

Zero footprint, better impact

Texon International Group Limited
Sustainability Report 2019
Revised version published Oct 2020



Introduction



Jelle Tolsma
CEO, Texon International

“I am pleased to share with you Texon’s first sustainability report, which forms part of our commitment to become a zero waste organisation by 2025. We have a long and proud history around sustainability, going back as far as 1992 when we were the first company to launch a sustainable insole followed over the years by many other initiatives.

We are firm believers that approaching sustainability holistically will allow us to address our customer needs, do what is right for people and planet, and still meet our financial goals. This is the basis of our recently launched zerofootprint strategy.

More than ever, consumers – which we all are – want to know where products come from and how they have been made. This sustainability report is our first foray to provide the expected level of transparency and allow us to monitor our progress over time.

I invite you to join our team as we continue our journey towards zero waste by 2025.”

Texon at a glance

Texon is an industry leader in high-quality, sustainable materials for shoe components, performance fabrics and consumer applications, with a history stretching back more than 70 years.

5

countries where factories are located – UK, Germany, Italy, China, Vietnam

90

countries where operations take place

550

employees globally

70%

Leading manufacturer and supplier to 7 out of 10 sports and leisure shoe brands

+30 million m²

of material made annually

740 million

pairs of shoes that we make counters, toe puffs, insoles, strobel and uppers for each year

¹ This report has been republished with corrected and updated figures from August 2020. For further details on the revisions made, please email zerofootprint@texon.com

Texon's sustainability journey

We've been committed to sustainability for over two decades. It's woven into every decision we make. And, because we know there's always more we can do, we've set ourselves a challenging ambition: **zero waste by 2025**.

Leaving zero footprint

The fashion industry is recognised to be among the world's most polluting sectors, with the production of footwear playing a significant role in terms of sales and environmental impact¹. However, the industry also recognises the responsibility it has to change how things are done.

As a material producer to the footwear industry, we have always seen it as our responsibility to minimise negative impacts on the environment. We have embraced sustainability, not only as a responsibility but also a business opportunity. By using unconventional materials in our products and adopting alternative business models, we're creating sustainable value for our customers and the business.

That's why we set our ambition and defined four distinct goals for our sustainability journey to 2025, working from a 2015 baseline and measuring progress per net tonne of product. It's a journey that started decades ago and has taken us down a path that drives how we think, what we produce and who we work with.

[Learn more on our website.](#)

CO₂

#1
Reduce our carbon footprint by 50%

-50%

#2
Reduce our use of virgin materials by 50%



#3
90% of our waste to be recyclable or reusable

H₂O

#4
Reduce our water use and water waste by 20%

¹ Ligia Silvestre Zottin (2019), *The environmental performance of footwear in an eco-friendly company and recommendations to increase sustainable value creation*. Master's thesis, University of Utrecht.

Goal #1

Reduce our carbon footprint by 50%
From growing energy-efficient processes at our manufacturing sites to cutting down air freight, we're looking at the bigger picture of our global business to reduce energy use and emissions at every step.

CO₂

Our progress to date

Climate change is one of the global sustainability pressures impacting our industry and one we're working hard to tackle. We've already made strides to reduce our greenhouse gas (GHG) emissions. To avoid transporting our products by air, we primarily use ocean shipping.

In our manufacturing sites, we've developed an ongoing programme of lighting replacement, upgrading old systems with more energy-efficient LED technologies. At our site in Dongguan, China, this has translated into a 34% energy saving (16,473 kWh) annually.

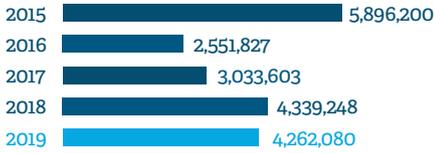
To date, our efforts have resulted in a total average reduction of 2,835,194 kg of CO₂ emissions (28%) across all sites surveyed and a 20% reduction in CO₂ per net tonne of product since 2015, contributing towards our 2025 goal and reducing emissions on average per site by the equivalent of a passenger flying from London to New York and back every day for four years. We've also achieved a 17% reduction in total energy use and 1.4% reduction per net tonne of product since 2015.

Where next?

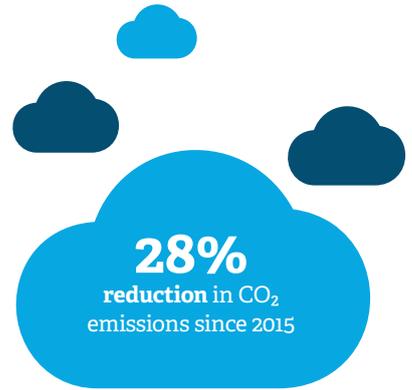
We will continue to invest in, and develop, new processes that dramatically reduce the amount of energy lost through current inefficiencies, including:

- maximising efficiencies through material and process selection
- exploring the feasibility of using renewable energy tariffs and green energy sources.

Total average yearly GHG emissions (kgCO₂e)²



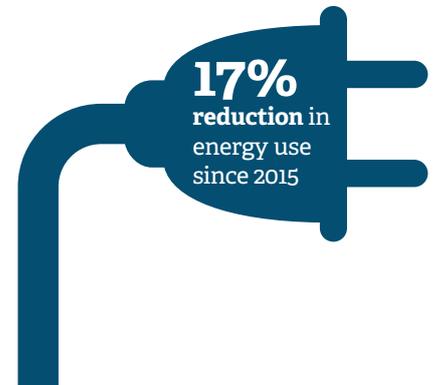
Total energy use (kWh): combined gas and electricity



Total average yearly GHG emissions intensity (kgCO₂e/net tonne)²



Total energy use (kWh/net tonne): combined gas and electricity



² The large variation between 2015 and later years' data can be attributed to: (1) production and sales reached a record high in 2015, in contrast to significantly lower volume in 2016; and (2) partial data sets for energy-intensive sites such as Möckmühl and Ripatransone have impacted yearly averages.

A sustainable approach to global transport

Transporting goods and materials by air and road has a notoriously negative impact on the environment. Research carried out by Massachusetts Institute of Technology found that long-haul air freight generates 47 times as many emissions as ocean freight per tonne-mile.

For Texon, sustainable transport has long been a key area of focus. Given that our materials travel around 7 million miles every year, it's vital we move them in the most environmentally sound and cost-effective way.

Our main mode of product transportation is ocean shipping, and we make sure our factories are placed on global shipping routes in the UK and Europe. In addition, we base our operations near customers and suppliers to reduce transport requirements.

As many of our customers are in East Asia, we use freight forwarders that operate a 'take-back' service from Europe to Asia, ensuring containers don't make empty journeys.

This is another example of how we're helping to close the loop on our own production as well as helping customers reach their own sustainability goals. There is one product that sits right at the heart of this take-back scheme. Our Texon Ecoline insoles are made using waste materials that customers can return to us for reuse, making a product that combines strength with sustainability.



Goal #2

Reduce our use of virgin materials by 50%

We're scaling down our use of virgin materials like cellulose and polymers, finding more ways to reduce what we already have and taking less from the planet.

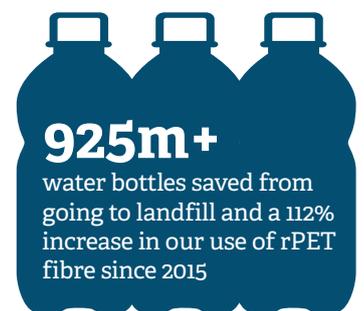
-50%



2,400 tonnes
of plastic waste saved from going to landfill and a 123% increase in our use of recycled polymer since 2015



25%
increase in our use of recycled materials and 11% reduction in virgin material use on average since 2015



925m+
water bottles saved from going to landfill and a 112% increase in our use of rPET fibre since 2015

Our progress to date

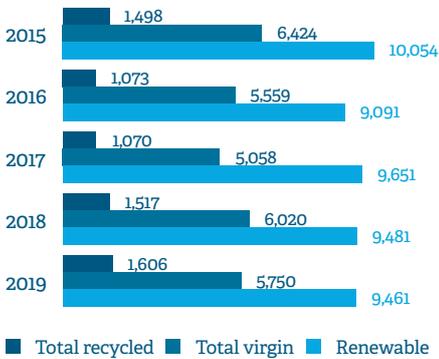
Every year, millions of pairs of shoes are thrown into landfill. There, they can take up to 40 years to break down. That's why we're making the recycled content and recyclability of our materials a priority.

Many of our products already contain up to 85% recycled content and we have plans to increase this further. We've been working closely with one customer to redesign our Texon Sportflex box toe puffs, increasing recycled content from 0% to over 40% for the bio-based version and a minimum of 60% recycled content for the eco version. Similarly, we have increased recycled materials from 8% in our Texon X8R to close to 65% in the X8R(S).

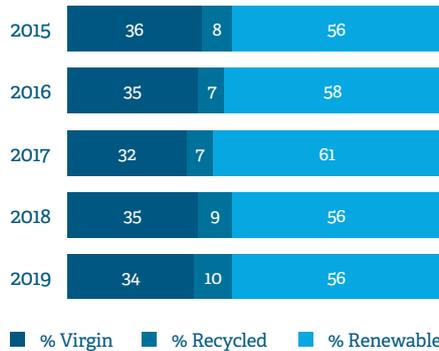
Our newly developed Texon Halo counters are also made of 50% recycled materials, using reclaimed plastic bottles. For every 1 million counters made, over 333,000 bottles and 350,000 blister packs are diverted from landfill.

Thanks to concentrated efforts, we have reduced virgin material use, on average, by 11% since 2015 and increased the purchase of recycled materials by 25%. For one of our customers, we refer to their own environmentally preferred materials (EPM) rating, using it as a guide during our product selection and development. All our recycled polyester fibres are Global Recycled Standard certified.

Comparison of material sources (site average) (tonnes)



Comparison of material sources, proportion of production totals (site average) (%)



Where next?

We are continuously exploring more sustainable materials for use in our production. Current areas of research include:

- using natural sources and organic waste streams to create new materials
- leveraging supply chain relationships and emerging chemical recycling industries to increase supply of high-quality recycled materials and reduce dependence on virgin petroleum-based materials.

Unlocking the power of plants to create pioneering materials

Our circular design principles see us planning for the end of our materials right at the beginning. To develop products that meet customer requirements for durability and sustainability, we've been exploring the possibilities of using plant-based materials.

Texon BioForm is our first foray into biopolymer materials. This high-performance material contains at least 39% bio-based content from non-GMO plant scraps such as corn stover otherwise destined for landfill. Because we only use plant scraps, there's no competition with the food chain and we're not taking up land that could be used to grow food. We're now working with a customer to expand our use of biomaterials for orthopaedic insole construction.

Giving consumers more of the sustainable products they want

We know that consumers are looking for more sustainable footwear. They're also demanding more transparency from fashion brands about how products are created and what happens at their end of life.

For us, it makes perfect sense. And in 2019, we invested over €1 million in a brand new pulper machine in response. This machine enables us to recycle fibres from more sources, including toilet roll ends and napkins, to create pioneering cellulose products, such as Texon Stride.



A global team of zero waste pioneers

Our innovation team is reimagining our products in terms of sustainability. By collaborating with our supply chain to source more sustainable materials, they have achieved an increase in recycled material use for products such as Texon Sportflex, increasing content from 0% to a minimum of 60% for the eco (recycled content from post-industrial waste) version and from 0% to over 40% for the bio (sugar cane waste) version. Our Texon X8R(S) box toe puffs also contain nearly 65% sustainably sourced content and are 100% recyclable. Our sales teams help to shape what our innovation experts do as they, in turn, help us to differentiate ourselves when it comes to sales.

We also collaborate closely with our customers to understand their own sustainability goals and how we can develop our products to support these ambitions. By working together, both within the walls of Texon and with our suppliers and academic institutions, we continue to break the boundaries of what's possible.

Goal #3

90% of our waste to be recyclable or reusable
Our culture of zero waste innovation and product lifecycle design ensures less goes to landfill and more of our materials support a circular economy.



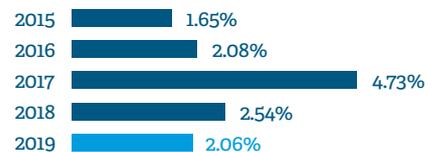
Our progress to date

We are innovating to make sure we send as little waste as possible to landfill. This means developing products with circularity in mind. Texon Reform, which we introduced in 1998, is the world's first 100% recyclable, closed-loop heel counter product. All customer waste from this product can be collected and reused to make more of the same product.

We also run a take-back service at our site in Ripatransone, Italy, and, between 2017 and 2018, recovered over 430,000 kg of paper scraps from customers. These scraps, together with a procurement of 2,500,000 kg of recycled wasted paper, replaced the use of almost 3,000,000 kg of virgin cellulose for our products, equivalent to saving 11,000 trees from being cut down. Thanks to our closed-loop processes, roughly 30% of our China site's polymer demand was met through the reuse of our own material waste.

As a result of our efforts, we generated an average of 190 tonnes of production waste in 2019, a reduction of 45% since 2017, when our largest production site in China came online.

Average waste generated (% of total production)



Where next?

We already design products with circularity in mind; however, we are accelerating these efforts, planning for the end from the beginning and looking for ways to minimise waste production. Our next steps include:

- expanding our net delivery infrastructure to give us complete control over the waste generated by our products
- developing relationships with waste converters, enabling us to reuse more of our waste in-house.

Based on these planned developments and our existing innovations, one of our key customers has predicted that their portfolio of Texon products could be 95% closed loop by 2021.



Our closed-loop approach

We put a lot of thought, effort and time into creating our products. With this in mind, we're always keen to find ways to recover and reuse these materials, closing the loop on our product manufacturing.

Our Texon Ecoline insole range highlights this. Made using fusion-bonded technology, Ecoline can be produced using thinner materials while maintaining the strength of insoles with heavier materials. This reduced weight means that less raw material is used in the manufacturing process, as well as less water and fewer chemicals. The fusion-bonding process also requires 50% less energy than alternative systems.

Creating closed-loop products means finding ways to incorporate recycled materials and Texon Ecoline insoles contain 85% recycled polyethylene tetraphyte (rPET). They are also 100% recyclable at their end of life. To make sure we capture as much of this used material as possible, customers can return waste material via a take-back system. It is then transformed into rPET staple fibres for incorporation back into our products.



Weaving sustainability with aesthetics

More and more, our customers are looking for products that are better for the planet without compromising on aesthetics or performance. We want to collaborate with these customers, incorporating their ideas into products that meet their needs. That's why we've focused more of our efforts on the manufacturing of specialty woven materials and products that have a smaller environmental impact.

Our new Texon ProWeave material for uppers brings together our technical experience in structural components, with patented weaving and surface finishing technologies, producing a woven material with unique functionalities and design freedom. The production processes also mean we can create Texon ProWeave products in less time and with less waste – of which up to 100% is recyclable.

Customers have the option to use fully recycled yarn and materials, reducing material waste in the weaving process to practically zero without compromising on look, feel or function.

Goal #4

Reduce our water use and water waste by 20%
Not only do we use less water and reuse as much as we can, we also return water to its source cleaner than it was when we got it.

Our progress to date

We need water for many of our manufacturing processes. In fact, water scarcity is one of the major pressures on the fashion and textile industry. Even beyond our industry, we recognise that, globally, there is a lack of access to clean, safe drinking water and sanitation. That's why we're committed to reducing the strain we put on local water sources as much as possible. In Dongguan, China, 100% of our wastewater is treated and reused, while used water at our site in Ripatransone, Italy, undergoes a two-step cleaning process before it is returned to the river to ensure it meets quality regulations. To minimise withdrawals, water is reused in our production processes before being sent for treatment. We are also evaluating the potential to install equipment that would allow us to recover 50% of water for reuse after being biologically treated.

Globally, we've reduced our water withdrawals by 30% on average since 2015.

H₂O

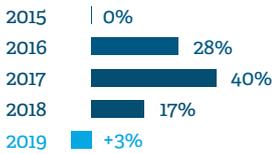
Group average water usage (m³)



Group average water usage intensity (m³/net tonne)



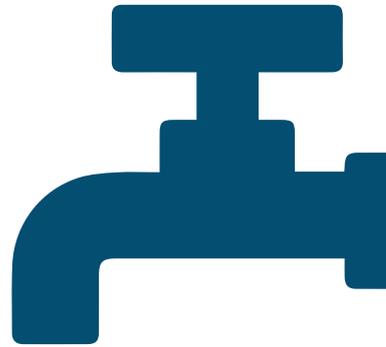
Reduction in water use m³ per net tonne (% change vs 2015)



Where next?

As we progress against our goals, we will continue to streamline our processes to minimise water requirements. This includes:

- introducing new technologies to reduce water use in particularly intensive areas of our operations
- developing our wastewater treatment methods so more water can be recycled and reused.



30%
reduction
in water
withdrawals
on average
since 2015



Just under
1
Olympic swimming
pools worth of
water saved on
average by each
site since 2015

Giving back as much as we get from our water

We're always looking for ways to use water more responsibly. At our Möckmühl, Germany, site, we've reduced water use from 180,000 m³ to 130,000 m³, finding ways to recycle it where we can.

To make sure we get as much as we can from our water, we reuse it in the production of several of our materials that start out as wood pulp. Starting with white products, we then recycle it for use in making brown, grey and black materials. When we've reused it as much as we can, we process the water, by both mechanical and biological means, and return it to the river cleaner than when it came out.

We know that the river we source our water from is important to other living creatures. We want to make sure we're looking after them too. In 2015, we installed a fish ladder that enables fish to swim upstream. We're now looking into how we can create a downstream and ranking system to remove excess debris from the water, protecting wildlife as well as the local community.

We wanted to harness the immense power of water. That's why we installed a water turbine at Möckmühl. In 2018, the turbine produced 163,000 kWh of energy, enough power to produce 230 tonnes of material.



Managing sustainability at Texon

We're always looking for ways to have a positive impact on our planet, our communities and our future. We have several systems and policies in place to ensure we're on the right track to make a sustainable difference.



How we're managing our environmental impact now and in the future

External collaborations

Texon works closely with industry-leading coalitions and test houses to ensure our products and processes deliver on both performance and sustainability.



We are an active member of SATRA and have collaborated with them to revise and modernise test methods even as material and manufacturing processes have evolved. This helps us maintain the high standard of validated performance for which Texon prides itself.



We are a member of the Sustainable Apparel Coalition (SAC), an industry platform sharing best practices, pushing sustainable solutions and identifying areas for industrywide improvement.



As part of SAC, we voluntarily submit a variety of environmental data from each of our production sites into the Higg Index. The Index allows us to monitor our yearly performance, as well as providing our customers with a standardised overview of all their suppliers.

Our Code of Conduct principles:



Act with business integrity and honesty in accordance with local and international laws.



Promote the protection of the environment.



Provide employees, visitors and contractors with a safe and healthy work environment.



Treat our employees fairly by providing career progression and development opportunities. Listen, respect and do not let biases get in the way.

Responsible production

Management systems

We have developed several systems to ensure responsible environmental management.



Our manufacturing sites in Möckmühl, Germany; Ripatransone, Italy; Dongguan, China; and Skelton, UK are all ISO 9001 accredited for their quality management systems, while Dongguan and Skelton are also ISO 14001 accredited for effective environmental management systems. We're dedicated to being more energy efficient and our Dongguan and Möckmühl sites have received ISO 50001 accreditation for energy management.

We include sustainability as a key consideration in every initial product brief

Our site in Ho Chi Minh City, Vietnam, was established with a focus on zero waste principles and recycled material use. We include sustainability as a key consideration in every initial product brief. At every step of production, we evaluate the environmental impact of our processes and the products we make.

Chemical use control

We require a range of active substances to manufacture our products and work to ensure we are meeting local, regional and national chemical regulations as well as our own internal standards.

We cooperate closely with regulatory and certifying bodies and perform strict testing to identify any potential environmental impacts of our operations. One of our products recently achieved a Cradle to Cradle Gold Standard Material Health Certificate, a globally recognised measure of safer, more sustainable products made for the circular economy.

Supplier selection

Acting sustainably is also about making sure we source raw materials from responsible companies, and we're working with our suppliers to identify ways to reduce their footprint. We listen to customer feedback, to understand what supply chain issues are most important to them and how we can ensure they are addressed within our own.

Acting sustainably is also about making sure we source raw materials from responsible companies

Each year, our suppliers must complete an assessment survey, covering topics such as human rights, health and safety, fair employee pay, and compliance with local and national regulations. Alongside this survey, we also require them to provide us with certification records and review contractual agreement terms that set out our expectations on environmental and social criteria. Prior to working together, Texon expects potential suppliers to operate guided by four basic Code of Conduct principles (see above), and to acknowledge their compliance annually.

To ensure transparency throughout the supply chain, we ask suppliers to use industry recognised standards

Material quality control

We perform risk assessments with our raw materials supply chain leaders on a weekly basis to identify potential compliance risks. Where issues are identified, we work with suppliers to improve practices. To ensure transparency throughout the supply chain, we ask suppliers to use industry recognised standards where available; for example, we request all recycled polyester fibre and yarn suppliers to supply Global Recycled Standard (GRS) approved fibres.

We are currently developing a new vendor management system that will bring together key information on all our suppliers, products and locations where our raw materials are produced. This platform will allow us to better understand compliance with our environmental and social standards. It is also a step towards reducing our own footprint and using more sustainable products, often sourced from our local communities.

We verify compliance of sourced products with the bluesign® system

We verify compliance of sourced products with the bluesign® system. We actively monitor perfluorinated compound (PFC) content to eliminate it from our supply chain at every stage.

Many of our customers maintain independent restricted substance lists (RSL), as well as SAC membership, which requires them to adhere to a manufacturing RSL (mRSL). With such a diverse customer base, we employ the strictest standards combining several RSL lists to produce our own very stringent list. It is now a prerequisite that all current and potential suppliers must review and sign a mandate of compliance. This way we can guarantee we meet all our customers' requirements with regard to restricted substances.

How we're managing our social impact now and in the future

People are behind the success of Texon, innovating material solutions and driving our efforts to always be sustainable. We want to keep our standards high and create a positive impact for these people – from our employees to our consumers to our communities.

Health and safety

We're committed to keeping all our people safe at work. We've developed a health and safety strategy that covers the wider Group, as well as more specific policies for areas of increased risk such as working at heights and manual handling. When incidents do occur, a thorough risk assessment is performed to identify the cause. We can then develop and implement measures to address these issues and prevent a similar incident from recurring. Regular site audits are performed to ensure safety risks are minimised and best practices for health and safety are shared across the Group.

Employees are required to complete training on health and safety, as well as environmental management, during their onboarding phase and at set intervals throughout their employment. During a Group-wide health and safety campaign at the beginning of 2020, sites carried out local activities focused on key safety areas, ideas and initiatives.

In June 2020, a new Group Quality & Environment, Health and Safety Leader joined the Texon team. He will be responsible for designing and implementing robust processes. This includes supporting and guiding manufacturing teams to transform workplace culture and implement best practices for health, safety and environmental protection.

Diversity and inclusion

We consider diversity and inclusion in everything we do. Through our employee training tools, we provide mandatory training on communicating cross-culturally and without unconscious bias. We are committed to promoting gender diversity at all levels of our organisation, starting at recruitment. To date, 16% of our senior managers are women and we are continuously looking for ways to increase this and to encourage more women to join the industry.

Employee experience

In February 2020, we launched a comprehensive e-learning platform to provide around 200 employees with key training and learning resources, wherever they are. We also offer location-specific programmes to develop the skills of our shop floor employees. In May 2020, 144 employees took advantage of these educational tools. As well as our academy, our employees can stay connected during COVID-19 through Texon Together – an internal, at-home campaign.





Texon International Group Limited

Skelton Industrial Estate
Skelton-in-Cleveland
Saltburn-by-the-Sea
TS12 2LH
UK

www.texon.com/zerofootprint

zerofootprint@texon.com

Think zero

