relationship to chemical pollution.

The economic costs of plastic pollution are enormous, only cleaning up the beaches with high concentrations of plastics litter has been estimated at USD 13 billion per year. Associated cost of shellfish population declines due to the use of tributyltin as anti-fouling marine coatings is estimated at €22 million per year to the UK shellfish industry alone. Cleaning up contamination just from polychlorinated biphenyls (PCBs) is estimated to have cost the EU more than €15 billion between 1971 and 2018⁵.

Treating diseases from common endocrine disrupting chemicals alone costs European taxpayers an estimated €157 billion annually⁶. A 2015 study estimated the costs from neurobehavioral deficits caused by certain chemicals to be more than USD 170 billion per year in the European Union alone.⁷

⁵ Milieu Ltd, Ökopol, Risk & Policy Analysts (RPA) and RIVM. Study for the strategy for a non-toxic environment of the 7th Environment Action Programme. Final Report. Luxembourg: Publications Office of the European Union, 2017 (page 10 and 11).

⁶ Trasande L et al. Estimating burden and disease costs of exposure to endocrine-disrupting chemicals in the European union. J Clin Endocrinol Metab. 2015 Apr;100(4):1245-55. doi: 10.1210/jc.2014-4324. Epub 2015 Mar 5.

⁷ [Global Chemicals Outlook, UN:](#)

Each year, a third of all babies born in the EU have mercury levels above “the recommended safe limit” (Bellanger et al., 2013), though contamination is worse in countries with higher levels of fish consumption⁸.

Action to combat mercury use and emissions from all relevant sources would be an appropriate follow-up to the conclusion of the recent State of Environment Report 2020 from the European Environment Agency, which asks for an urgent change of direction to face climate change challenges, reverse degradation and ensure future prosperity. The report confirms, among other things, that *‘Diffuse pollution remains a problem in Europe. It is mostly due to excessive emissions of nitrogen and phosphorus to water and to both historical and current emissions of mercury to the atmosphere and subsequently surface waters’*⁹.

Together with clear scientific evidence showing the health issues and the environmental damages caused by air pollution¹⁰; with the World Health Organisation about to publish its updated Global Air Quality Guidelines, which will most likely suggest lower air pollution concentration levels compared to the 2005 version, the study¹¹ underpinning the Second Clean Air Outlook report¹², recently published by the European Commission, also shows a significant surplus of benefit over cost for each policy scenario for reducing air pollution in the EU27: in the National Air Pollution Control Programmes scenario, which looks at the impact of the implementation of emission reduction measures selected for adoption and included in the national programmes, annual benefits amount to €8.0 - €27.8 billion in 2025, increasing to between €12.1 and €43.6 billion in 2030. This confirms that reducing air pollution not only saves lives and our environment, but also saves money.

This knowledge is more than enough for authorities to take action without delay to achieve European Green Deal goals of zero pollution and a toxic-free environment. Furthermore, it is important to highlight that 80% of important information regarding pollution is wasted, withheld or otherwise not used, this bottleneck needs to be remediated, also at regional level (E.g. UNECE Kiev Protocol review on PRTRs) <https://meta.eeb.org/2020/10/22/industrial-pollution-its-time-to-enter-the-digital-age/> and global level.

Part 2: Main conclusions

⁸ See <https://meta.eeb.org/2020/02/20/mercury-rising-for-johnny-depp/>;

⁹ [The European environment - state and outlook 2020](#);

¹⁰ [Air pollution and disease burden](#), The Lancet, Planetary Health;

¹¹ [Support to the development of the Second Clean Air Outlook, International Institute for Applied Systems Analysis \(IIASA\)](#);

¹² [Second Clean Air Outlook report](#), European Commission, January 2021;



The definition of ‘zero-pollution’ will be important within the zero-pollution action plan. In this context, the European Commission should be guided by four key principles: pollution prevention, precautionary principle, transparency and polluter-pays. The clear ambition for the Plan to deliver the highest pollution reduction possible, promoting behavioural changes, technical solutions and, especially, system changes, must be outlined in the ZPAP.

Pollution prevention – to avoid pollution, and polluter-pays - to make polluters pay for pollution related costs, must be explicitly referred to in the ZPAP text. Polluters should internalise the costs of pollution. Hence, the full implementation of the polluter-pays principle constitutes an essential way to define a (economically) sustainable path towards zero-pollution (see [EEB report Mind the Gap https://eeb.org/library/mind-the-gap-report/](https://eeb.org/library/mind-the-gap-report/) as an example about how public money should not be used). See further examples in this paper in relation to question number 3.1.

The EEB welcomes the proposed focus of the ZPAP on improving implementation and enforcement of the existing legislation to address pollution in air, water and soil. The European Commission recently concluded that the Water Framework Directive is broadly fit for purpose, while the Ambient Air Quality Directives have not been fully effective and some big gaps remain. Both fitness check evaluations highlighted significant shortcomings in implementation, enforcement and funding of these legal instruments preventing reaching their environmental objectives. For the Water Framework Directive, the need to properly address pollutants of emerging concern can be met through the legal update of the priority substances polluting surface and groundwater. While we welcome the Commission’s decision to already start the process for revising the Ambient Air Quality Directives (AAQDs), such process must have as objective the full alignment of EU air quality standards with the upcoming WHO Air Quality Guidelines (expected in Q1 2021). Without waiting for the revised AAQDs, the Commission should provide immediate further guidance to Member States on how to set up their monitoring networks and on how to prepare an effective air quality plan, by adopting implementing acts in accordance to Article 28 of Directive 2008/50/EC.

For the largest industrial point sources, we welcome a review of the Industrial Emissions Directive (IED) and the related E- PRTR, there is an urgency to transform this framework to become the new zero pollution industrial framework regulation with a redesign of its scope and a strengthened determination of what is Best Available Techniques (BAT) performance standards. More information is available here http://eipie.eu/storage/files/EEB_basic_elements_on_Industry_Strategy_IED_FIN_1.pdf , <http://eipie.eu/the-sevilla-process/the-industrial-emissions-directive> and from the joint NGO petition website <https://www.cleanteindustry.eu/>



The EEB also believes the ZPAP should promote large-scale deployment of nature-based solutions as a central instrument to tackle remaining air, water and soil pollution. Despite growing evidence of nature's ability to filter pollutants harmful to human health and to natural ecosystems, in addition to providing various co-benefits for biodiversity, climate adaptation, climate mitigation, well-being, the current EU policy framework has been insufficient to deliver a large-scale uptake of the nature-based solutions.

The EEB also welcomes the European Commission's intention to set up a centralised pollution monitoring and management system. This should have as objectives: awareness raising through the active dissemination of information; including on available scientific evidence; comparability of data; identification of possible cocktail effects of pollutants (exposure to different kinds of pollution); setting-up of a harmonised alert system on pollution levels; centralisation of all available pollution related data to improve its traceability along the whole life-cycle, from production (from e.g. ECHA database), to use (from e.g. SCIP database) to emissions and releases (from e.g. PRTR database) and in particular integrating the resource consumption phases. The system should not only look at the pollutants, physical pollution or substances covered by existing legislation, but should provide data on all pollutants, physical pollution (e.g. indirect impacts due to abstraction of resources) and substances which science identifies as potentially harmful, or for which not enough evidence to declare their safety is available (in application of the precautionary principle). Databases shall support the benchmarking of all actors, including the decision-makers, compliance promotion and improved data exchange for strengthening pollution prevention measures and standards. More information is available here <https://meta.eeb.org/2020/10/22/industrial-pollution-its-time-to-enter-the-digital-age/> and notably in EEB position on PRTR review as regards to list of issues, pollutants and essential functions of data access and usability <https://eeb.org/library/eeb-input-to-e-prtr-impact-assessment/>

The EEB is informing the European Commission about its will to cross the 'completely agree' option for the lines 1,3,4 and 5 in question number 4.2 of the ZPAP public consultation questionnaire. That option was unfortunately missing due to a technical failure, and we therefore make use of this space to highlight our preferences.

Part 3: EEB's feedback to the EC's roadmap (the comments below are based on preliminary input of the EEB to the IA consultation)

The EEB welcomes the opportunity to provide feedback to the European Commission's roadmap for a Zero-Pollution Action Plan. With this paper EEB would like to highlight:

- the overall objectives that this Action Plan should aim to achieve;
- the key principles on which it should be based, coupled with a structured and horizontal pollution management approach;
- additional comments to be considered for complementing the roadmap's proposals as tools to realise the European Green Deal's zero-pollution ambition.

Overarching objectives and guiding principles

When developing the Zero-Pollution Action Plan, it is fundamental to keep in mind what are the overall objectives that EU legislation and actions must deliver on. TFEU art. 191 (1) lists them:

'Union policy on the environment shall contribute to pursuit of the following objectives:

- *preserving, protecting and improving the quality of the environment,*
- *protecting human health,*
- *prudent and rational utilisation of natural resources,*
- *promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change'.*

Next to the identification of EU overall objectives, the TFEU also defines what are the key principles guiding the EU in its actions towards achieving those objectives; those are: transparency, the precautionary principle, the pollution-prevention principle and the polluter-pays principle:

- **Transparency:** through accessible decision-making processes (e.g. webstream and publish vote by Member State in the Comitology committees and COM expert groups); by making information on pollution available and easily usable (e.g. merging existing databases on chemicals production, use, emissions and monitoring data; ensuring a user friendly and effective [PRTR](#); ensuring that air, water, soil quality and noise levels information are accessible, understandable and comparable);
- **Precautionary principle:** by anticipating protective actions in case a risk cannot be determined with sufficient certainty, to protect the environment and people's health

(e.g. not allowing a product or a substance in the market, or a process to be undertaken, until the corresponding risk has been fully assessed and determined);

- **Pollution prevention principle:** preventing pollution by acting at source (e.g. establishing legally binding standards for avoiding pollution by any production process or product use, coherently framing source regulating policies and laws which are to be considered complementary to water, air and any other quality standard);
- **Polluter-pays principle:** by keeping polluters accountable (e.g. develop economic instruments to incentivise pollution reduction and penalise pollution production; require 0.1% levy on profits made by any polluting industrial sector, including chemicals, industrial farming, internal combustion engines automotive, fossil fuels energy production); making sure water taxes and tariffs reflect the polluter/ user pays principle; ensure that pollution monitoring and remediation costs are paid by polluters); ensure that EU authorities and agencies have the required funds to monitor, regulate and manage pollution (see question number 3.1 above).

Defining “Zero pollution” and scoping of action

The Industrial Emissions Directive provides a definition of ‘pollution’; Art. 3 (2): *‘pollution’ means the direct or indirect introduction, as a result of human activity, of substances, vibrations, heat or noise into air, water or land which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment;*

This definition implies that any form of impact from substances, vibrations, heat or noise (be it intentional or unintentional) that may either be harmful to human health or the quality of the environment, even if it is merely “impairing or interfering with amenities” of the environment, is considered as a pollution.

There are already some approaches in the EU legislation that aim to result in zero pollution for example the obligation to phase out priority hazardous substances under the Water Framework Directive or Substances of Very High Concern (SVHC) under REACH Regulation. The Action Plan can build on those approaches.

The Zero-Pollution Action Plan should also mean zero-pollution ambition at a global scale, therefore considering the impacts of the EU’s way of life, its policies and global actions; specifically looking at how trade and standards of imported and exported chemicals and



products are contributing to pollution and ensuring that it is tackled accordingly (see link with [8th EAP proposal](#) objectives).

Green Deal commitments relevant to Zero Pollution

The EU Green Deal emphasizes those goals and highlights the following objectives to be achieved through the Zero-Pollution action Plan:

- Creating a toxic-free environment through more action to prevent pollution from being generated as well as measures to clean and remedy it (Chemicals Strategy for Sustainability);
- Protect citizens and the environment better against hazardous chemicals and encourage innovation for the development of safe and sustainable alternatives (Chemicals Strategy for Sustainability);
- Restoring the natural functions of ground and surface water. This is essential to preserve and restore biodiversity in lakes, rivers, wetlands and estuaries, and to prevent and limit damage from floods;
- The risk and use of chemical pesticides is reduced by 50% and the use of more hazardous pesticides is reduced by 50% (Biodiversity and 'Farm to Fork Strategies');
- The losses of nutrients from fertilisers are reduced by 50%, resulting in the reduction of the use of fertilisers by at least 20% (Biodiversity and 'Farm to Fork Strategies');
- Significant progress has been made in the remediation of contaminated soil sites (Biodiversity Strategy);
- Source measures to address pollution from urban runoff, harmful sources of pollution such as micro plastics, chemicals (including pharmaceuticals) and combination effects;
- Achieve cleaner air, including the revision of air quality standards to align them more closely with the WHO recommendations; strengthening provisions on monitoring, modelling and air quality plans to help local authorities achieve cleaner air and reducing ozone concentrations and emissions through the Methane Strategy;



- Address pollution from industrial installations, working on the scope of industrial production legislation (e.g. IED / Seveso III) also to make it fully consistent with climate, energy and circular economy policies and improve prevention of industrial accidents;
- A clean and circular economy (Circular Economy Action Plan and Chemicals Strategy for Sustainability).

The ZPAP, and its objectives, are directly connected to the Toxic-Free Environment Goal, as well as the goal to achieve a decarbonised, circular and restorative zero-pollution economy (see also 8th EAP proposal). They are also connected to other key European Green Deal's initiatives, including: the Biodiversity Strategy, the Farm to Fork Strategy, the Chemicals Strategy for Sustainability, the Renovation Wave Strategy, the Methane Strategy, the Industrial Strategy, the Smart Mobility Strategy, the Beating Cancer Action Plan and the climate neutrality objective.

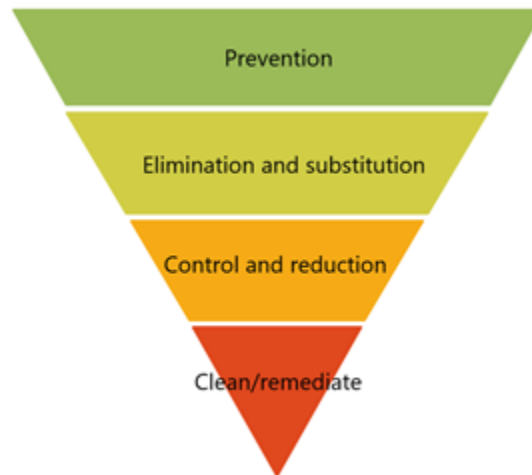
The ZPAP should therefore set out the guiding framework on concrete meanings and scope of the objectives set, decision-tree and criteria to apply for shaping the “action plan” as well as necessary monitoring, benchmarking and enforcement frameworks so as to deliver on the “zero pollution” ambition in the most holistic and coherent way.

Zero-pollution management

In order to deliver on the identified objectives, the actions foreseen by the Zero-Pollution Action Plan must follow a structured approach, systematically applied to all policy areas (media objectives, targets, policy framework decisions): it could be named ‘zero pollution hierarchy of actions’. This approach will ensure that precaution and prevention are prioritised over elimination and substitution; which are as well priorities over control and reduction measures. Remediation and restoration actions are considered as the last possible step to take. While for existing pollution remediation should be a top priority.



Current pollution management



Future pollution management

Clear timetable, targets and initiatives

Zero-Pollution Action Plan must provide the tools and framework required to achieve the following objectives/targets by 2030:

- Aim to reduce to zero premature deaths and diseases due to anthropogenic air pollution; air pollution impact on ecosystems and biodiversity is reduced to not exceed critical loads and levels;
- Deploy nature-based solutions (NbS) as a systemic solution to tackle remaining air, water and soil pollution on a large scale;
- Restore 15% of EU's land and in sea focusing on ecosystems important for biodiversity and climate and free flowing rivers through legally binding restoration targets;
- Achieve good chemical and ecological status in water bodies by 2027;
- Achieve WHO Environmental Noise Guidelines for the European Region's standards on traffic, railway, aircraft, wind turbine and leisure noise; therefore reducing noise related premature deaths, new cases of ischaemic heart disease, the number of people suffering chronic high annoyance and the number of people suffering chronic high sleep disturbance;

- Industrial activities are carried out in full compatibility with achieving environmental quality standards / acquis and the set 'zero pollution' goals, based on a new benchmarking approach set to lowest ratio of 'environmental impact of activities versus public good/service provided' (see more details on specific media sub-targets [here](#));
- Reduce by 50% the risk, production levels and use of industrial chemicals as well as the percentage of chemicals with properties hazardous for human health or the environment;
- A 100% remediation target of contaminated sites and a zero-accidents involving hazardous substances released target;
- Achieve the climate neutrality by 2040 target, achieving climate action to ensure below 1.5 degrees scenario / and maximum [300] ppm GHG in atmosphere target, unless climate science sets stricter target level;
- Zero tolerance to polluters and full internalisation of pollution costs in any policy and finance frameworks;
- Improved benchmarking and compliance promotion tools so to track efforts made in delivery by all economic actors;
- Improved transparency on the pollution life-cycle and decision making processes.

The Zero-Pollution Action Plan roadmap identifies 4 priorities: strengthen implementation and enforcement, improve the existing health and environment acquis, improve the governance of pollution policies and drive societal change. While EEB agrees with those, many of them being obligations established by EU Treaties, it is important to highlight the need for the Zero-Pollution Action Plan to go beyond the initiatives which were already expected before the European Green Deal was published. In particular, the Zero-Pollution Action Plan should drive the following developments and initiatives:

- the establishment of an independent body working as a constant link between science and policy (Zero Pollution Transition scrutiny board) - nowadays scientific developments are not considered nor embedded in the related legislation as fast as they should be; an ad hoc independent body regularly feeding the European Commission with updates on relevant scientific developments would ensure a swift consideration of the latest, triggering the periodic obligation for the European Commission to assess the correct level of ambition of health and environmental protection standards, to be considered for inclusion into EU law. This body should

work in cooperation with WHO and UNEP but it would not be bound by Parties' mandate for providing updated information on scientific evidence and it will focus on European Union level. This body will consider all different kinds of pollution: e.g. soil, noise, chemicals, water and air, as well as resource consumption. This approach will ensure a coordinated action and will facilitate the framing of overall strategies and initiatives to deliver on its zero-pollution ambition;

- the consideration of specific initiatives to tackle indoor air pollution;
- the consideration of a key criteria when developing all EU policies and legislation (which reflects the implementation of the polluter-pays principle): no money for polluters and polluters-pay for the pollution costs. This requires an overhaul of EU state aid frameworks as well as the Impact Assessment approach to fully internalise the costs first, including for inaction, by decision makers:
 - a) Adapt EU state aid regime to require compliance with all 6 environmental quality objectives set in the Taxonomy and “best value for money” test. EU state aid will assume de facto compliance with all “Union standards” and state aid applications need to demonstrate the common interest first;
 - b) EU impact assessment procedures are adapted to fully reflect inaction costs as to negative externalities e.g. for CO₂ a carbon shadow price of at least 100€/GHG is set, the value statistical life adapted to US EPA prices method is assumed as the minimum for quantifying air pollution health costs. Policy options considered are compliance-checked against delivery on the zero-pollution ambition and are rated by effectiveness and coherence, compliance costs affecting the polluters are considered as ‘justified by default’.

Awaited and ongoing revision processes

The Zero-Pollution Action Plan roadmap announces the revision of different pieces of legislation. To make the soon to be updated legislative instruments coherent with the announced zero-pollution ambition, those instruments will have to deliver on the most ambitious environmental and health standards. The Ambient Air Quality Directives, the Industrial Emissions Directive and the Environmental Noise Directive must establish zero-pollution objectives which are aligned with the latest available scientific evidence and best achievable performance levels.

To reduce air pollution at source, the European Commission should, in addition, quickly revise the National Emission Ceilings Directive to include reduction targets for methane emissions, mercury emissions and black carbon, and more ambitious targets for already covered pollutants.

The results of the 2019 Fitness Check of EU Water legislation confirmed the need to review the lists of pollutants affecting surface and groundwaters under the EQS Directive and Groundwater Directive, and their corresponding regulatory standards, taking account of recent technical work and watch list mechanisms, including on the risks from several emerging pollutants such as pharmaceuticals and microplastics and the list of Substances of Very High Concern (the Candidate List) under REACH. In addition, the revision of the Urban Waste Water Treatment Directive should address the pollutants of emerging concern and the substances of very high concern.

Source policies play a fundamental role, considering that the priority is to reduce pollution at source:

- the Common Agricultural Policy, now under revision, must be a driver for change, not an engine for pollution (being it for soil, water and air);
- The Eco-design Directive, soon to be revised, must establish ambitious minimum standards which deliver on reducing air pollution from domestic heating;
- Amend the Industrial Emissions Directive Framework to transform it into a sustainable production framework regulation, which will have as core elements a redefinition of the BAT determination method and its scoping. See more details [here](#).
- Sectoral legislation (pharmaceuticals, detergents, pesticides, biocides and other legislation) should contribute to reach water, air and soil policy objectives. For example, mechanisms included in pesticide regulation - by which Member States shall review an authorisation, where it is concluded that the objectives of the WFD on the reduction of pollution in surface water and groundwater cannot be met - should be introduced in other sectoral legislation.
- The industrial chemicals regulation REACH (to be reviewed by 2022) should not allow any chemical on the market if it is not proven to be safe for human health and the environment by producers in the first place.

Conclusion

To achieve the zero-pollution ambition, it is key that the EU develops an ambitious overarching action plan which:

- effectively prevents, and for essential activities or uses, reduces pollution at source;
- fully addresses pollution both from a sectoral and horizontal approach of all related strategies and policies and focus on “essential services or products” concept which have a wider public benefit (e.g. covering energy production, water policy, protein production, biodiversity and soil fertility, resource and noise management, substitution of chemicals of concern, living conditions, mobility services, etc.);
- is coherent and creates bridges and has synergies among all related EU laws and policies (e.g. on chemicals, industry, water, noise, and air policies, etc.)
- provides the necessary tools and instruments to continuously improve on the efforts and benchmarking (of all economic actors involved) so to ensure proper tracking of progress towards delivery of the set action plan.
- is bold on the decision-tree for actions and policy instruments to take, abandons counterproductive dogmas or limitations such as ‘technology neutrality’, ‘fuel choice’, command and control type versus market based instruments, ‘acceptable risk’ or exposure based thresholds