

MedTech's sustainability mission

31 May 2024 | Analysis | By Ayesha Siddiqui

MedTech, not unlike other industries, hurts the environment and must find ways to mitigate this harm. Several leading top medtech companies have announced environmental, social, and governance (ESG) goals. What steps are medtech companies taking to improve sustainability and how much further do they need to go to make a dent in carbon emissions? Let's dig deeper.



Healthcare accounts for 5 per cent of total global carbon emissions, and medical devices and technology are responsible for a large portion of that, according to Boston Consulting Groups (BCG). Much of this comes from the manufacturing operations and supply chains of medtech companies and their suppliers. At the provider level, MedTech generates tonnes of unrecycled waste through single-use disposable products and packaging.

Stringent regulations

Regulators worldwide are also establishing rules requiring companies to publish standardised ESG information. In Europe, regulations are already in place. In the US, proposed new disclosure requirements for public companies focus on climate-related risks and relevant risk management processes. Another key ESG trend is the mandatory sustainability reporting obligations imposed on companies globally. In the Asia-Pacific region, ESG regulation is accelerating due to the urgent need for greater transparency and tightened definitions for sustainable investment products. The twofold increase in the number of ESG policies in the region over the past five years has led to increased corporate ESG disclosure across most APAC markets, which now align with or exceed those in the US, says Goldman Sachs report.

The Australian government plans to introduce mandatory climate-related financial disclosure requirements, encouraging companies to adopt more environmentally responsible practices. Moreover, stringent waste disposal regulations are on the horizon, with Japan aiming to cut plastic waste by 25 per cent and South Korea by 50 per cent, both by 2030.

In light of all this, the medtech industry and the broader healthcare sector are increasingly committing to environmental stewardship.

Cutting carbon footprints

All the top medtech companies, GE HealthCare, Becton Dickinson, Philips, Siemens Medtronic have set ambitious targets to reduce carbon emissions. Medtronic plc announced in 2022 a new ambition to be net zero across its value chain by 2045. Philips is definitely a leading innovator in environmental technology in the medical device industry. Philips aims to maintain carbon neutrality and use 75 per cent renewable energy in its operations by 2025. Additionally, the company is committed to reducing CO₂ emissions across its entire value chain in alignment with a 1.5°C global warming scenario. Furthermore, Philips will embed circular practices at its sites and achieve zero waste to landfill by 2025.

Siemens Healthineers is committed to becoming carbon neutral by 2030. Currently on track, the company has already accelerated its efforts. Siemens Healthineers proudly reports a 50 per cent reduction in its CO₂ footprint from operations (without offsetting) since 2019 and is targeting a 90 per cent reduction by 2030. Additionally, Siemens Healthineers has reduced its energy consumption by 9 per cent since fiscal 2021, and 96 per cent of its locations have implemented a water strategy.

Japan-based Olympus is committed to becoming carbon neutral by 2030. Since 2021, Olympus has promoted sustainability management by designating an ESG Officer and establishing KPIs in its medium- to long-term business plan.

The APAC region, which represents 18 per cent of the approximately \$660 billion global medtech industry and is projected to be the fastest-growing region, is also prioritising ESG initiatives.

Bain & Company and APACMed partnered to survey 120 customers and more than 800 employees on ESG considerations within the medtech industry. Nearly 70 per cent of medtech customers surveyed expect ESG will become a core purchasing criteria. Among the 874 employees surveyed, 60 per cent reported that their companies have already established ESG ambitions and set specific targets, while 43 per cent confirmed the existence of separate ESG strategies for their companies' suppliers.

Innovative solutions

MedTech companies have announced initiatives to address climate change by cutting carbon emissions, saving water, cutting waste, and incorporating environmentally stable manufacturing into their products.

"Medtech companies are proactively addressing various ESG issues and have launched numerous initiatives. These include energy-efficient manufacturing, supply chain engagement, recycling, waste reduction, remanufacturing, and eco-material adoption. Additionally, medtech firms continue to focus on improving healthcare access, community engagement, diversity, and inclusion. Further acknowledging the importance of ethical business practices and transparency, medtech companies in the APAC region have restructured their standard operating procedures and offered supplementary compliance training for employees," said **Vikram Kapur, Head of APAC Healthcare & Life Sciences practice, Bain & Company.**

Successful medtech companies emphasise global sustainability while recognising the importance of addressing local market nuances and engaging with local stakeholders.

Kapur highlighted a couple of initiatives within the industry. Firstly, a global diagnostic company is collaborating with waste and recycling partners in Australia to ensure the proper disposal and management of end-of-life instruments. Secondly, another global medical devices company has partnered with the Japan Containers and Packaging Recycling Association for waste recycling efforts. In 2021 alone, this company recycled 31 tonnes of paper and 207 tonnes of plastic packaging materials, thanks to contracted recycling firms associated with the association.

Reprocessing single-use medical devices extends their lifespan, reduces costs, and minimises waste. According to Cardinal Health's latest ESG Report, its Sustainable Technologies Division, which serves over 2,000 US hospitals and ambulatory service centres, collected 18.3 million single-use devices (SUDs) in fiscal 2022, diverting over 5.6 million pounds of waste from landfills. In 2023, Stryker's Sustainability Solutions enabled their customers to divert more than 5 million pounds of waste from landfills through reprocessing programmes.

A research paper from 2021 focusing on the remanufacturing of medical catheters emphasised that heightened recycling and remanufacturing efforts could result in CO₂ savings of up to 50 per cent. This significant reduction is mainly attributed to the decreased production of new plastic.

Despite this, medtech companies are lagging in terms of their sustainability progress when compared to other sectors in the life sciences and healthcare industry. While 19 of the top 20 medtech companies have set carbon reduction targets, only 40 per cent of those have included consumer and supplier emissions in this carbon reduction target. To put this into perspective, 9 of the top 10 pharmaceutical companies have included consumer and supplier carbon emissions in their reduction targets, and seven have full-scope net-zero goals.

“At the same time, implementing sustainability-focused changes presents challenges, requiring a shift in organisational culture and approaches. Sustainability must be incorporated into every facet of the business with flexible scenarios and incremental steps over rigid plans. Investments in new capabilities and skill sets, as well as a focus on scalability and adaptability, are crucial for achieving a capability shift. Furthermore, collaborating with unexpected allies, such as renewable energy providers, government agencies, educational institutions, and environmental nongovernmental organisations, is vital for effectively driving systemic change,” said Kapur.

While the medtech industry has taken initiatives, there is still much to be done to significantly reduce carbon emissions. Despite setting ambitious targets and making progress, more efforts are needed to make a substantial impact. Embracing sustainability can also contribute to cost-cutting measures. BCG report estimated that reducing emissions by 20 - 30 per cent could result in net cost savings. Therefore, it is imperative for the industry to take all necessary steps to become more sustainable and maintain a healthy ecosystem.

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