

FEDERTEC COMMENT ON PFAS RESTRICTION PROPOSAL

In the "**concern**" section, on page 1, paragraph 1, it's expressed the concern regarding bioaccumulation and persistence in the environment. In light of what is reported in table 11, considering that for the various sectors of use there are different percentages of emissions compared to the use/production of PFAS, we believe a different approach that concerns the management of the processes, rather than the substance/product, is more useful, by better controlling emissions throughout the life cycle. As can be seen from table 11, there are virtuous sectors and sectors that are less virtuous; We believe that developing and improving processes is the best approach, also because best practices could be easily exported and shared with those countries where the problem linked to PFAS has not yet been taken into consideration or even it is not economically feasible to limit the use of these molecules (as in developing countries).

Further consideration regarding Table 11: very significant results in reducing PFAS emissions into the environment would be achieved by improving the efficiency of the processes for 3-4 sectors that use and emit PFAS the most, reducing the global socio-economic impact and therefore being able to concentrate efforts in certain industrial sectors (Fluorinated Gases and TULAC emit 74% of total emissions).

Although RO1 proposes a total ban for PFAS molecules, in Annex 15, "scope" section, paragraph 2, on page 2, there is talk of some completely degradable PFAS that have no negative impacts on the ecosystem and on humans. We would like to have this list to subject these molecules to a careful study, to understand what makes them more degradable compared to others and perhaps study the possibility of transforming, through chemical-physical processes, the PFAS that are not, without altering the characteristics that make them better than available alternatives or at least to make them degradable at the end of their life.

The "**Socio-economic analysis**" section, on page 3, set out estimates of health costs for the whole of Europe resulting from exposure to PFAS (source "**Nordic Council report - 2019**"); this number is estimated to be between 52 and 84 billion euros. However, it seems to us to be a thesis of little importance, since, if on the one hand this figure may seem large, we would like to point out that, for example, if compared to the healthcare costs SUPPORTED ONLY BY ITALY and due to the consumption of tobacco, alcohol, added to the social costs (including health costs) resulting from road accidents, this figure is around 49 billion every year (of which 25 for alcohol alone (World Health Organization annual estimate), 17 for road accidents (2019) with injured and 7.5 tobacco (World Health Organization annual estimate)).

Therefore, if we want to reduce European healthcare costs, it would certainly be easier to move towards other issues.

Sources:

Alcol: Italian Ministry of Health

Tabacco: ANSA (National Associated Press Agency)

Incidenti: Ministry of Infrastructure and of transport

Regarding what is stated in chapter "**1. Problem identification**", on page 13, paragraph 3, a very interesting but generic argument is proposed regarding the impact of fluorinated gases on the greenhouse effect and therefore on global warming.

What is, quantitatively (in terms of **equivalent CO₂**), the impact of these gases on global warming?

It would be correct to consider this information in light of quantitative data, to understand if we are really talking about significant impacts.

Again, in chapter 1, paragraph 4, it is confirmed that on most PFAS there are no objective data regarding their dangerousness, but this is hypothesized on the basis of the fact that some PFOA and PFOS are dangerous. Since there is no clear evidence of the toxicity and danger of PFAS but only small isolated events, it seems excessive to us to ban their use..

Chapter "**1.1.5.5. Emissions from waste management**", last paragraph, on page 43 it says: "*New PFAS destruction technologies are being investigated, but often on a laboratory scale and these new technologies all have their specific advantages and disadvantages (Meegoda et al., 2022; Trang et al., 2022; Verma et al., 2023). These technologies have in common that they cannot be efficiently or in an economically feasible manner applied to PFASs that already entered the environment.*"

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Actually, even a ban on PFAS would not lead to recovery/disposal of past emissions. Given the socioeconomic impact of a potential ban (even temporary transition facility closures), we believe it is much more socioeconomically sustainable to focus on developing these processing and disposal technologies rather than banning PFAS.

Chapter **2.2.1.5. Examples of legislation outside the EU**, it says:

“The PFAS Action Act of 2019 requires the U.S. EPA to establish destruction and disposal guidances for a range of materials, including landfill leachate, biosolids, and “solid, liquid, or gas waste streams” from facilities that manufacture or use PFASs. The legislation requires that over a five-year period EPA reviews all other PFASs and decides whether to list them under the Superfund program. The Superfund program is designed to investigate and clean-up sites contaminated with hazardous substances. During these five years, the bill will require comprehensive health testing of all PFASs”;

please note that the American PFAS Action Act and the Superfund Program show a better and scientific approach based on based on health testing on all PFAS.

Consideration regarding **exports** and consumption of countries that do not have restrictive policies on the use of PFAS: considering the widespread use of these materials globally, if exports were interrupted in all territories that are NOT currently moving in the direction of a possible ban or reduction in the use of PFAS, in particular India, Africa and Asia, this would leave a huge market share to these territories. This not only represents a purely economic disadvantage from which these economies could profit greatly, but also from the point of view of control over substances at a global level. A policy of international control is much more effective, which would be lost if all the world powers were not involved.

Chapter **“2.4.1.1. Economic impacts on producers and customers and other impacts (e.g. employment losses)”**, paragraph 2, page 78, states the following: *“Changes to the production process might also result in more energy use with associated cost increases for companies”*, and therefore an increase in CO2 produced, worsening the problem of CO2 levels produced by anthropic activity, which are already critical.

Considerations regarding the possible alternatives of seals, hydraulic fluids and pipes, particularly important for FEDERTEC companies that develop technologies intended for use in the hydraulics of the mobile sector (earthmoving and agricultural machinery, etc.):

as reported in **Table 8 RO1**, the gaskets (especially in engines), as well as the O-rings, are indispensable devices for safety and hard to replace unless after a long and accurate testing and certification phase, as well as in many cases after redesign of equipment.

Also for hydraulic fluids, as indicated in **Table 8 RO1**, there is a "low substitution potential" and for this reason *“full ban would cause major disruption to the industry leading to significant producer and consumer surplus losses, and impacts on employment.”*

Similarly, regarding tubes, we can read (on page 107) *“Weak evidence that technically feasible alternatives exist for gaskets, tubes, and liners of pipes/tanks”*.

Thanks for your attention,

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