

H&M Group

Climate Transition Plan



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A message from our Head of Sustainability



Climate change is already impacting people around the world. Rising temperatures and extreme weather events are disrupting communities and ecosystems, threatening lives and livelihoods. Science shows we need to act decisively, and we need to act now. At H&M Group, we recognise the profound impact of climate change on people and our planet, as well as our role in addressing this pressing issue. Sustainability is an integral part of our business. It is reflected in our 2030 goal to double our revenue while halving our greenhouse gas (GHG) emissions and our ambition to achieve net-zero by 2040.

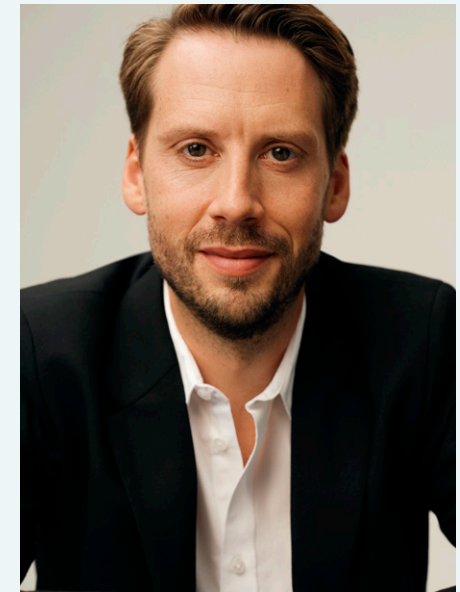
Back in 2019 we launched our first science-based targets. Since then, we have been continually upgrading our emissions accounting and integrating climate action into how we do business. This has put us in a great position to push forward on our emission reduction agenda. In 2022, the Science Based Targets initiative (SBTi) validated our updated climate targets and our 2040 net-zero commitment. We also took a significant step forward by establishing the Green Fashion Initiative, supporting our suppliers to reduce their climate impact, and developing collaborative financing initiatives to create impact on a larger, industrial scale. We are already seeing the results of our actions. In 2023, we successfully reduced GHG emissions by more than 20 percent compared to the 2019 baseline. This accomplishment spans both our own operations (scope 1 and 2) and our broader value chain (scope 3), bringing us closer to achieving our Science Based Targets, which are among the most ambitious in the industry.

While we are proud of this progress, we know there are still many challenges ahead. Achieving sustainability goals is a continuous journey, and our commitment to ongoing improvement demands enhanced clarity and transparency. By presenting our Climate Transition Plan we underline the urgency for immediate action. The plan starts with the big picture, setting out our overarching targets, then zooms in on the actions we are taking and the challenges we face. It details how we shape our strategic decisions, refine our operational practices and promote sustainable innovation. Then it looks ahead to present our focus for the years to come. We will keep increasing energy efficiency and switching to renewable electricity across our value chain and to meet our 2040 goal, we will continue to optimise our business, reduce stock in trade and build a circular ecosystem.

We recognise that moving towards net-zero and becoming a circular business will impact people and communities along our value chain in different ways. At this stage, we are focusing on understanding better the social implications of this transition, as well as establishing a framework that ensures we uphold human rights and develop inclusive strategies that do not leave anyone behind. This process is ongoing. We're continuously exploring collaboration with industry partners to define what a fair transition looks like for our industry and to ensure that jobs in a circular economy are decent. Our actions and plans show our commitment to reducing our impact, improving outcomes and playing our part in solving the climate crisis. To drive positive change on a global level, we need deeper collaboration and engagement between stakeholders, including our suppliers and customers. I hope that the increased level of transparency and accountability this plan brings will strengthen dialogue and inspire others to do the same. Together, we hold the power to drive meaningful change and shape a better world for generations to come

Sincerely,

Leyla Ertur
Head of Sustainability



We are committed to reducing our impact across our business. In our first Climate Transition Plan we set out clear and actionable plans on how we will cut emissions and achieve our climate goals. We hope it will inspire others to join us on this journey to drive positive change in our industry.

Daniel Ervér
CEO H&M Group

Introduction

Our Climate Transition Plan consolidates all our climate related activities into one comprehensive document. It functions as a strategic action plan for our organisation, and illustrates our dedication to addressing climate change and increasing transparency around our work.

This plan focuses on our journey towards 2030, building on the results of the actions we have already taken and our strong emissions calculation model. We briefly touch on our 2040 target and some of the key enablers to achieve it, such as the scaling of our circular ecosystem.

This milestone document presents our targets, strategy and methodology, examines the risks and opportunities, and details the internal levers we use in our work on climate. Next it looks at our value chain, listing our impact, actions and challenges, and stating what else needs to happen to enable and accelerate change.

For an overview of this transition plan see [page 26](#)



Climate targets

We have three groupwide greenhouse gas (GHG) emissions targets aligned with the Paris Agreement’s goal of limiting global temperature rise to 1.5°C.

- **Near-term targets** to reduce absolute scope 1 and 2 emissions and absolute scope 3* emissions by 56% by 2030, against a 2019 baseline.
- **Long-term targets** to reduce absolute scope 1 and 2 emissions and absolute scope 3* emissions by at least 90% by 2040, against a 2019 baseline.
- A long-term target to achieve **net-zero by 2040**** and balance out any remaining emissions with permanent carbon removals.

The [Science Based Targets Initiative](#) (SBTi) validated our groupwide climate goals in September 2022. We were one of the first companies in our industry to have our net-zero target validated.

56%

We have two ambitious short-term targets to reduce absolute scope 1 and 2 emissions and absolute scope 3* emissions by 56% by 2030, against a 2019 baseline.

Alongside our overarching targets, we have set further goals focusing on different aspects of our value chain. These are detailed in the relevant sections.

We continually evaluate our annual progress reporting and disclosures, metrics, and targets with a dual focus: internally improving methods and emissions reporting, and externally consulting with stakeholders such as [WWF](#), [Stand.earth](#), and [UNFCCC](#). This collaborative effort ensures the continual improvement of our targets and operational strategies.

*Excluding indirect GHG emissions from use of sold products. Find out why this is excluded from our targets [here](#).

**Target boundary includes 100% of scope 1 and 2 emissions, and 100% of minimum boundary scope 3 emissions (which excludes indirect emissions from use of sold products).

Offsetting

At H&M Group, we do not use carbon offsetting as a way of reducing our emissions. Read more about how we work with emissions beyond our value chain [here](#).

Our climate strategy

To support our climate commitment we have devised a five-step action framework:

	STEP	ACTIONS
ACTIONS FOR WIDER AND ACCELERATED CHANGE WITHIN AND BEYOND OUR VALUE CHAIN	5. Advocate for systemic change	<ul style="list-style-type: none"> — Advocate for policy that aims to limit global temperature rise to 1.5°C and push for legislation that accelerates the decarbonisation of our value chain. — Engage and collaborate with peers and others to enable and inspire global climate action.
	4. Contribute to addressing impact	<ul style="list-style-type: none"> — Remove and permanently store atmospheric CO₂ to reach net-zero by 2040. — Protect existing carbon sinks to avoid emissions and biodiversity loss that arise from their degradation.
IMPACT TARGETS	3. Address direct & indirect impact	<ul style="list-style-type: none"> — Prioritise actions for emissions reductions based on potential for impact and our ability to influence. — Identify and work collaboratively to remove barriers to decarbonisation, through financing and innovation. — Reduce absolute emissions in line with a 1.5°C pathway.
	2. Calculate & disclose impact	<ul style="list-style-type: none"> — Collect GHG emissions- and energy use-data in accordance with the latest industry models and science. — Disclose results transparently and openly.
FOUNDATION	1. Identify, quantify & mitigate risk	<ul style="list-style-type: none"> — Identify climate risks in line with the latest science and best practice. — Assess financial, people and planet effects and prioritise risks. — Create and follow up on plans to mitigate risks and build resilience.

Emissions and methodology

Governance

We integrate responsibility for climate action throughout the company to ensure accountability and transparency, and drive effective action. Accountability starts at board level and runs throughout our brands and operations.

- The board monitors our sustainability performance and initiates change where necessary, ensuring sufficient resource allocation.
- Sustainability performance, including progress towards climate targets, influences the CEO's remuneration.
- The Head of Sustainability and the executive management team are responsible for implementing sustainability strategies. The Head of Sustainability reports on sustainability key performance indicators biannually to the Board of Directors and quarterly to the CEO and CFO.

Our greenhouse gas (GHG) emissions

The table to the right sets out emissions across our value chain from 2019–2023.

SCOPE	CATEGORY	2019	2021	2022	2023	% CHANGE FROM 2022	% CHANGE FROM 2019 BASELINE	
		tonnes CO ₂ e						
Scope 1	Direct emissions from owned/controlled operations (tonnes CO ₂ e)	23 024	20 294	17 796	16 354	-8%	-29%	
Scope 2	Emissions from purchased or acquired electricity, steam, heat and cooling* (tonnes CO ₂ e)	48 733	35 339	46 803	38 451	-18%	-21%	
	Total Scope 1 & 2 GHG emissions (tonnes CO₂e)	71 757	55 633	64 599	54 805	-15%	-24%	
SCOPE	CATEGORY	2019	2021	2022	2023	% CHANGE FROM 2022	% CHANGE FROM 2019 BASELINE	
		ktonnes CO ₂ e						
Scope 3	1. Purchased goods and services	Garment manufacturing	312	285	254	220	-13%	-29%
		Fabric production	4 887	4 623	4 371	3 978	-9%	-19%
		Raw materials for sold products	1 722	1 312	1 200	1 148	-4%	-33%
		Non-garments	456	413	404	345	-15%	-24%
		Other expenditures	508	515	517	481	-7%	-5%
	4. Upstream transportation and distribution	Packaging	235	184	152	145	-5%	-38%
		Sea freight	64	65	67	64	-5%	1%
		Air freight	176	103	50	54	8%	-69%
		Road freight	205	187	210	183	-13%	-11%
		Rail freight	4	5	4	2	-49%	-44%
	12. End of life treatment of sold products	End of life of sold products	97	97	92	89	-3%	-8%
	3. Fuel and energy related activities 5. Waste generated in operations; 6. Business travel; 7. Employee commuting; 14. Franchise; 15. Investments;	Other	172	147	177	166	-6%	-4%
	Total Scope 3 GHG emissions under our science based target (ktonnes CO₂e) excluding use-phase emissions	8 839	7 936	7 498	6 873	-8%	-22%	
	11. Use of sold products	Use of sold products	2499	2 021	1 851	1 659	-10%	
	Total Scope 3 GHG emissions (ktonnes CO₂e)	11 338	9 957	9 349	8 532	-6%	-25%	

We need to reduce emissions across both our operations and our value chain to meet our 2030 targets.

We base our emissions calculations on the [GHG Protocol](#). Our GHG inventory includes emissions from our own operations (scope 1 and 2), as well as our wider value chain (scope 3).

Read more about [how we calculate and report our emissions](#).

Data quality

Most of our emissions occur outside our own operations. This means we rely on data from third parties, such as our landlords for store energy consumption, or our suppliers for fuel and electricity use. Collecting, verifying and managing this data is a challenging and lengthy process.

It is easy to measure the impact of energy efficiency initiatives or fuel substitutions where we have actual fuel and electricity consumption data. However, it is challenging to measure these improvements when we have to rely on industry-average data. For example, if we swap virgin material for recycled the industry-average data captures the emissions saving, but it does not take into account switching to renewable energy to power recycling processes.

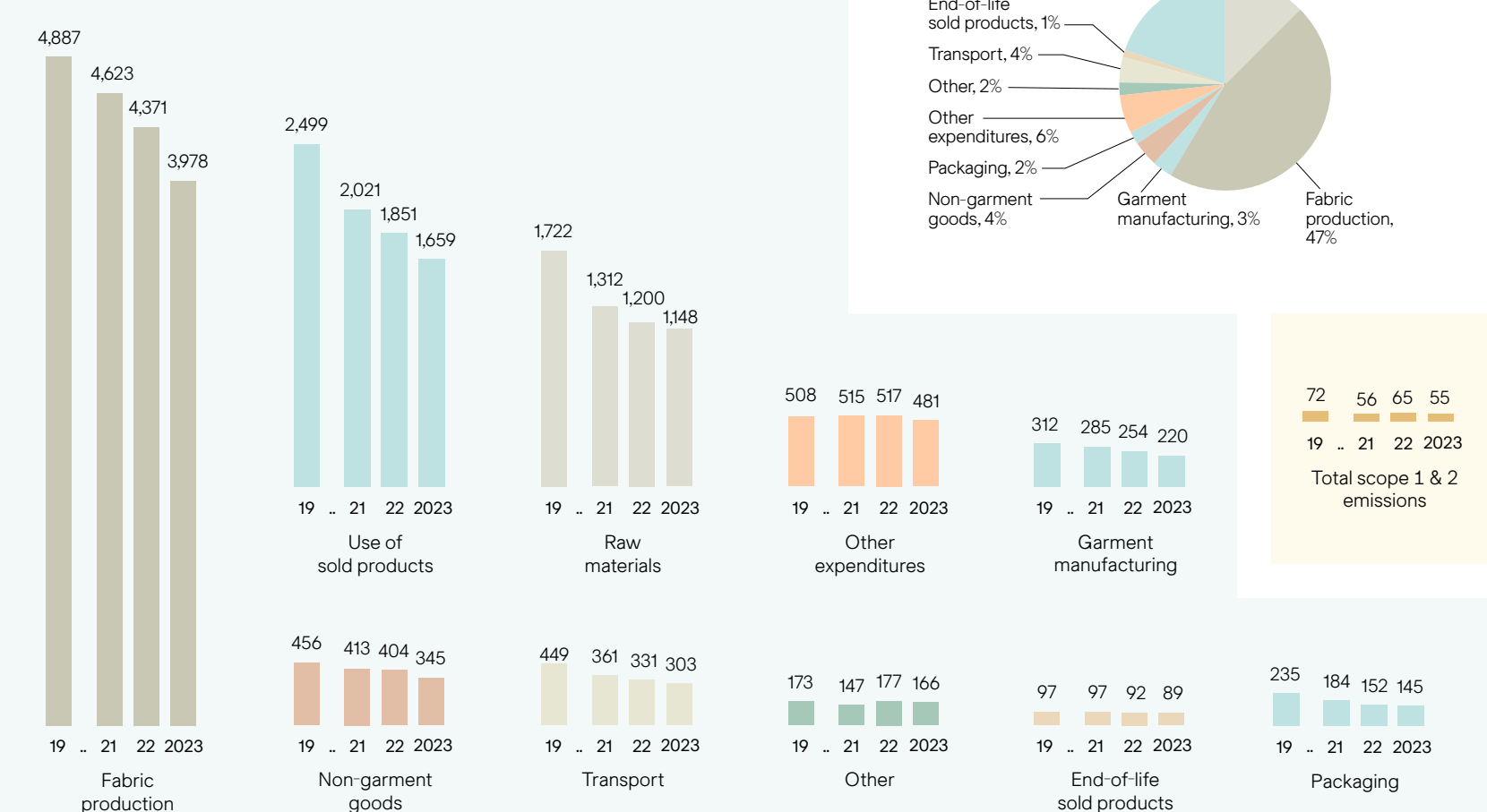
Traceability and actual consumption data are key to monitoring the full impact of our actions.

It is important to consider these challenges and data limitations when evaluating the impact of individual actions.

We are continually advancing our data and calculation methods to better represent actual emissions and reflect improvements. We recently developed a new

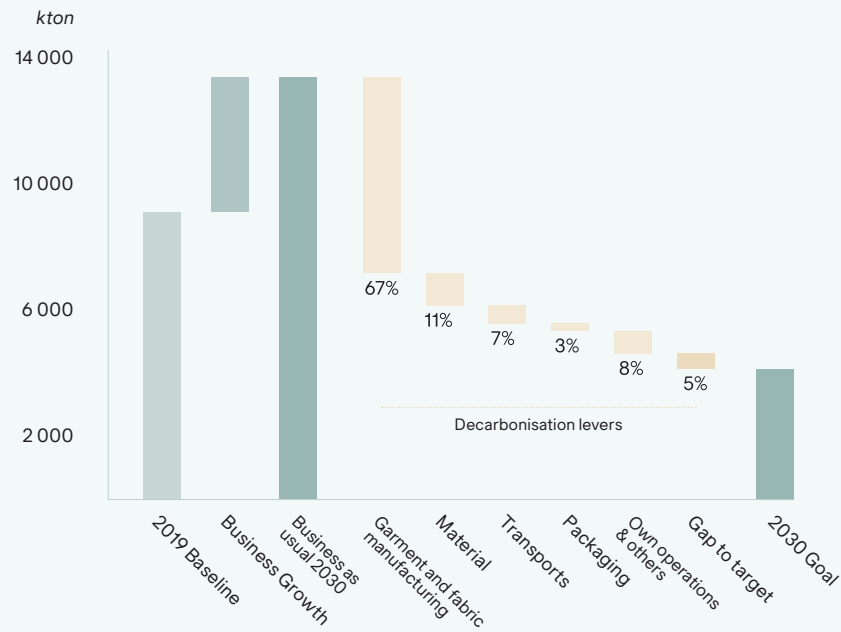
Progress on reducing emissions (kilotonnes CO₂e)

Charts show our progress in reducing scope 1, 2 and 3 emissions in the different areas of our value chain against a 2019 baseline.



Focus areas for reducing emissions

Chart shows how much we aim to reduce our emissions in different areas of our value chain towards our science-based targets (excluding use phase emissions).



model for measuring our garment and fabric manufacturing emissions and updated the methodology and results for 2019-2023. Read more about this in our [Sustainability Disclosure](#) and [How we report](#).

Emissions reduction accounting

Emissions accounting frameworks are currently limiting us in making progress. When [investing](#) in

our suppliers to support their emissions reductions, we can only claim reductions proportional to our share of production in a factory. For example, a single factory could make a sweatshirt for H&M, a pair of trousers for another brand and a hoodie for a third. When we invest in a factory like this, all three companies benefit from reduced emissions.

As we cannot account for the full reduction, the investment per tonne is less financially appealing. To address this, we are working with organisations involved in developing accounting rules, such as

the GHG Protocol and the SBTi. We also use collaborative financing solutions to make joint investments with other brands.

The Science Based Targets initiative (SBTi)

The Science Based Targets initiative (SBTi) is a partnership between [CDP](#), the [United Nations Global Compact](#), [World Resources Institute \(WRI\)](#) and the [World Wide Fund for Nature \(WWF\)](#). The SBTi drives ambitious climate action in the private sector by enabling organisations to set science-based emissions reduction targets.

The SBTi's approach to determining 1.5°C-aligned emission reduction pathways for target-setting is documented in "Pathways to net-zero", which references e.g. low/no overshoot scenarios from the [UN Intergovernmental Panel on Climate Change \(IPCC\) Special Report on Global Warming \(SR15\)](#), the [One Earth Climate Model \(OECM\)](#) by the [Institute for Sustainable Futures](#) at University of Technology Sydney, and the [International Energy Agency's \(IEA\) Net-Zero Roadmap](#).

H&M Group's near-term (2030), long-term (2040), and overall net-zero (2040) targets have been validated against SBTi's criteria and were formally approved by the SBTi during 2022 as being in line with what the latest climate science regard necessary to limit warming to 1.5°C above pre-industrial levels.

Climate related risks and opportunities

Climate-related risks are some of the most significant issues facing our company.

Since 2019, we have identified and assessed our climate-related risks and opportunities in line with the [Task Force on Climate-related Financial Disclosures](#) (TCFD) guidelines, updating this analysis annually. Our analysis is based on two Representative Concentration Pathway (RCP) – or warming scenarios:

- **RCP 2.6:** a rapid transition scenario with mostly short- and medium-term risks, where average global temperature increase is limited to 1.5°C through far-reaching measures such as legislation, global carbon taxes, and major shifts in consumption patterns and lifestyles.
- **RCP 8.5:** an accelerating temperature increase scenario with mostly long-term risks, where the world fails to curb rising GHG emissions. This results in a global average temperature increase of at least 3-4°C by 2100. Impacts from extreme weather events are assumed to grow in magnitude.

In these two scenarios we analysed possible impacts in the short term (one to three years), medium term (around ten years) and long term (around 30 years).

Risks

Rapid transition scenario with mostly short- and medium-term risks:

- **Changes in customer attitudes and purchasing patterns**
Growing awareness of climate change is expected to increase customer preference for products with a low climate impact from trusted companies that are seen as leaders in sustainability. This could be

a risk or an opportunity, depending on our future emissions reductions and communications.

- **Transition to lower-carbon footprint production and/or low-emission technologies**
Fossil fuels remain a significant source of energy in many of our production countries. We are gradually increasing requirements for suppliers, for example phasing out coal and other fossil fuels. Energy costs are expected to rise, impacting overall production costs.
- **Introduction of global or regional carbon taxes**
GHG emissions taxes or import duties on garments produced in one region but exported to another may influence total production costs. This could be both a risk and an opportunity depending on our progress in phasing out fossil fuels in our supply chain.
- **Increased energy and water cost**
Switching to lower carbon energy sources could lead to increased energy costs due to potential gaps between demand and supply. Similarly, water scarcity together with increased water taxation may increase prices. Both increases could impact production and operating costs, and therefore product prices.

Accelerating temperature increase scenario with mostly long-term risks:

- **Raw material availability and price**
We are heavily dependent on cotton as a raw material. Higher temperatures and water shortages will affect cotton production in many regions. In the long term, we believe that this will impact availability and price. Price increases for other raw materials are also expected.

- **Water scarcity or extreme weather events that influence production and logistics**
Climate change will increasingly impact access to freshwater in certain regions, affecting where and how garments can be produced. Extreme weather events may also cause disruption to production and distribution in some countries.

Risk mitigation

Our approach to risk mitigation falls into two categories:

- **Reducing short-term operational risks**
These risks mainly relate to possible disruption from extreme weather events. We mitigate them by developing contingency plans or back-up solutions for production and logistics.
- **Reducing long-term operational risks**
These risks largely relate to the impact of climate change on local societies, such as political instability, increased poverty and social unrest or conflict. This could impact the ability to maintain stable production in our sourcing countries. We closely monitor developments in our sourcing countries and have contingency plans in place.

Opportunities

For both scenarios:

- **Building a more sustainable business and attracting more customers**
Growing awareness of climate change is expected to impact customer preferences, with an increased preference for products and services with low climate impact from trusted companies that are seen as leaders in sustainability.

This could also include reputational risks related to brand perception.

- **Developing customer-facing circular business models**
Increasing awareness of the climate crisis may change customer behaviour as people are incentivised to switch to new ways of enjoying fashion without the climate impact associated with garment production. This could reduce our climate impact and open new revenue streams that complement the traditional business model.
- **Decarbonisation of garment production to reduce the impact of carbon taxes and higher energy prices**
Our emissions reduction targets could create a competitive advantage, largely by reducing the impact of future climate legislation or emissions taxes.
- **Creation of new business-to-business revenue streams**
Increasing awareness of the climate crisis may put pressure on our competitors' sustainability strategies. This, combined with the decarbonisation of our production, will increase opportunities to expand our business-to-business service offering. By investing in reverse supply chain initiatives, we can introduce new revenue streams that complement the traditional business model.
- **Reducing our dependence on virgin materials and increasing the climate resilience of natural fibre production**
Scaling recycled materials and transitioning to regenerative agriculture for key virgin materials like cotton and wool can reduce our material vulnerability and improve the climate resilience of both farmers and our business.

Financing the transition

Investing in climate action is crucial for tackling climate change. However, these investments may take a long time to show financial returns, if ever. This creates a gap between the ambition of climate initiatives and their prioritisation in everyday financial decisions. To close this gap, we introduced a strategy to channel investments effectively, balancing climate impact with financial viability. Because most of our emissions are scope 3, we focus these investments towards our suppliers.

Green investments

Our green investments are designed to speed up decarbonisation. They bridge the gap between business goals and climate ambitions, bringing financing for long-term payback projects within reach. We measure return on investment by emissions reductions rather than financial gain.

Most of the funds are directed towards fabric production, a resource-intensive process. First we introduce energy efficiency measures, or process innovations such as waterless dyeing. Then we look to electrify steam-powered factories and switch them to renewables where possible. Other projects include developing low-impact materials, decarbonising logistics and scaling activities that promote circularity.

We have developed a [range of solutions](#) that support our suppliers to reduce emissions in a cost-effective way, adapting to their differing needs.

As most of our emissions are in scope 3, we have a dedicated programme to decarbonise our supply chain by providing finance to suppliers — the Green Fashion Initiative (GFI). Limited technical expertise, restricted access to finance, high interest rates and

low financial return are common barriers to our suppliers when investing in emissions reductions. We address these barriers by offering technical support and financing at favourable terms, made possible by our financial position and wide network of banking partners.

Sustainable finance

We issue sustainable financing to align our sustainability priorities with our financial strategy and to provide investors with transparency on our investments and performance towards key sustainability targets. In 2023, we issued a EUR 500 million green bond. The net proceeds will be invested in projects under the categories circular economy, green buildings, renewable energy, energy efficiency, and sustainable water and wastewater management. In 2021, we issued a EUR 500 million sustainability-linked bond tied to targets for emissions reductions and use of recycled materials. For more information, see our [Sustainable Finance Framework](#).

Business case for green investments

Sustainability investments are a key strategic focus to ensure future resilience and success. Our **decarbonisation investment strategy** includes:

- **Risk evaluation and alternative cost** using an alternative cost analysis to identify the economic impact of transformational investments. This enables informed decision-making by assessing the long-term risks and benefits of climate action.

- **Bridging the gap** investments help bridge the gap between aspirational goals and concrete achievements, accelerating sustainability progress.
- **Unlocking new revenue streams** as the market evolves towards sustainability-conscious consumers, innovative climate solutions can create competitive advantages and new business opportunities.
- **Driving innovation** sustainability drives innovation that enhances resource efficiency and reduces costs.

Collaborative finance

Like many other fashion retailers, we work with suppliers around the world. Often we share their manufacturing capacity with other companies and we only purchase a small share of the total volumes produced.

To achieve our emissions reduction goals, we are committed to supporting the upgrade of our suppliers' facilities in their entirety. As a consequence, our investments reduce the GHG emissions of other brands more than they reduce our emissions.

By sharing the costs, we could achieve more substantial reductions. For example, where factories produce garments for an H&M Group brand and other brands (see emissions reduction accounting), our investment reduces our scope 3 emissions at a cost, while the other brands benefit without a cost. This misalignment highlights the need for collaborative financing to speed progress.

With the window to act closing, collaborative financing between industry peers, banks, NGOs and financial bodies is vital to amplify and accelerate

GFI Business case study

H&M Group x US Apparel: Bidding Farewell to Coal

H&M Group's Green Fashion Initiative (GFI) provides direct funding to supplier factories to invest in technologies and processes that reduce energy demand and replace fossil fuels. US Apparel, a Pakistani denim manufacturer supported by GFI, successfully phased out a 10-tonne coal boiler. This resulted in an annual CO_{2e} emissions reduction of 14,000 metric tonnes. Previously reliant on two 10-tonne coal boilers, US Apparel's Lahore factory continues to significantly improve energy efficiency and reduce its environmental impact, including through on-site solar generation.

Since the programme's launch in January 2022, GFI has financed 17 projects focusing on several aspects of decarbonisation, including solar installation, energy efficiency, coal phase-outs and electrification. These initiatives have the potential to reduce approximately 50 kilotonnes of CO_{2e} annually within H&M Group's supply chain, with an additional reduction of approximately 120 kilotonnes beyond our supply chain.

the transition. We are a lead partner of the Apparel Impact Institute's (Aii) [Fashion Climate Fund](#) and the driving force behind the [Future Supplier Initiative](#), which brings together brands to collectively finance decarbonisation projects for shared suppliers. It limits the cost of borrowing for factories and enables access to technical support, as well as offering the potential to build long-term, resilient business relationships with brands.

We firmly believe that joint action is the most effective way to drive rapid industrywide transformation. Therefore, we want to encourage fellow brands to engage in collaborative financing initiatives.

Advocating for systemic change

Our public affairs team engages with a range of stakeholders around the world, including policymakers, academia, civil society and peers. Through our advocacy work, we aim to develop solutions that enable and advance progressive climate policies, supporting a systemic shift aligned with the Paris Agreement.

Climate policy priorities

We engage directly with national and regional policy-makers across our main retail and production markets, and indirectly through participation in stakeholder platforms and partnerships, including the [UN Framework Convention on Climate Change Fashion Charter](#), [WWF](#), [World Economic Forum \(WEF\)](#) and [RE100](#).

Our primary objective is to support a policy shift in key production markets to improve the availability and accessibility of renewable energy. This involves collaboration with local governments in Bangladesh, Cambodia, mainland China, India, Indonesia, Türkiye and Vietnam, as well as engaging with EU institutions and member states to gain further support for decarbonisation in our production markets.

Focus areas

Access to renewable electricity

We collaborate with governments in our production markets to develop policy solutions that facilitate power purchase agreements (PPAs). We also work to support increased availability of reliable and internationally recognised renewable energy certificates in these markets.

Electrification

Transitioning from thermal energy to electricity in production is key to reaching our goals. We advocate for policy solutions to enable this change, investments in national grids to enable handling a high share of renewable energy sources and technologies.

Intermediary solutions

The electrification of the industry is another multi-faceted issue that will need to be tackled. We advocate for transitional solutions while pushing for long-term systemic change. For example, while new innovations are signalling that the industry has the potential to move towards less water- and energy-intensive processes, there is a need to decarbonise heating for current processes by using heat pumps, or by adding hot-water storage solutions to reduce energy requirements.

Raising awareness

We encourage the EU and international institutions to support our production countries through their green transition and to ensure their continued access to the EU market through evolving policy reforms.

Advocacy for climate targets

We advocate for ambitious climate targets aligned with the Paris Agreement’s goal of limiting global average temperature rise to 1.5°C. To achieve this, we are calling for policy ambitions at a national and global level to be upheld or raised. At EU level, we collaborate with partners such as [WWF](#) and [IKEA](#) to advance policy ambitions. Read more to the right.

Target integration

Climate, circularity and biodiversity are deeply interconnected. We advocate for alignment of policy frameworks in these areas to achieve holistic sustainability goals.



CASE STUDY

Renewable Energy Directive (RED) & Energy Efficiency Directive (EED)

In partnership with [WWF](#) and [IKEA](#) we worked to strengthen the EU’s [Renewable Energy Directive \(RED\)](#) and [Energy Efficiency Directive \(EED\)](#).

We jointly advocated for an ambitious 2030 renewable energy target for RED. We highlighted that several 2030 energy scenarios show that a 50% renewable energy supply is both possible and necessary. The outcome was lower than we advocated for, but higher than the previous version of the directive. For EED, we jointly advocated for an ambitious target of 20% energy efficiency by 2030 against the 2020 EU reference scenario. The outcome was again lower than we advocated for, but we welcome the fact the target will be binding at EU level.

Our work to push for more ambitious EU climate policies remains a priority. For example, we will advocate for 80-90% emissions reductions for the upcoming EU 2040 climate target.

We welcome and support the EU’s commitment to addressing climate change. To ensure we meet the global targets set out in the Paris Agreement, we encourage the EU to pursue its global thought leadership on climate policies by further supporting the decarbonisation process outside its own borders.

Resource use and circularity

By transitioning towards a [circular ecosystem](#), where products and materials are circulated at their highest value for as long as possible, we can reduce our dependence on natural resources and accelerate our progress towards our emissions reduction target. We are optimising our business while scaling our circular ecosystem, so we can achieve more with less and ultimately decouple our growth from resource use.

We are building a circular ecosystem made up of three interconnected areas. In each one, the components have varying levels of maturity and present different challenges and opportunities.

- **Circular products:** creating products that are made to last from safe, recycled, [regenerative or sustainably sourced](#) materials, that can circulate multiple times.
- We are increasing the share of recycled materials we source for our products as well



as investing in emerging materials made from — for example — post-consumer waste and other waste streams.

- **Circular supply chains:** building scalable systems that circulate products and materials for repair, reuse, remake and recycling and that use lower-impact production processes — such as dyeing, printing and finishing.
- The majority of our stores offer a garment collecting point for customers to drop off any textiles they no longer use. These items are sorted for reuse as a product, or material, or recycling.
- In 2023, we launched [Looper Textile Co.](#), an independent joint venture with [Remondis](#) that provides local municipalities and retailers with solutions to extend the useful life of unwanted garments via reuse and recycling. This is part of our work to invest in progress around key processes, visibility, and technology, which increase the likelihood of extending the useful life of unwanted garments.
- **Circular customer journeys:** providing convenient ways for our customers to engage in circular fashion where products are used more before being repaired, reused, remade and recycled.
- Scaling circular business models that increase the use of products and recover their materials when they are no longer usable are key to reduce our dependency on natural resources. We are trialling different types such as resell, with the potential to lead to significantly lower emissions than buying new and to reduce resource use. We have invested in second hand platform [Sellpy](#) and launched several resell initiatives both in stores and online, including [COS Resell](#), [ARKET ARCHIVE](#) and [H&M Preloved](#).



Achieving net-zero

We have set targets to reduce our absolute scope 1, 2 and 3 emissions by 56% by 2030, and 90% by 2040, against a 2019 baseline. To reach net-zero, we must use permanent carbon removals to balance out the 10% of emissions that we cannot reduce.

Scaling carbon dioxide removal

To be successful, we need carbon dioxide removal. However, these solutions are still in the early stages of development. By supporting this emerging sector now,

we can help drive its scale up, secure supply in a market expected to face supply constraints and inspire others to become early adopters of carbon removal strategies.

In 2022, we signed our first contract for permanent carbon dioxide removal using direct air capture and storage via a multi-year agreement with [Climeworks](#).

In 2023, we joined [Frontier](#) and made an advance market commitment for carbon removal along with other members. Since joining, we have entered into four offtake agreements — a contract to buy permanent carbon removals once they are delivered.

Charm Industrial produces bio-oil from agricultural waste and injects it into geologic storage. Carbon Capture and Heirloom engage in [direct air capture](#), and Lithos Carbon engages in [enhanced weathering](#).

What is carbon dioxide removal?

The [Intergovernmental Panel on Climate Change](#) (IPCC) has identified carbon dioxide removal as a [necessary measure to achieve global net-zero](#). The process extracts carbon dioxide from the atmosphere and oceans. Permanent* carbon dioxide removal refers to storing the captured carbon dioxide for extended periods of time to prevent its re-release into the atmosphere.

Direct air capture and storage is one example of permanent carbon dioxide removal. It captures CO₂ from ambient air, injects it underground where it turns into stone.

Scaling unproven solutions brings risks and challenges. For example, untested technology, unknown impact on ecosystems and people, and little visibility about the amount of energy, land and resources required. Also, the result will vary depending on the method, site, implementation and scale. To navigate

these complexities, we rely on Frontier’s group of scientific experts that assess companies and their solutions before they are included in Frontier’s portfolio.

Why tree-planting and regenerative agriculture cannot be used to support net-zero claims

Tree-planting and [regenerative agriculture](#) are valuable carbon dioxide removal methods, however there is a risk they may start releasing carbon instead of storing it through events like forest fires or a change in land management practices.

* Permanent carbon dioxide removals for use under the net-zero standard are currently being defined by the SBTi. Until this work is completed, we will take a conservative approach and only focus on those that have a durability of over 1000 years.



Beyond value chain mitigation

Achieving global net-zero emissions is a shared responsibility. We acknowledge that alongside our efforts to cut emissions in our value chain, we have a duty to contribute to this wider goal. [The Science Based Targets initiative](#) (SBTi) is currently developing guidance outlining how organisations can make responsible and impactful contributions on beyond value chain mitigation.

Actions

Halting tropical deforestation and scaling permanent carbon removals are crucial to solving the climate crisis. We are already implementing concrete actions and increasing funding in areas the SBTi has flagged as demanding [urgent collective attention](#).

We have joined the Lowering Emissions by Accelerating Forest Finance ([LEAF](#)) Coalition as a corporate partner. The coalition brings together public and private sector buyers to purchase high-quality carbon credits from forest governments (national and subnational) that have implemented jurisdictional REDD+ programs to reduce deforestation.

This provides a viable economic alternative to clearing forests for uses such as agriculture and can encourage governments to introduce policies to protect forests, enforce laws to stop illegal deforestation, and provide economic incentives to landowners to preserve forests.

Crucially, LEAF will not provide funding to governments that do not respect the rights of indigenous peoples and local communities, or those that do not meet strong social safeguards.

Forest carbon credits purchased by LEAF Coalition partners are issued by the Architecture for REDD+ Transactions (ART) that meet the requirements of [The REDD+ Environmental Excellence Standard](#) (TREES).

The TREES credits we receive will not be used to meet our emission reduction targets. Instead, protecting ecosystems in this way is part of our contribution to the global net-zero goal.

Our carbon removal commitments and agreements with organisations such as Climeworks and Frontier

will also contribute to beyond value-chain mitigation. Read more in [Achieving net-zero](#).

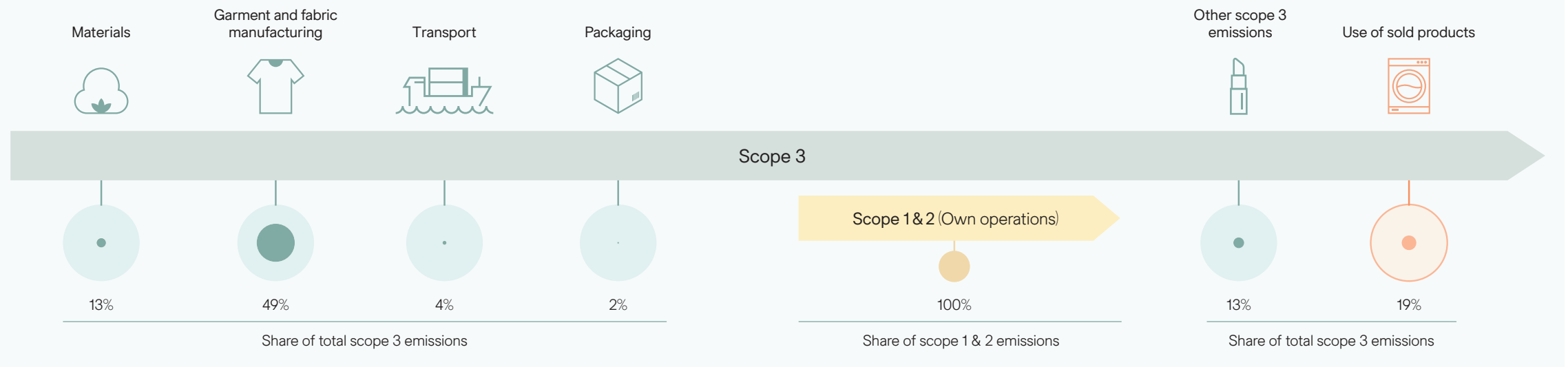
These actions show we have started engaging in the voluntary carbon market despite the lack of clarity from the SBTi on how companies are expected to contribute to wider climate and nature goals in parallel to decarbonising their value chains. The SBTi's upcoming guidance will inform our approach, commitment and focus areas when it comes to beyond value chain mitigation.



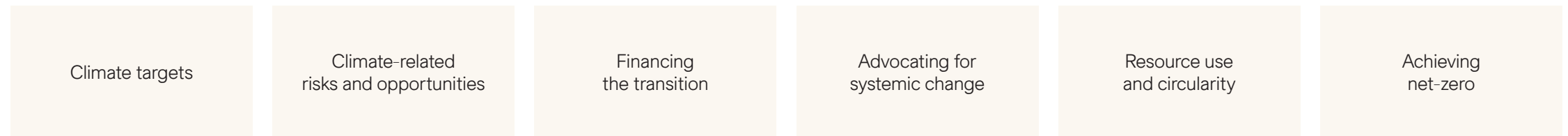
Climate impacts across our value chain – deep dive into key impact areas

In the following sections we deep dive into the impact areas of our business and supply chain – **materials, garment and fabric manufacturing, transport, packaging, own operations, use of sold products** and **other emissions**. For each area we set out the relevant targets, our actions, the challenges we face and what we believe needs to happen to achieve greater emission reductions.

Emissions from each area of our value chain:



Our approach in these areas support actions in the value chain



Materials

At H&M Group, our key materials based on volume and risk are cotton, synthetics, wood and man-made cellulosic fibres (MMCF), wool and leather. Emissions at the raw material production stage — often referred to as tier 4 of the textile supply chain — are largely generated by energy used in farming and forestry, fossil fuel extraction and agricultural sources of methane and nitrous oxide.

In 2023, emissions from our raw materials amounted to 1,148,000 tonnes CO₂e — approximately 13% of our total scope 3 emissions.

Targets and commitments

- Use 100% recycled or sustainably sourced materials by 2030.
- Use 30% recycled materials by 2025 and 50% recycled materials by 2030.
- Use 100% polyester from recycled sources by 2025.
- All wood and wood-based materials in products and packaging will come from either FSC-certified forests or be made of recycled materials by 2025.
- All MMCF will come from FSC- or PEFC-certified sources, or be replaced with next-generation fibres from sources such as agricultural residues and pre- and post-consumer textiles by 2025.
- All wool will be Responsible Wool Standard certified, or from recycled or regenerated sources by 2025.

Our material vision focuses on sourcing recycled, regenerative and responsible fibres. Read more [here](#)

Actions

Reducing and switching

Reducing the amount of materials we use and switching to lower-impact alternatives are key to lowering emissions. In 2023, 85% of the materials we sourced were either recycled or sustainably sourced, including 25% recycled materials. We aim to increase the share of recycled materials to 30% by 2025 and 50% by 2030.

We work to invest in and support the scaling of innovative materials, such as [Infinited Fiber Company's Infinna™](#) and Keel Labs' seaweed-based fibre. Read more about our work with innovative materials [here](#).

Regenerative agriculture

Our materials vision includes sourcing materials

produced using regenerative agricultural practices. These practices improve soil health, increasing the soil's ability to sequester carbon, while enhancing livelihoods and ecosystems. This can drive carbon reductions and removals and improve soil resilience to extreme weather events like drought and heavy rainfall. In 2023, we placed our first orders for regenerative cotton and wool. We aim to scale up the volumes over the coming years. Through our partners, we are also investing in other regenerative agriculture projects in key landscapes, see details below.

Increasing feedstock through collect and sort

To increase the share of post-consumer feedstock for recycled materials we work with our garment collecting

partners to collect and sort used and unwanted garments and textiles.

Circular transition

Transitioning to a circular ecosystem through introducing resell business models, scaling recycled materials and business optimisation — for example improving demand planning — have all contributed towards decoupling emissions and material use from the growth of our business.

These emissions are part of our science based target to **reduce absolute scope 3 emissions by 56%** by 2030 from a 2019 baseline.



Materials

Partnerships

We support [Textile Exchange](#)'s Climate+ ambition, which aims to reduce emissions from fibre and raw material production by 45% by 2030. This goal also addresses opportunities to amplify beneficial impacts on soil health, freshwater, and biodiversity.

[Better Cotton](#) (BCI) is one of our key partners for improved practices in cotton production. The organisation aims to improve soil health and reduce emissions by 50% per tonne of cotton lint by the end of 2030.

We are a strategic partner of the [Ellen MacArthur Foundation](#) (EMF) and we support their vision for a circular fashion industry, where products are designed

to be used more, made to be made again and are made from safe and recycled or renewable inputs.

Together with [WWF](#) and other partners, we are investing in several regenerative agriculture projects linked to both wool and cotton production. See our [Sustainability Disclosure](#) for a full list of projects.

Challenges

Building a circular ecosystem

Decoupling virgin material use from business growth is one of our industry's biggest challenges. To do this, we need to reduce resource use by optimising our business and building a circular ecosystem. There is still a long way to go, and we need systemic industrywide change to get there.

Measuring impact

There is a lack of reliable methods for measuring textile impact. For example, regenerative agriculture practices have the potential to cut emissions, but it is difficult to measure how much carbon is sequestered and for how long. Traceability is essential to fully understand the emissions impact of material choice. Secondary data can be used to a limited extent, but it does not include geographical sourcing location — key for impact and risk assessments. We need to partner with relevant stakeholders to achieve traceability down to farm level.

We are actively involved in developing the EU Product Environmental Footprint (PEF) methodology, which requires brands to measure the lifecycle impact of their products using a common framework. This will give customers greater transparency and allow them to compare products based on their environmental score.

Scaling circular business models

Customer-facing circular business models like resell, rental and repair, alongside circular systems for collecting and sorting, are important to keep products and materials in use for longer. However, the lack of robust business cases to scale them is a challenge.

To reach its full potential for cutting GHG emissions, our industry needs to demonstrate that these initiatives can be economically viable and create jobs.

Closed loop recycling

Challenges remain within closed loop textile-to-textile recycling. We need innovation, financing, infrastructure and effective legislation to accelerate

progress. Recycling requires reliable feedstock, but collecting and sorting used textiles is a complex process. All stakeholders must work together to enable the shift towards a circular model. We are partnering with industry stakeholders, advocating for effective policy, investing in innovation and scaling circular solutions.

Increasing volumes of regeneratively produced materials

To be able to source substantial volumes of regeneratively produced material we need to support farmers through the short-term, negative impacts of transitioning away from conventional production as well as recognise that this approach to agriculture is context-specific and difficult to standardise. We are actively collaborating with industry partners to find solutions to address these challenges.

Learnings and future focus

The material solutions at scale today will not be enough to reach net-zero. To achieve further reductions, we need to rapidly scale textile-to-textile recycling, improve material impact measurement and implement

regenerative agricultural practices. We will focus on our key materials in terms of volume, impact and risk — cotton, polyester, wool, leather and MMCF.

We also need clear shared goals on scaling regenerative agricultural practices and textile-to-textile recycling at an industry level.

Summary and call to action

We are making progress against our materials goals and commitments. However, we need to do more as an industry to:

- Support further technological innovation to fully unlock the potential of closing the loop for clothing and textiles, including support for bringing innovative materials to market and scale.

- Implement aligned methodology for measuring impact.
- Establish an early-stage funding mechanism that supports and incentivises farmers to adopt regenerative agriculture practices.

- Develop an accounting approach that translates positive environmental impact into monetary value, to further support farmers.

Garment and fabric manufacturing

Garment manufacturing - often described as tier 1 in our supply chain - generally refers to cutting and sewing final products, but can also include processes such as washing, ironing and printing. Here, the majority of emissions come from the energy used in factories. Most processes are electrified and powered by the national grid. Where the grid cannot provide a stable supply, suppliers generate electricity on-site, mostly using natural gas, with a small share using renewable sources such as solar panels.

In 2023, garment manufacturing emissions equalled about 220,000 tonnes CO₂e, approximately 3% of our total scope 3 emissions.

Fabric production - often called tier 2 and tier 3 in our supply chain - includes all the processing of raw materials, such as cotton lint, into a fabric ready for cutting and sewing. This includes spinning, weaving, knitting, as well as dyeing and other wet processes. Emissions related to this stage come from the energy used in these processes, largely from generating or purchasing heat and steam, as well as from electricity.

In 2023, fabric production emissions were about 3,978,000 tonnes CO₂e, approximately 47% of our total scope 3 emissions.

Targets and commitments

- Sourcing of 100% renewable electricity in our supply chain by 2030.
- Supplier factories reporting the use of on-site coal boilers dropped to 67 in 2023 (117 in 2022).
- Since January 1st 2022, we do not onboard new factories using on-site coal.

Actions

We have three main levers to address these emissions:

- energy efficiency (EE)
- reducing the climate impact of energy sources
- optimising the value of each product.

Energy efficiency

One of the most cost-effective ways of cutting emissions is to reduce energy use. Our internal team of energy experts offer suppliers free energy audits to identify potential efficiency measures.

Changing processes can also drive energy efficiency. For example, [dope dyeing](#) or waterless dyeing uses

significantly less energy, water and chemicals. We are currently setting up pilots using this technology.

Another way to reduce the amount of energy consumed is to limit the use of blended materials containing a mix of synthetic and natural fibres, as these blends need to be dyed twice. This also increases the recyclability of products.

Reducing climate impact from energy consumed

Any remaining energy demand should be fulfilled by sources with the lowest possible climate impact.

To meet heat and steam energy needs in our textile supply chain, we prioritise electrification with renewables, complemented by ground or air-source heat pumps.

Consolidating the number of suppliers and facilities we work with and expanding our work with those already using lower-impact energy sources will also contribute to reducing our supply chain energy consumption impact.

Optimising the value of each product

Making sure we have the right product, in the right place, in the right amounts and at the optimal price can support our efforts to cut emissions.

To maximise the value of energy and raw materials embedded in products we need to keep items recirculating for as long as possible before repurposing and, eventually, recycling.

Partnerships

Our most important partners to reduce manufacturing emissions are our suppliers. We are committed to supporting them to lower GHG emissions by developing long-term relationships and providing access to finance.

To develop common policy positions and to share knowledge and data, industry collaborations such as the [UNFCCC Fashion Charter](#), or the [Fashion Pact](#) are vital.

We also need to work with other brands. On average, we use just 10-20% of a factory's capacity at our tier 1 and 2 suppliers. The other 80-90% is used by other

companies, so we share the same challenges and opportunities.

Finally, we need to work with the partners involved in our [financing streams](#), as well as banks and investors.

Challenges

Traceability

Because a large share of our emissions is created by suppliers and facilities that we do not have a direct relationship with, we need better traceability to calculate emissions and reductions accurately. Over the past few years we have improved traceability for our tier 2 suppliers, but we still have work to do to secure primary data from our tier 3 partners. We also need to steer our tier 2 and 3 business through existing direct supplier relationships and offer all tiers access to financial support to reduce emissions.

Electrification

Replacing fossil fuels often poses challenges. Electrification can be costly and, if not coupled with renewable electricity, could lead to little or no emissions

reductions. Dependency on grid electricity can also be challenging in regions without reliable infrastructure.

Biomass

Sometimes electrification is not feasible — for example, when processes demand a level of heat or pressure that electricity cannot provide, or when renewable electricity is not available and the grid is dependent on fossil fuels. In these cases, some types of biomass can be a necessary transitional on-site energy source.

Biomass from fast decaying organic materials or residues could provide a transitional energy source. However, as many types of biomass can have negative impacts, such as implications for land use and biodiversity, they should be carefully considered.

As the sustainability risks associated with different biomass feedstocks vary, we are guiding our suppliers

on selecting biomass with the lowest risk of adverse impact, guidelines and a risk assessment tool are available from [ISC](#).

Innovative energy generation

Innovative energy solutions exist, such as solar-thermal steam generation. These technologies are not yet mature nor cost-efficient enough for our industry.

Fossil fuel subsidies

Fossil fuel subsidies can currently make the costs of transitioning to renewable energy appear overly expensive.

Advocacy and policy

Our public affairs team advocates for scaling or enabling investments in renewable electricity generation, as well as improving the accessibility and reliability of national grids.

Garment and fabric manufacturing

Learnings and future focus

Using lower-energy processes, especially during wet processing stages, can significantly reduce energy consumption. For example, adopting waterless dyeing methods conserves both water and reduces the need for energy-intensive hot water and steam. Exploring technologies like heat pumps and solar-thermal can further cut emissions and improve access to renewable energy.

However, implementing these technologies often requires significant modifications to factories, which can impact the industry's willingness to adopt them.

We will continue to prioritise electrification to reduce emissions and we hope for more industry-level initiatives in this area. These actions should be supported by a

push for faster development of renewable electricity sources to increase the amount of renewable electricity generated and replace fossil fuels in grids.

Summary and call to action

We recognise that production processes are the largest source of emissions in our industry. While we are committed to address this challenge, we strongly advocate for increased collaborative action to reduce our combined climate impact.

Therefore, we call for:

- Other brands to join forces with us and each other, to use our collective influence and share the work of transitioning with suppliers. By joining one of the many financing initiatives and expanding supplier requirements we can encourage broader collaboration and faster action.

- Governments to increase investment in renewables, make it easier for companies to invest in renewables through different methods such as PPAs and phase out fossil fuel subsidies.
- More brand and industrywide initiatives that support the development and scale-up of innovative textile processes and technology.

These emissions are part of our science based target to **reduce absolute scope 3 emissions by 56%** by 2030 from a 2019 baseline.



Transport

Transport involves the movement of goods from production to end-customers. We work with external service providers, with goods travelling via ocean, road, rail and air.

In 2023, our transport emissions amounted to 303,000 tonnes CO_{2e}, approximately 4% of our total scope 3 emissions.

The primary climate impact of transport results from the production and combustion of fossil fuels:

- Sea freight (about 54% of product volume): includes all water-based transports, whether overseas, coastal, or inland waterways (64,000 tonnes CO_{2e}).
- Air freight (about 1% of volume): includes transport via air, ranging from regional to intercontinental distances (54,000 tonnes CO_{2e}).
- Road transport (about 37% of volume): covers all forms of land-based transport on roads, ranging from heavy trucks to electric bicycles (183,000 tonnes CO_{2e}).
- Rail freight (about 8% of volume): includes transport by train (2,000 tonnes CO_{2e}).

These emissions are part of our science based target to **reduce absolute scope 3 emissions by 56% by 2030** from a 2019 baseline.

Targets and commitments

- Reduce absolute emissions by 56% by 2030, against a 2019 baseline.
- All transport service providers are required to sign our Sustainability Commitment for transport business partners. This includes establishing emissions reduction targets and action plans, and implementing a rigorous monitoring system.

Actions

Low-emissions transport alternatives:
We are actively expanding the use of [preferred transport options](#), which include electric and zero-emissions vehicles, with a particular emphasis on electric vehicles (EV) and 100% biofuel. In regions where EV infrastructure is less advanced, we use biofuels as a transitional measure.

We maximise the use of preferred transport options, reducing air transport wherever possible.

Reducing number of transports:
We are cutting the total number of transport journeys through initiatives such as using parcel collection points instead of direct home delivery. In addition,

we are refining our returns management and store replenishment processes.

Other ongoing initiatives include improving load efficiency, consolidating shipments and optimising delivery schedules.

Partnerships

We are part of [The Pathways Coalition](#), which aims to accelerate the decarbonisation of heavy transport.

[Clean Cargo](#) is a collaborative alliance hosted by [Smart Freight Centre](#) and includes ocean container carriers, freight forwarders and cargo owners. The partnership is dedicated to tracking and reducing GHG emissions in container shipping, as well as sharing best practice.

As a signatory to the [Arctic Corporate Shipping Pledge](#), we commit to not use Arctic transshipment routes, to protect vulnerable ecosystems.

Challenges

Biofuels
Biofuels have a role to play while we transition to electrified transport. However, availability and infrastructure are limited, and there is no accepted, common definition of sustainable biofuels.

Infrastructure and technology limitations
Inadequate EV infrastructure, deficient rail infrastructure and slow progress on electrifying heavier road transport are all obstacles to reducing transport emissions.

More transport choices
To reduce risks, we need a broader range of transport choices including affordable, lower emissions alternatives for air freight and ocean transport.

Accounting model
Because we rely on average data for air and sea freight, we cannot account for all improvements, such as reduced speed or more efficient vessels and fuels. We are continuously working to improve these models and collect actual rather than estimated data.

Summary and call to action

Our success in cutting our transport emissions depends upon the progress made by our service providers. Therefore, it's crucial to deepen our collaboration with these partners.

We aim to continue being leaders in the decarbonisation of transport and this may demand additional investment, for example to cover the cost of alternative fuels. We aim to keep exploring innovative approaches and business setups to drive our goals further.

The slow pace of decarbonising transport brings potential financial risks.

Therefore, we ask that:

- Policymakers accelerate the development of EV infrastructure.
- Transport service providers adopt and develop better alternatives to conventional transport methods, especially within maritime shipping and air freight.
- Transport buyers, including H&M Group, set clear requirements for transport service providers and provide support in financing this transition.

- The transport industry and policymakers to develop a common definition for sustainable biofuels.

Packaging

Packaging protects products on their journey from production to our customers, minimising the need to discard products due to damage. Most of our packaging is made from cardboard, paper, or plastics. Textiles and metals may also be used. Emissions come from the energy used to produce the raw materials and manufacture the packaging.

In 2023, packaging emissions amounted to 145,000 tonnes CO₂e, equalling about 2% of our total scope 3 emissions.

These emissions are part of our science based target to **reduce absolute scope 3 emissions by 56% by 2030** from a 2019 baseline.

Targets and commitments

- Absolute reduction in plastic packaging of 25% by 2025 (2018 baseline).
- Design all packaging to be recyclable, and where relevant reusable, by 2025.
- Reuse or recycle 100% packaging from our own sites by 2025.
- Make 100% of packaging from recycled or sustainably sourced materials by 2030, with a preference for post-consumer recycled materials.

Actions

Plastic packaging

We have already reduced absolute plastic packaging volume by 55%, against a 2018 baseline. To further cut our use of plastic we are moving from using single-use transport hangers to reusable ones and reducing the amount of non-transport packaging used in our daily operations.

Optimising packaging

We optimise the size and weight of our packaging to make sure we don't use more materials than we

absolutely need to. To prevent used packaging becoming waste we're working to design all our packaging to be recyclable and, where possible, reusable.

Changing materials

We prioritise recycled and next generation fibres such as paper made from agricultural residues or sustainably sourced materials. Where there is no alternative to virgin material derived from forests,

we will only source FSC-certified material to protect endangered and ancient forests.

We are also reducing the amount of retail shopping bags we use and switching to FSC-certified paper for online shipping bags, to help ensure a higher recycling rate. We are increasing the share of post-consumer recycled plastic in polybags used for transit.

Partnerships

To reduce the industry's dependency on plastics we have signed the Global Commitment on Plastic, led by the [Ellen MacArthur Foundation](#) (EMF).

We are involved in the business coalition for a global plastic treaty. Convened by EMF and [WWF](#), the initiative aims to tackle the plastic pollution crisis in a globally coordinated way.

Challenges

Next generation materials

For next generation materials to reach scale, investment, collective action and a commitment to using these materials are needed.

Recycling infrastructure

Not all markets in which we sell have adequate infrastructure to recycle packaging, making it hard to ensure our packaging is reused or recycled.

Renewable energy access

Securing access to renewable electricity for packaging manufacturers would have a large impact on the total emissions from this category. We need cross-industry collaboration, and regulatory development to make this happen.

Learnings and future focus

Collaboration is key to addressing certain challenges, such as scaling and deploying next generation packaging materials, as well as encouraging suppliers to switch to renewable energy.

It is equally important to align on industrywide methodology to measure and account for the impact of packaging throughout the value chain, from extraction of material to end-of-life.

We also need to work together to raise awareness and influence customer purchasing habits to help reduce the amount of packaging used — for example, by promoting packaging-free deliveries or using reusable packaging.

Summary and call to action

To reduce the environmental impact of our packaging, we are removing all unnecessary packaging, streamlining packaging processes and designing our packaging to optimise its size and weight, as well as

ensuring that it can be recycled or reused. We are increasing recycled and next-generation material content, as well as the share of reusable packaging.

We need collective action within the industry to scale next generation and recycled packaging materials. Governments must introduce standards and regulations to support the shift.

Own operations

Across H&M Group we operate almost 4,400 stores, 62 warehouses, 185 offices, and we employ more than 100,000 people. In our operations, our scope 1 and 2 emissions come from fuels and energy used in stores, warehouses, offices and cars, plus leakage of refrigerants used in cooling systems.

In 2023, emissions from our own operations amounted to about 55,000 tonnes CO_{2e}.*

*Calculated using the market-based method. With the location-based method, emissions would be 377,000 tonnes CO_{2e}, or approximately 4% of our combined scope 1, 2 and 3 emissions.

These emissions are part of our science based target to **reduce absolute scope 1 & 2 emissions by 56%** by 2030 from a 2019 baseline.

Targets and commitments

- Reduce absolute scope 1 & 2 emissions by 56% by 2030, against a 2019 baseline.
- Achieve net-zero by 2040.
- By 2030, reduce electricity intensity by 25% against a 2016 baseline, i.e. kWh electricity use per square metre and opening hour in our stores. In 2023, we

exceeded this target and achieved a 29% reduction against our baseline, driven by fitting of LED lighting and optimised ventilation and heating systems. We will establish new targets with the aim to further accelerate our progress.

Source 100% renewable electricity in our own operations by 2030, including ≥50% from power purchase agreements with new renewable electricity generation.

Actions

Energy efficiency

We are rolling out energy efficiency programs, such as real-time monitoring, LED lighting, installing motion sensors and adjusting indoor temperatures.

Renewable energy

2023, we sourced renewable electricity equal to 94% of the group's total electricity use. When we procure standalone Energy Attribute Certificates (EACs), we focus on the lowest-impact sources — primarily wind and solar. All our EAC purchases comply with the [RE100 technical criteria](#). In addition to increasing the share of renewable electricity, we are also committed to procure in more impactful ways. For example, we are signing PPAs directly with developers of solar parks or wind farms. We have entered into our current PPAs before

the parks or farms are built to support increases in grid renewable electricity capacity and this will continue to be our preferred route into PPAs.

To date, we have signed five PPAs in Europe for solar parks in the UK, Spain and Sweden. The first one, in the UK, started delivering electricity in December 2022. This means we have secured a capacity of 240MW of renewable electricity in total, which will result in an indicative annual output of 370 GWh, corresponding to more than a quarter of yearly electricity use in our own operations.

In addition, we have installed solar panels on some of our warehouses to increase renewable electricity generation.

Policy and advocacy

We actively advocate for a more ambitious roll-out of renewable electricity across our markets. There is some progress with energy and climate legislation in markets, such as the EU and US. Although this often focuses on the building owners rather than tenants, this is a step in the right direction.

We also advocate for the possibility to make private investments in renewable electricity generation through PPAs in countries where this is not currently an option.

In addition, we are calling for robust electricity certificate schemes to be developed or implemented in some countries. This would enable companies to be able to transparently account for purchased renewable electricity.

Partnerships

We do not own all our warehouses, offices or stores, so constructive relationships with site-owners is vital. We rely on site-owners to invest in energy efficiency

measures, replace fossil fuels, install solar panels and share energy consumption data.

Organisations like [RE100](#) and building-certification schemes like [LEED](#) or [BREEAM](#) are important to drive a

cross-industry agenda and to set common guidelines and technical requirements — for example, what to consider when purchasing renewable electricity.

Challenges

Sourcing renewable electricity

The main challenge relates to sourcing renewable electricity where credible energy certificate systems are missing and there is limited possibility to enter into PPAs.

Data issues and inconsistency

Collecting accurate data and implementing actions across a large number of landlords and site-owners can be difficult. There is also inconsistency in current energy monitoring data formats.

Own operations

Learnings and future focus

Our largest scope 1 emission source is the use of natural gas for heating our offices and warehouses. We are replacing this with heat pumps, although this technology

has limited heating capacity in low temperatures. Biogas is a potential alternative, but a lack of availability and an inability to account for reductions make it a less viable solution.

We will need to replace certain refrigerants and implement a companywide policy on using zero-emission company cars.

Summary and call to action

We aim to improve our formal collaboration with site-owners and landlords and call on these actors to be more transparent and share energy data. In turn, we can share our data with them.

In addition, we ask policymakers to promote transparent energy-related invoices and make it mandatory to include energy-consumption information.



Other scope 3 emissions

Other expenditures (6%) and non-garment goods (4%) make up the largest share of other emissions. Remaining sources include waste in our own operations, end-of-life of sold products, business travel and other smaller categories such as the building, refurbishment and interiors of stores, offices and warehouses.

These emissions are measured using a mix of actual data from suppliers and material- or product-specific data coupled with average emission factors or spend-based factors.

Other emissions are spread across many business partners and different parts of the organisation, which makes it more complicated to address. Therefore, they are not prioritised for near-term interventions.

In 2023, other emission sources accounted for about 1,080,000 tonnes CO₂e, equalling around 13% of our total scope 3 emissions.

These emissions are part of our science based target to **reduce absolute scope 3 emissions by 56%** by 2030 from a 2019 baseline.

Actions

All our value chain partners must sign our Sustainability Commitment that sets out how we expect our business partners to act. It includes a requirement to continuously improve performance. We're also informing employees on the impact of their choices, for example, flying for business travel.

Many of the actions taken to reduce emissions in other areas will positively influence this category, such as choice of materials, efficiency measures, reducing resource use and eliminating waste.

We will continue to improve data and define actions to reduce emissions in these areas by, for example, increasing traceability and data modelling capabilities.



Use of sold products

Emissions associated with the use and care of our products primarily come from the energy used for washing, drying and ironing.

In 2023, use of sold products emissions amounted to about 1,659,000 tonnes CO₂e, equal to 19% of our total scope 3 emissions.

Targets and commitments

The customer use phase is not included in our validated scope 3 target. We are working with the [Science Based Targets initiative](#) (SBTi) to identify a credible approach

to mitigation and measurement, as well as with other stakeholders to build wider consensus on target setting and measurement for use-phase emissions.

Actions

Even though we do not have specific targets for these emissions yet, we are already taking steps to reduce them. To help shift customer behaviour, we

provide information on how to save energy and [take care of products](#). We have also piloted a project to support customers to purchase renewable electricity collectively via a third party. In addition, our on-product

care instructions guide customers on how to make choices that could lower use phase emissions, for example by selecting lower washing temperatures.

Partnerships

Establishing emissions accounting and target setting frameworks for the use phase demands collaboration on advocacy and consumer information at an industry

and cross-industry level. Partnerships are therefore crucial for success — for example, the [UNFCCC Fashion Charter](#) and [Fashion Pact](#) for industry collaboration and

the [RE100](#)-initiative for driving renewable energy advocacy.

Challenges

Measuring emissions and accounting for reductions during the use phase is difficult. Energy use is spread across customers and some emissions occur in the future because a product's entire lifespan is accounted for in the year it is sold.

Insufficient progress in decarbonising energy grids around the world is another challenge. Fossil fuel subsidies, inadequate roll-out of renewables and outdated electricity grids limit access to renewable

electricity and slow down the transition away from fossil fuels.

Learnings and future focus

We are working with our partners, including the SBTi, to develop methodology for use-phase emissions measurement, target setting and reductions accounting.

We also need stronger collaboration on advocacy for decarbonising electricity grids and expanding renewable electricity generation.

We have explored purchasing renewable energy certificates to match the estimated electricity

consumption of our customers' use and care of our products, market by market. This is on hold because the SBTi does not accept this type of approach.

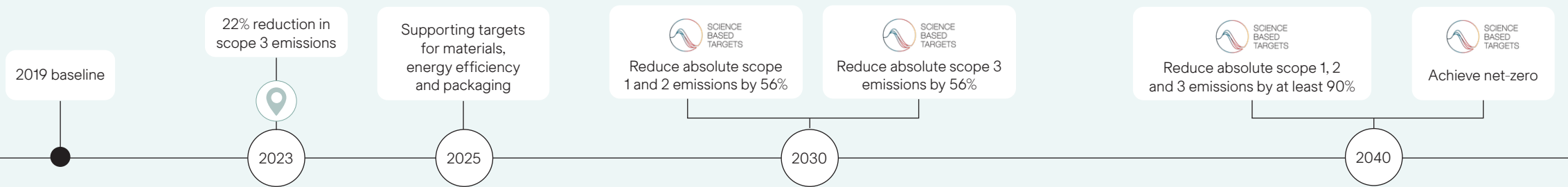
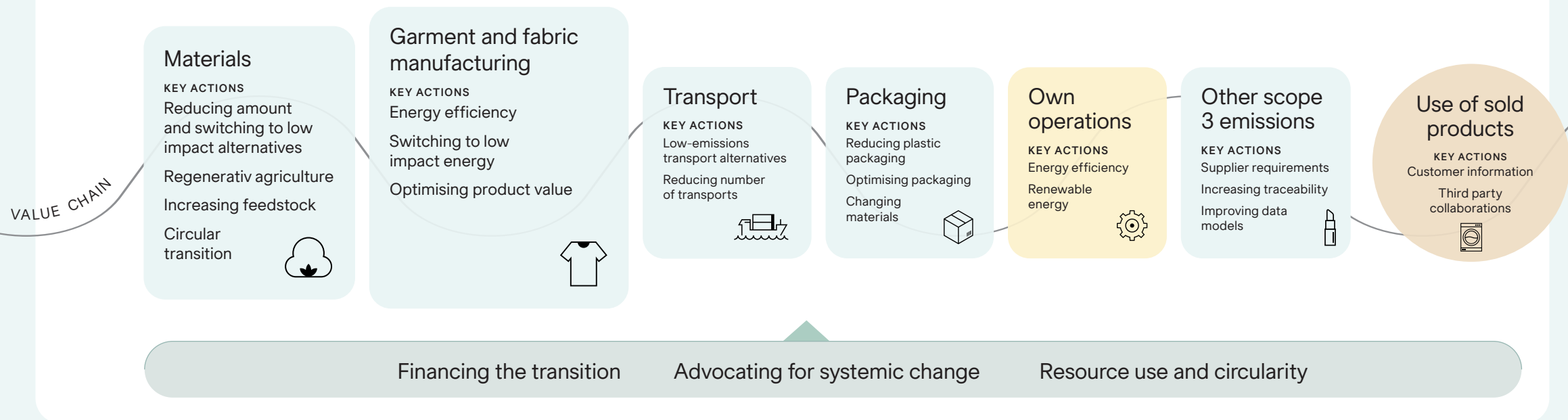
Summary and call to action

We hope for increased efforts to develop emissions accounting and target-setting frameworks for use-phase emissions from the SBTi and standards organisations such as [World Resources Institute](#) (WRI) and the [GHG Protocol](#).

We also want to see more action from policymakers on phasing out fossil fuels and fossil fuel subsidies, as well as adding renewable energy capacity to national grids.

An overview of H&M Group's Climate Transition Plan

We have set ambitious climate targets that contribute to the global goal to keep temperature rise within 1.5°C and are verified by the Science Based Targets initiative. Our **finance solutions, advocacy work and transition to becoming a circular business**, support our actions across our supply chain.



Closing remarks

We are committed to reducing our emissions across our value chain to keep global temperature rise below 1.5°C. We have made progress on our goals, but there is still much to be done and several challenges remain. Collaborative action is key and there are great opportunities for ambitious companies to grow while reducing their impact on the climate. We call on other brands to join us in financing a just transition and we call on policy makers to scale up climate policy, remove fossil-fuel subsidies and invest in renewable electricity to help make this transition possible.

In the last few years, we've taken great strides in improving our data- and calculation models to more accurately account for emissions and capture more of the improvements we manage to make. This work will continue, while our focus on decarbonisation will increase even more, supported by our diversified financial instruments, and deepened partnerships such as collaborative financing.

This is our first complete Climate Transition Plan and it is our way of increasing transparency around the climate related actions we have already taken, as well as those we will take in the future. We will continue to develop our plans for the journey beyond 2030. To deliver net-zero, we need to develop our circular ecosystem and optimise our business to decouple growth from resource use. As we make progress, we will update the plan to reflect what we and others have learnt. We value feedback and insights from our stakeholders and peers, their input is integral to improving future transition plans.



Glossary of terms

Circular and circularity are terms we use throughout this report in different contexts. We use them as high-level terms to describe activities aligned with our Strategic Partner, the [Ellen MacArthur Foundation's](#) definition of circular economy. This is based on three principles, driven by design: eliminate waste and pollution, circulate products and materials (at their highest value), and regenerate nature. More specifically, we support and aspire to the Foundation's [vision for a circular economy for fashion](#), where products are designed to be used more, made to be made again, and made from safe and recycled or renewable inputs. Where we reference our **circular ecosystem**, we are referring to putting all these principles into practice through the way we operate our business and create our products, including:

- **Circular products:** Creating products that are made to last from safe, recycled, regenerative or sustainably sourced materials that can circulate multiple times.
- **Circular supply chains:** Building scalable systems that circulate products and materials for repair, reuse, remake and recycling and use lower-impact production processes — such as dyeing, printing and finishing.
- **Circular customer journeys:** Providing convenient ways for our customers to engage in circular fashion where products are used more before being repaired, reused, remade and recycled.

Customer-facing circular business models is an additional term we use to describe circular customer journeys. Circular business models can be in place throughout the entire ecosystem. When we talk about care, repair and reuse models, we frame them as customer-facing circular business models.

Dope dyeing is a process used for colouring synthetic fibres. Pigments are added to the polymer melt before the fibre is formed, embedding colour in its structure. This process requires less water, energy, and chemicals compared to traditional dyeing methods that apply dye after the fabric is made.

More sustainable describes changes to our overall operational activity, or that of our suppliers that have a reduced environmental impact compared to conventional alternatives. We base this assessment on various qualitative and quantitative comparative data sources including third-party lifecycle assessment (LCA) data, external benchmarks and assessments, supply chain assessment scores, and data on other KPIs.

Preferred transport options refer to modes of transport including 100% biofuel, electric and zero-emissions vehicles. A **zero-emissions** vehicle is one that does not emit exhaust gas or other pollutants when operational.

Regenerative agriculture is a concept we refer to in relation to raw material production. It is a holistic approach to agriculture that focuses on the interconnection of farming systems and nature. Regenerative farming practices can improve soil health and strengthen the resilience of farmers, enhancing livelihoods while also restoring natural habitats.

Recycled or sustainably sourced materials.

Our definition of recycled or sustainably sourced materials has evolved over the years — from primarily evaluating environmental factors of certain materials compared to the conventional alternatives, to today taking a more holistic approach that also include social factors.

Through this definition, we are working to align with Textile Exchange's definition of preferred fiber and materials: "A fiber or raw material that delivers consistently reduced impacts and increased benefits for climate, nature, and people against the conventional equivalent, through a holistic approach to transforming production systems." The Textile Exchange's tool, Preferred Fiber and Material Matrix (PFMM), provides further clarity around what constitutes a "preferred" material per material category.

A "recycled or sustainably sourced" material at H&M Group is assessed against factors including voluntary sustainability standards, the Textile Exchange definition of preferred fibre and materials, the Fashion Industry Charter for Climate Action's Raw Materials Working Group's work to identify low-carbon sources within each fibre category, and aligning our sourcing processes with relevant H&M Group policies. [Read more](#) about our definition of recycled or sustainably sourced.

