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Pharmaceutical Services

# SO FAR SO GOOD: MAINTAINING THE MOMENTUM OF PROGRESS FOR SUSTAINABLE POLICIES

In this article, Michael Earl, Director of Pharmaceutical Services at Owen Mumford, discusses the highlights of a review undertaken by Owen Mumford into how the pharmaceutical industry is faring on environmental, social and governance standards, noting that while the industry is performing above average overall, there remain some key areas for improvement.

The pharmaceutical sector is working hard to reduce its carbon footprint, eliminate pollution, conserve water and use sustainable components. Similarly, upstream suppliers and partners for combination drug delivery products are stepping up to ensure that the whole supply chain improves its environmental, social and governance (ESG) standards. As a key delivery device partner for pharma companies, Owen Mumford has reviewed the current state of play on ESG compliance in the industry across the top 25 companies reporting ESG scores. We summarise the highlights here, with the intention of contributing to the industry's current understanding, underlining the achievements made to date and signposting some of the key areas for improvement.

## SUSTAINABILITY IN PHARMACEUTICALS – THE CURRENT STATE OF PLAY

Around the COP26 Summit in 2021, The Association of British Pharmaceutical Industries (ABPI) published a report entitled "Drive to Net Zero: How Pharmaceutical Companies Are Helping the Fight Against Climate Change".[1] The study reflected similar reviews covering the pharmaceutical industry in the US, the EU and parts of Asia. It describes a number of examples of leading pharma companies that are achieving significant sustainability targets or promising to reach ambitious goals over the next two decades. Those goals can be categorised into four distinct areas of sustainability policy:

- **Carbon emission** issues focused on energy use reduction, sustainability and overall net-zero targets
- **Water sustainability** concentrated on reduced manufacturing consumption and the elimination of pharmaceutical waste from the water system
- **Waste management improvements** zeroed in on packaging and more effective product recovery and disposal
- **Sustainability by design** covering both green chemistry and chemical recovery and reuse, as well as reusable delivery devices.

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**Michael Earl**
Director, Pharmaceutical Services
T: +44 1993 812021
E: pharmaservices@owenmumford.com

**Owen Mumford**
**Pharmaceutical Services**
Brook Hill
Woodstock
Oxfordshire
OX20 1TU
United Kingdom

**www.ompharmaservices.com**

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Corroboration of this positive industry view was seen in the October 2021 Climate Reporting Performance report from EcoAct,[2] which states that three biopharmaceutical giants feature in the global top 20 companies for sustainability. As a sector, biopharma outperformed the overall company average in each of the report's key measurement categories: measurement and reporting; ambition and targets; governance, strategy and action plan; and achievement.

Owen Mumford has conducted its own analysis of the pharmaceutical industry, across a set of ESG factors that are extremely specific to the sector and the supply chain that serves it. This latter point is important, as no company can claim to be part of a sustainable ecosphere unless its whole supply chain (including distribution channels) is moving in lockstep and to similar standards – exemplified by the rules on Scope 3 emissions which specifically reference the supply chain in total.[3]

Owen Mumford sees this pressure come down the line from its pharma clients and is taking a collaborative approach to increase attention to ESG aspects for combination products across sourcing, manufacturing, packaging and distribution. A good example is the contentious area of disposable plastic devices in drug delivery. While alternatives, such as degradable plastics, are under constant review, immediate progress is being made by reducing the number of disposable components in delivery devices. At Owen Mumford, this kind of sustainability by design is already visible in the development of its reusable autoinjector range, providing pharma partners with environmental progress in their supply chain.

## VARIANCE AND SIZE – TWO PRELIMINARY POINTS

Before getting into the specifics of the industry review, there are two overarching observations that are worth pointing out. First, although the industry as a whole achieves an ESG score of 61% in the EcoAct review mentioned prior – significantly above the all-industries average of 53% – the performance of individual companies varies significantly. The study revealed a variance of over 40% between the top performers and those who are at an earlier stage in their journey. As such, the industry cannot be complacent until the industry average is accompanied by a narrower band of variation. Equally, it appears that neither geography nor size is a major factor. The top performing smaller firms are only a few percentage points short of the top performing giants, all spread across the world. This implies that corporate will and commitment to ESG improvements are almost as important as large budgets with which to achieve them.

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## MEASURING REAL TARGETS

Owen Mumford's review considered not only where ESG policies had been put in place and published, but also where a pharma company had publicly set hard targets (where appropriate) – as the saying goes, "handsome is as handsome does". Given that ESG credentials (including hard targets) are ever more frequently forming part of every tender, proposal and partnership requirement up the supply chain, it is logical to conclude that pharmaceutical companies will themselves want to demonstrate to customers, policymakers and healthcare system stakeholders not only company ambitions, but evidence of hard actions and achievement thresholds.

As just one example of what key supply chain partners are doing, Owen Mumford is pursuing a number of science-based targets, including a net-zero deadline (2045), reusable device development, renewable energy use in manufacturing and office environments, freight journey minimisation, zero waste to landfill (achieved) and various others.

## FOUR POSITIVE ACHIEVEMENT AREAS

The most mature areas where hard targets have been publicly set were energy, water, waste and air emissions. Pharmaceutical manufacturing is energy intensive,[4] and the most developed energy policies focused on a combination of renewable energy sources, self-generation and energy efficiency via reduction of energy requirements in the manufacturing process.[5] Manufacturing energy efficiency can be focused on either production lines or industrial buildings – in both cases, overall savings in the region of 25% were typical and were often much higher.[6]

Water, of which the pharma sector is a major consumer,[7] focused not only on reducing consumption – itself a worthy and socially important aim – but also on cleaning and reprocessing water (either for reuse or putting back into the water grid). Health and water are closely interconnected, so managing its use – not only in-house but also throughout the supply chain – helps avoid potential risks. One international generics giant aims to achieve 100% water "neutrality" by 2025 by reusing water, recycling wastewater and capturing rainwater. The review showed that around 50% of pharma companies have set hard targets in this category.

28% of pharma companies have set targets to reduce their waste emissions by at least one quarter. Some companies are attempting to avoid reliance on landfills for waste disposal, while others are pursuing a zero-waste approach. Indeed, a commercial incentive may be coming into play as increasing commodity prices encourage pharma companies to recognise waste as a source of scarce resource.

Air emissions are a major focus with almost 70% of pharma companies pursuing specific targets. Not only are they looking at carbon emissions reduction, but also the release of gaseous pollutants. Typical pollutants to be filtered include acidic gases, basic gases, dust and aerosols, pharmaceutical "actives" and volatile organic compounds.

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## CONTAMINATION AND PACKAGING – A WORK IN PROGRESS

As well as these highly developed areas of ESG compliance and specific target setting in the pharmaceutical industry, there are other areas of surprisingly low commitment to measurable outcomes, at least to date. In particular, while 84% of companies have a policy on pharmaceuticals in the environment and 36% have a policy on the related issue of anti-microbial resistance, almost none have actual targets in these areas. The AMR Alliance, an industry initiative to address anti-microbial resistance in all its aspects, notes that, "Manufacturing emissions from both the production of APIs and their formulation into drugs is another source of environmental emissions. In regions like Europe, only trace levels of antibiotics in the environment can be attributed to waste from production but in countries where discharges are not well controlled some studies have found very high levels of active residues in the discharge vicinity of antibiotic factories."[8] A variety of studies confirm this issue, which is just one of several when it comes to safeguarding the environment from pharmaceutical contamination.[9] Clearly this area is a work in progress.

More surprising (and less complex) is the issue of packaging. While 76% of pharma companies have a policy on this front, only 13% of companies studied in the review had translated policy into actual targets. This is a little perplexing, as it is an area that other sectors have long since addressed, and one in which it is a relatively straightforward task to define goals. Packaging can be converted to sustainable alternatives – where clinically acceptable – and companies can also address weight and packaging efficiency to reduce the burden on shipping. A few leaders have pinned their colours to the mast, with specific targets set, especially around rebalancing the use of plastics versus recycled/sustainable paper – objectively assessing where replacement brings a net environmental gain and where the original packaging should be retained. It is likely that this area will become widespread rapidly over the course of the next few years.

## CONCLUSION

A variety of independent studies have clearly indicated that the pharmaceutical industry is above average when it comes to ESG compliance, initiatives and recognised measurements. Many of those measurements specifically scrutinise the imposition of standards throughout a pharmaceutical manufacturer's supply chain and distribution channels. However, there are several areas revealed in the Owen Mumford review where hard target commitments should be developed over the next few years to enhance the industry's positive position on ESG standards further.

## ABOUT THE COMPANY

Owen Mumford is a major healthcare company and device manufacturer that commercialises pioneering medical products in its own brand and custom device solutions for the world's major pharmaceutical and diagnostic companies. Owen Mumford's goal is to enhance access to diagnostics, encourage adherence to treatment and reduce healthcare costs, making a world of difference to a world of people.

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## ABOUT THE AUTHOR


**Michael Earl** joined Owen Mumford as Director of Pharmaceutical Services in November 2020. He was previously the Commercial Vice-President at Bespak (now part of Recipharm), leading the commercial team there to drive growth in its substantial medical devices business. Prior to that, he worked for a number of pharma, biotech and device companies. In a career spanning 35 years, he has been responsible for all aspects and stages of drug and device development and commercialisation. Mr Earl has also completed a substantial number of commercial, licensing and mergers and acquisitions transactions.

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