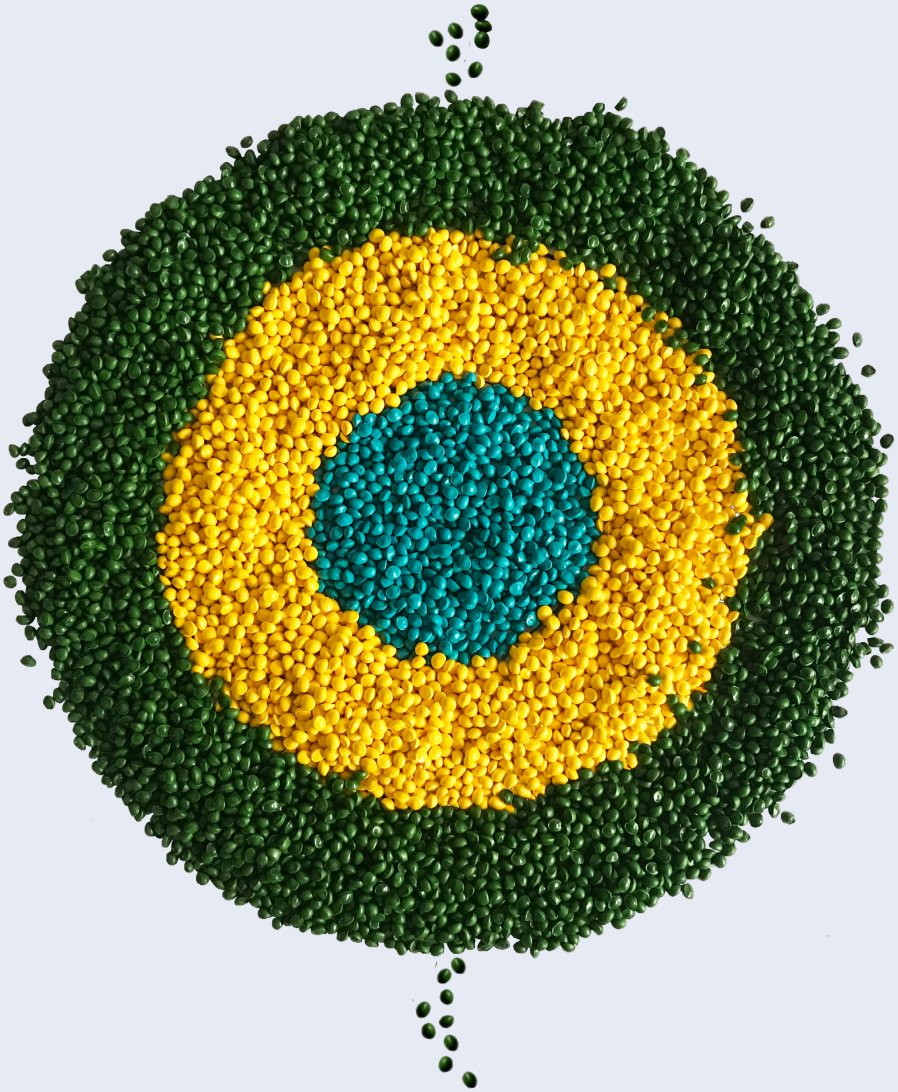
follow the pellets to track our progress

1st ever

welcome to our IMPACT REPORT 2020



We've put this report together to show the environmental impact of HEXPOL TPE's European operations in terms of the energy and water we consume and the waste we produce.

Why We've Made This Report

It's a zoomed-in version of the **HEXPOL Group Sustainability Report.** The scope isn't as wide, but it allows us to focus on how we're doing at our European sites in Sweden, the UK and Germany.

It highlights some of the good work that's usually kept behind the scenes. A lot of these projects are **part of our daily operations and life,** but we wanted somewhere we can explain our actions in more detail.

It's also the first report of its kind from us, so we can see **how we're performing now, while providing the basis of future reports.**

The HEXPOL Group Sustainability Report explains in detail how we operate, measuring many different **aspects of environmental and social impact**.

We're members of **the UN Global Compact** at the signatory level, meaning that we have publicly endorsed ten basic principles in the areas of **human rights, working conditions, the environment and anti-corruption.**

The Global SDGs are linked to these principles and the HEXPOL Group have identified which goals we're focusing on; **read more in the Sustainability Report.**

We're reporting on SDG 7, 12 + 13

HEXPOL Group Sustainability Report

UN Sustainable Development Goals

How We're Working

Operating efficiently, reducing our waste and water, and developing lower-impact materials have always been high on the agenda. We've strengthened these activities and added some new areas with our **Sustainability Focus Groups.**

The groups are made up of people whose roles are most connected to that area of the business. They meet regularly to discuss **ongoing improvements and keep us on track with larger projects.**

Anyone in the business can help and contribute their ideas, it's really a whole-team approach.

Every role has a link to **ensuring we reduce our impact as much as possible.**

A lab technician will consider how they manage equipment efficiency, an account manager will consider how we travel and we all consider how we drive down waste. ***It's no single person's job, it's everyone's.***

MATERIALS

OPERATIONS

BUSINESS TRAVEL

GO VIRTUAL

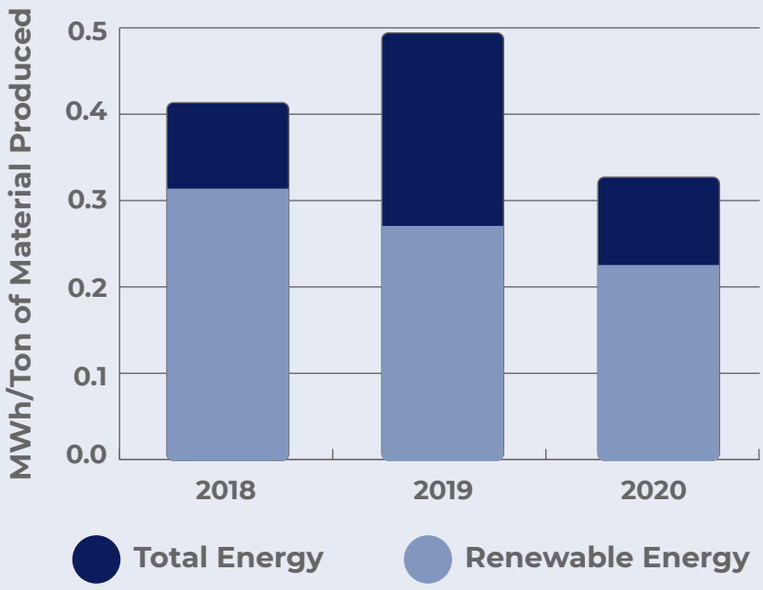
OUR WORKPLACE

EDUCATE + INFORM

Targets + Performance

HEXPOL has implemented Group-wide objectives. We're also monitoring and setting local targets to reduce our environmental impact. Below we show consolidated data for our European sites in Sweden, the UK and Germany.

Energy Consumption per Metric Ton of Material

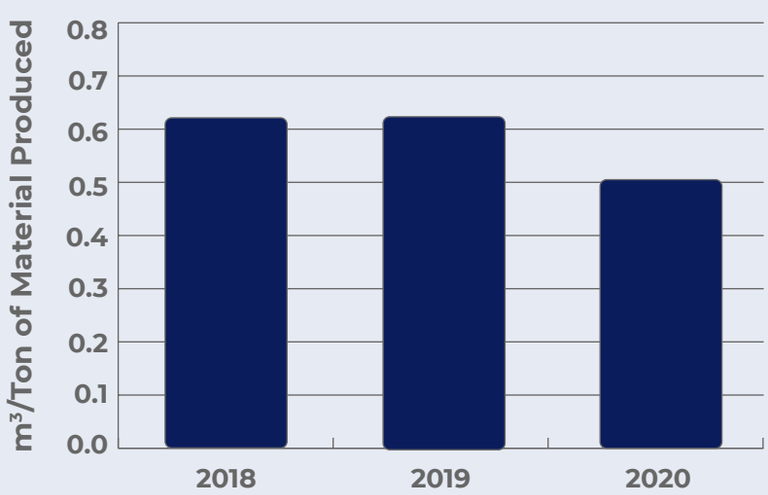


Our sites work within the framework of **ISO 14001 +/or ISO 50001,** with targets for increased energy efficiency.

For the **HEXPOL Group**, by 2025, scope 1 + 2 emissions of carbon dioxide emissions are to be reduced by **75% compared with average of 2018-2019.**

From 2021 all our European sites use **100% renewable electricity.**

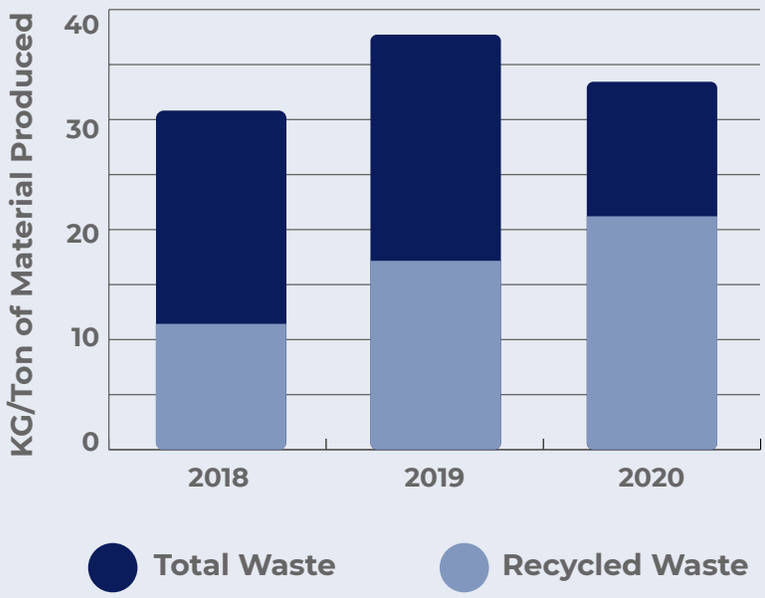
Water Consumption per Metric Ton of Material



Emissions to wastewater from our manufacturing processes are limited, mainly coming from sanitary facilities and cleaning.

Any water that comes into contact with our materials during production and becomes wastewater is routinely analysed to ensure it's safe to go through normal channels.

Waste Generated per Metric Ton of Material



We aim to **Drive Down Waste**.

We do this in many ways, from efficient material production, equipping our labs & offices with reusable items, to being selective with packaging.

Where it cannot be avoided we're working to increase the amount that is recycled **... scroll down to read about one of our projects ...**

In 2018 we produced more than 2019, as we weren't getting the same efficiencies of scale the usage per ton produced was higher.

Production volumes were higher in 2020 than 2019. In 2020 we also started to see the impact from projects on energy management and increasing recycling *(read more below)*. So, the impact per ton of material produced trended down.

2020 Whoop Whoop Moments

In a year like no other, our teams, like others across the world, have been adapting to new ways of working, dealing with disruptions and worries whilst getting on with the job at hand.

We're pleased to say that the work to reduce our impact didn't take a back seat in 2020. We've had more than one ***'whoop whoop'*** moment as we see the reduction in impact from our actions, spurring us on to keep making these changes.

We know there's still a lot of work to do, **both on a business and industry level,** but we're also pleased to share what's working so far.

Lowering Waste

Interview

Katie, SHEQ Manager, HEXPOL TPE UK

What have you been doing at the Manchester, UK site that's improved the recycling rate of your waste so much?

- We've always recycled what we could from our production waste. It's quite easy when it's in pellet form as it's ready to be injected or extruded into a final product.

When you say recycled, do you mean it goes to a facility like our household recycling?

- No, TPE is recyclable in closed-loop systems, meaning that it can be melted down and re-processed into new products, but it's a compound of more than one ingredient and so doesn't fit into the household recycling schemes.

And how have you managed to increase the recycling rates from 2019 to 2020?

- We've always assumed what we refer to as "lump waste" wasn't going to be recyclable. It's the purge from the start and end of a production run, but it can be huge chunks of solid material once it sets, which isn't the easiest thing to handle. An injection moulder can't take that away and use it. Once we found a partner to take away the waste, we had to work out the logistics from our side.

Is it just a case of getting the lump waste over to a recycler?

- It took quite a few changes to our production lines to make it possible, modifying existing equipment and processes. Once done, it was quite straightforward from there. We've even scaled it down to smaller pieces of equipment such as where we injection mould our test plaques and the waste from our pilot line. It can all be recycled now.

What happens to it when it's taken away?

- The lump waste is a mixture of lots of different grades of TPE, it goes into simple, low-grade applications that don't have particular technical requirements.

Educate + Inform

As part of their educate and inform activities, **Mette**, **Inger** and **Yana** from our site in Åmål, Sweden, ran a training essentials on this topic and contribute their experiences and ideas.

session for the whole team on the topic of **Plastics & Sustainability.**

It was a huge success and **essential training** at a time where people have questions and concerns about plastics and their impact on the natural world.

Everyone got involved, from the **lab**, **factory** and **offices** to cover the

The training will be given to all new employees and updated as things inevitably change and progress.

We feel it's important to provide employees with context surrounding our business activities. It encourages systems thinking, rather than taking a project out of its environmental and social background.

Energy Management

Markus, Operations Manager, HEXPOL TPE GmbH

- Since January 1, 2021, both plants of our site in Lichtenfels have been running on **100% green electricity.**

- By implementing a new dry cooling system in 2020, we managed to **cool our production facilities with outside air**, as soon as outside temperature is below 15°C. This has relieved the energy-intensive refrigeration compressors, and we were able to save **282,327 kWh**.

- By optimising the process parameters on our production lines, we were able to save a further **90,913 kWh**. In particular we are working to reduce

So far, we saved the energy of 315 households with 4 people*

the running time of the materials being produced. Adjustments to various heating zones on the extruder machines were also implemented.

- Another project was to look at the heating systems in Plant 1 and Plant 2 to **heat the buildings more efficiently**. This relates to both the production and office areas. We use the waste heat from the compressors as a heat curtain in front of the shipping doors. A total of **79,300 kWh** could be saved in this way.

**based on average annual electricity consumption de.statista.com*

Resource Saving Materials

We've opted for the title *resource saving*, that's because we're looking at alternative ways of producing TPE and polymer materials, **without relying on virgin fossil resources**.

During 2020 we expanded our portfolio of Biobased and Recycled Content materials. We continue to trial new and emerging raw material combinations and further test possibilities.

Dryflex® Green

Soft plastics from plants... Dryflex Green are Biobased TPEs with raw materials from renewable sources

Dryflex Green TPE

Lifocork®

Lifocork Biocomposites combine the feel of natural cork with the processability of plastics

Lifocork

Dryflex® Circular

We're taking recycled polymers and incorporating them into our Dryflex Circular TPEs

Dryflex Circular TPE

Application Stories

Bicycle Bottle From Vaude Runs on Dryflex Green TPE

"For VAUDE, the idea behind the bicycle bottle was to shift reliance from fossil to renewable resources. We want to support a biobased circular economy and improve the ecological footprint of an article that all frequent bikers need to have. Thanks to Dryflex Green TPEs, VAUDE was able to manufacture a technical component, in this case a soft valve, from biobased material."

- **Clément Affholder,** Manager Innovation: Materials and Plastic Engineering at VAUDE.

Read The Story

End of Life to New Life with Dryflex Circular

Dryflex Circular materials come in many forms from **PIR** to **PCR**, natural colour to black, soft & rubbery to rigid.

A common **waste to resource** story comes from the automotive industry.

We work with a recycling company that offer polymers from **End of Life Vehicles**, *in this example battery boxes*. They are cleaned, sorted and mechanically recycled.

We compound the recyclate, together with other ingredients, and under quality controls, **to give the required properties.** These Dryflex Circular TPE materials are being used to mould mud-flaps and other automotive applications.

What Next?

This is the first time we've put together a report like this, so we hope to grow it from here. **We'll be back in 12 months to report on progress.**

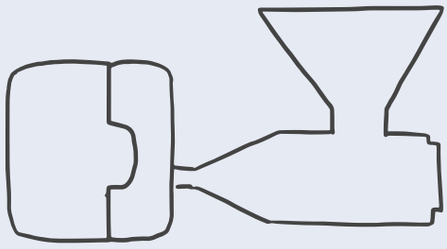
Our **Sustainability Focus Groups** will continue to direct our efforts, with changes big and small that all contribute to lowering our environmental impact. We've further material developments in the pipe-line and we're looking to **Drive Down Waste**, in all its forms.

We know sustainability isn't something that we achieve, **it's a whole new way of working and thinking.** We're always open to conversation and would love to hear your thoughts and feedback on this report. Come over to speak to us on Linkedin, via email or have a look around our website.

team HEXPOL TPE

HEXPOL® TPE

no pellets were spilt during the making of this impact report



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