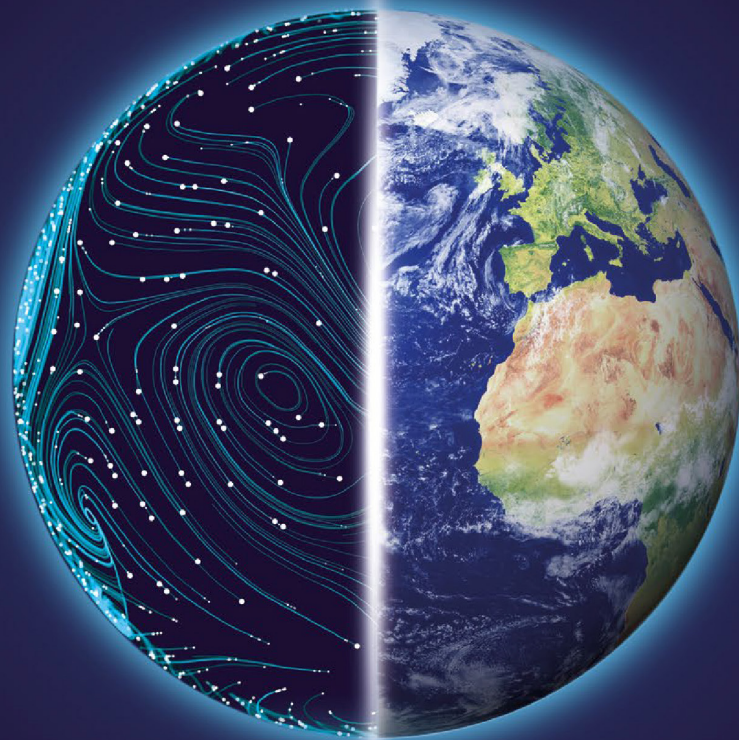# Hubgrade

by **VEOLIA**

**Where digital and AI
meet human expertise**

VEOLIA

Hubgrade

by ⊙ **VEOLIA**

Hubgrade is Veolia's unique range of digital services that provides data analytics, supervision, optimization and predictive systems for water, waste, energy and other environmental resources.

Using the power of data and the most advanced AI technologies trained with our worldwide operational expertise, we tailor solutions for your specific ecological transformation journey, whether it's decarbonization, depollution, or resource saving and regeneration.

Our experts collaborate with you remotely or from the Veolia Hubgrade Centers. Their expertise are augmented with digital services and AI to enhance, every day, your operations and to co-create innovation that fulfill your specific needs.

" In today's world, our customers face immense environmental challenges and often have to make rapid decisions on complex issues. Veolia Hubgrade, our new range of digital services combined with the global expertise of our environmental specialists, offers a unique response adapted to their challenges to accelerate their ecological transformation. "

Aude Giard, Group Digital Director Veolia

Join the
Hubgrade transformation

Are you ready to change the way you manage environmental resources?

With Hubgrade, innovation is your ally. Data and expertise converge to create solutions that inspire growth and sustainability.

Join us in shaping a world where environmental resource management is not just a necessity, it is a choice of performance and environmental protection.

10,000+
sites connected for municipalities, industry and commercial institutions

3000+
completed GHG emission studies

60+
Hubgrade Centers in 20 countries

More than
450
experts and data scientists

Ecological engagement and transparency for our clients
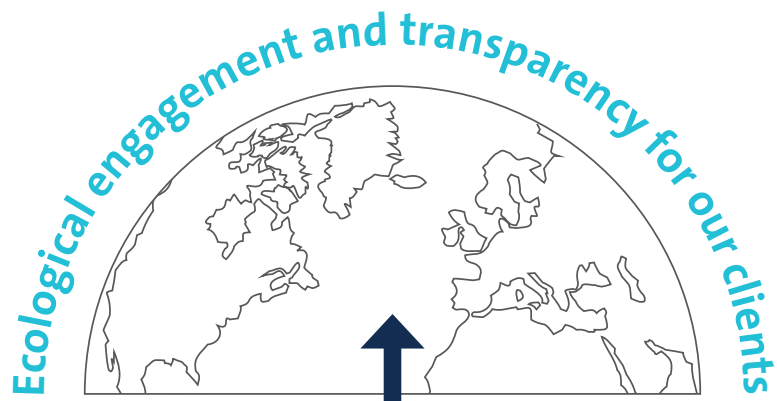
CONTROL
Optimise, Integrate
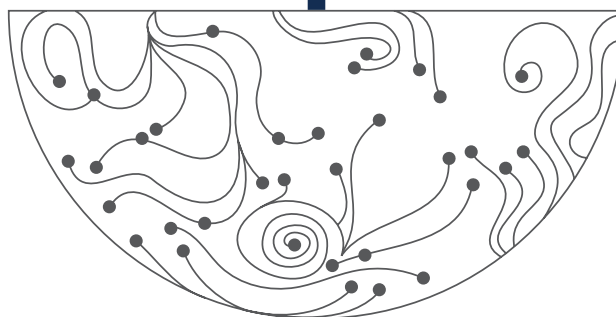
IMPACT
Use, Change, Reuse

ANALYSE
Data Visualisation, Machine Learning,
Predictive & Prescriptive Alerts

COLLECT
Connectivity, Data platform,
Data management

MEASURE
Building Management
System, IoT

Case studies

Waste separation automation

AI Waste quality

Municipal
FRANCE

Waste water plant optimisation

Coca-Cola

Industry
CANADA

CHALLENGE

French municipalities have to comply with norms regarding **the purity of waste streams**, otherwise they incur penalties on the non recoverable part of waste. The characterization of waste is **a time consuming, manual process,** that can only be done by sampling. This process is a huge risk management challenge for operations, since the complexity of waste mix is increasing and the safety of operators has to be ensured.

CHALLENGE

The Coca-Cola plant in Weston was **meeting non-compliance events due to the change in the wastewater quality**. The factory's production variation impacted the quality of the wastewater. Coca was facing difficulties maintaining the effluent's pH between 6 and 10.

SOLUTION

This solution has been implemented in one of France's most recent materials recovery facilities, in a city of over 250,000 inhabitants, and combines **AI recognition of waste flows with an end to end quality control.** With characterization reaching 90% on some flows, this innovation is helping the operators to cut down the risks and improving the recoverable part of waste.

SOLUTION

At the end of 2019, Coca-Cola implemented Hubgrade to provide them with a real-time overview of equipment, alarms and documentation of their plant. It enables them to be more informed and make faster and better decisions in order to optimize their facility. Hubgrade also gives them access to the support of Veolia Water Technologies's experts for: real-time monitoring, alarm management, swift resolutions…

BENEFITS

Veolia is able to:
• **respect** its contractual **commitments**
• be fully **compliant** with waste purity regulations,
• contribute to **increase the global part** of recoverable waste of cities.

BENEFITS

• Resolved technical issues on effluent and influent valves quickly thanks to Hubgrade data analytics module,
• Reduced non compliance events thanks to real time monitoring,
• Optimized water treatment operations and processes.

Building energy optimisation

Majid Al Futtaim

Commercial
MIDDLE EAST

CHALLENGE

Majid Al Futtaim is **the leading shopping malls, communities, retail and leisure pioneer** across the Middle East, Africa and Asia. Today, Majid Al Futtaim owns and operates 27 malls, welcoming over 178 million visitors annually.
In 2019, the company approved **the launch of an energy efficiency plan** at 15 of its malls across 5 countries: the United Arab Emirates, Oman, Bahrain, Lebanon and Egypt.

SOLUTION

In 2019, Enova by Veolia, a join venture by Majid Al Futtaim and Veolia, focused solely on energy efficiency measures that did not require investment. **The teams of Hubgrade, Enova's smart monitoring platform, and site operations** worked closely together to identify measures directed at optimizing the operation of existing systems.

BENEFITS

The energy reduction plan yielded significant savings during the first year:

- **8.2%** energy cost reduction,
- **8.7%** electricity cost reduction,
- **6.5%** water cost reduction,
- **12 million** AED savings.

Additionally, the project improved the malls' carbon footprint, by avoiding 20,974 tons of CO_2 emissions.

CONTACT-US

Our teams are at your disposal worldwide to help you

hubgrade.vna@veolia.com

Combining digitally enabled solutions with human expertise

Hubgrade encompasses a wide range of digital solutions for monitoring, evaluating, and optimizing facilities and infrastructure. Teams of industry experts operate our Hubgrade centers on behalf of municipal, industrial and commercial customers to ensure quality data, technology flexibility, and actionable data analysis. By combining real-time data, advanced analytics, and human expertise, Hubgrade creates new opportunities to manage and optimize water, energy, and waste systems.

Hubgrade digital solutions are designed to ensure a high level of end-to-end cybersecurity. We are mindful of the critical nature of your facilities and the emerging threats of cyberattacks. For this, we have designed our digital solutions with the highest level of end-to-end cybersecurity and in line with international security standards to ensure that your business is fully resilient.

Recent developments in the Internet of Things (IoT), cloud-based computing, and data science make it possible to capture more granular information on buildings, systems, and equipment. By collecting and analyzing data in realtime from our main assets, we help guide impactful business decisions.

The growing availability of digital tools requires expert knowledge on how to put data collection and analysis to use effectively. Human operators can harness data and advanced analytics to improve operational processes through actionable insights.

Optimizing the management of water, energy, and waste

Hubgrade serves local governments, businesses, and manufacturers by adding value through digitalization to improve facility operational processes such as:

- Enhancing utility invoice processing, budgeting and financial reporting
- Optimizing operations and maintenance for facilities, systems and assets
- Improving performance, efficiency optimization
- Managing sustainability projects and programs

- Managing regulatory and environmental compliance
- Enhancing security and safety on site
- Ensuring business continuity and stability of operations (anticipating crisis, preventing failures, shutdown, regulatory breaches)
- Reducing utility consumption and costs

Veolia North America is ready to help you implement Hubgrade smart digital solutions to monitor and improve your waste, water and energy operations.

Contact us to learn how we can put Hubgrade to work for you.

Scan here to learn more about **Veolia's Hubgrade digital solutions**

veolianorthamerica.com/about/innovation/ introducing-hubgrade-smart-digital-solutions