

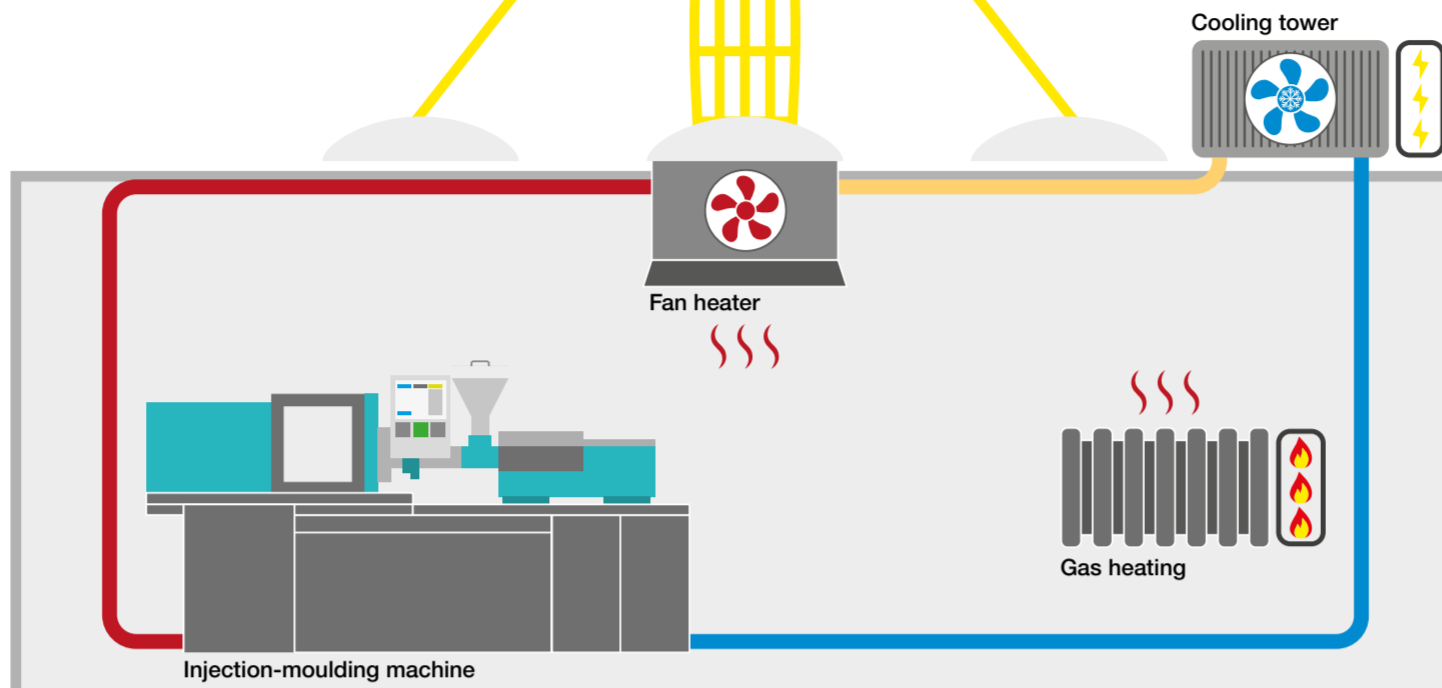
A tough goal. But we are on the right track.

# Corporate objective: CO<sub>2</sub>-neutral & "zero plastic waste"

As a plastics producing company, should igus® strive for sustainability? We believe that every company bears the responsibility to produce and operate sustainably. For us, this aspect is the focus of our entrepreneurial activities. Since we produce a heavily discussed material, in addition to reducing emissions and resources, we also have an eye on the plastic itself. Can plastics for motion be sustainable? Yes, we know they can. They are durable, make environmentally harmful lubricants obsolete, can be recycled and returned to production as regranulate or recycle. Or you can make something completely different out of it: maybe a bicycle made of plastic. In addition to our own efforts to act sustainably, we support the ideas and projects of other companies, clubs and organisations. For example, the British company Mura Technology Ltd. is currently building the first recycling plant for unsorted plastic waste in England, and we were an investor from the outset. Waste is turned into crude oil again here, and another plant is being planned, in Germany.

More information on the sustainable aspects of our products and on projects and initiatives can be found at [www.igus.eu/sustainability](http://www.igus.eu/sustainability) and the following pages.

#sustainability #energy-saving #recycling



## MHRS – Machine Heat Recovery System Concept for heating with waste heat

Thanks to new, energy-efficient injection moulding machines, we have already been able to reduce electricity consumption. We have identified the heat generated in the production process as a further potential. After detailed analysis and research, we developed a heater that heats our injection moulding production halls. How it works: During the injection moulding process, the hydraulic motors of the injection moulding machines increase in temperature. To prevent them from overheating, they are cooled with cooling water. The cooling water is provided by cooling towers, from which the cold water is pumped to the machines. There, the cooling water absorbs the waste heat from the motors and is heated and fed to the fan heater. A fan located on the fan heater heats the drawn-in air and thus heats the hall. At the same time,

the heated cooling water cools down during this process and is pumped back to the cooling tower. The process starts over. With this in-house heating system, we will be able to reduce gas consumption to zero in the future. We are convinced that the concept can be interesting for many industrial companies and will make the mature concept available, free of charge.



**Dennis Berninger**  
Factory Manager  
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Project Manager MHRS

[igus.eu/MHRS](http://igus.eu/MHRS)

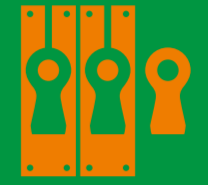
CO<sub>2</sub>

31.2%

CO<sub>2</sub> savings 2021 compared to 2020\*



150 renewed IT equipment sold internally and proceeds donated in 2022



196 new energy-efficient injection moulding machines 275 old machines exchanged for new ones between 2021 - 2022



64,405 trees planted since 2020



75,000kg

of material returned as part of the "Change" recycling program since 2019

## Projects and initiatives we support



"The plastic in the garbage dumps of the world is becoming a valuable resource."

### 1) Rheinkrake - floating garbage trap in the Rhine

Every day, a ton of waste floats across the Rhine into the North Sea. The Cologne-based Association K.R.A.K.E. („Krake" means octopus) has been rolling up its sleeves to tackle rubbish in and around the Rhine for years. With the floating waste trap, the association took a big step further in September 2022. Waste floating on the surface drifts into the London-style passive trap. The waste trap is emptied and the waste recorded on land by the association members on a regular basis and scientifically evaluated in cooperation with the University of Bonn. In this way, a long-term study on plastic waste in the Rhine will hopefully be carried out. We are happy to support this project

### 3) Plastic Fischer - against plastic waste in rivers

8 to 12 million tons of plastic end up in the oceans every year, mostly via rivers. Plastic Fischer's approach of collecting waste in the rivers is more cost-effective than getting it out of the sea. How does the project work? Local people fish the rubbish washed up in devices from rivers and receive a regular income in return. The plastic waste, which is mostly classified as non-recyclable, is forwarded to thermal recycling plants and incinerated with energy recovery. Altogether, igus® funds the collection of 10,000kg of plastic waste. This gave at least 34 people a regular income and, on some days, additional workers helped out.

### 2) Recycling meets mobility - the igus:bike project

A bike that does not rust. No maintenance, no lubrication. Together with strong partners, we are building the urban bike of tomorrow: robust, durable and made of more than 90% plastic - from the frame to the bearings and the toothed belt. A high proportion of the required raw materials can be covered by recycling plastic waste. Our vision is to develop a manufacturing concept for bicycles made from plastic waste that can be set up at the site where the plastic waste is created. More about the bike at [www.igus.bike](http://www.igus.bike)

### 4) International tree plantings

We do not plant trees to improve our carbon neutrality record, but because it is important to us. As of March 2023, we have planted 64,405 trees worldwide since 2020. Some planting is a long-term project, such as the forest test laboratory in Brandenburg, where the climate stability of trees for the (dry) future is being researched. Sometimes aromatic herbs were planted alongside trees for afforestation, as in Spain in Valdecans. Conservation of nature is not a one-off thing and so we will continue to plant trees and support initiatives with all our branches. Here is an overview of our planting campaigns: [www.igus.eu/trees](http://www.igus.eu/trees)

[igus.eu/sustainability](http://igus.eu/sustainability)



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