

March 31st, 2022

## John Cockerill launched BeFlow®, an eco-responsible and competitive alternative to current biological purification processes

*On March 31, John Cockerill presented BeFlow®, its 100% biological, compact and energy-saving treatment solution, to more than a hundred guests. The stakeholders in water management and politics were thus able to discover this unique process of aerobic granular activated sludge in continuous flow.*

BeFlow® is a scientific and technical success because this wastewater treatment technology delivered on its promises. It requires no chemical reagents and is therefore 100% biological. It applies to a wide variety of liquid effluents, whether from municipal or industrial facilities, and considerably reduces their environmental footprint. Much more compact than traditional treatment facilities, BeFlow® is also more energy efficient. It can handle both high and variable flow rates in continuous mode and therefore makes it possible to absorb peaks. This is particularly useful for municipal wastewater and certain industries.

BeFlow® has proved its worth: it has been validated in real conditions thanks to an industrial demonstrator at the Namur (Belgium) wastewater treatment plant. Eighteen months of operations on an urban effluent have demonstrated that BeFlow® meets all discharge standards while significantly reducing the volumes of the biological reactor and the settling surfaces. BeFlow® thus offers a competitive alternative to current biological purification processes. The developed solution has brilliantly met the challenge, providing a granular sludge process for activated sludge plants operating in continuous mode, long awaited by operators.

The industrial demonstrator in Namur was built with the help of CEBEDEAU, the Walloon reference center for water treatment, and benefits from the support of the Walloon Region. Beyond the industrial qualification of BeFlow®, the demonstrator has also enabled John Cockerill to develop the “smart monitoring” of the installation: The pilot has been equipped with a large number of sensors that provide information the proper functioning of the treatment in real-time, helping the operator to efficiently manage the installation. This intelligent data monitoring also allows John Cockerill to develop artificial intelligence models to predict changes in key process parameters.

After the validation of the process in Wallonia, BeFlow® enters the prospecting phase. Being the only fully biological process allowing continuous operations, the demonstrator will be sent to Switzerland in a few weeks, a country among the world leaders in wastewater treatment.

**Christophe Cassant, President of John Cockerill Environment:** “The prospects are important for all players who encounter problems with their installations being overloaded, but it also offers considerable advantages in the framework of the construction of new treatment stations, by rendering the related infrastructures both more compact and less expensive. With BeFlow®, John Cockerill contributes to the preservation of natural resources and positions itself as a solution provider for an eco-responsible future, based on wastewater treatment that is smart, efficient, compact, economical and 100% biological. »

**Jean-Luc Maurange, CEO of the John Cockerill Group:** “Wastewater treatment is a major challenge for our societies: quality water is crucial for preserving our health and our environment. John Cockerill is determined to contribute to this essential preservation of natural resources. We innovate in wastewater treatment technologies on a daily basis, in order to return clean water to the natural environment, or to allow its reuse in industrial or agricultural processes. BeFlow® is the fruit of this commitment. Today, we presented the major advantages of this new technology to the stakeholders of the Walloon region, tomorrow we are setting out to conquer other markets. We are fully confident in the success of this new eco-responsible process. »



## **John Cockerill, enablers of opportunity**

Driven since 1817 by the entrepreneurial spirit and thirst for innovation of its founder, the John Cockerill Group develops large-scale technological solutions to meet the needs of our time: preserving natural resources, contributing to greener mobility, producing sustainably, fighting against insecurity, and facilitating access to renewable energy. Its offering to enterprises, States and public bodies comes in the form of services and associated equipment for the energy, defense, industry, environment, transport, and infrastructure sectors. In 2021, John Cockerill achieved a turnover of 941 million euros in 19 countries on 5 continents.

[www.johncockerill.com](http://www.johncockerill.com) • [activityreport.johncockerill.com](http://activityreport.johncockerill.com) • [h2.johncockerill.com](http://h2.johncockerill.com)

## **John Cockerill Environment provides responses to the needs of our time**

Because the urgency of the climate crisis reminds us on a daily basis that we must act to protect future generations, and because taking care of water, waste and emissions makes good commercial sense, John Cockerill Environment supports its clients with cutting-edge technological solutions with the stated objective of considerably reducing the environmental footprint of their facilities.

As a unique expert in sustainable and innovative technologies ranging from the pumping, treatment and purification of drinking and wastewater to the treatment of air, odors, and gases, as well as solids and waste, John Cockerill Environment goes a step further by providing its clients with high added value and personalized solutions. As such, we are offering our clients a complete range of environmental solutions combining performance, quality and local services throughout their life cycle.

[johncockerill.com/environment](http://johncockerill.com/environment)

### **Press Contacts**

Specialized press : [anja.roxin@johncockerill.com](mailto:anja.roxin@johncockerill.com) +32 475 30 27 49

General and economic press : [caroline.crevecoeur@johncockerill.com](mailto:caroline.crevecoeur@johncockerill.com) +32 475 30 20 09

