Executive summary

Healthy planet, healthy people

The innovative pharmaceutical industry's contribution to the Kunming-Montreal Global Biodiversity Framework (GBF)

IFPMA

Human health and nature are deeply interconnected. Land-use change, climate change, and pollution drive biodiversity loss and reshape the environmental conditions on which human well-being depends. Land-use change increases the risk of zoonotic spillover and emerging infectious diseases; climate change alters the distribution of vector- and waterborne diseases and stresses threatened species; and pollution adds to the human disease burden while accelerating habitat degradation.

The pharmaceutical industry plays a central role in protecting human health and increasingly recognizes that fulfilling this mission requires a healthy and biodiverse planet. Through company-level initiatives and decades of pre-competitive collaboration, IFPMA member companies are working to reduce environmental impact and contribute positively to a healthy and biodiverse planet.

The GBF adopted under the Convention on Biological Diversity in 2022 lays out ambitious targets for governments. Across four operational domains, the industry contributes to 18 of the 23 GBF targets, through initiatives including:

1 Strengthening responsible value chains for nature

Pharmaceutical companies are extending biodiversity and environmental standards across their sourcing and into their supplier network.

Sustainable, deforestation-free sourcing: Certified sourcing for high-risk commodities such as palm-oil and wood pulp, and management plans for agricultural, marine, forestry-derived, and mineral inputs.

Sensitive species utilization and alternatives: Shifting to synthetic and recombinant alternatives, such as replacing horseshoe-crab-derived reagents with recombinant Factor C for bacterial endotoxin testing.

Site-level Biodiversity Action Plans: Habitat restoration and native planting at manufacturing and research sites.

Supplier biodiversity standards: Embedding standards on land use, water, waste, and pollution into commercial relationships with supplier base.

The Pharmaceutical Supply Chain Initiative (PSCI), founded in 2006, has 85 members (74% of IFPMA companies are PSCI members) and reaches more than 2,000 suppliers through its shared audit platform and capability-building tools Its responsible supply chain principles include environmental expectations related to climate change and biodiversity conservation.

Eli Lilly, a recombinant Factor C testing leader since 2016, has converted 80% of its injectable-medicine testing from the horseshoe-crab-derived LAL assay to recombinant Factor C, helping protect a vulnerable species critical to the food web of shore birds and the coastal ecosystem.

2 Reducing the environmental footprint of medicines

Pharmaceutical companies are acting to reduce the impact of water usage, solid waste, and wastewater that can impact biodiversity.

Water stewardship and pharmaceuticals in the environment: Investing in technology and corporate programs to cut consumption and improve discharge quality.

Responsible antibiotic manufacturing: Implementing discharge limits based on predicted no-effect concentrations to prevent environmental drivers of AMR.

Packaging circularity and green chemistry: Developing of solutions for hard-to-recycle packaging and implementing process innovation that improve reaction efficiency and reduce solvent and water usage.

The AMR Industry Alliance (AMRIA), established in 2016, brings together over 90 companies and associations. More than 60 antibiotic products have been independently certified to AMRIA's Antibiotic Manufacturing Standard across 15 geographies, with BSI-certified discharge limits based on predicted no-effect concentrations (PNECs) for environmental protection.

Bristol Myers Squibb's process-chemistry program cut process mass intensity by an average of 39% in 2024–2025, eliminating more than 6,500 metric tons of chemical waste.

3 Aligning climate action with nature outcomes

Pharmaceutical companies' initiatives increasingly reflect the interrelation between climate change and biodiversity loss as mutually reinforcing crises.

Greenhouse gas (GHG) emissions reduction: Setting of Scope 1-3 emissions reduction targets at scale, aligned to 1.5°C pathways and externally validated.

Renewable energy and operational efficiency: Transitioning to renewable electricity through a combination of power purchase agreements, on-site generation, and renewable energy certificates.

Nature-based solutions and restoration partnerships: Investing in reforestation and watershed restoration that sequester carbon while rebuilding habitat.

97% of IFPMA member companies have decarbonization programs in place, with 82% having targets aligned with the Science Based Targets initiative (SBTi) on a 1.5°C-compatible pathway.

AZ Forest, AstraZeneca's global reforestation and biodiversity program, aims to plant more than 100 million trees by 2030 to restore forests, protect biodiversity, and strengthen natural ecosystems, with projects co-designed with ecological experts and local communities.

4 Embedding nature in corporate governance

Pharmaceutical companies are ensuring biodiversity commitments become durable by advancing governance of programs and investments.

Corporate-level governance and sector frameworks: Embedding biodiversity in governance processes and aligning actions with frameworks such as the World Business Council for Sustainable Development (WBCSD) Roadmap to Nature Positive.

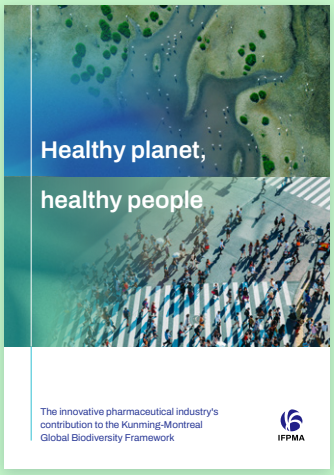
Nature-related disclosure and assurance: Growing adoption of the Taskforce on Nature-related Financial Disclosures (TNFD), mandatory Corporate Sustainability Reporting Directive (CSRD) / European Sustainability Reporting Standards (ESRS) Biodiversity and Ecosystems (E4) reporting, and preparation for Science Based Targets Network (SBTN) validation.

Six IFPMA member companies co-developed the WBCSD Roadmap to Nature Positive for the Pharmaceutical Sector in 2025, the first sector-specific nature-positive pathway in the industry. Fifteen are now engaged with TNFD-aligned disclosure – seven as formal registered adopters – and 14 hold Carbon Disclosure Project (CDP) leadership-level scores on climate or water.

Roche's Corporate Governance and Sustainability Committee of the Board of Directors oversees climate, water, and biodiversity, with a structure running from board level through executive ownership to divisional implementation, anchored in internationally recognized frameworks.

A health industry in evolution

A healthy and biodiverse planet is fundamental to human health. The industry's contributions to GBF targets are evidence of an industry in evolution, one increasingly embedding biodiversity considerations across its value chain. In this journey, the innovative pharmaceutical industry remains committed to collaborating with governments, multilateral organizations, scientific and research institutions, and indigenous peoples and local communities to achieve the Kunming-Montreal GBF targets and a shared vision of a world living in harmony with nature.



Read the full publication

Scan to access

IFPMA International Federation of Pharmaceutical Manufacturers & Associations

For more information, visit ifpma.org