

Post-CHAM opinion piece by Frédéric Collet: **Pharma can be decarbonised... In fact, it's already happening!**

Last Saturday, I had the pleasure of making my contribution to CHAM 2021. I was given the opportunity to share my views on this year's theme of 'One Health' at a round table discussion on 'A low-carbon healthcare system'.

Starting point: current estimates of the pharmaceutical industry carbon footprint put us ahead of textiles, but behind automotive. Why? Because of the indirect environmental impacts of our industry that result from the complexity of the pharmaceutical product manufacturing and distribution supply chain. As health industry stakeholders committed to working together for the benefit of human and global health, it is our responsibility to adopt an approach that encompasses and controls the environmental consequences of **all the activities** in which our member companies are involved. From researching raw materials, through product development and manufacture to distribution via hospital and community pharmacies, we must be mindful of the environmental footprint of our industry at every stage of the product life cycle.

Most of our leading pharmaceutical corporates have strategies in place to achieve carbon neutrality by 2030 or 2035, and the effects of those strategies are already measurable: 25% lower greenhouse gas emissions since 1990, and a 40% reduction in airborne releases of volatile organic compounds from production facilities since 1995. So I say yes, it is possible to reindustrialise France at the same time as shrinking our carbon footprint, and would argue that **the 5th industrial revolution** is already underway.

In addition to its carbon footprint, the sector is also actively engaged in managing the end-of-life phase of pharmaceuticals by recycling not only packaging, but perhaps more importantly, unused products, which are recovered for incineration via a specialist channel operated by Cyclamed. The 25% reduction in contaminated industrial waste and active ingredients achieved over the last 10 years is a very welcome development. But even more impactful than production facility emissions are the natural discharges of active ingredients into wastewater, which is the main channel through which pharmaceuticals enter the natural environment. According to the OECD, 10% of the 2,000 or so pharmaceuticals prescribed worldwide pose a risk to the environment, and once absorbed by patients receiving treatment, their persistence in the body can be very long and concerning. This is the case with antibiotics, whose continuous release is the root cause of the antibiotic resistance that has become such a major threat to human health (greater than the risk of cancer from 2050 onwards, according to WHO forecasts). Responding successfully to this threat relies partly on R&D, and partly on **educating everyone about the proper use of medicinal products** to curb their excessive and/or inappropriate use.

In 2020, Leem set up an Environment Committee with responsibility for monitoring the carbon footprint of pharmaceutical companies. It provides a space for sharing best practices with the ultimate aim of guiding, encouraging, and creating a virtuous ripple effect around a series of shared indicators. Nevertheless, the changes required are neither simple nor immediate, because pharmaceuticals are not like any other type of product. The gain in environmental impact cannot be achieved at the expense of efficacy, quality, regulatory compliance or patient safety. Nor must such progress be made at the expense of production performance, which could threaten the security of supply of essential treatments. And making any change to materials in direct contact with our products takes an average of two years (stability studies, compatibility studies and applications to change the marketing authorisation dossier).

The European health sector has a role to play in removing regulatory obstacles and supporting manufacturer-driven green innovation by harmonising standards. 2022 will present an opportunity that should not be missed. But it is only through involving society at every level from national governments to manufacturers and the general public that real change can be achieved. There is still

a great deal to be done, and everyone has to play their part to the full. The Covid-19 pandemic has had one advantage: it has highlighted the extraordinary resources represented by human genius and courage. The next big challenge facing humanity today is climate change. So let's re-waken this human genius once again... **it's urgent!**