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## **Water reuse in food production – barriers and opportunities**

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Water footprints in food processing are of increasing environmental and economic concern, as large volumes of high-quality water are needed in the manufacturing of food and beverage products, and consequently significant wastewater volumes are produced. At the same time water resources are under stress and lower quality resources may have to be exploited.

The food industry's process- and waste-waters vary significantly which makes a 'one-size-fits-all' solution impossible. Today several technologies exist and new methods are emerging. In particular, membrane technology allows recovery of high quality process water based on existing methods (e.g. reverse osmosis) and new methods based on forward osmosis may lead to improved wastewater treatment technologies.

Water reuse and consumption reduction is imperative for future sustainable growth in the food and beverage sector. However, some barriers must still be overcome, such as: consumer psychology and regulatory framework. At the same time these barriers and challenges offer unique opportunities for water technology providers in collaboration with knowledge institutions to conceptualize, develop, and implement new water treatment solutions.