

"OUR GOAL IS NOT TO SPEND A CENT MORE ON ELECTRICITY IN THE FUTURE"

FRECH

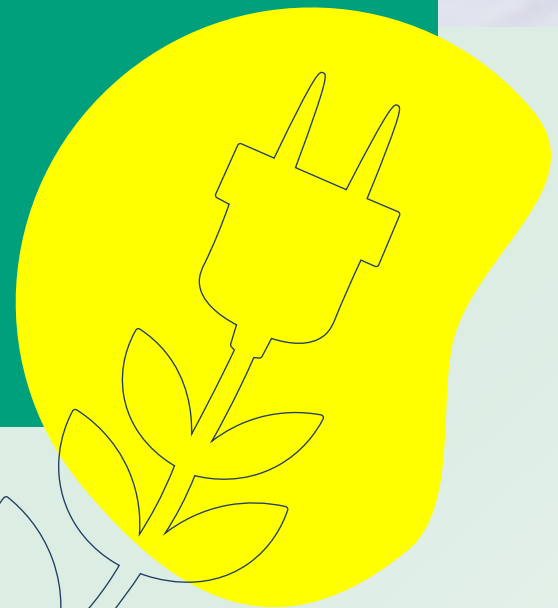
# "OUR GOAL IS NOT TO SPEND A CENT MORE ON ELECTRICITY IN THE FUTURE"

As a supplier of die casting technologies, Oskar Frech GmbH + Co. KG operates in an energy-intensive environment. Thanks to efficiency improvements and sustainable planning, the hidden champion was able to drastically reduce its energy consumption. Managing Director Dr. Tim Nikolaou explains in an interview how the transformation succeeded and what role lean management plays in the green transformation.



**DR. TIM NIKOLAOU**

is a mechanical engineer and holds a doctorate in economics. As Managing Director, he has been responsible for the entire operational business, including development of Oskar Frech GmbH + Co. KG, since 2014.





(CO<sub>2</sub>-reduction  
(tons/employee):

**45%**

**-77%**

greenhousegas-  
emissions (TCO<sub>2</sub>)

Approx.

**800**

employees

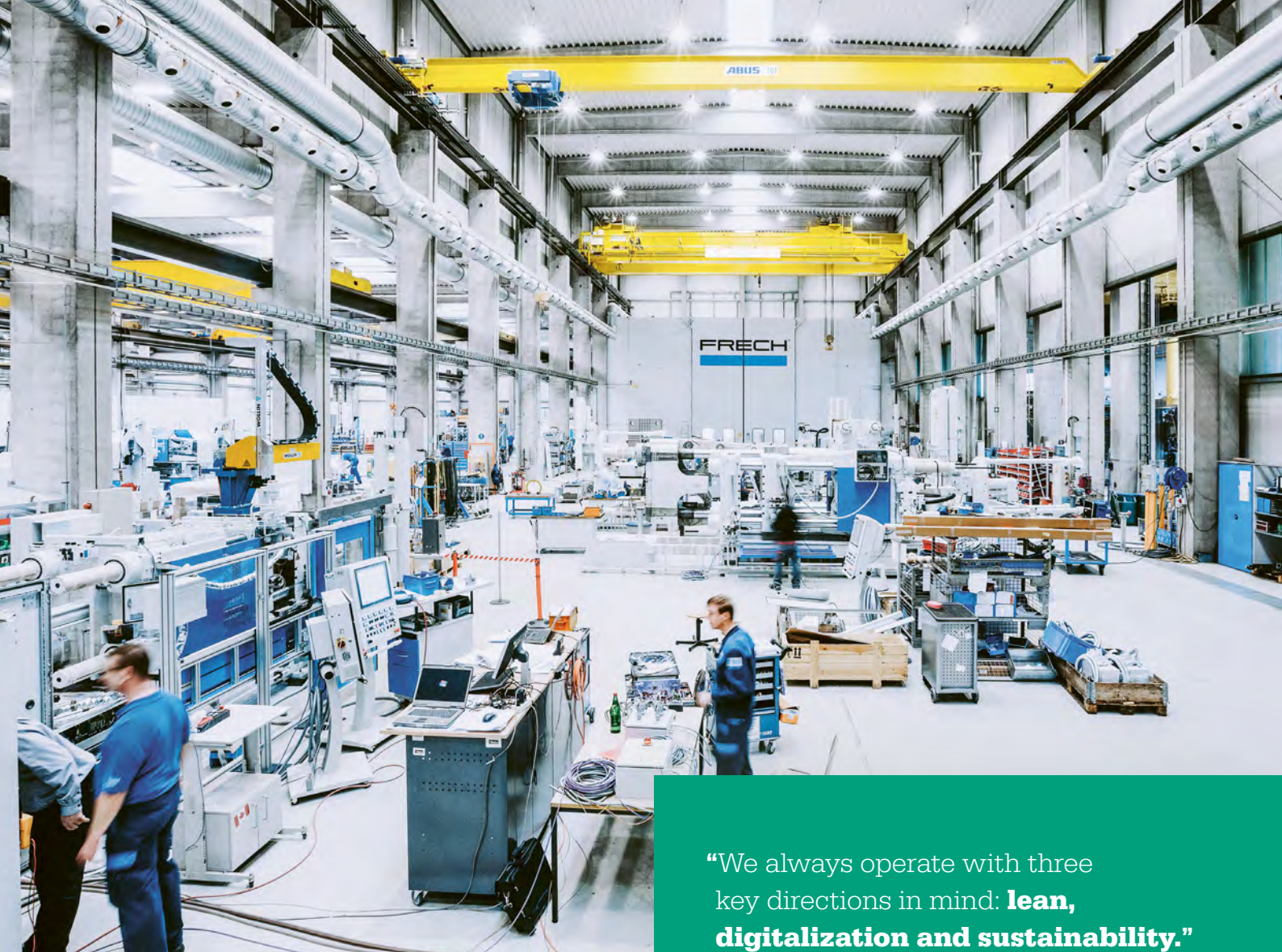
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**1949**

Dr. Nikolaou, in 2015 you initiated an initial energy audit at Oskar Frech, and a year later you launched a lean project with Staufen. Since then, you have consistently linked sustainability and process optimization. Is this a financially successful combination as well?

It pays off in more ways than one. Just a few years ago, we emitted around 2,800 metric tons of greenhouse gases each year from our three plants. Now our emissions are at zero. At the same time, our electricity costs fell from around one million euros a year to 650,000 euros, albeit at a significantly higher cost per kilowatt hour. Extrapolated to the current price level, our electricity bill today would be 2.5 million euros per year. Thanks to the combined heat and power plant, PF systems, energy-related renovations, optimized production, and smaller savings such as switching to LED lighting fixtures, we were able to significantly reduce the amount of electricity purchased. We have also been sourcing CO<sub>2</sub>-neutral electricity since 2020. This means that our production is already climate-neutral in Scope 1 and Scope 2, and by 2030 we also want to achieve this mark in Scope 3, i.e., including indirect emissions from the supply chain.

Oskar Frech GmbH + Co. KG from Schorndorf is the world's leading supplier of die casting technologies: small die cast parts such as zippers as well as car body parts or engine blocks are produced on Frech die casting machines.



“We always operate with three key directions in mind: **lean, digitalization and sustainability.**”

Many companies are planning far-reaching sustainability projects, but the Staufen study “Green Transformation in Mechanical and Plant Engineering” shows that only one in three companies actually gets it right. How did you manage to implement it?

We started with an energy audit to find out where we stand and what development needs we have. On this basis, we then established and expanded a small energy management team, with managers, area managers and executive positions. The first task was to gather information and reveal potential. To this end, for example, we brought apprentices on board as “energy scouts.” Among other things, they took compressed air measurements and determined where leaks were occurring. We then worked through the list bit by bit. These were only small measures, but they saved hundreds of thousands of euros per year. A combined heat and power plant is a more recent larger project that paid for itself within two years. At the same time, we purchased two electric Smarts for traveling between the plants.

How does the lean project you launched with Staufen in 2016 fit into the sustainability efforts?

We always operate with three key directions in mind: lean, digitalization, and sustainability. If, for example, we find that the cycle in the work process is not right in producing casting units, we first try to increase efficiency through lean. In the next step, we use digital tools. And finally, we link constructive and development activities with the topic of sustainability.

For us as a company, though, not only is our own production relevant but also the steps behind it: from energy-efficient use to recycling. That is why we bought a company last year so that in the future, for example, we can feed aluminum rims produced on our machines back into the materials cycle.

Is recycling a new business model for Oskar Frech?

As far as our core products are concerned, recycling and refurbishing have always been a topic. Used machines are also overhauled and reconditioned in our plants. This is worth it because the service life of our machines is very long. If we can get a Frech machine from the used market, we will gladly take it and then offer it for sale again as a refurbished unit. Especially smaller customers, for whom a new machine is still too expensive, can immediately put a high-quality production line into operation with a used machine.

How do you engage your suppliers regarding ESG?

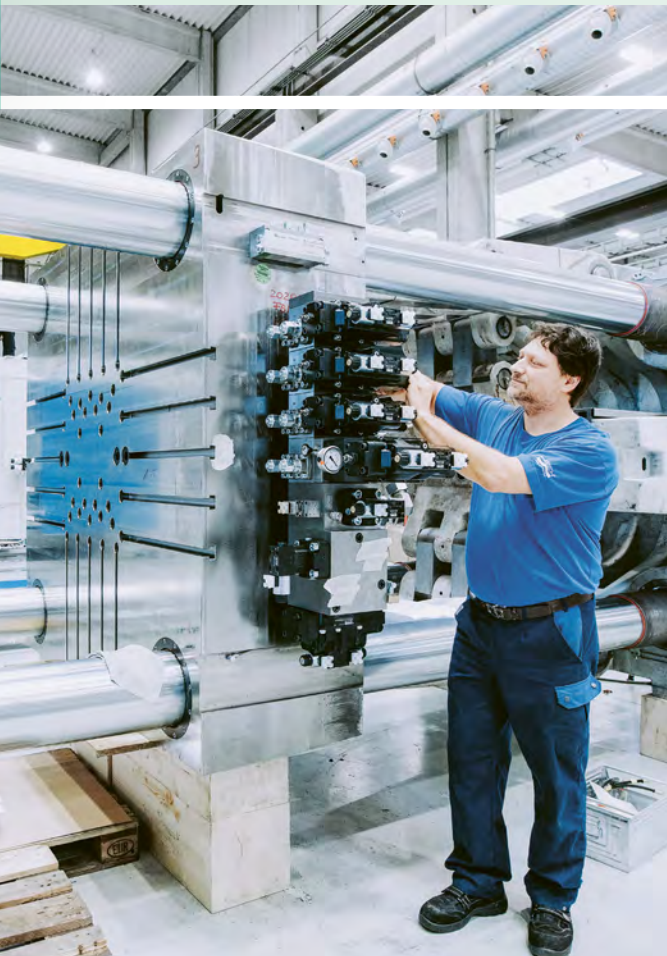
As a company, we have a responsibility. That is why in 2018 we established a Code of Conduct (Corporate Social Responsibility) that applies to the entire Frech Group worldwide and covers the topics of people, profitability, environment, and energy. We also communicate very clearly to our suppliers what our vision is and where our journey is going, and ask for appropriate self-disclosure. We started with the large suppliers, and now we have reached the smaller companies in the supply chain and have already received signed self-disclosures from 140 suppliers.

Are SMEs generally the more sustainable companies due to their corporate and ownership structure?

Look, we are in die casting technology, an industry with a high energy load. Energy efficiency on the machine has therefore always played a major role for us. In addition, as a medium-sized and family-owned company, we always think across generations – from Oskar Frech to Wolfgang Frech and now to his grandchildren. Family entrepreneurs want to leave behind the best possible living conditions and act as a regional anchor. High ecological awareness is anchored in the corporate philosophy.

What “green projects” do you want to implement next?

We are currently planning a central warehouse, which should be ready by the end of 2023, with greenery and a PV system. This will be built without fossil fuels (KfW 40) and will also sustainably heat the administration building. Our goal is not to spend a cent more on electricity in the future. That is a big goal, but we need to venture forward so that our customers can also see what is possible. ■



“That is a big goal, but we need to venture forward so **that our customers can also see what is possible.**”

**DR. TIM NIKOLAOU**  
Oskar Frech GmbH + Co. KG

# STAUFEN.

INSIDE EVERY COMPANY  
THERE IS AN EVEN BETTER ONE.

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