



VEOLIA  
INDUSTRIEDIENSTEN B.V.



Veolia Industriediensten B.V. is an all-round technical service provider in the industrial sector and part of Veolia Nederland B.V. An important activity is the conversion of energy. Veolia Industriediensten is able to assume total responsibility in this for supply, maintenance, optimization and servicing. Our package of services offers a wide range of possibilities that are of course entirely adapted to the wishes and needs of the installations- and the specific requirements of each client. Within Veolia, energy, water and waste recycling services are also provided to the building-related environment and city networks. In addition, Veolia is active in supplying recycled raw materials to industry.

" CUSTOMIZED SOLUTIONS FOR A SUSTAINABLE FUTURE"



**| WATER**

Managing, maintaining and optimizing the global water cycle. From the production and distribution of drinking water to the collection, treatment and recycling of wastewater.



**| WASTE**

Waste management, optimization and processing. Our expertise covers the entire life cycle of waste materials, from collection to recycling, leading to the recovery of waste as a renewable resource or energy.



**| ENERGY**

Optimization, management, maintenance and upkeep of industrial utilities. Whereby this expertise offers guaranteed efficiency and availability of the energy conversion installations.



"VEOLIA THINKS ABOUT THE CHALLENGES OF TODAY AND TOMORROW"



### Challenges:

- Operational reliability, availability and flexibility;
- Compliance with environmental legislation while meeting economic, social and environmental challenges;
- Increasing competitiveness and reducing operational costs;
- Improving energy efficiency;
- Applying new information technologies and digitalization;
- Reducing the impact of your activities on the environment and achieving sustainability goals.

**At industrial sites, Veolia Industriediensten provides a unique model of integrated services based on its multi-technical, and international knowledge and expertise.**

### What is our added value?

- A single point of contact for the management of our solutions, and guaranteed output;
- Full compliance with safety, quality and environmental regulations;
- Internal departments with technical and innovation skills that create value for the entire range of services;
- Optimization in the field of engineering;
- Advanced digitalization of services and organizations;
- Expertise in managing workforce transitions to ensure business continuity and saving knowledge.

## DESIGN & BUILD



- In collaboration with the client, our specialized technical teams work out a technical solution to cover the client's needs;
- Veolia is able to bring in local and international technical specialists for each discipline;
- Veolia always designs from a vision, taking into account the total operating costs;
- Efficiency improvements, environmental impact and total operating costs are prioritized in the design and construction of installations;
- Guaranteed smooth transition between construction and operation through Veolia's concept of integrating the construction phase and the operations team.



## OPERATIONS & MAINTENANCE



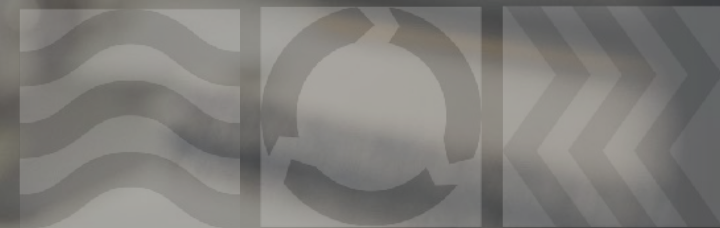
- Guaranteed efficiency and availability because Veolia has construction and management as core competencies;
- Guaranteed results with clear SLA/KPIs;
- Guaranteed return through supply of utilities based on volume compensation;
- Safety and regulations guaranteed under all circumstances;
- Management, maintenance and upkeep by applying asset management principles.



## FINANCE

- Opportunities to finance the installation through the utilization of energy performance contracts in order to enable our clients to invest faster to achieve their sustainability goals.

# PROJECT REFERENCES



## CHALLENGE

Construction of the utilities center of Danone Nutricia, with the main objective of low water and energy consumption, high availability and minimal emissions to the environment. This at the best possible Total Cost of Ownership.

## SOLUTION

**Design & construction of the utilities center for the guaranteed supply of:**

Steam and hot water, compressed air, ice and cooling water;  
Process and osmosis water;  
Nitrogen and CO<sup>2</sup>;  
Transportation of wastewater;  
HVAC, lighting and 10kV

## RESULTS

Operation -maintenance and continuation agreement:  
The term is 10 years with performance guarantees on energy returns, savings and availability of utilities.

Veolia is helping Danone reduce its environmental footprint at Nutricia's newest production site for infant formula. Veolia is ensuring the availability and optimal use of utilities thanks to its Hubgrade smart control center, which maximizes the reuse and recovery of water and heat. The project represents a new milestone in the global alliance between the 2 groups that began in 2016. It contributes to the "One Planet One Health" vision and Danone's "Zero carbon goal" for 2050.



## CHALLENGE

Renewal and optimization of the current utilities center with emphasis on energy-saving measures and optimal reuse of residual products.

## SOLUTION

- Testing of a pilot solution focused on new coffee grounds dewatering techniques;
- Retrofit of the entire coffee grounds processing facility;
- Expansion/automation of all existing and new installations;
- Development of new biomass boiler for coffee grounds for optimal reuse of residual products;
- Management of the WWTP and recovery of biogas from wastewater;
- Takeover process of the staff of the utilities center.

## RESULT

Energy performance contract for the duration of 13 years with responsibility for the entire management, maintenance and upkeep of the utilities center, WWTP, biogas recovery and Norton de-ironing installation.

Veolia helps Jacobs Douwe Egberts create value from its residual products (Spent Coffee Ground/coffee grounds and biogas) by converting them into steam in a circular manner. In addition, Veolia guarantees a fixed cost basis of utilities, occupancy and contributes to achieving energy savings from the generation of utilities.



## CHALLENGE

Limited availability of utilities expertise among the clients' employees.

## SOLUTION

- A Veolia team to provide on-site technical support in the operation and maintenance of utilities during business hours;
- Operation and maintenance of the boiler house, drinking and recirculating water systems, nitrogen plant, compressed air plant, WWTP and emergency power generators;
- 24/7 on-call service for malfunctions in the utilities center;
- Operational support for day-to-day maintenance, including checking and monitoring plant operations; as well as periodic maintenance;
- Operational support with troubleshooting to restore the facilities to working order within the shortest possible time.

## RESULT

Veolia is helping the client to quickly respond with any unforeseen fluctuations in daily operations. With a full view on utilities operations, we find solutions on the spot with the client to handle drastic changes in energy use or wastewater produced. Our commitment is to ensure that production will not be negatively impacted by bottlenecks in utilities and wastewater and to comply with safety and environmental regulations that are applicable on site.

LARGE PHARMACEUTICAL CLIENT

NETHERLANDS





## REMOTE CONTROL & HUBGRADE

### Remote management & guaranteed availability

Veolia can manage its installation(s) for the client in such a way that the assets are continuously monitored, supervised and adjusted so that the assets deliver what they are designed to do. The client receives reports on this in which agreed KPIs are included and set off against actual performance. In case of malfunctions, Veolia will take care of the follow-up, both during and outside office hours.

### 24/7 monitoring and remote control

Veolia can provide 24/7 monitoring and remote control through a connection with two centralized control rooms. These control rooms have a real-time connection to our clients' Plant(s). This allows our clients to achieve an efficient deployment of employees for the utilities center.

### Hubgrade

Hubgrade is a unique service, with a focus on energy intelligence. It relies on a collaboration between a digital platform and a human network of specialists. Hubgrade consists mainly of a platform specifically developed and equipped with a management system for collecting and analyzing energy data and of a team of experts specialized in energy savings. Hubgrade allows for 5 to 15% additional energy savings in relation to existing energy efficiency services on the market.



Hubgrade  
by VEOLIA

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## FLEXCITY BY VEOLIA

Imbalance in the grid may occur. This requires re-balancing through flexibility. The opportunity lies in making power available for up- or downstream generation. By participating in network balancing, our customers benefit from additional income through the use of the flexibility of the electrical installations available in their production environment. By doing so, the customer supports the electricity grid and contributes to the reduction of the greenhouse effect by enabling fluctuating renewable energies such as wind and solar power.

### **Electrification of boilers**

In order to achieve the 2030 climate targets, industry is expected to make their energy supply more sustainable by reducing fossil fuel needs. Veolia can help you with this by reducing part of this need through electrification. Currently electrification of e.g. heat/steam generation is only feasible with the help of subsidies. Veolia has developed a way to make electrification also feasible when no subsidy is available, for example for an installation < 5 MW electrical capacity or at a temperature lower than 100°C.

By using Flexcity, a 100% Veolia company, we have the possibility to capitalize on the imbalance market and thus still obtain a feasible case without subsidy. And, to make a case where subsidy can be applied, even better!

# Igniting the clean fuel revolution



CO<sub>2</sub>-free



Circular



Compact



Industry ready



Safe



Storable



Transportable

## IRON FUEL TECHNOLOGY

Iron fuel offers a sustainable fuel for energy intensive industries for which no feasible and attractive solutions exist yet. Iron fuel enables industries to meet their sustainability goals by restricting their emissions. Iron fuel is applicable in various applications:

### District heating

District heating for the supply of hot water for residential, public and business purposes. Iron fuel is applicable for water networks at 90 as well as 120 °C.

### Industrial processes

Production of heat used as a utility in for example the food & beverage, pulp & paper, chemical and petrochemical industries. Iron fuel can be used to produce saturated steam (180 to 300 °C), super-heated steam (380 to 640 °C) and direct heat without product contact (100 to 1000 °C).

## CONTACTDETAILS

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