CHEMTrust
Protecting humans and wildlife from harmful chemicals

Briefing

EU Biodiversity Strategy to 2030 roadmap

CHEM Trust's feedback

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CHEM Trust welcomes a Biodiversity Strategy aiming to deal with the drivers of the biodiversity crisis and would like to emphasize the urgent need to deal with one of the drivers listed in the roadmap: pollution, and more specifically, **chemical pollution**.

Chemical pollution does not only involve pollution from direct sources such as industrial accidents or large-scale pollution from the widespread use of synthetic pesticides, but also **diffuse pollution from synthetic chemicals leaching from consumer products** such as flame retardants, plasticizers, water and grease repellents and pharmaceuticals. Over the past years CHEM Trust published many reports that highlighted the impacts of chemicals on biodiversity[1-3].

Recent scientific findings provide very concerning evidence of chemical pollution as a driver of ecosystem losses, as much for terrestrial ecosystems as for marine ecosystems. To mention just a few:

- on land: bird populations in Europe are highly impacted by the extensive use of synthetic pesticides[4];
- in freshwater: in the EU, on average 20 % of aquatic species are disappearing due to exposure to chemical mixtures[5];
- in marine waters: legacy pollution from banned PCBs is threatening the survival of orca populations[6].

A conservative estimate suggests that in terms of economic value at least **27% of total ecosystem service losses are due to chemical pollution**[7].

Moreover, chronic exposure to chemical pollution, such as from endocrine disrupters, is impacting wildlife's welfare and resilience by weakening their reproduction, immune, hormonal and neurological systems as well as their mating, migration and feeding behaviours[8-10]. This makes wildlife populations and entire ecosystems more vulnerable and less resilient in a context where they are also affected by many other external stressors such as climate change or habitat loss.

The burden of synthetic chemicals in the air, water and soil has reached critical levels. To cite one example, a study mapping chronic risk on the aquatic environment demonstrated that organic chemicals were likely to exert chronic long-term effects on sensitive freshwater species in 42% of the 223 European sites they studied[11]. Tragically, the situation is set to get worse: The 2019 landmark report of the European Environment

Agency on the state of the European environment concluded: *"The projected increase in chemical production and continued emissions of persistent and hazardous chemicals suggests that the total chemical burden on health and the environment is unlikely to decrease"*[5].

Some of the synthetic chemicals burdening the environment are highly persistent, such as the group of PFAS chemicals[12]. Therefore, further emission means a constant increase of this synthetic chemical burden and an increase of the exposure.

Once these chemicals are present in the environment it is extremely challenging, costly and in some instances impossible to remove them. Restricting these chemicals at the source and replacing them with safer alternatives and processes is critical to slow down the build-up of this toxic load in the environment. Stricter risk management measures to better control and reduce the overall use of chemicals of very high concern is also crucial to ensure Europe can establish a clean circular economy.

In CHEM Trust's view the success of the Biodiversity Strategy is therefore bound to the ambition and delivery of several other strategies developed in the context of the European Green Deal. Especially the Zero-pollution ambition for a non-toxic environment including the Chemical Strategy for sustainability as well as the 'Farm to Fork' Strategy. **An integrated approach between all these strategies is critical to restore the natural environment on a path to recovery.**

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