



Boortmalt installs Qpinch's breakthrough energy efficiency solution in its Antwerp plant and enters into a global partnership agreement

- CO₂ Emissions reduction is one of the 4 core sustainability objectives for Boortmalt. The group aims to reduce its emissions by 42% by 2030.
- As in all process industries, heat represents the bulk of Boortmalt's energy consumption, and it's currently primarily produced with fossil fuels.
- The Qpinch technology substantially reduces this heat consumption by recovering waste heat and feeding it back into the process. The result is a reduction of CO₂ emissions and operational costs.
- The unit will be the first-ever implementation in the food industry.

Boortmalt, the world's largest malting company, has announced it wants to implement the Qpinch energy efficiency technology in its largest malting facility – the largest malting plant in the world.

Qpinch's revolutionary and patented heat recovery technology converts process waste heat back into valuable heat of higher temperatures for reuse in the same process. The resulting reduction in energy consumption means that factories can achieve the same output with fewer energy costs and lower emissions.

The novel solution, developed with the help of prof Chris Stevens, head of the SynBioC department at Ghent University, uses a reversible chemical reaction, unlike most other industrial heat pump technologies. This overcomes the hurdles of recovering vast amounts of residual heat that could otherwise not be exploited.

The process is inspired by the energy system found in all living cells in humans, animals, and plants: the ATP-ADP cycle. (ATP and ADP refer to adenosine triphosphate and diphosphate, respectively.) By mimicking this process on a large, industrial scale and with inorganic chemistry, Qpinch raises the temperature of waste heat by 50 to 100+ °C.

Yvan Schaeplman, CEO Boortmalt Group, said: *"Reducing our scope one and two emissions with 42% by 2030 to align with the Paris agreement 1,5°C scenario is one of our primary targets. As the biggest malting company globally, we play a major role in the whole beer and distiller supply chain. For years we have been working hard to reduce our emissions, striving to become the most efficient maltster in the world. We are committed to continuing doing so. That's why we always keep an eye open for novel solutions such as these."*

The engineering work for the first unit has started. It should result in the integration with Boortmalt's malting plant, by the end of 2022.

When operational, the unit will avoid up to 7 500 tonnes of CO₂ emissions per year, the equivalent of almost 5000 small passenger cars.

Gert Van Laer, Projects & asset care manager EU said: *"We encountered the Qpinch technology when it was still in full development back in 2017. We instantly saw the potential to make a quantum leap in energy efficiency and emissions reduction and started talking."*

Koenraad Dumont, Group Chief Commercial & Innovation Officer, said: *"We're pioneering here, bringing this breakthrough to the next level together with Qpinch. Through the partnership agreement we aim to integrate the technology in many of our global malting assets but as well in customer and competitor maltings, as such leveraging the potential impact our innovative solutions can bring to the malting industry."*

"Technology development is not a goal on its own," says **Wouter Ducheyne, Qpinch's CEO and co-founder**. *"We aim to help the industry reach net-zero emissions faster and reduce cost at the same time. With a market leader such as Boortmalt, we have the chance to further develop our technology for the whole food industry. We want to have an impact and help food & beverages to achieve their ambitious climate goals."*

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About

About Boortmalt:

Boortmalt is the world's leading malting company with 3 million tonnes of production capacity. The group is present on five continents with 27 malting plants. Boortmalt's expertise is widely acknowledged by brewers and distillers who rely on the supply of top-quality barley malt.

Boortmalt defines its sustainability strategy based on the UN's Goals. "Energy use efficiency & Emissions reduction" is one the 4 core objectives with Water conservation, Sustainable farming and Health & Safety. For more information, please visit www.boortmalt.com.

About Qpinch:

Qpinch introduces breakthrough technology to reduce industrial emissions and energy use. The Qpinch Heat Transformer uses chemistry inspired by nature's energy system (the ATP-ADP cycle). This patented and novel approach overcomes the hurdles faced by conventional technologies to upgrade waste heat into process heat. The large-scale and broad applicability position Qpinch as a strategic solution to reduce emissions faster and with fewer expenses. The company has solutions for the largest consumers of energy globally: Petrochemicals, food & beverages, paper & pulp, and other industries that require substantial amounts of process heat.

Qpinch BV is a spin-off from Ghent University with headquarters in the Port of Antwerp.

For more information:

www.boortmalt.com
www.qpinch.com

