

WATER

ABB Vertical Solution for the Wastewater Industry

Enhancing your plant operations



- Augmented visibility and control across key plant processes
- Streamlined engineering workflow
- Scalable and flexible solution
- Simulation environment for training and test

For more than 50 years, we have helped the water and wastewater industry with integrated automation, electrical instrumentation and digital solutions. Hundreds of utilities and single operators around the world have chosen ABB to perform safely, effectively and sustainably.

Introduction

A change in the paradigm

The strong need to preserve fresh water for human use and to relieve water-stressed areas from chronic scarcity have brought the huge potential of water reuse under the spotlight.

In this new scenario, wastewater plants continue their pivotal contribution to environmental protection and see the bar of the complexity they need to handle raise even more.

A new solution, crafted for wastewater operators

When it comes to wastewater treatment, the technology to make these plants efficient and sustainable presents substantial differences from all the other water segments and must be specifically designed to it.

For this reason, ABB has designed its new solution together with key operators and experts, blending field-proven ABB automation, instrumentation, and control with dedicated add-ons that help customers deal successfully with their most pressing challenges:

- Increased level of automation and control for enhanced plant performance
- Security and stringent government regulations
- System capacity expansion and need for equipment flexibility
- Aged technology to be replaced
- Water quality standards

ABB vertical solution for waste-water or sewage treatment plants combines in a single harmonized offering all the necessary building blocks to manage plant's key processes:

- Control (PLCs, RTUs)
- Automation with high-performance graphics and dedicated libraries
- Simulation and training
- Key performance indicator (KPI) dashboards
- Field instrumentation and devices coordination

The integrated engineering tool ensures a substantial reduction of the configuration effort, while the platform capability to interface with many third-party field devices and technologies, as well as ABB's products and systems, ensures the right level of flexibility that today is required.



3.9%

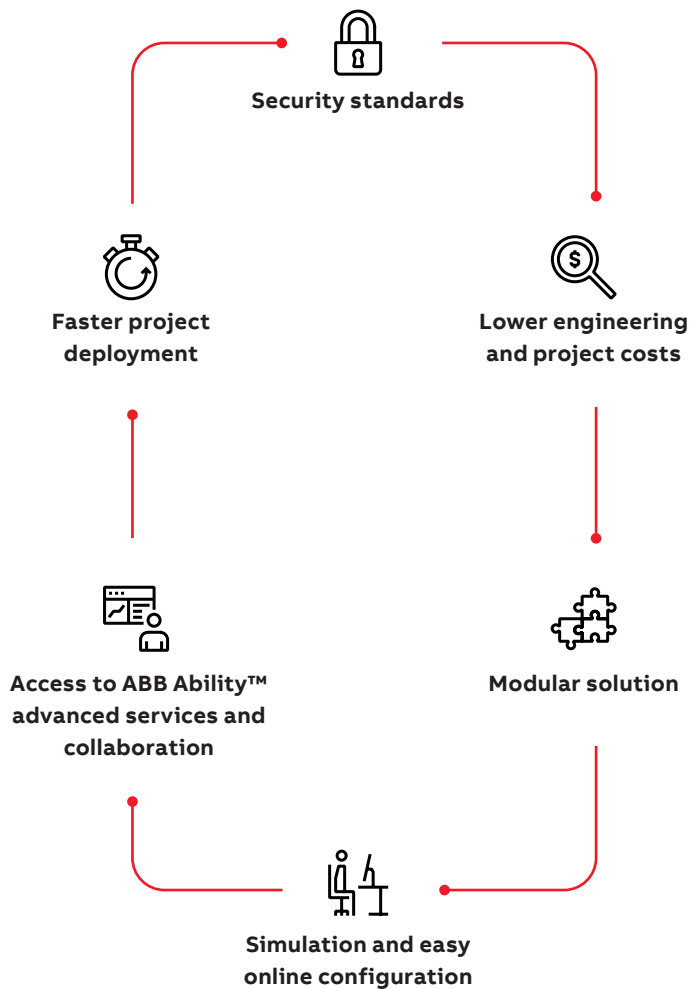
compound annual growth rate (CAGR) of estimated investments by 2025 for the municipal wastewater treatment segment



2%

of the world's total energy consumption is used to collect and treat wastewater

Keystones of the solution



Modularity

ABB solution for wastewater modular approach offers the possibility to start the journey from any point. The building blocks of the solution can be mixed and chosen depending on what is already available on site or deployed in phases to meet the diverse investment capabilities.

Flexibility

By being able to combine ABB and third-party elements, this solution provides you with the freedom to reuse your existing equipment.

Security

ABB hardware and software are always compliant with the highest security standards.

Fast deployment

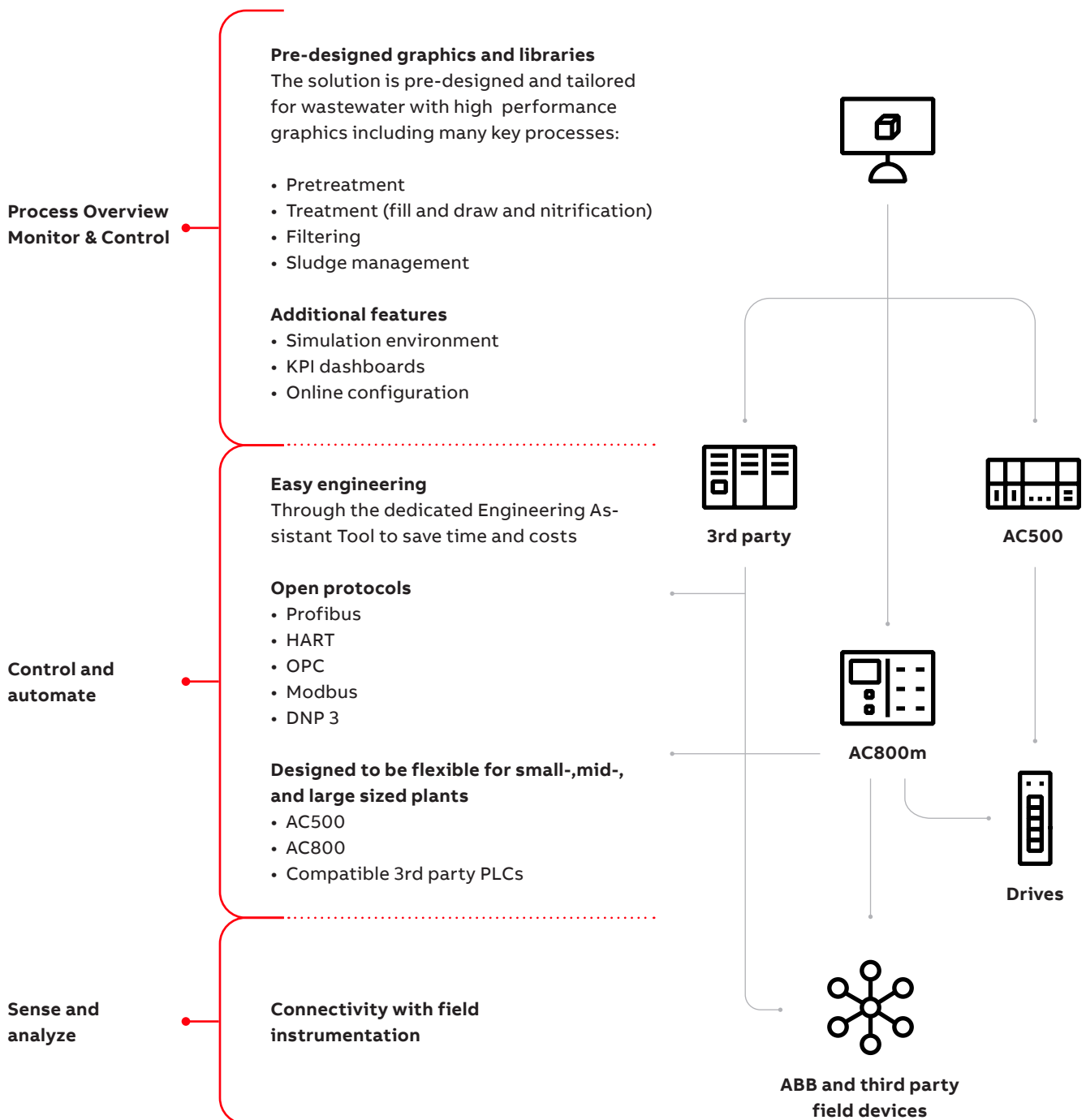
The embedded configuration tools reduce substantially the engineering effort. Through the human machine interface (HMI), using solutions template, you can quickly add or remove some assets with no need to reengineer.

Simulation

The simulation environment enables to explore how each plant reacts to different scenarios without impacting on it. Through the simulator, you'll be able to generate alarms, change the number of assets, change processes, and proceed with test before implementation.

Vertical architecture

The concept of the ABB solution for wastewater overcomes the traditional boundaries of automation by combining all layers in the plant with pre-configurations that work best for the specific wastewater engineering and operational needs



Values, knowledge, and experience

Why ABB

- Safety and security as underlying value for technology and projects
- Innovation with continuity
- Global presence to support with project execution and upgrades
- World-class products.

More than 50 years in the business

- Extended capability with field-proven applications
- Expertise in integrated systems for water segments
- Large installed base with leading utilities worldwide
- Evolution and integration of automation systems
- ABB Service centers, including remote support 24/7 with collaborative operation centers globally available.





—

ABB Energy Industries
new.abb.com/contact/form

new.abb.com/water