Understanding impact and dependencies on nature:

Highlights and learnings from initial progress on our nature goal

December 2022

Ahead Together
Habitat degradation and deforestation are increasing the risk of new human pathogens and potentially pandemics. Safeguarding nature makes our business more resilient as scientists can find new solutions through observing processes in the natural world, while also helping to ensure the sustainable supply of raw materials for medicines and vaccines. That's why in 2020, we set out our goal to have a net positive impact on nature by 2030 across our entire value chain – from raw materials to patient.

We set clear and measurable targets on water, biodiversity, waste and materials and are making important progress on early ‘no regret’ actions – initiatives which allow us to drive change while we continue to deepen our understanding of our full value chain nature impacts and dependencies and align with evolving best practice.

We are one of the first companies – and the first in our sector – to pilot target-setting with the Science Based Targets Network for Nature (SBTN) and disclosures aligned to the Taskforce for Nature-related Financial Disclosures (TNFD). While climate is now well understood with widely accepted frameworks, those for nature are forming and evolving quickly. We want to help accelerate their adoption in the healthcare sector and beyond.

Here we share some of the highlights of our progress so far, together with our learnings from adopting this approach. Action to protect and conserve nature can’t wait, so we hope to encourage others to get started, even while the full data sets and standards are not yet available.

We support an ambitious biodiversity agreement at COP15, and alongside partners, we’re calling for mandatory requirements for all large businesses to assess and disclose their impacts and dependencies on nature.
**Our approach**

**Priorities**

1. **Water**

   Water it’s fundamental to human health and the sustainable production of our vaccines and medicines.

   - **Targets**
     - Achieve good water stewardship at 100% of our sites by 2025.
     - Reduce overall water use in our operations by 20% by 2030.
     - Be water neutral in our own operations and at key suppliers in water-stressed regions by 2030.
     - Zero impact Active Pharmaceutical Ingredient (API) levels for all sites and key suppliers by 2030.

   - **Progress highlights**
     - In 2021, we reduced overall water use in our operations by 16% compared to 2020 and by 21% in sites in high water stress regions. 91% of our sites now meet good water stewardship standards.
     - We have identified three initial water basins in water-stressed areas where we have manufacturing sites, including across India, Pakistan and Algeria, which we have prioritised for investment in water neutrality to achieve a measurable and positive impact in water-stressed basins on availability, quality and accessibility.
     - In 2021, GSK led the Antimicrobial Resistance Benchmark, due in part to progress in limiting the release of antibiotic waste into the environment, with 100% of our manufacturing sites and 93% of supplier sites in compliance with the discharge limits we have set.

   - **Where next**
     - We have identified which of our suppliers are located in water-stressed regions and will work to engage with them to drive good water stewardship, addressing water withdrawals, quality, sanitation and hygiene.
     - We are finding local partners in the water basin for our manufacturing site in Nashik, India, to improve the collective management of the basin, to benefit nature and local communities.

2. **Biodiversity**

   Biodiversity plays a critical role for human health and wellbeing, and our approach spans both our own sites and our supply chain through the materials we source.

   - **Targets**
     - Positive impact on biodiversity at all sites\(^1\) by 2030.
     - 100% agricultural, forestry and marine-derived materials sustainably sourced and deforestation free by 2030\(^3\).

   - **Progress highlights**
     - In 2021, we piloted our approach to biodiversity with a baseline assessment and action plans at improving habitats, protecting species and improving soil and water quality. We have now commenced biodiversity uplift projects at our three largest R&D facilities — Stevenage in the UK and Upper Providence and Upper Merion in Pennsylvania in the US.
     - As a first stage, we are addressing 12 critical agricultural, forestry and marine-derived materials. We have engaged with associated suppliers and external independent experts to map the full supply chains involved, understand existing sustainability standards, identify gaps and establish improvement plans.

   - **Where next**
     - All sites will have biodiversity action plans by 2025, which are supported by third party assurance and use external databases to evaluate the local impacts.
     - We will build on what we learnt from addressing the 12 critical materials, roll out our analysis to 12 additional materials in 2023 while defining a Sustainable Sourcing Standard, including action plans to avoid, reduce and replace materials.

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\(^1\) Below the predicted no-effect level.

\(^2\) GSK-owned sites.

\(^3\) Target updated in December 2021 to reflect priority materials.
Materials and waste

We are committed to reducing our operational waste and reducing the environmental impact of our medicines and vaccines, and their packaging.

**Targets**

- Zero operational waste⁴, including eliminating single-use plastics⁵ by 2030.
- 25% environmental impact reduction for our products and packaging by 2030.
- 10% waste reduction from our supply chain by 2030.

**Progress highlights**

- In 2021, we reduced the waste from our sites by 7% and recovered 43% of the waste through circular routes like reuse or recycling.
- As part of our eco-design programme, we have developed tools to help scientists and engineers reduce the environmental impact of future products at the development stage. For example, we removed paper leaflets and reduced the size of the carton packaging of a respiratory medicine in Japan, reducing the amount of paper and cardboard used. All new products will now go through an eco-design assessment.

**Where next**

- We are building a waste footprint to identify hotspots across our supply chain. We will use this footprint to engage suppliers on waste reductions and it will also help us find opportunities to reduce our products’ end of life waste.
- GSK will continue to be a member of the Ellen McArthur Foundation to help develop our approach to circularity and to work with other members on collaborative projects for mutual benefit.

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Protecting and restoring nature

Protecting and restoring nature is fundamental to address climate change and human health, as well as nature loss.

**Targets**

We’re investing now in high quality nature protection and restoration to support:

- Our net nature positive goal, with a focus on water neutrality, biodiversity and deforestation.
- Our net zero impact on climate goal, through investing in nature-based solutions equivalent to 20% of our 2020 footprint.
- Our Race to Resilience Pledge to help 15 million people become more resilient to the health impacts of climate change by 2030.

**Progress highlights**

- This is an area where collaboration is key, so GSK was a founding member of the Lowering Emissions by Accelerating Forest finance (LEAF) Coalition, a public-private initiative that aims to end deforestation and protect biodiversity by supporting tropical and subtropical jurisdictions through the acquisition of high-quality carbon credits.
- We have invested in a community reforestation project, in Ghana, which creates jobs, promotes gender equality and supports the provision of clean water and sanitation.
- Since 2021, we have been supporting The Wallacea Trust to develop a consistent, scientifically robust and open source methodology for quantifying the biodiversity impact of nature interventions. Measuring impact is fundamental to unlock investments in nature protection and restoration. We’re currently developing a project using the biodiversity methodology in a forest in Honduras.

**Where next**

- In September 2022, we signed an initial agreement with the LEAF Coalition and we aim to start supporting specific projects from 2023.
- In November 2022, we committed to restore over 2500 hectares of mangroves in Indonesia, through community-led projects. Mangroves play a crucial role in climate regulation and climate change mitigation because of their carbon sequestration potential. Mangroves make the local population more resilient to flooding, improve the local fish ecosystem, water quality and contribute to the health and livelihood of local communities.

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⁴ Including a 20% reduction in routine hazardous and non-hazardous waste.
⁵ Where regulatory obligations allow, and excluding plastics which are critical to product discovery and development and health and safety.
Learnings from deepening our understanding of our nature impacts and dependencies

At the same time as delivering progress against our nature targets, we have undertaken a full value chain materiality assessment to deepen our understanding of our nature impacts and dependencies, in line with the latest available guidance from SBTN and TNFD.

This has been a further crucial step, using emerging methodologies, to create a more detailed view of where our nature pressures are — across products, commodities, suppliers and landscapes. This is grounding our overall nature targets in our business realities, allowing us to build a portfolio of initiatives responding to each of those pressures, helping to de-risk our business and ensuring our actions are data driven.

While continuing to deliver on our targets and improving our data will take time, we have taken 5 top learnings so far:

1. Accurate data is key to full analysis, but don’t delay action
   We all want data that’s scientifically accurate and is also practical for the business to act on. So build in detailed business data at the very first steps of analysis: product line, the supplier, the spend and the source geography. It would be much harder to add it in later. But do not delay action while waiting for perfection or the science to mature: take no regret actions by addressing your material nature impacts.

2. Solutions demand traceability so working with suppliers is key
   We have found that our most significant impact is through complex products that we buy from suppliers, especially active pharmaceutical ingredients. These materials are critical for healthcare, which is why we need to secure the sustainable supply of these ingredients — for our business, our sector and for people’s health. To achieve this, engagement with suppliers and partners is non-negotiable. To ensure accountability and drive change, we have to increase levels of transparency on where and how materials are sourced, often well beyond the suppliers we procure directly from. That’s why getting information from and partnering with suppliers is a critical part of setting and hitting targets.

3. Find and harness the nature and climate co-benefits
   Climate and nature can be two sides of the same coin — with interdependencies and multiplying impacts. So while it’s necessary to have both climate and nature ambitions, mapping materiality across both agendas can help spot opportunities and potential trade-offs. We have found that often the most impactful levers drive positive change on both fronts. For example, we know that the Active Pharmaceutical Ingredient supply chains are the largest contributor to our upstream carbon emissions as well as a significant part of our impact on water, so engaging with these suppliers will deliver against both our climate and nature goals.

4. We win or lose at a local level — where the pressures on nature and health are felt
   While carbon emissions are a global phenomenon, nature degradation is local and interacts with threats to health and resilience locally. Work to create healthy and sustainable ecosystems requires partnership with local communities, who are best placed to know and deliver workable solutions, often a broad range of interventions across a specific landscape—from operational change to nature-based solutions.

5. Nature is a business resilience issue
   As a pharmaceutical company this work shows very real risks to supply chain and operational resilience from the degradation of the natural world. Performing this analysis is helping us understand our own nature exposures, which may prove to be just as significant as climate risks. A reduction in our reliance on natural resources reduces cost, improves supply management, and ensures continued delivery of medicines and vaccines to the people who need them. For example, from our initial analysis we know that many of our Active Pharmaceutical Ingredient (API) suppliers are located in high water stressed areas and that water is an important part of their manufacturing process. For example, from our initial analysis we know that many of ourimers rely on these APIs, so delivering our water targets will help to ensure supply chain resilience for these key ingredients.
Our approach  Progress highlights  Learnings  Looking ahead

Looking ahead

We are uniting science, technology and talent to get ahead of disease together. To achieve this purpose and to project health, we want to have a net positive impact on nature by 2030.

Alongside taking action on targets to achieve this goal, we are continuing to deepen our understanding of our nature impacts and dependencies as new methodologies evolve. This work is showing the levers we can pull from product redesign, to deepening supplier partnerships and investing in nature-based solutions. Once the SBTN and TNFD frameworks are finalised, we will seek to gain accreditation and disclose in line with them.

Collaboration is essential to define robust and pragmatic approaches to nature action. We welcome input and partnership from NGOs, other companies, our suppliers, our people and the communities we work in, as we continue to evolve our approach and contribution to a nature positive, net-zero, healthier planet.

IMAGES
Front cover and page 4: Community Reforestation Project, Ghana
Page 1: Manufacturing quality team members, GSK Ware
Page 2: Child watering plants
Page 2: Biodiversity Project, GSK Stevenage
Page 4: Warehouse operative, GSK Ware
Page 6: Scientist working on chemical sustainability, GSK Worthing