

# BeverGreen

*BeverGreen leverages green digital twins to increase energy efficiency in the beverage industry.*

## Project description

BeverGreen is focused on developing an assistance system based on use-specific ontologies. Ontologies are structured models of areas of knowledge and systems of terms, which record energy-related information in the form of digital models.

These form the basis for the green digital twin and enable a precise integration and evaluation of data, including CO<sub>2</sub> equivalents, in order to identify potentials for optimisation. This allows, for example, energy consumption, energy generation and carbon footprint to be mapped. The use of machine learning (ML) methods also opens up the possibility to recognise patterns and correlations, which can then be used for targeted energy and resource savings.

## Expected results and use

The BeverGreen project contributes towards the ecological transition of the economy by creating transparency around energy consumption and intends to build on this by enabling analyses and decision aids. The project aims to demonstrate how digital technologies can contribute to sustainable change in the beverage industry, and can thus serve as a role model for other sectors.

One unique selling point of the project is that it strives not only to increase efficiency in manufacturing, but also to generate data-based business models grounded in sustainable principles. With a view to usability, the BeverGreen project is planning to actively incorporate the modules and solutions it has developed into production. One exemplary use case is illustrated by the demonstrations of CO<sub>2</sub> sequestration reduction due to carbon dioxide binding in a virtual testing brewery. The project is thus creating a basis for production to drive and optimise energy and emissions-oriented production programme planning with smart process control.

**FIELD**

*Increasing energy efficiency in the beverage and brewing industry*

**PROJECT PARTICIPANTS**

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2. KONTOR N GmbH & Co. KG
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**TERM**

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**HOMEPAGE**

[www.bevergreen.de](http://www.bevergreen.de)

MORE INFO

