



## REDUCING OUR CARBON FOOTPRINT IN STADE

*This sustainability story is one of many that shows how Olin products, technologies, ideas, and people are having a positive impact on our world.*

### SUSTAINABILITY CHALLENGE

- For several years, Olin relied on natural gas to provide all of the heat energy for Olin's chlorinated organics operations in Stade, Germany.
- Natural gas was used in hot oil furnaces for the production plants, resulting in more than 24,000 metric tons of CO<sub>2</sub> emissions per year – not to mention considerable fuel costs.

### OLIN'S SOLUTION

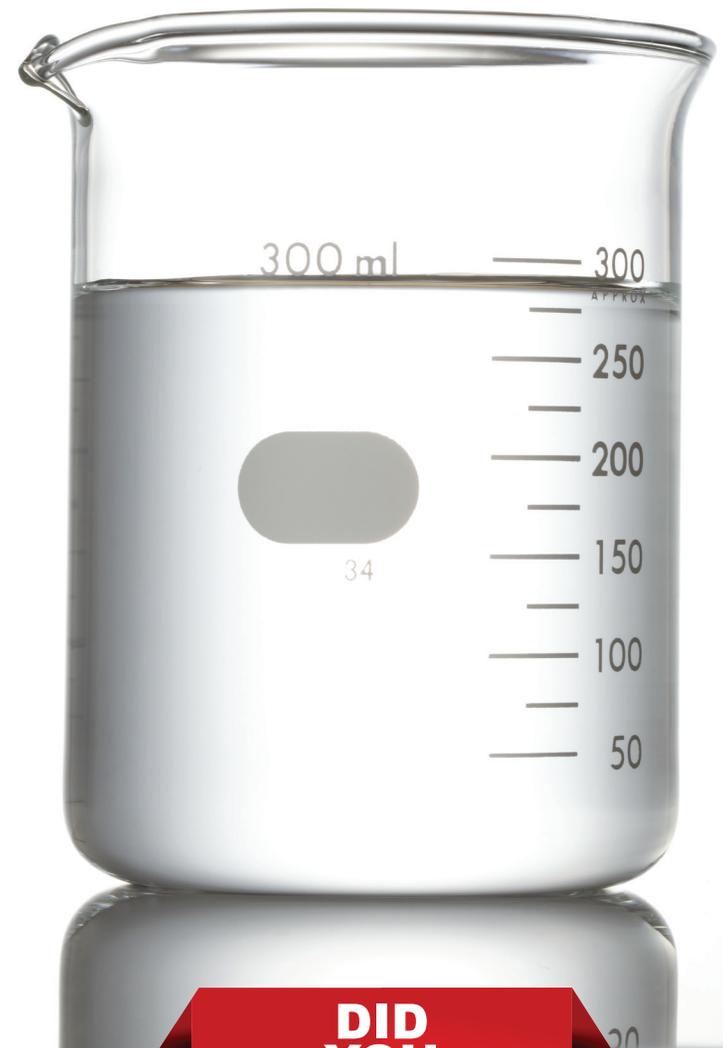
- Olin considered converting to hydrogen as an energy source, which would alleviate both CO<sub>2</sub> emissions as well as fuel costs. But existing furnace coils were damaged and could not run with hydrogen due to its higher burning temperature.
- Olin launched a project to investigate the coil damage and invest in new equipment during an annual turnaround to allow for conversion from natural gas to hydrogen.
- The team in Stade also negotiated for more favorable service and pricing to supply hydrogen for plant operations.
- A monitoring system was implemented to prevent damage to the newly installed furnace coils in the future.

### POSITIVE IMPACT

- After converting to hydrogen, CO<sub>2</sub> emissions were reduced from more than 24,000 metric tons per year to less than 400 metric tons per year.
- The conversion also reduced fuel prices and yielded substantial savings in CO<sub>2</sub> certificates, which are part of the EU's Emissions Trading program to combat climate change.

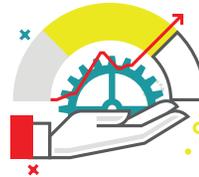


Olin systematically and strategically manages our energy and carbon footprint, driving greater efficiency and increasing utilization of renewable resources.



**DID YOU KNOW?**

Hydrogen is a clean fuel –  
and when it is consumed as energy,  
the only emission is plain water.



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**As we continue on our sustainability journey, we invite you to follow our progress at [www.Olin.com](http://www.Olin.com).**

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