



DHI MARKET AREA: URBAN WATER

# WATER AND WASTEWATER TREATMENT

## Contending with rapid urbanisation and stricter environmental regulations

Water and wastewater treatment consumes the majority of the energy in water utilities — often because the plants are operated in a less than optimal manner. With up-to-date technology, control parameters aligned with discharge standards and optimised operations, 50% of the energy can be saved. Less energy consumption also means a lower CO<sub>2</sub> footprint, reduced use of chemicals and better effluent quality, thereby lessening the impact on the environment significantly.

Making such improvements to water and wastewater treatment plants is not an option anymore. Effective and efficient treatment has become a necessity, in order to meet the growing needs of rapid urbanisation and climate change. It's also required to meet the increasingly strict environmental regulations.

- THE CHALLENGES**
- Meeting the needs of the growing population
  - Optimising limited treatment capacity
  - Alleviating environment impacts to comply with current environmental regulations
  - Reducing CO<sub>2</sub> footprint

**OUR APPROACH** At DHI, we have the scientific and technical knowledge to support you. We have vast experience in water and wastewater treatment plant optimisation. We can help you improve your treatment processes and optimise your operations. Our goal: get the most out of your treatment capacity with reduced energy expenditure. We also have the requisite tools for accurate monitoring and control, as well as integrated data management and analysis to support your decisions. Moreover, as the expert in water environments, we have the solutions to help you meet environmental regulations as well.

- OUR SOLUTIONS**
- Improved treatment efficiency
  - Energy audits
  - Real-time monitoring
  - Data integration and management
  - Real-time control and optimisation
  - Integrated control of sewer networks and Waste Water Treatment Plants (WWTP)

**THE ULTIMATE GOAL** EFFECTIVE AND EFFICIENT WATER AND WASTEWATER TREATMENT

# Well operated wastewater treatment plants can be energy-neutral or even **energy producers**



## OUR TOOLS AND SERVICES

We can provide you with everything you need to optimise your water and wastewater treatment processes and operations. Our tools and services include:

- WEST (dynamic modelling and simulation of wastewater treatment plants – a MIKE Powered by DHI software)
- DIMS.CORE (data integration and business processes)
- Computational Fluid Dynamics (CFD) modelling of treatment tanks
- on-line sensors
- real-time monitoring
- capacity building and training by THE ACADEMY by DHI

Contact us: [info@dhigroup.com](mailto:info@dhigroup.com)  
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