



Triple-T specializes in delivering simple, economical "fit and forget" biological wastewater treatment solutions. We address water scarcity and make un-useable water valuable through sustainable game-changing technologies, a "can do" approach, genuine care and drive. Triple-T enables municipalities, decentralized communities and agricultural customers transform wastewater treatment from a liability into an asset. By minimizing OPEX, maximizing tangible resources, and reducing eco-footprint – the company offers affordable clean water autonomy together with ultimate peace of mind.

TAYA TECHNOLOGY - SMART SIMPLICITY

TAYA is a patented biological wastewater treatment technology using atmospheric oxygen via a fixed film attached growth bacteria process and an aerobic-anoxic reactor with passive aeration, It's novel design combines the benefits of high quality effluent from intensive technologies with simple operation of extensive technologies. This enables us to deliver solutions that maximize efficiency, while minimizing sludge, energy consumption and professional labor requirements. TAYA outperforms conventional wastewater treatment technologies, offering extremely low OPEX, for increased savings and growth.

A SUSTAINABLE WASTEWATER OFFERING

We combine in-depth process know how and broad industry experience, to deliver modular and turnkey wastewater treatment solutions for a range of customers worldwide.

TAYA ECO FOR MUNICIPAL DECENTRALIZED COMMUNITIES

TAYA ECO - 5,000 M³/DAY

TAYA ECO is a proven patented technology, delivering superior results at the lowest based on operational costs available. The size of each system is calculated to allow starvation of the bacteria, creating minimum secondary sludge in the process. With TAYA ECO, customers benefit from ease of operation, low energy consumption, biomass production and minimal labor, resulting in significant cost savings. TAYA ECO can be operated via solar panels as a self-generator in order to reduce energy consumption even more, enabling truly autonomous water treatment. Each unit of 1000 m³ provides water for 5000 people in remote areas. TAYA ECO is modular and can contain up to 50 units.

TAYA GO - UP TO 100 M3/DAY

A WASTEWATER REUSE FACILITY IN JUST 2 WEEKS!

TAYA GO is a unique, prefabricated wastewater treatment solution ideal for small decentralized communities. The plant equipment for TAYA GO is shipped containerized, enabling simple and rapid set up. While it takes only 2 weeks to complete the onsite facility construction, the wastewater flow can be started immediately. With minimal equipment, labor, energy and sludge handling, this trouble-free solution enables customers to obtain high-quality clean water with lower costs and eco-footprint - resulting in huge savings.

BENEFITS

Near Zero Sludge: Once every 8 years sludge removal

80% Energy Savings: 0.17kwh/m³

Minimal Maintenance: once a week by a nonskilled operator

High-Quality Effluent: 90% Reduction of BOD, COD and N-NH4 levels

80% OPEX SAVINGS

TAYA GROW FOR AGRICULTURE

TAYA GROW - 500-1000 M3/DAY

TAYA for agricultural wastewater treatment in animal farms such as poultry farms and piggeries addresses the main challenge in the industry: spreading the fertilizer on limited landscape in line with local regulations, resulting in either slurry evacuation to countries with poor nutrient levels or renting land for spreading the manure – both incurring high costs. Our solution is designed to treat heavy organic loads with high levels of Total Nitrogen and Ammonia (up to 5,000 ppm). With TAYA GROW, we treat the manure to the exact permitted level, enabling the farmer to spread the manure, eliminating the need, to dispose the slurry, while saving costs and maintaining the required fertilizer for increased productivity. TAYA Grow is designed to reduce TN as the main focus, yet sharply decreasing BOD, COD, and TSS concentrations in parallel.

60% OPEX SAVINGS

85% ENERGY SAVINGS

50% SLUDGE & LABOR REDUCTION

PROJECT HIGHLIGHTS

WATER REUSE AUTONOMY WITH MAXIMUM SAVINGS AND MINIMUM RESOURCES



Customer Menashe Council

Project Type
Municipal & Industrial
Wastewater Treatment

Capacity 3,500 m³/day

In 2011, the Menashe council decided to upgrade an existing Wastewater Treatment Plant (WWTP) and selected Triple-T to execute the project in order to comply with new environmental regulations requiring improved effluent quality for irrigation. The TAYA technology was chosen due to the low lifetime costs. The project resulted in high performance, 80% energy savings, sludge minimization and operational simplicity, with annual cost savings of hundreds of thousands of dollars.

SECURING THE FUTURE OF SMALL COMMUNITIES VIA SMART WATER REUSE



Customer
Town of Bennett, CO, USA

Project Type
Municipal Wastewater
Treatment

Capacity 27 m³/d

The Town of Bennett needed to provide affordable water for self-irrigation, while expanding eastward and required a simple and cost-effective solution for wastewater reuse. TAYA ECO's robust design, minimal electro-mechanical equipment and automated control features allow it to operate without a professional dedicated laborer. Since its commissioning in Bennett, the TAYA solution is recording impressive results compared to conventional treatment, even in cold weather, far exceeding the requirements of the Colorado Department of Public Health and Environment (CDPHE).

CONVERTING WASTEWATER TO CLEAN WATER FOR PARK IRRIGATION



Customer Ramon Airforce Base, Negev, Israel

Project type Municipal Wastewater Treatment

Capacity 800 m³/day

The park at the Ramon Airforce base in the Negev desert in Israel is irrigated with effluent from the wastewater treatment plant, based on the proprietary, game-changing TAYA technology. The plant has been operational for the last 8 years, serving as a model for a decentralized, cost-effective wastewater treatment solution, while achieving very high effluent quality. It was granted public gardening irrigation approval by the Ministry of Health (MoH) as a clear vote of confidence in its high-quality water treatment. The plant has already produced 1.44 million cubic meters of high-quality potable water. By reducing the plant footprint and lowering OPEX costs, this has led to huge savings for the IAF and the Government of Israel.



WATER VALUE CREATORS

A member of the WFI Group, Israel-based Triple-T delivers novel biological wastewater treatment solutions, including reuse, for the global community. The company is led by a team of senior water experts with profound know-how and over 25 years of experience, who are driven by genuine care and drive to solve wastewater treatment challenges in the most creative and economical way. Based on the circular economy concept and our proprietary game-changing TAYA technology, we deliver fast, dynamic and flexible turn-key and self-setup solutions, reducing maintenance, energy consumption and sludge-handling costs. This results in minimal OPEX and ecological footprint, enhancing your organization's positioning as eco-responsible. Our proven track record spans a variety of customers worldwide including councils, decentralized communities, agricultural farms and plants as well as tourist sites.

