



FEATURED STORY FOR CREATING PRODUCTS AND SERVICES

We innovate and educate to develop the best products and services using less.

Our aim is to make the best products and services in our industry. For us, that means products that support healthy lifestyles by helping our customers move, enjoy sport and improve their sporting performance. It also means products developed in a way that considers environmental impact at every stage of their life cycle, including design, production processes and business operations.

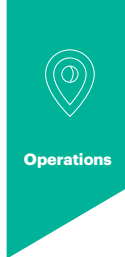
Cellulose nanofiber (CNF)

- › Launched in 2018, the GEL-KAYANO™ 25 is the world's first running shoe to feature cellulose nanofiber (CNF).
- › CNF is a nano-sized ultra-fine fiber made from plant biomass that is one-fifth the weight of steel but five times stronger. As well as improving lightness and strength, it also reduces the shoe's overall carbon footprint.
- › The midsole for the shoe features ASICS's new foam material FlyteFoam™Lyte, reinforced with CNF. As a result, the GEL-KAYANO™ 25 has improved both durability and stability for runners, without compromising on weight.

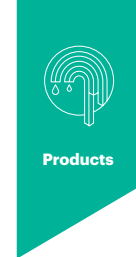
- › Compared to the original FlyteFoam, FlyteFoam™Lyte enhances strength by approximately 20% and durability by approximately 7%, while still remaining lightweight. It also reduces CO₂ emissions in production by 27%, compared to traditional midsole material.
- › We are currently expanding the use of CNF to other ASICS shoe models, including our DynaFlyte series (left image). We will continue to pursue technology innovation to improve both product sustainability and functionality.

“The first commercial application of CNF reinforced resin material is taking advantage of CNF features and is indeed a big step in the development and usage of CNF material. We hope this will mark the start of more and varied uses of CNF reinforcing resin material in the future”.

Hiroyuki Yano, Professor,
Research Institute for Sustainable
Humanosphere at Kyoto University



Operations



Products

OUR APPROACH TO CLIMATE CHANGE

Addressing climate change

Climate change is a serious threat to the environment and economies around the world. Rising global temperatures are affecting weather patterns and causing extreme weather conditions, leading to food shortages and water scarcity; they also affect our ability to move and play sports, as well as the places where we do this. Climate change is also a direct threat to our business, impacting production sites and logistical routes in our supply chain.

Climate change is caused by a build-up of greenhouse gases in our atmosphere, released in part by businesses such as ours. We know that we contribute to global CO₂ emissions both through our manufacturing and distribution processes and our direct operations. The materials we use to make our products can also contribute to our overall emissions. For example, polyester and polyurethane are derived from fossil fuels, and release CO₂ when the products containing carbon are incinerated at the end of their life. For these reasons, we see climate change as a crucial issue for our business.

We're committed to reducing our carbon footprint by setting science-based carbon reduction targets in line with the goal of the Paris Agreement to keep global temperature increases below 2°C. Our new targets were set in 2018, and officially approved by the Science Based Targets initiative (SBTi) in the same year.

We will actively engage our supply chain partners, consumers and other stakeholders on these issues and work toward achieving our targets together.

For more about what we're doing to achieve our targets

→ see pages 19, 20, 25, 26 and 30.

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Science Based Targets initiative (SBTi)
The SBTi was established in 2015 and is a collaboration between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The initiative champions science-based target setting as a way to boost companies' competitive advantage in the transition to the low-carbon economy. Targets adopted by companies to reduce carbon emissions are considered "science-based" if they are in line with the level of decarbonization required to keep global temperature increase below 2°C compared to pre-industrial temperatures.

Find out more about Science Based Targets initiative
→ <https://www.sciencebasedtargets.org>

CO₂ emissions reduction targets for 2030

Scope 1 and 2: 33% Reduction in absolute CO ₂ emissions from our direct operations (2015 baseline)	Scope 3: 55% Reduction in CO ₂ emissions from our supply chain per product manufactured (2015 baseline)*
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Action 1

60%
Or above boost to the ratio of renewable energy in our business facilities

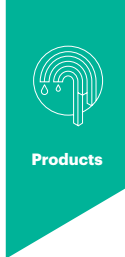
Action 2

30%
Reduction to the amount of energy our Tier 1 supplier factories use to manufacture each of our products

Action 3

100%
Recycled polyester to replace standard polyester materials in shoe uppers and sportswear products

* Target scope is 'purchased goods and services' and 'end-of-life treatment of sold products'.



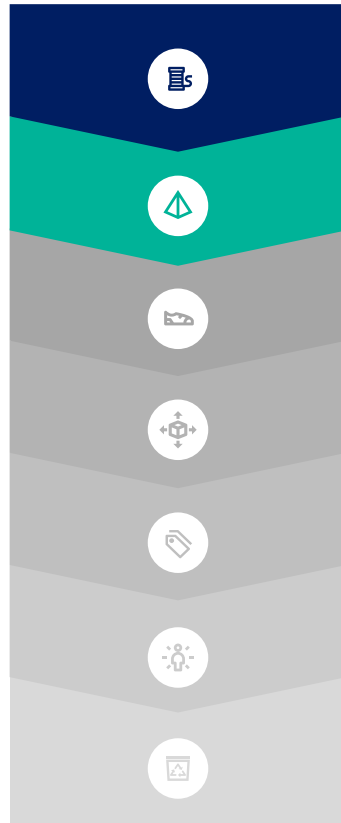
OUR APPROACH TO CREATING PRODUCTS AND SERVICES

Life Cycle Assessments

Through Life Cycle Assessments (LCAs), we continuously investigate the environmental and social impacts of our products at each stage of their life cycle, from the sourcing of materials all the way to recycling or disposal. We then use the findings of these assessments to improve our approach to design and development.

In 2018, we conducted an LCA on our GEL-KAYANO™ 25 running shoes, and compared the results with the LCA on the previous GEL-KAYANO™ 17 model. The analysis showed that we have reduced CO₂ emissions per pair by around 24% compared with the previous model. This result was achieved by reducing the number of materials used on the shoe uppers, using bio-based materials in the midsole, and switching to less carbon-intensive energy for the manufacturing process.

Value chain



- ▶ **Raw materials**
We are committed to switching to more sustainable materials, such as recycled polyester, bio-based and more sustainable cotton.
[See pages 16, 20 and 21](#) →
- ▶ **Material processing** (Tier 2)
We committed to meeting our quality and safety standards, and reducing impacts in the dyeing process.
[See pages 19, 22 and 23](#) →
- ▶ **Product manufacturing** (Tier 1)
We engage with our suppliers to reduce environmental impacts during the manufacturing processes.
[See pages 19, 30 and 31](#) →
- ▶ **Distribution to market**
We work with our logistics providers to transport our products to our various markets in the most efficient way.
[See pages 28](#) →
- ▶ **Retail**
Our own retail stores are designed to use energy efficiently and to maximize the reuse of store fittings.
[See pages 28](#) →
- ▶ **Product use phase**
We help consumers reduce their environmental impact through care label advice.
- ▶ **End of life and recycling**
We investigate partnerships and engage consumers in programs to support a circular economy.
[See pages 20](#) →

Developing and implementing the Higg Index

Developed by the Sustainable Apparel Coalition (SAC), the Higg Index is a suite of tools that allows brands, retailers and manufacturing facilities to measure the sustainability performance of their products and facilities accurately. As a founding member of SAC, we have been actively involved in developing the Higg Index product-level tools, and using them to assess the sustainability of our materials and products. As these tools are developed and launched, we integrate them into our product development process.

In 2018, we contributed to the development of the Higg Product Module (Higg PM) by providing input related to the footwear manufacturing processes and related environmental data. To support our sustainable materials targets, we shifted from focusing on whole products to assessing materials-related indicators in our product assessments. In 2019 we will continue to support the development of the Higg PM ahead of its expected launch in the middle of the year, for example by providing data and feedback.



OUR APPROACH TO CREATING PRODUCTS AND SERVICES CONTINUED

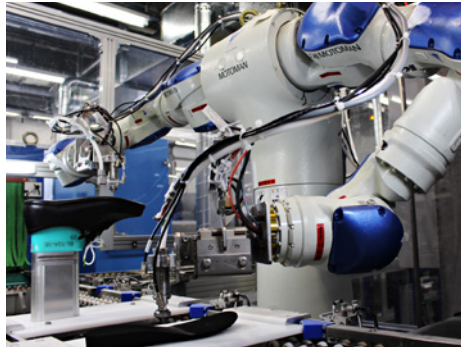
A scientific approach to sustainable product development

For ASICS, scientific research is the starting point for sustainable product development. We continuously research new sustainable materials and manufacturing processes through the ASICS Institute of Sport Science, and in collaboration with external partners. When we develop more durable or lightweight materials, we actively apply them in our footwear products to improve both their functionality and sustainability.

Automated shoe production

In 2018, we launched a new automated shoe production system using industrial robots. Used mainly in the process of bonding shoe uppers and soles, the automated system is expected to double production efficiency, as well as reducing the negative impact of adhesives on factory workers' health and safety and on the environment (see page 23).

Researched and designed by the ASICS Institute of Sport Science, the automated process uses machinery made by YASKAWA Electric Corporation, one of the world's leading companies in its field.



Industrial robot bonding shoe upper and sole

The machinery will be introduced at the Sanin ASICS Industry Corporation, one of ASICS's shoe production bases in Japan, where it will be used to make lifestyle and walking shoes.

We are researching other areas where technology has the potential to enhance our processes and reduce our environmental impact. For example, we are currently examining the potential of AI and IoT technologies to better meet consumer needs and reduce CO₂ emissions from transportation.

Solution dyeing

As part of our shift to more sustainable manufacturing processes, we're increasingly using solution dyeing, a process that uses around 50% less water than conventional dyeing methods. Instead of introducing dyes by dipping and washing of fabrics, the new process adds color to the synthetic fiber components in their liquid state before the fiber is actually produced.

Our new training apparel collection, launched in 2018, is produced using the solution dyeing process.

50%
less water used to dye
our apparel collection

Apparel: Apparel collection with waterless dyeing technology



OUR APPROACH TO CREATING PRODUCTS AND SERVICES CONTINUED

Selecting more sustainable materials and processes

Shifting to sustainable materials is at the heart of our sustainability strategy. To help us realize this ambition, we're working with industry partners (see pages 21 to 22 for examples) to enable us to switch to more sustainable materials and processes during manufacturing.

Examples of sustainable materials currently used in ASICS products include recycled polyester, sustainable cotton and bio-based materials. Solution dyeing (see previous page), which uses less water and energy than conventional methods, is a good example of a more sustainable manufacturing process increasingly used by ASICS.

As well as using more recycled materials in our main collections, we're also applying them in the manufacture of apparel for sponsored events. In 2018, 89,700 of our event shirts were made entirely of recycled polyester and more sustainable cotton.

In addition to reducing waste and other environmental impacts, switching to more sustainable materials and manufacturing technologies will play an important role in helping us meet our new carbon reduction targets (see page 17).

Closing the loop: collecting and recycling used products

To reduce our CO₂ emissions and use resources efficiently, we're committed to supporting a circular economic model where resources are reused and recycled rather than being sent to landfill. During 2018, we've been working in partnership with others on a number of projects to reclaim and reuse clothing and shoes of any brand at the end of their life.

In Japan, we worked to launch the ASICS REBORN WEAR PROJECT (ARWPJ) in early 2019 to offer a way to cheer for Japan Team for Olympic and Paralympic Games Tokyo 2020 by gathering sportswear rich with memories from people across the country and giving it new life as Tokyo 2020 Japan Team official sportswear¹. We applied a circular production and development process to extract polyester from the donated items, use it to manufacture resin, thread and fabric, and then produce new sportswear and shoes². ASICS will continue to contribute to the success of Tokyo 2020 and to reducing environmental impacts.

In the US, we are preparing for the upcoming launch of our partnership with I:CO, a global solutions provider for the collection, reuse and recycling of used clothing and shoes. Through the partnership, consumers will be able to donate used apparel and footwear from any brand at 22 selected ASICS outlet stores across



Campaign poster featuring donated sportswear from retired wrestler Saori Yoshida, the three-time Olympic gold medalist

the country. The project will launch in the second quarter of 2019.

As part of our preparations, our team designed and created in-store materials and other supporting materials such as a web page (www.asics.com/ico) to help consumers understand our circular business model, and the purpose and goals of the project. Staff at the selected stores received project training.

Consumers who donate clothes will be rewarded with a 15% discount coupon that can be used to purchase a single item in a future visit. Proceeds from the program will be donated to our non-profit partner, Right To Play. (see page 33 about Right To Play).



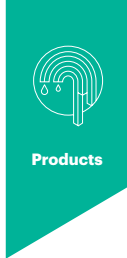
Products



DynaFlyte 3 Sound

- 1 Heel: 50% recycled polyester
- 2 Tongue: 25% recycled polyester
- 3 Upper: 45% recycled polyester
- 4 Midsole: FlyteFoam™Lyte: 40% bio-based using waste products from sugarcane and organic fibers from wood pulp (CNF)

1 ASICS is a Gold Partner (Sporting Goods) of the Japan Olympic and Paralympic Team.
2 For shoes, the upper and the insole are made with recycled materials.



OUR APPROACH TO CREATING PRODUCTS AND SERVICES CONTINUED

Guidance on sustainable material choices

Our ASICS Materials Guideline gives guidance covering materials such as animal-based materials and PVC, and enables ethical, compliant and more sustainable choices in product development and sourcing. In 2018 we continued to update and expand the guideline, adding specific guidance on the use of conflict minerals.

In conflict-affected and high-risk areas including the Democratic Republic of the Congo (DRC), the minerals trade can be used to directly or indirectly finance armed groups, fuel forced labor and other human rights abuses, and support corruption and money laundering. Although the likelihood of conflict

minerals such as tin, tungsten, tantalum and gold being applied in ASICS products is small, it's important to have formal guidance to avoid using them in all products where metal is applied, such as zippers, buttons or eyelets.

In the exceptional case that the functionality of a product requires us to use one of these minerals, we now require our business partners to source these from DRC-conflict-free suppliers whose due-diligence practices were validated by a third party audit program such as the Responsible Minerals Initiative (RMI). We will review due diligence information received from business partners against our company's expectations to ensure they are conflict-free.

Leather Working Group: responsible leather sourcing

Increasingly, consumers want to know more about the origin of branded products and materials, particularly natural materials. Although ASICS products mainly use synthetic materials, leather is the most significant natural material we use in terms of volume.

To ensure the traceability of our leather products and shift to source more sustainable leather, in February 2018 we joined the Leather Working Group (LWG), a multi-stakeholder group promoting sustainable leather manufacturing practices. ASICS is the first Japanese brand to join the group.

We took part in the LWG Main Member Meeting in Hong Kong and gained valuable information about the leather industry and how to address common challenges around leather sourcing. We set a target to source 80% of the total leather used for ASICS, ASICSTIGER and Onitsuka Tiger branded footwear from LWG medal-rated suppliers by 2020. In 2018, we sourced 88% from LWG medal-rated suppliers, reaching our target two years early.

Better Cotton Initiative: responsible cotton sourcing

Cotton is one of the main natural materials used for ASICS apparel products. Cotton is known to use a large amount of water before harvesting, as well as a large amount of chemical substances (pesticides and fertilizers). It is also associated with a high risk of human rights issues such as forced and child labor.

In 2018, we made a group-wide commitment to source more sustainable cotton. We publicly announced the commitment in early 2019, as well as formalizing our partnership with the Better Cotton Initiative (BCI). BCI works with a diverse range of stakeholders across the cotton supply chain to promote measurable and continuing improvements for the environment, farming communities and the economies of cotton-producing areas.

By 2025, ASICS will source 100% more sustainable cotton in our apparel products and accessories. We consider cotton to be more sustainable if it is one of the following:

- › Better Cotton Initiative (BCI) cotton
- › Organic cotton, Global Organic Textile Standard (GOTS) certified
- › Fairtrade cotton, Fairtrade certified
- › Recycled cotton, Global Recycle Standard (GRS) certified
- › Cotton made in Africa (CmiA), traded under CmiA license

ASICS Materials Guideline Focus Subjects	
Materials of animal origin	PVC
<ul style="list-style-type: none"> › No use of endangered or exotic species. › Animal welfare to be respected and good animal husbandry shall be applied. › No use of fur. › All leather and skin shall be by-products of the meat industry. › No down and feathers obtained through live plucking or from farms practicing forced feeding. › Wool shall originate from suppliers who do not apply mulesing practices. 	<ul style="list-style-type: none"> › ASICS continues to actively phase out the use of PVC. A small number of items in specific markets currently still contain PVC as alternatives are not available for all product applications and functions. › Screen print inks used for ASICS products shall not contain PVC. › ASICS, ASICSTIGER and Onitsuka Tiger branded products shall not contain PVC. Currently, more than 99% of all ASICS products are free from PVC.
Conflict minerals	
<ul style="list-style-type: none"> › No use of conflict minerals (tin, tantalum, tungsten and gold). 	