WHAT'S COOKING? & ECO-VISION: TOGETHER TOWARDS WATER REUSE

Wommelgem - As - Waregem

European food group 'What's Cooking?' and water treatment specialist Eco-Vision are joining forces to make water reuse a priority. The 'water-as-a-service' project at the factory in Wommelgem ensures maximum recuperation of processed water and works towards a closed water cycle. Result? A solid water saving of about one Olympic-sized pool every half week.

'What's Cooking?' is a European food group with 12 branches spread across Belgium, the Netherlands, France, Poland and the UK. In 37 countries, 'What's Cooking?' conjures delicious food on the table every day. Sustainable consumption is a priority for 'What's Cooking?'. The company sets the bar high. Maximum use of renewable resources, 100% recyclable or "recycle-ready" packaging by

Together with Eco-Vision, 'What's Cooking?' is setting up its first project to recover processed water. Waste water from the production line in Wommelgem, also known as effluent, has been treated biologically for years. Without further treatment, the water is unusable and is discharged in accordance with environmental laws. However, by further purifying the water, reuse becomes possible. Eco-Vision, with sites in As and Waregem, developed a CCRO (Closed Circuit Reverse Osmosis) solution in combination with glass filtration. After biological treatment, the effluent is recovered and continues its way through three glass filters. Glass is the ideal medium to capture the remaining biological fraction. The water is then passed through a reverse osmosis plant, type CCRO. Here, water is forced through a semipermeable membrane under high pressure to remove the last impurities. CCRO stands out thanks to the use of an internal closed circuit. The system is designed to minimise water loss. In traditional reverse osmosis systems, some saltwa2025 and running with renewable energy at all sites before the end of this year. These are just some of the sustainability goals to produce greener every day. The water-intensive nature of the food industry in general is also an issue. It is crucial for the food industry to develop methods to minimise the impact on water resources.

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WHAT'S COOKING?

ter, which does not pass through the membrane, is disposed of as wastewater. CCRO systems minimise wastewater. After treatment by the CCRO, the water receives a disinfectant chlorine dioxide injection. This allows it to be reused as high-quality water in production. If more water is needed, a second system with groundwater steps in to replenish the reused water. The groundwater is treated into usable water by means of a sand filter and an upflow water softener. In case of water scarcity, there is also a third and final backup system with tap water. Tap water also first flows through a water softener. This removes calcium from the water to prevent limescale. This final fallback is activated only in an emergency, but ensures business continuity. Art Picavet, Plant Manager of 'What's Cooking?' in Wommelgem, explains: "Thanks to the technology and expertise of our partner Eco-Vision and the good project work of our engineer Tony Lanciers, we will be able to convert the waste water from the production process into drinking water from now on. Despite the drinking water quality achieved with the new plant, the water will only be used for cleaning our machines for the time being. In other words, from now on we will use our treated wastewater in a circular way to reduce the need for groundwater in order to clean. If you think of the frequent and long periods of extreme drought in recent years, we are certainly helping nature and the water table. The residual flow from the reuse plant ends up in Aquafin's plants, which in turn continue to process the residual water."

The water reuse project is unique to 'What's Cooking?' and by extension the food industry. The discharge is reduced to salts and chlorides only. Moreover, CCRO is a relatively new development and the technology requires specific knowledge. The system provides much higher efficiency thanks to a single installation. Eco-Vision unburdens 'What's Cooking?' thanks to a 'water-as-a-service' model. Here, Eco-Vision takes care of the entire engineering, construction, operation and maintenance of the installation. In return, 'What's Cooking?' pays a fixed amount per cubic metre of water recovered. Thanks to reuse, Eco-Vision and 'What's Cooking?' together manage to save 30 m3/hour. That is more or less equivalent to one Olympic-sized swimming pool about every half week.



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Eco-Vision is part of the international Pollet Water Group. With more than 30 companies across 17 countries, Pollet Water Group is a core water treatment expert. Belgium's Eco-Vision has the know-how and technologies to close the water cycle. This is how Eco-Vision makes the production chain more efficient, greener and less water-consuming. Thinking together about how to use water smartly in the future is the message. 'Change starts with a vision!"

