



URBAN WATER

Urbanisation – the challenge of the century

By 2050, the world is expected to have an urban population of over 6.4 billion – a sizeable challenge for urban water management. Infrastructure networks are expanding as we speak. Moreover, the impacts of climate change are inescapably dramatic in densely populated urban areas. Consequently, it has become crucial to manage water environments efficiently within cities – today and in the future. With our generalised and customised Integrated Urban Water Management solutions and software, we make this possible for you.

THE CHALLENGES

- Meeting the increased demand for drinking water
- Alleviating the greater threats to water quality
- Increasing efficiency and reliability in water distribution
- Reducing waste of energy and resources in treatment plant operations
- Improving storm water and wastewater networks
- Coping with higher flooding risks and greater adverse effects
- Adapting to the impacts of climate change on urban waters

OUR APPROACH

At DHI, we adopt a holistic approach to urban water management. Our solutions are tailor-made to our clients' specific requirements. At the same time, we work at building our clients' capacities to handle water-related urban issues. We empower them not only with solutions, but also with the requisite training to be able to manage their unique problems independently and sustainably.

OUR SOLUTIONS

Our solutions combine state-of-the-art technology and time-tested methodologies to ensure that our clients' specific requirements and challenges are met (forecasting and monitoring services and MIKE Powered by DHI software). Our solutions focus on planning, design and operation of urban infrastructure, to manage city water better.

THE ULTIMATE GOAL

ENHANCED SUSTAINABILITY, INCREASED SAFETY AND REDUCED COSTS

OUR EXPERTISE

DRINKING WATER

To ensure safe and reliable water supply, we offer services for:

- master planning and improving system performance
- Non-Revenue Water and leakage management
- water safety and security planning
- regional water supply
- improving intermittent water supply systems

WASTEWATER AND STORM WATER

To enable safe and reliable water management — from source to treatment, we provide:

- master planning and improving system performance
- wet weather control planning and optimisation
- storm water management and urban flood control
- low impact development planning and analysis

WATER AND WASTEWATER TREATMENT

To achieve efficient and effective treatment, we support you in:

- water and wastewater treatment analysis
- design and optimisation of treatment processes
- improvement of sludge management
- increasing energy savings

RECREATIONAL WATER

To strike a balance between all urban uses of water, we facilitate:

- health risks and safety planning
- climate change adaptation
- recreational and bathing water quality forecasting
- water quality impact assessment
- waterfront design and management

DATA COLLECTION AND MONITORING

To provide reliable information for management and planning, we help you in:

- flow monitoring and analysis
- water quality monitoring and analysis
- weather radar installation and forecasting

WATER AND HEALTH

To ensure the safety of water use and related products, we offer services for:

- dynamic risk modelling
- sustainable solutions for urban water cycle
- risk management and water safety planning
- toxicology and risk assessment

“ By 2050, over **6 billion people** are expected to live in urban areas

CASE STORIES



Aarhus – Denmark's second-largest city and principal port – faced a serious need to increase its wastewater treatment efficiency and capacity. We were able to provide a cost-efficient fix that could be easily maintained by Aarhus Water's own staff. The result? Annual savings of EUR 701,000, a reduced CO2 footprint and optimised capacity.



Gold Coast is growing, and so is its need to release excess recycled water from its wastewater treatment plants. We optimised the timing of recycled water release into the waterway while improving water quality and minimising operational costs. New infrastructure investments worth AUD 60 million were deferred!



With our help, the city of Copenhagen succeeded in providing locals and visitors a recreational bathing area in the very heart of the city. Our solution – dynamic models, early detection of pollution threats and reliable forecasts of water quality. With the new, safe and well-managed recreational water area in place, the inflow of tourists into Copenhagen is bound to increase.

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For more information, visit: www.dhigroup.com