

# REDUCING OPERATIONAL EXPENSES

WATER TECHNOLOGIES



Wastewater treatment operations are increasingly confronted with external factors such as **price inflation**, **chemical shortages** etc.

These factors are highlighting the importance of **operational expenses (OPEX) optimization**.

**Hubgrade Wastewater Plant Performance** optimizes your plant by aggregating **real-time data**, applying **analytics, algorithms**, and **AI** developed with Veolia's worldwide **expertise**.

Your plant's performance is then continuously optimized: **ensuring compliance, maximum OPEX reduction** and **sustainability**.

## RESULTS OF Hubgrade

by VEOLIA

## WASTEWATER PLANT PERFORMANCE \*

UP TO  
40%

REDUCTION OF  
ENERGY  
EXPENSES

UP TO  
100%

REDUCTION OF  
CHEMICAL  
CONSUMPTION

UP TO  
30%

REDUCTION OF  
EFFLUENT  
QUALITY TAXES

## OTHER BENEFITS OF REAL-TIME OPTIMIZATION

### SUSTAINABILITY

By decreasing the usage of **electricity & chemicals**, increasing the production of **biogas**, improving the **effluent** quality and reducing **N<sub>2</sub>O** emissions, HWP can reduce the carbon footprint of treatment plant by 60 %, from **scope 1 to scope 3**. Going even further in creating some scope 4 gains (also known as “avoided emissions”).

### COMPLIANCE

By having a **full understanding of the biological processes** occurring in the treatment plant and by leveraging the power of **data**, HWP can improve the **biomass performance** and adapt it in real-time to the actual load. This thereby enhances the capacity of the treatment plant. With increasing loads and/or stricter effluent permits, HWP will **aid the operator to be compliant**.

### EMPOWERMENT

By **continuously monitoring** various parameters, **analyzing** data trends and leveraging AI, HWP can **alert** operators to potential challenges, **before they would be detected** by traditional technologies. It will help the operators to **be in control** of what is happening in their plant. The **more proactive** the solution is, the **less pressure** the operators will have.

\*formerly named: Hubgrade Performance Plant

### Kuldiga WWTP, Latvia

300,000 PE - Reduce operational expenses by avoiding unnecessary aeration and mixing



33%

- Reducing electricity expenses\* on aeration by 33%
- Reducing electricity expenses\* on mixing by 34%

\*Expenses : we can reduce both the total consumption in kWh and - in case of variable energy price - the cost of each kWh

### Europe (confidential)

47,000 PE - Improve energy efficiency through intermittent aeration and AI



80k€

- Reducing energy expenses on specific energy by 45%
- Reducing energy expenses per day, on average, by 27%
- Yearly savings of 80k€

### Klaipeda WWTP, Lithuania

300,000 PE - Reduce operational expenses while increasing performance during wet events



180k€

- Reducing external carbon dosing by 89%
- Reducing energy expenses by 27%
- Yearly savings of 180k€

### Nosedo WWTP, Italy

1.25M PE - Enhance the overall utility efficiency



1.8M€

- Yearly savings of 1.8M€, over the past 3 years
- Reducing energy expenses in biological step by 30%
- 350% higher than guaranteed (400k€ of performance guarantee)