



## Performance improvement in water cycle management

In our peer-to-peer partnerships, we work towards sustainable water services for all







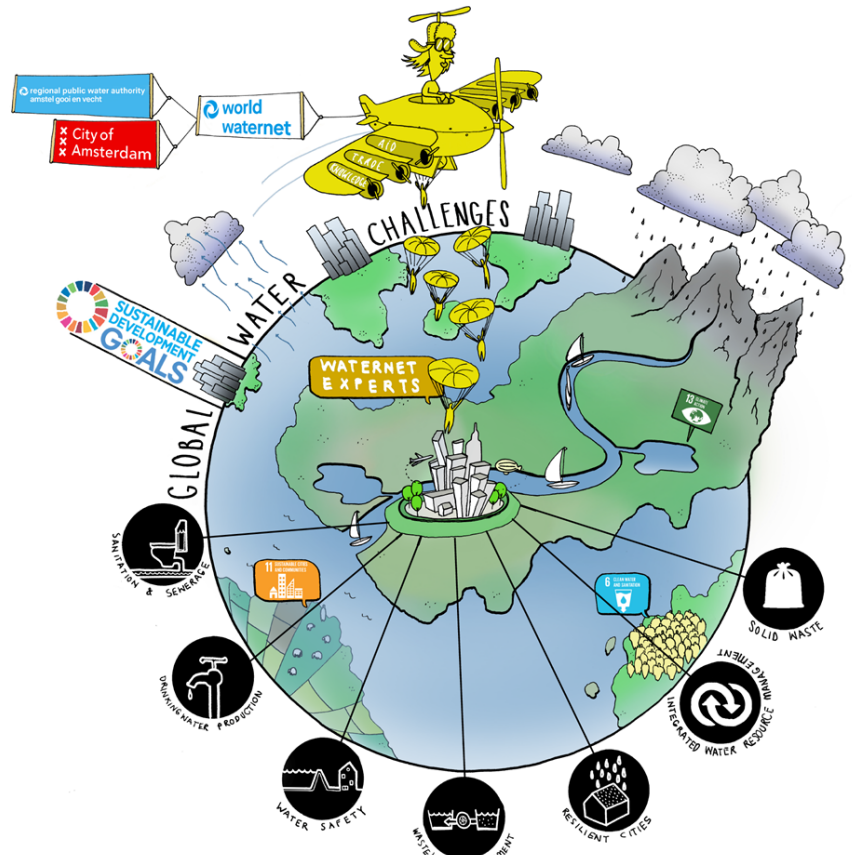
## Vision

Sustainable access to **clean, sufficient and safe water for all**, through performance improvement in water cycle management.



## Mission

World Waternet works with Waternet experts to **support public water organisations all over the world**.

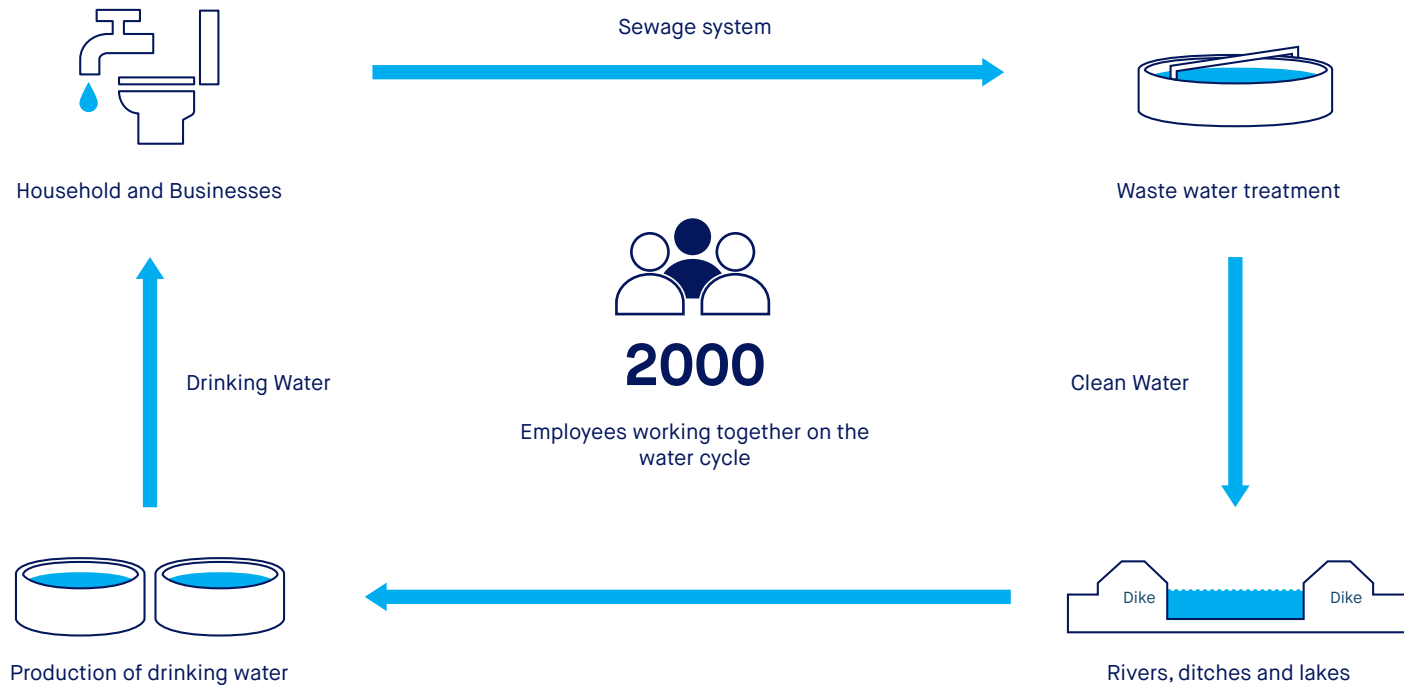


# Waternet is the Amsterdam public water organisation

We provide water services to 1.3 million people in an urban delta area, on behalf of the City of Amsterdam and the Regional Public Water Authority.



# Waternet is the only water organisation in the Netherlands that covers the entire water cycle



# An integrated water cycle approach has many benefits



**80%** of customers are happy with our services



Average **90M** cubic meters per annum drinking water production



**3-5%** non revenue water



**€ 1.58 per m<sup>3</sup>** drinking water tariff

**12**

Waste water treatment plants

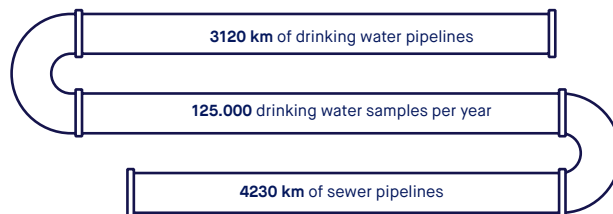


Active stewardship of thousands of hectares of nature areas

**373**  
Million euros annual turnover



**501.450**  
drinking water connections



**A 4 person household in 2020 has to pay**

Water management levy: **€113**

Waste water treatment levy: **€162**

Drinking water charge: **€198**

Sewage levy: **€131**

**Annual water bill: €604**

= total cost recovery  
= 2% of average annual income

# Our unique water cycle management expertise



## Climate adaptation

Waternet anticipates the adverse effects of climate change and takes appropriate action to prevent/limit the consequences of flooding and droughts, with e.g. the Amsterdam Rainproof programme.



## Managed aquifer recharge

Two-third of Amsterdam's drinking water is pre-treated in the Amsterdam Water Supply Dunes. This natural filter produces 60 to 70 million m3 drinking water annually. Water from the river recharges the groundwater and continues its journey to become tap water. This process takes about 3 months.



## Amsterdam City Swim

This event attracts thousands of swimmers yearly for a 2-kilometer open water race through the canals of Amsterdam. This event is now possible because of Waternet's extensive efforts to improve surface water quality.



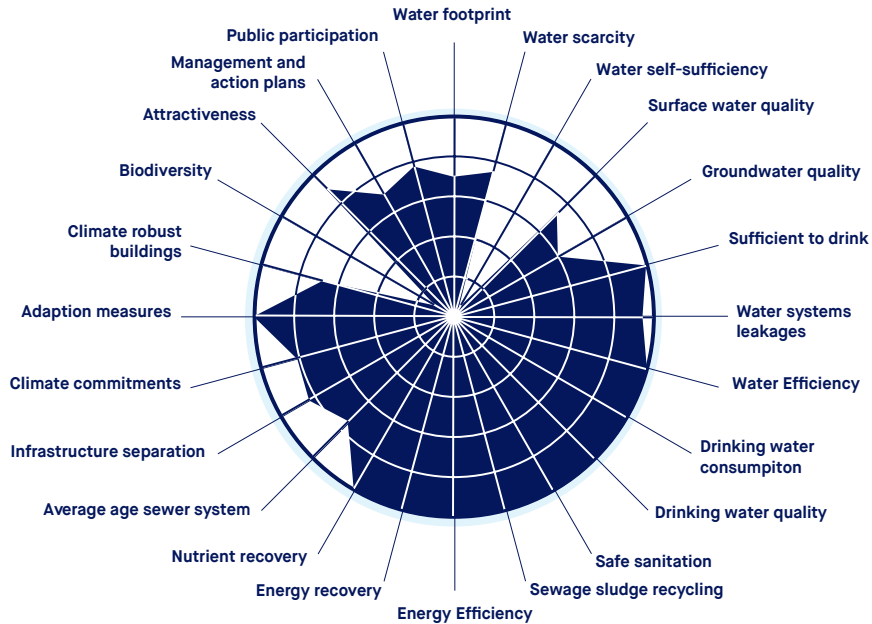
## Research & Innovation

The world is changing, and we are preparing for the future. To find new solutions we introduce new technologies, improve operations, and respond to societal challenges through our powerful Research and Innovation programme.

We are preparing for the future, with our powerful Research & Innovation programme



# Amsterdam is No.1 in the Blue City Index



City Blueprint of Amsterdam, Urban Water Atlas for Europe (European Commission 2017)



# We strive towards sustainable water services for all

- 💧 Increase access to water and sanitation services for all people (SDG 6.1 and 6.2)
- 💧 Promote integrated water resources management, focusing on the water cycle (SDG 6.4, 6.5 and 12.2)
- 💧 Maintain and conserve the water supply sources in a sustainable way (SDG 12.2, 13.1 en 15.1)
- 💧 Govern and cooperate with all stakeholders involved in water cycle management (SDG 5.5 and 17.7)
- 💧 Triple investments in water infrastructure by 2030 (SDG 17.1 and 17.9)
- 💧 Raise awareness for behavioral change (SDG 6.4, 13.3 and 15.3)
- 💧 Collaborate to boost innovations, new technologies, methods, concepts and financing (SDG 17.6)



# What makes our partnerships unique?

Waternet's  
leading water  
cycle expertise

Peer-to-peer learning

Long-term,  
public-to-public  
relationships

Non-profit exchange

Demand-driven  
performance  
improvement

On-site, hands-on,  
specialised on-  
the-job training

Proven to catalyse  
investments



**We collaborate in  
strategic alliances to  
increase our impact**



In a public-private collaboration until 2030, 10 Dutch water companies, together with the Dutch Ministry of Foreign Affairs, and local partner companies in Africa, Asia and Latin America contribute to increasing access to sustainable water services.



In the international programme of the Dutch Ministries of Foreign Affairs, and Infrastructure & Water Management, the 22 Dutch Water Authorities are helping 20 million people in 40 catchment areas around the world to gain access to clean, sufficient and safe water by 2030.

# Operational excellence of water organisations depends on 4 critical success factors

## Autonomous governance and accountability

Water organisations have the leadership and staff to run their operations and finances autonomously and hold themselves accountable.



## Integrated Water Resources Management

Water organisations are capacitated to manage the whole water cycle and address climate change, food security, gender equality and partner with all stakeholders.



## Operational efficiency

Water organisations achieve efficiency by targeting customer satisfaction, 100% collection rate, reduction of non labour costs, reduction of NRW and energy efficiency.

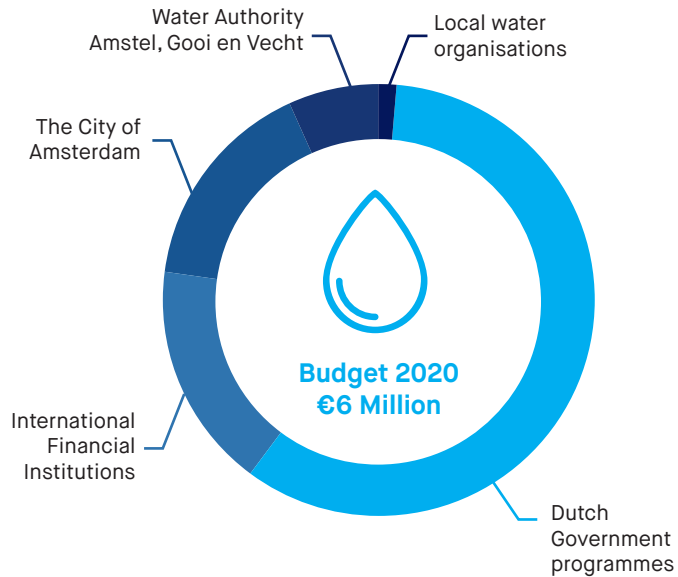


## Financial sustainability

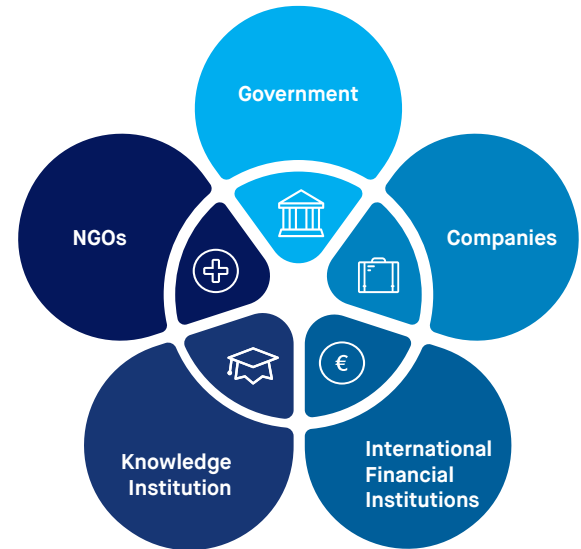
Water organisations cover their operational costs at 120% through revenues.



## How do we finance our projects?



## Who do we work with?



# World Waternet operates across four continents



● Performance Partnerships

📍 Knowledge Partners



# Mali

Water Operators' Partnership to improve water quality in 90 cities in Mali

-  **Region:** Southern Mali
-  **Period:** 2018 - 2030
-  **Partners:** Akvo Foundation, Direction Nationale de l'Hydraulique de Mali
-  **Recipients:** Société Malienne de la Gestion de l'Eau Potable (SOMAGEP SA), Société Malien de Patrimoine de l'Eau Potable (SOMAPEP), Agence Nationale de Gestion des Stations d'Épuration du Mali (ANGESEM)
-  **Financier:** WaterWorX, Blue Deal programme, Via Water, Young Expert Programme, Entrepreneurial Development Bank (FMO), Netherlands Enterprise Agency (RVO)



## Topics

- 💧 Work towards improved operational and technical management of wastewater through capacity activities and implementation of Standard Operating Procedures
- 💧 Support in the effective and sustainable realisation of more than 30.000 drinking water connections

## Results

- 💧 Baseline study of ISO-certification of laboratory
- 💧 Model for water quality data collection
- 💧 Registration of over 250 sample points in Bamako by using Akvo-flow and Akvo Caddisfly
- 💧 Improved water use and increase of water use efficiency



# Burkina Faso

Supporting water authorities with the implementation of integrated water resources management



**Region:** Burkina Faso



**Period:** 2019 - 2030



**Partners:** Dutch Water Authorities Drents Overijsselse Delta, Noorderzijlvest, Brabantse Delta and Hunze & Aa's, University of Utrecht, IRC Wash, Alliance for Responsible Mining, Artisanal Gold Council



**Recipients:** Five (5) Regional Water Authorities in Burkina Faso, Secrétariat Permanent pour la Gestion Intégrée des Ressources en Eau (SP-GIRE)



**Financier:** Blue Deal programme, European Commission



## Topics

- 💧 Capacity building activities on water governance, water quality monitoring, development of water management plans, introduction of water taxes and the support of local water committees
- 💧 The 'Gold Project': minimalising the negative impact of small-scale gold on the water system

## Results

- 💧 Establishment of local water authorities
- 💧 Implemented water quantity and quality monitoring system
- 💧 Implemented reforestation project to prevent riverbank erosion and to recover the ecosystem
- 💧 Implementation of integrated water resources management
- 💧 Improved monitoring, maintenance and renovation of essential reservoirs



# Lebanon

Strengthening the Lebanese water and agriculture sector



**Region:** Bekaa Valley



**Period:** 2017 - 2019



**Partners:** Acacia Water, Wageningen University and Research, USAID, World Bank



**Recipients:** Litani River Authority, Bekaa Water Establishment, Lebanese Ministry of Energy and Water, Lebanese Ministry of Environment, Green Plan/Lebanese Ministry of Agriculture, Lebanese Agriculture Research Institute



**Financier:** Dutch Ministry of Foreign Affairs



## Topics

- Capacity building water utility management, groundwater management, water productivity in agriculture, water monitoring and pollution abatement

## Results

- Algae control stations
- Pilot for managed artificial recharge for agriculture
- Construction of adapted greenhouses
- Solutions for industrial wastewater treatment
- Improved brand awareness
- Increased collection rate



# Jordan

From emergency to sustainability in Za'atari refugee camp: support to host communities in Northern Lebanon.



**Region:** Mafrq Governorate



**Period:** 2014 - 2019



**Partners:** City of Amsterdam, International Cooperation Agency of the Association of Netherlands Municipalities VNG-I



**Recipients:** Za'atari refugee camp, the City of Mafrq, UN Refugee Agency, UNICEF, Yarmouk Water Company



**Financier:** Dutch Ministry of Foreign Affairs



## Topics

- 💧 Capacity building in operations and maintenance for secured water services
- 💧 Investment in vacuum trucks for improved sewer maintenance operations

## Results

- 💧 Piped water supply distribution and sewerage system for every household in the refugee camp
- 💧 Improved water supply and wastewater services
- 💧 Improved sewer maintenance operations
- 💧 Improved asset management
- 💧 Waternet vacuum trucks donation for improved sewer maintenance
- 💧 Trained Yarmouk Water Company staff



# China

Europe-China initiative for climate resilience measures in Zhuhai



**Region:** Zhuhai



**Period:** 2018 - 2020



**Partners:** Palmbout Urban Landscapes



**Recipients:** Zhuhai Municipal Bureau of Housing and Urban-Rural Development



**Financier:** EU's Directorate-General International Cooperation and Development: Europe-China Eco-Cities Link (EC-Link)



Europe-China Eco-Cities Link  
中欧低碳生态城市合作项目

## Topics

- Capacity building and joint elaboration of interventions for integrating flood protection measures in urban planning

## Results

- Integrated strategy and practical guidelines on flood protection and urban planning
- Toolbox for interventions at various levels
- Water retention square operational
- Integrated design for two coastal areas
- Stakeholder consultations within the intervention process



# Laos

Supporting water utilities to improve water services



**Region:** Luang Namtha Province



**Period:** 2017 - 2030



**Recipients:** Provincial Public Water Utility Luang Namtha, Laotian Ministry of Public Works and Transport, Department of Water Supply, Provincial Public Water Utility Luang Prabang



**Financier:** Asian Development Bank, WaterWorX



## Topics

- Capacity building on the use of IT, geographic information system (GIS), and data management for sanitation and water use
- Support of investment proposal preparations

## Results

- Implementation of a GIS and asset management
- Improved customer satisfaction
- Improved access to safely managed sanitation services
- Improved drinking water production
- Climate change mitigation, adaptation and impact reduction



# Ethiopia

Water allocation and water quality



**Region:** Rift Valley Lakes basin & Abbay basin



**Period:** 2018 - 2022



**Recipients:** Rift Valley Lakes Basin Development Office, Abbay Basin Development Office, National Basin Development Authority



**Financier:** Blue Deal programma & Sustainable Water Fund (FDW)



## Topics

- 💧 Development of Water Allocation Plans (WAPs)
- 💧 Institutional capacity building activities for WAP implementation, stakeholder engagement, revenue collection, financial planning and management
- 💧 Hydrological Basin Information Management
- 💧 Pilot study payment system

## Results

- 💧 Integrated water resources management implemented
- 💧 Increased water-use efficiency across all sectors and water stress reduced in Rift Valley Lakes basin and Abbay basin by implementation of water allocation plans





[www.worldwaternet.com](http://www.worldwaternet.com)