



## Environment

# THE BOUS WASTEWATER TREATMENT PLANT

IN SEPTEMBER 2020, THE WASTEWATER TREATMENT PLANT IN BOUS, IN THE GRAND DUCHY OF LUXEMBOURG, TREATED WASTEWATER FOR THE FIRST TIME IN ITS NEW FACILITIES. A REFURBISHED PLANT IN WHICH THE ELECTROMECHANICAL PROCESS WAS INSTALLED BY THE JOINT VENTURE FORMED BY LUX TP AND BESIX ENVIRONMENT.

### IMPROVING PRODUCTION CAPACITY AND QUALITY OF TREATED WATER IN LUXEMBOURG

"The treatment capacity was increased to treat wastewater of about 5,000 population equivalent, compared with 2,000 before the works. And we've improved its quality of treatment to comply with the European environmental norms", says Alain Dostert, Managing Director of Lux TP.

The 3.6 million euros contract, awarded in 2019 by SIDEST, aimed to upgrade the process and electromechanical equipment of the plant. This comprised the installation of the treatment process from A to Z.



WASTEWATER TREATMENT PLANT, BOUS, LUXEMBOURG

"The first stage of the project was to prepare it meticulously. Based on the plans and the process required by the client, we carried out the detailed engineering of the project, which allowed the team led by Manuel Hartmann to determine with the greatest precision all the equipment assembly, draw up the technical sheets and follow the orders up to the installation", says Adrien Theunissen, Senior Manager BESIX Environment. Precise phasing also had to be coordinated with the client and the civil contractor, as the plant had to remain in operation at all times, which the teams of Lux TP and BESIX Environment remarkably respected throughout the works.

Once the new equipment was installed, the tests continued during the last months of 2020 without the slightest hitch. The final equipment has been installed at the beginning of 2021 to allow complete delivery in the second quarter of the year.

### WASTEWATER, A BUOYANT SECTOR

Over the past three years, BESIX Environment and Lux TP have won six contracts for the construction and rehabilitation of electromechanical systems of wastewater treatment plants in Luxembourg. Contracts of ever-increasing importance, while new ones are expected to follow in the coming years.

At least two reasons explain the vitality of the Luxembourg market in this field. There are about 200 wastewater treatment plants in the country, many of which were built decades ago while the population continues to grow steadily. This is a first reason for extensions or rehabilitations. "In many cases, current technologies make it possible to improve their performance, both in terms of production capacity and water quality. This is what we do", explains Adrien Theunissen.

The second reason is linked to the North Sea, into which the rivers of the Benelux region flow. Their waters carry with them the wastewater, discharged after treatment. These have contributed to an ecological imbalance in the sea, known as eutrophication. The European Union made it a 'sensitive area' and called on countries to improve the quality of treated water.

All this has contributed to a strong-willed policy in Luxembourg to improve the country's existing plants.



### // Mamer: the latest contract

The Mamer wastewater treatment plant, a 19 million euros project, is the sixth contract won by Lux TP and BESIX Environment. Awarded by Sidero in 2020, it will double the treatment capacity, from 23,500 to 50,000 population equivalent.

In addition to the modernisation of the electromechanical installations, the project includes the installation of a sewage sludge treatment and biogas production unit, enabling the plant to produce part of its electricity needs.

The companies are also responsible for the coordination of the parties involved on the site, including the civil and temporary works.

### JOINING FORCES

Today, the Lux TP - BESIX Environment team is one of the main players on the market. And yet, not so long ago, this was far from being the case. Before 2018, Lux TP was not active in the water electromechanical field, but the company had a thorough knowledge of the Luxembourg market. "BESIX Environment brought us the electromechanical expertise we didn't have. Our 'one-stop shop' capabilities are one of the strengths of BESIX Group. There are a lot of skills available within the group, and by combining them, we conquer new markets", says Alain Dostert.

The treatment of wastewater in Luxembourg is a textbook case of this. The local BESIX Environment - Lux TP team is itself completed by the stainless steel welding experts of Lux TP subsidiary Mabilux, which specialises in the manufacture and assembly of metal structures.

"We continue to bid for new contracts. The organisation of the project is taking profit of the first experiences and start now to be fine-tuned and standardised. It is turning into a rolling business!" concludes Adrien Theunissen.