

# Sustainable Use and Sourcing of Raw Materials

March 2025



# Introduction

We depend on materials of natural origin across our value chain, from discovery to the delivery of our medicines to patients. Sourcing materials from nature potentially risks adversely impacting people and the environment. We are working in partnership across our sector to understand and mitigate the risks linked to ecosystem degradation and biodiversity loss, as well as workforces and communities, including Indigenous Peoples and Local Communities (IPLCs). Our initial focus in addressing nature-related impacts of materials sourcing is within our upstream supply chain, where we are most dependent on natural resources.

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**We are taking a targeted approach to address the impacts and risks associated with priority agricultural, mining, forestry, and marine-derived materials.**

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Many of the supply chains for materials of natural origin are long and complex, often several tiers removed from the suppliers that we engage with directly. These supply chains can include input providers, miners, farmers, harvesters, primary and secondary processors, carriers, traders and a range of intermediaries. This complexity introduces challenges in understanding human rights and environmental impacts. We recognise the need for a long-term approach to drive transparency and continuous improvement across key areas of our supply chain, right back to the locations from where the materials are sourced.

**We are prioritising our efforts to drive positive impact, working to:**

Enhance our understanding of the materials we are most dependent on within our supply chain and that are most likely to drive nature loss or be associated with human rights risks

Leverage technology and data to build and maintain traceability to source of origin

Drive action, by designing out key dependencies or adverse impacts where possible, and through bespoke sourcing strategies for those that remain, partnering with suppliers to implement them

Systematically assess local impacts caused by these materials to inform investments, such as nature-based solutions, to address remaining adverse impacts and risks

# Why we are taking action

Our medicines require a wide range of ingredients, including chemicals and excipients, many of which require complex inputs to manufacture. While our learnings to date suggest that our use of any given material of natural origin is typically a very small portion of global demand, we aim to manage the risks of adverse impacts that drive nature loss such as land use change and deforestation, unsustainable use of freshwater, greenhouse gas (GHG) and non-GHG air emissions, and pollution from agricultural, mining and extraction runoff, as well as human rights violations including modern slavery. As we transition to a low carbon economy, our dependencies on nature are shifting. We are moving away from a traditional reliance on fossil-

based materials towards renewable resources. To avoid adverse environmental impacts from this shift, our interactions with nature need to be understood and carefully managed. To inform our approach, we are leaning on the expertise of others and driving alignment across our sector where our supply chains are linked, to enable scalable action.

As we progress our understanding, we aim to address adverse impacts and risks as they are uncovered, recognising the need to take action to manage our supply chain impacts responsibly. This is key to ensuring business resilience and to our ability to maintain a consistent supply of life-changing medicines for patients globally.



# Our approach in practice

We are following the science to assess our dependencies, impacts, risks, and opportunities related to the use of raw materials of natural origin.

We aim to minimise the water and materials we need through our process and product design, and also evaluate what we use to reduce potential impacts on people and nature. These efforts are driven through:

- Our focus on Product sustainability to build in sustainability by design through integrated business processes to ensure environmental aspects are considered throughout drug development, with guidance on environmental assessment of API manufacturing, formulation, packaging and devices. Our Product Sustainability Index (PSI) drives continuous improvement, assessing our products' environmental footprint across six environmental impact categories to track environmental sustainability performance and inform environmental improvement plans for: carbon, power, water, (resource, water releases), resource use, and innovation and improvement.

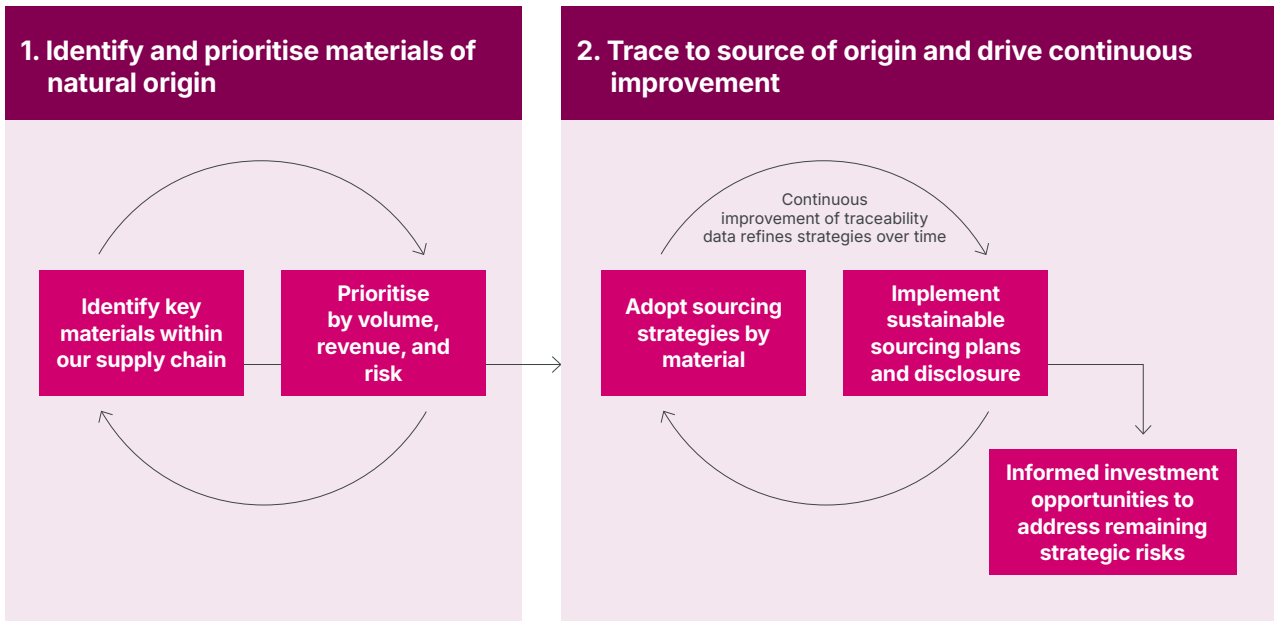
- Our Circular economy approach, supported by our Safety, Health and Environment (SHE) Standard and included within our OneSHE Framework of internal standards and procedures to provide guidance and inform decisions, including during product development.
- Our Natural Resources Efficiency Fund, which invests in capital projects that drive efficiency and progress against our water, energy, and waste targets, as well as other innovation projects within our operations.

We are also focused on how we source the materials we rely on to develop and manufacture our medicines across our supply chain.



## Our sustainable sourcing methodology

In our highly complex and dynamic supply chain, visibility of which raw materials have a significant impact at the point of natural origin are rarely immediately apparent. We have developed a methodology to bring nature and human rights more prominently into our decision making, aiming to drive action alongside efforts to improve our supply chain mapping and traceability.



### Identify and prioritise materials of natural origin

To help us define which materials of natural origin to prioritise for action, we are engaged in a number of partnerships. For example, through The World Business Council for Sustainable Development (WBCSD), we are collaborating with our peers to develop a Roadmap to Nature Positive: Foundations for the Pharmaceutical Sector. We are also collaborating with the Pharmaceutical Supply Chain Initiative (PSCI) and are active in several PSCI working groups, as well as having worked with the World Wide Fund for Nature (WWF) Sweden on assessing water risks of commodities.

Resources used to support how we prioritise materials of natural origin include:

- Science Based Targets Network tools such as the [High Impact Commodity List](#) and the [AR3T framework](#)
- The [Taskforce on Nature-related Financial Disclosures \(TNFD\) recommendations](#) – as early adopters, we are following the various guidance documents to inform [our approach for nature-related risks and impacts](#)

- Human rights and modern slavery guidance:
  - [Global Slavery Index](#)
  - [UNICEF and International Labour Organization \(ILO\) report on Child Labour](#)
  - [Amnesty International Global Risks Report](#)
  - [OECD Responsible Business Conduct by sector](#)
  - [UN Guiding Principles on business and human rights](#)

Using this external guidance, we are building a better understanding of the natural materials used across our supply chain that require our attention. While many of these materials are commonly used, such as aluminium, others are unique to our sector, such as horseshoe crab blood, used for testing required for patient safety. Based on this guidance and our best available knowledge, we prioritise the materials for action, assessing impacts on the environment and society based on severity and likelihood, and sustainability-related financial risks to AstraZeneca, which also factors in regulatory impacts and business continuity.

## Trace to source of origin and drive continuous improvements

We recognise that we need to collaborate with local communities and develop a deeper understanding of the natural environments we rely on, yet we also need to take a systems perspective to drive meaningful change at scale. Therefore, as a first step, we are creating bespoke sourcing strategies for each priority material, to measure, manage and mitigate the most significant sustainability impacts and risks. The supplier requirements identified through the development of each sourcing strategy are managed through our internal procurement processes and where appropriate, are integrated into our [Supplier Sustainability Guide](#). Where possible, we are leveraging common industry frameworks and using these alongside insights from relevant stakeholders and experts.

We recognise that sustainable sourcing of raw materials across our complex supply chain requires enhanced traceability, ideally back to the original location where the materials were sourced. We are collaborating with our suppliers to enhance transparency, engaging suppliers further up the supply chain, while also leveraging technology to enhance our upstream visibility of our priority materials.

Improvements to supply chain traceability enhance our ability to partner with our suppliers, taking their own maturity and sustainability goals into account, to assess the specifics of the ecosystems and workforces that we rely on and understand where preventative, mitigating or remedial action and support may be needed.

We continue to explore the most effective levers to drive positive impact at a local level with suppliers. Examples are included in [Advancing Water Stewardship through Supplier Collaboration](#), which we published in collaboration with WWF and the Embedding Project.

## Invest in nature and water stewardship beyond operations

As we define and implement our sourcing strategies and improve our supply chain traceability, we will identify opportunities to invest in nature to address remaining strategic risks and enhance the resilience of our supply chain. We support nature and water stewardship projects, driven through partnerships and funded via our annual Climate Adaptation and Nature fund.



## Existing targets

Following this approach, we have set targets to drive action and disclose our progress through our annual reporting:

1. 12 prioritised key materials to have sustainability action plans in place by 2025:
  1. Timber
  2. Natural Rubber
  3. Aluminium
  4. Palm Oil
  5. Castor Oil
  6. Shellac
  7. Talc
  8. Carnuba Wax
  9. Cellulose
  10. Sugar
  11. Tin, Tungsten, Tantalum, Gold and other minerals
  12. Lactose\*

This target was informed by research undertaken in collaboration with the collective impacts of our sector on human rights and the environment. We are on track to deliver against this target.

For example, working with pharmaceutical peers through the PSCI industry collaboration group, we have developed a standardised sourcing maturity framework to drive continuous progress for palm oil and lactose.

\* Fish oil was removed as a priority raw material and was replaced by lactose following changes to our portfolio.

2. For timber products, we set an interim target to ensure 95% of paper-based product packaging materials used are supplied from sustainable sources, initially achieved in 2022. We continue to transparently report our performance against this target through our annual disclosures.

To achieve this target, we developed our capability to trace paper-based packaging to the source of origin and identified credible certifications, such as Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC) and Sustainable Forestry Initiative (SFI), that we require from paper-based packaging suppliers to ensure these materials are deforestation and conversion-free, and come from responsibly managed forests.

**Read more in our annual sustainability reporting.**

