

ENSURE OPERATIONAL EXCELLENCE

We provide service with quality, meeting expectations of our clients and professional colleagues, seeking efficient and innovative solutions, as well as continuous improvement.

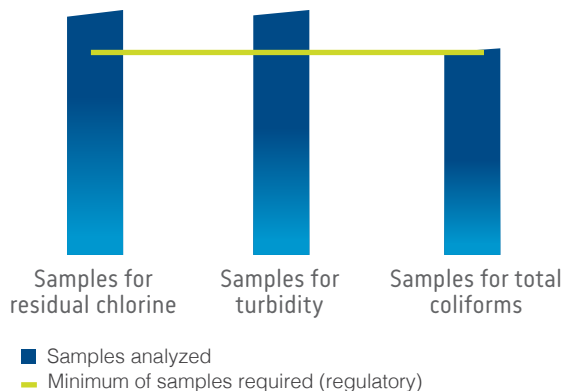


QUALITY of service

In all our units, we have tools and processes that guarantee our commitment to the quality of the water supplied to customers and the treatment of the effluents collected. The management system we adopt includes procedures and training for compliance with all parameters required by the Ministry of Health, the Sanitary Surveillance and the National Environmental Council, in addition to state and municipal regulations in each location.

Laboratory testing and analysis are part of this set of initiatives aimed at protecting the health of customers. The results obtained are disclosed monthly on the invoices themselves and inform the population about aspects such as turbidity, chlorine quantity, pH, total coliforms and other items evaluated.

WATER QUALITY ANALYSIS



**100% of bills
INFORM OUR CUSTOMERS
ABOUT THE QUALITY STANDARDS
OF THE WATER SUPPLIED**

BRK
Ambiental

Our management system also evaluates the effectiveness of sewage treatment systems and compliance with the parameters established by legislation. Structured in 2019, the Effluent Monitoring Program allows the analysis of the quality of the effluents discharged and the assurance that there are no significant changes or impacts on water bodies.

Our investments are directed to continuously expand the collection network in the municipalities where we operate and the treatment of effluents.

Each year, the volume of discharges has increased, which demonstrates the effectiveness of the expansion of sanitation services in our units.

Also in this sense, the Sewage Spill Management Program is one of the main initiatives carried out in 2019 with a focus on improving the quality of services. We conduct a diagnosis of all our operations to detect the places where maintenance and prevention actions will be most effective, carrying out interventions to reinforce the reliability of the systems.

All the care in the treatment and disposal of effluents collected by our network or coming directly from our operations avoids negative impacts to biodiversity



SPC: Tocantins

Actions to reduce water losses



Technology, investments and innovation have become our allies to reduce losses in water distribution, one of the greatest challenges for the sector in Brazil. According to studies by Instituto Trata Brasil, the country wastes 38.3% of all water collected, treated and ready to be distributed.

To be increasingly more efficient, we started the project Conheça seu DMC (Meet your Measurement and Control District – DMC), based on an international methodology of sectorization of our concession areas and continuous monitoring of supply. The project consists of the installation of macrometers along the network, which separate the concession area into sub-regions. This equipment allows for controlling the amount of water sent to a specific set of neighborhoods. By comparing

this quantity with the actual consumption of the customers measured in the individual hydrometers, we have the most accurate record of losses in the region. The continuous monitoring and daily checks of this model allow us more agility for decision making, avoiding more significant interruptions in supply.

At night, when water consumption is lower, we follow the water balance of the regions to identify changes in values that indicate possible leaks. Then we perform a network test (the Step Test) to identify the places where corrective actions are needed.

Together with these initiatives, we are installing equipment at strategic points in the network to equalize water pressure and avoid possible disruption of the distribution network.

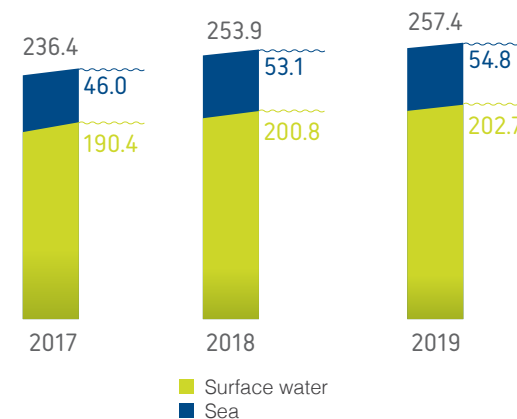
Among the actions already being implemented is the installation of emergency generators to maintain the operation of the systems even in the event of a power outage, one of the main causes of spills. We have also structured guidelines for environmental education programs, which guide the population on the correct disposal of solid waste and the proper use of the collection networks, in order to avoid obstruction of structures and possible incidents.

One of the results of the program is the construction of a database with accurate information and a standardized record of spillages, which subsidizes the definition of indicators, monitoring plans and the definition of future goals. Each unit is also defining individual action plans, such as initiatives to be executed in the short, medium and long term.

3.4 billion
liters saved by the
recovery initiatives in 2019,
enough to supply a city of
60,000 inhabitants in
the same period



EFFLUENT DISCHARGE (MILLION M³)



Innovation in **SANITATION**

Our units have an infrastructure planned to operate for long periods of time and with maximum efficiency, taking into account the long term contracts signed for water supply and effluent treatment. More than the planned maintenance and expansion works, innovation is an integral part of the project for continuous improvement and transformation of the quality of life in the municipalities we serve.

Research and the incorporation of new technologies in treatment plants have the potential to reduce the need for physical space for these structures, the use of chemicals and electrical energy and to automate the processes, reducing the risks of failures and human errors in the operation.

Our company was a pioneer in bringing to Brazil the Nereda® technology, developed and patented in the Netherlands. This system supports the use of a type of biomass that is structured in granules during the treatment of effluents, instead of the flakes that occur in traditional processes. Thus, the sedimentation of organic matter is faster and does not require the addition of chemicals or decanting units. Currently, two Sewage Treatment Plants (STPs) are already equipped with this solution.

Another research we are conducting in our units is a change in the way sludge is disposed of, the largest waste generated from the treatment of effluents. Our goal is to find mechanisms for drying this material, which is composed of approximately 80% water. With higher concentrations of solids, the sludge can be transformed into a substrate for agricultural fertilizers, for example.

SPC: Recife



Energy consumption for the operation of networks and systems is also a relevant impact of our business model. The increasing use of renewable sources and self-generation through photovoltaic plants are options we evaluate to make our operation even more environmentally sustainable. In this context, in 2020 we started the first partnership for solar energy in Maranhão state.

The definition of new technological routes for effluent treatment is part of our strategy and has been conducted in a structured manner in the company, involving multidisciplinary teams of innovation, engineering and operations. Different data and variables are considered when choosing these solutions, including the efficiency and operational costs involved, to ensure compatibility between the improvements and the planning outlined for the evolution of each unit.

In 2019, the share of renewable fuels among our energy inputs grew by 49%, driven by the substitution of gasoline by the use of ethanol in the vehicle fleet and by the reduction in LPG consumption



Innovation laboratories



Our company has been supporting WILBrasil – Water Innovation Labs for three years, a program aimed at engaging young people around new and disruptive solutions for water security and sanitation universalization. Coordinated by the Canadian NGO Waterlution, the 2019 edition was held in the city of Recife (Pernambuco).

With a different approach from previous years, WILBrasil promoted the immersion of 50 young people during one week and presented the creation of solutions to water problems in Brazil as a challenge. With the facilitation and support of more than 30 specialized mentors, nine innovation projects were created and three of them will be supported with the provision of seed resources to begin prototyping.

In 2020, WILBrasil will continue to monitor the three promoted innovations and encourage more young people to become involved in the national and international network of new water leaders.

The projects to be supported are:

Ajusta Água: creation of an automated system for cadastral update and reduction of losses in water supply systems through georeferencing.

Relodo: use of waste sludge from STPs to create pellets for use in textile industry boilers and thus reduce the volume sent to landfills and operating costs.

Oxente, Água É da Gente: inclusive education to improve water reuse in agriculture in semi-arid communities through gamification.

