Faillite hydrique mondiale : causes et conséquences dans les pays du Sud

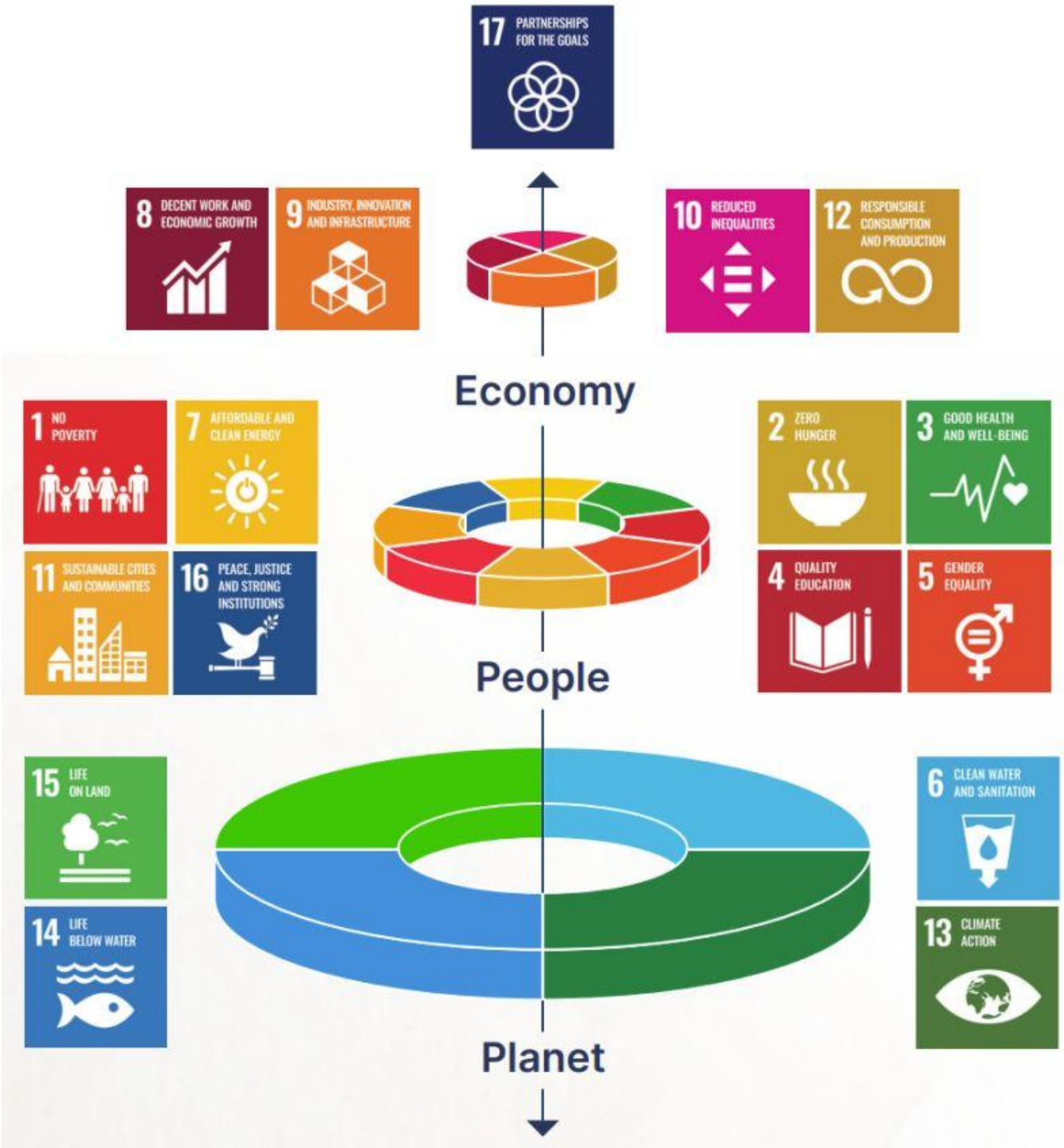
Sophie Trémolet
Water Team Lead
Environment Directorate

9 April 2026
Forum REH

OECD
BETTER POLICIES FOR BETTER LIVES

Why should we care about water?

The biosphere (including water) underpin all other SDGs



What is water security?

The capacity of a population to safeguard **sustainable access to adequate quantities of acceptable quality water** for:

- ✓ **Sustaining livelihoods**, human well-being, and socio-economic development
- ✓ **Ensuring protection against water-borne pollution and water-related disasters**
- ✓ **Preserving ecosystems**
- ✓ **In a climate of peace and political stability**

(*UN Water, 2013*)

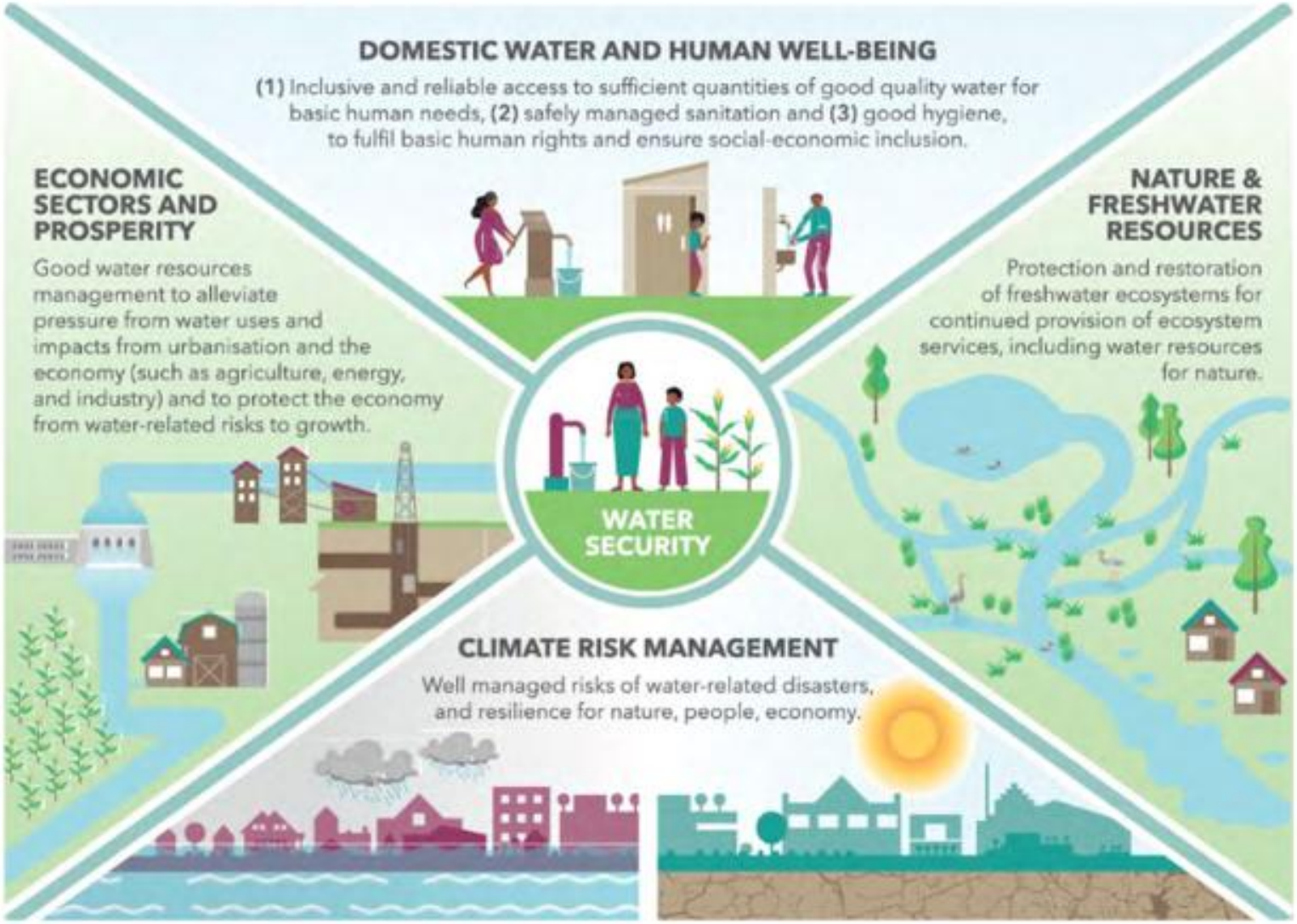


Diagram of Water Security (The Resilient Water Accelerator 2021). Societies can enjoy water security when they successfully manage their water resources and services to meet the needs of people and ecosystems over the long-term.

Water security underpins all human, economic and natural needs

Basic human needs

Food production

Industry (including data centers)

Power production

Navigation

Nature and ecosystems

Water security

Water risks are hitting the news and becoming impossible to ignore

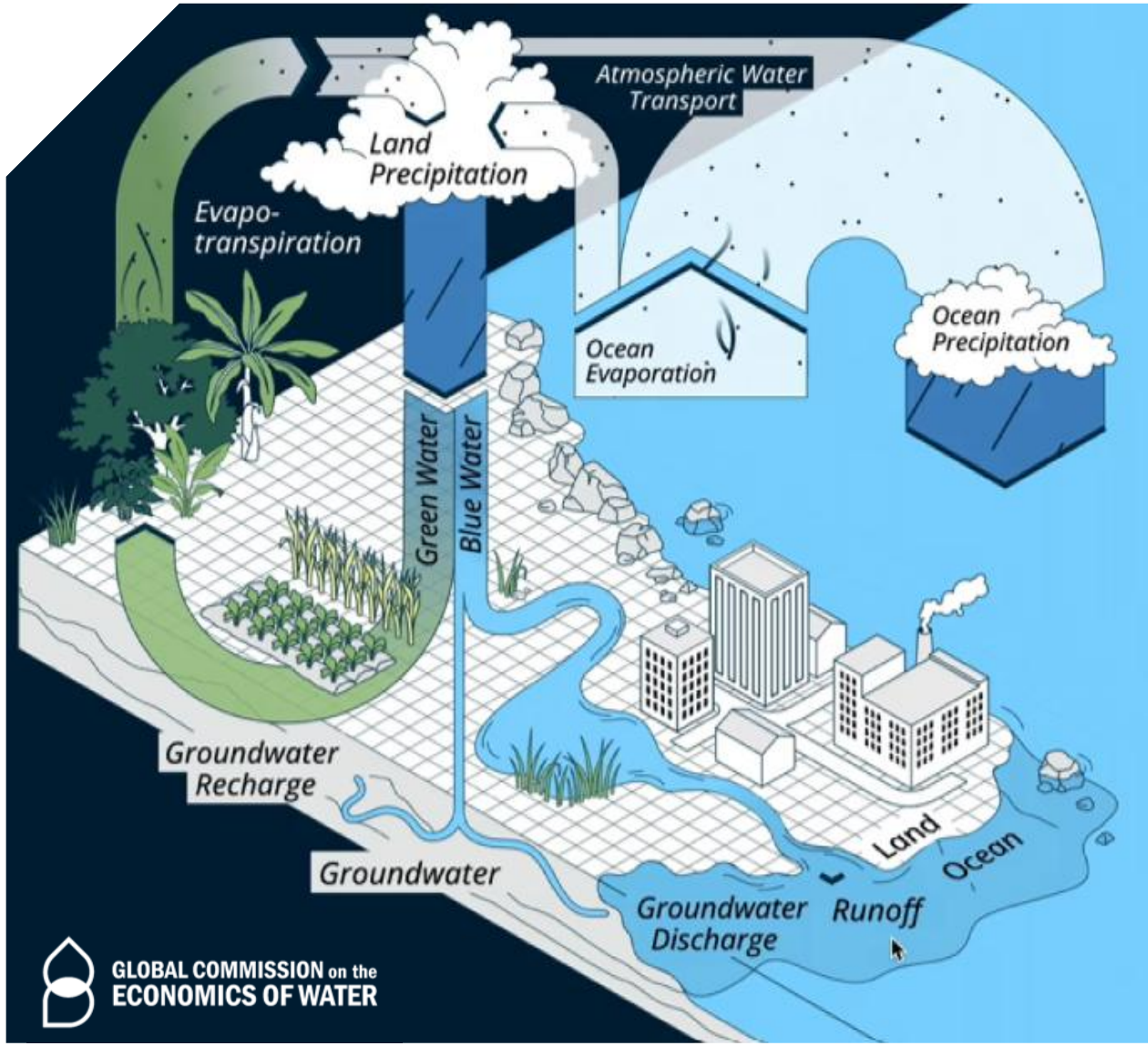
Water-related risks are significantly impacting our economies

The global hydrological cycle plays a central role in regulating climate and has been destabilised.

Major water-related risks

- **Too much and too little water:** by 2050, nearly one-fifth of the global population is expected to be exposed to flooding, and over half to water stress
- **Polluted water:** increasing contaminants such as diffuse pollution, PFAS, pharmaceuticals and microplastics are long-lasting and difficult to treat
- **Disruption to freshwater ecosystems**

The **combined impacts** of shifting precipitation patterns, rising temperatures, declining water storage, and limited access to clean water and sanitation are **projected to generate economic losses amounting to 8% of GDP by 2050 on average in high-income countries, with losses potentially reaching 10% to 15% of GDP in low-income countries (GCEW, 2024)**



Several factors are seriously undermining water security

Dimensions of water insecurity

- No, limited or inadequate access
- Water is too polluted
- Too little water (droughts)
- Too much water (flooding)

Risk factors / Drivers of change

Demography	• Population growth • Urbanization
Food Production	• Food demand growth • Diet changes
Energy	• Energy demand growth • Biofuels
Climate Change	• Reduced precipitation • Glacial melt • Extreme weather events • Sea level rise
Poor Water Management	• Uncontrolled water pollution and lack of monitoring • Misallocation between competing uses • Inadequate legal framework • Weak / poorly managed institutions • Lack of funding

Investment needs are significant and only partially covered

Water security investment needs

- Secure water resources
- Deliver water and sanitation services
- Prevent and treat pollution
- Flood resilience and stormwater management
- Watershed restoration and nature based solutions
- Agricultural water management
- Industrial water
- Navigation infrastructure
- Data, monitoring, governance, management, capacity building, etc.

Funding gap

Repayable finance

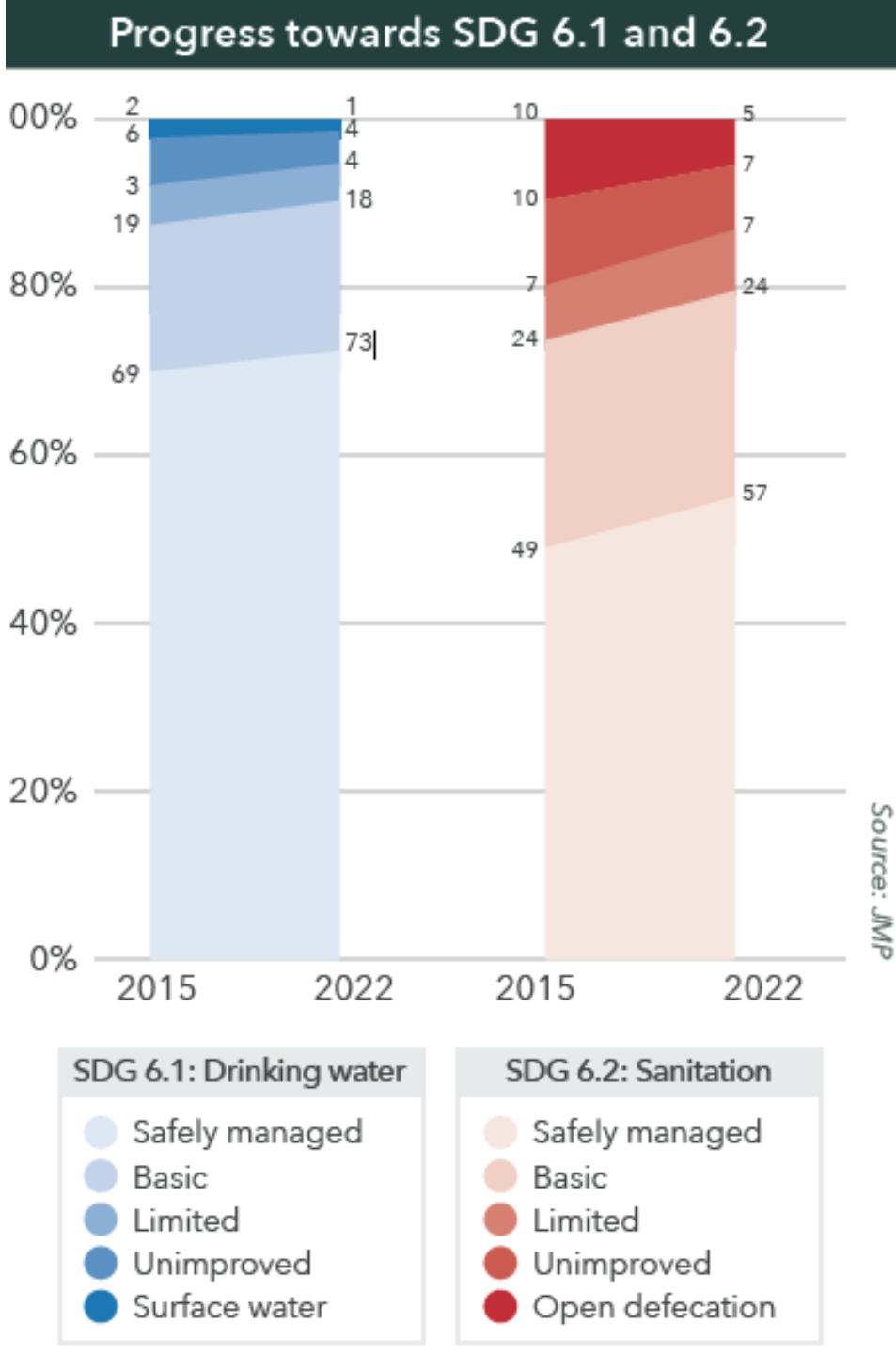
- Commercial finance
- Concessional finance

Funding sources

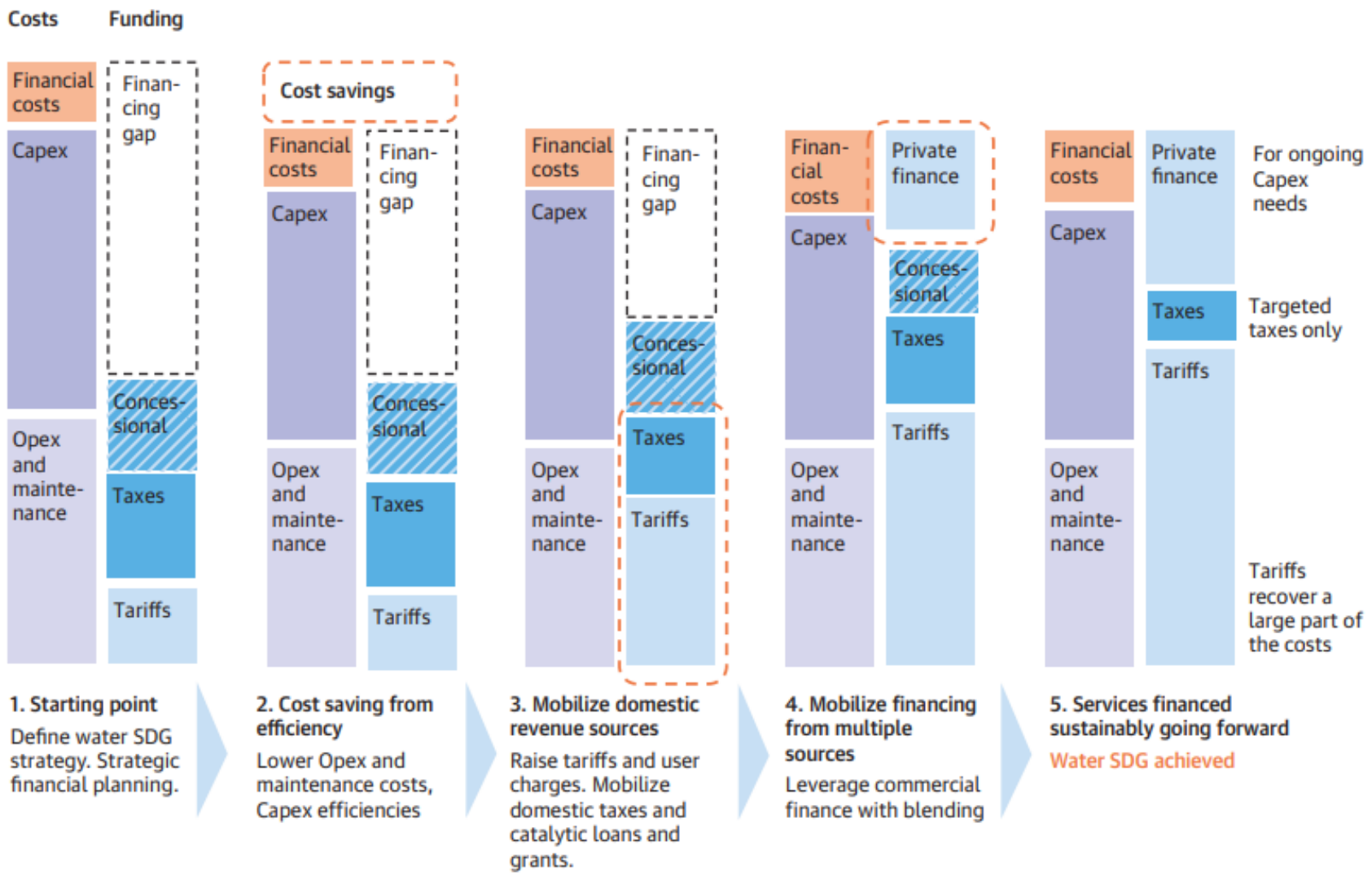
- Tariffs (from beneficiaries)
- Taxes (from public budgets)
- Transfers (development sources)

Significant investment will be needed to deliver universal and equitable access to safe water and sanitation

- **Double? Financing needs far exceed available finance for water-related investments – a doubling of finance needed to close this gap (Winpenny, 2003)**
- **Triple? Universal and equitable access to drinking water for all by 2030: USD 1.7 trillion of investment needed - three times the current investment levels (Hutton and Varughese, 2016)**
- **Quadruple? Achieving SDG 6.1 and 6.2 (drinking water and sanitation) by 2030: requires a fourfold increase in the current rate of progress (UN Water, 2021)**
- **Global costs of achieving SDG 6: USD 1 trillion per year, or 1.21% of global gross product (Strong et al., 2020)**
- **Food production and agriculture: USD 300 billion annually to meet the SDGs on food security (UNCTAD and Convergence, 2020)**



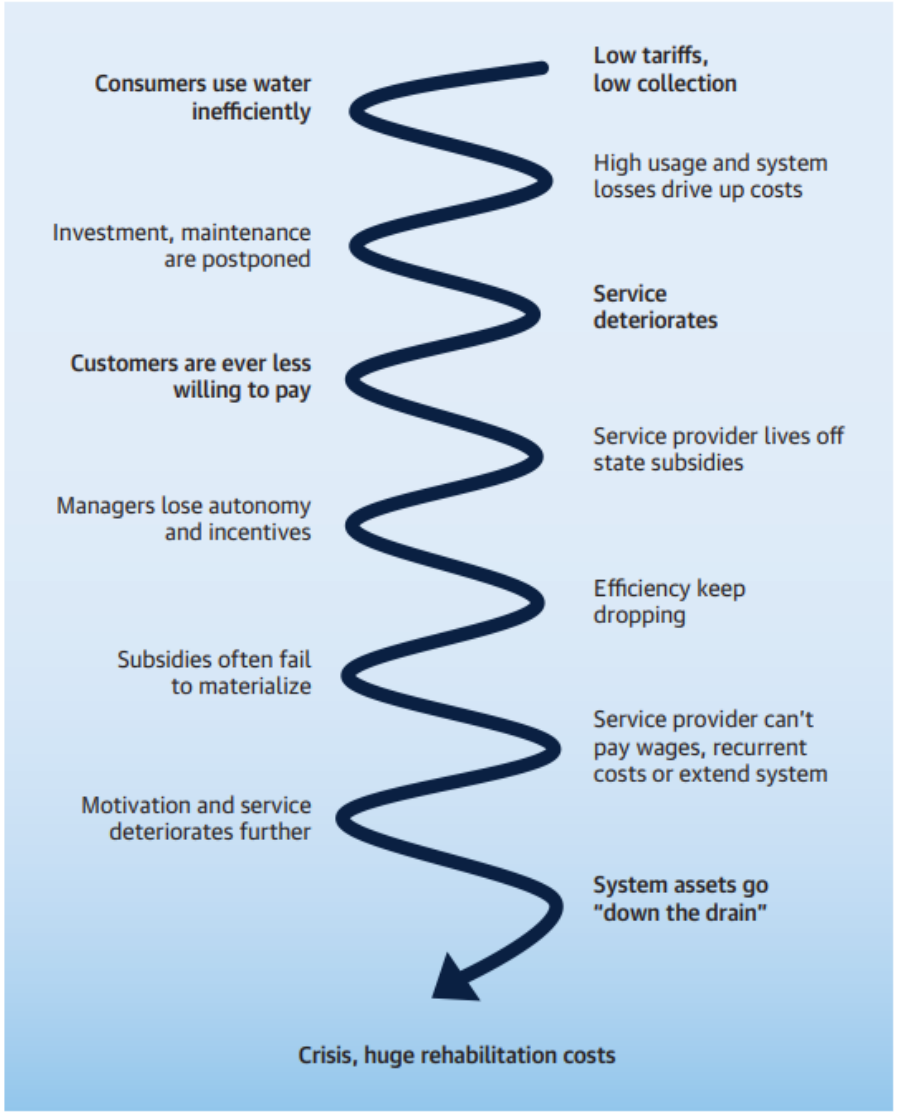
A schematic path to bridging the financing gap to achieve SDG6



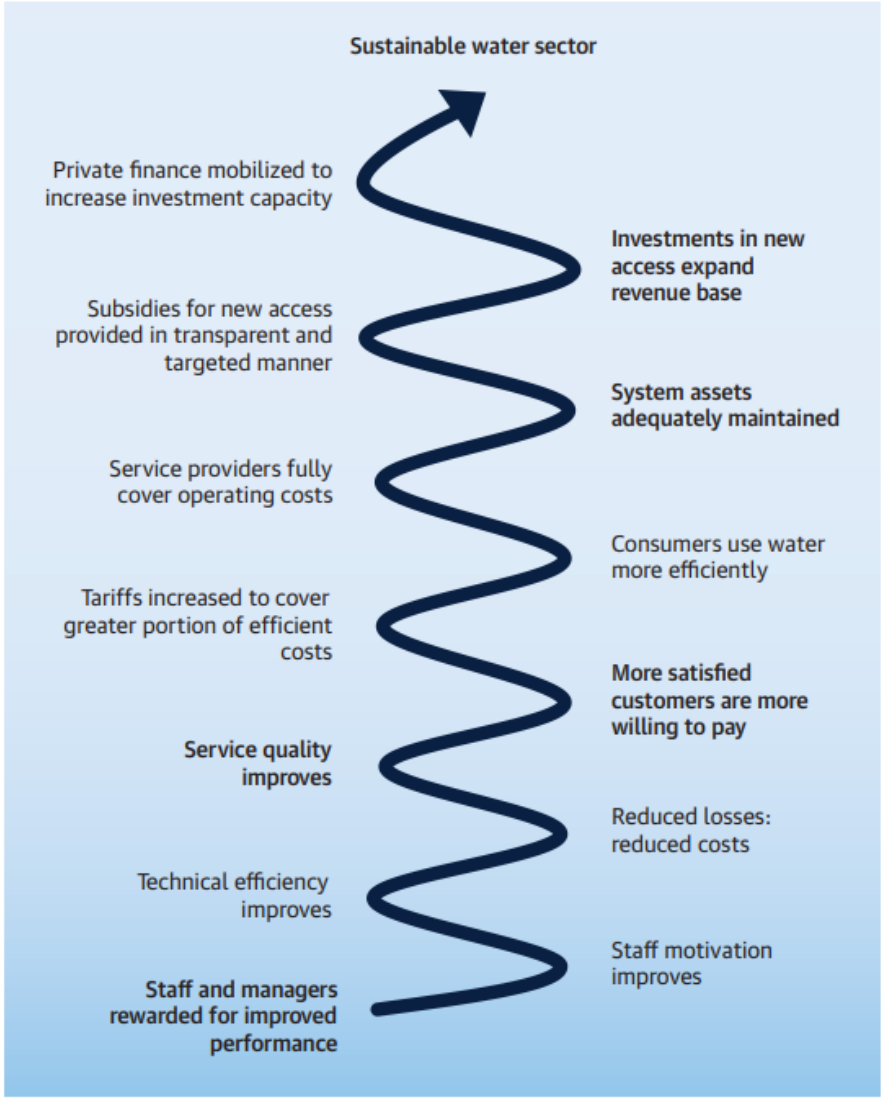
Source: World Bank 2016b.

Note: Capex = capital expenditures; Opex = operating expenditures; SDG = Sustainable Development Goal; WSS = water supply and sanitation.

Moving from a vicious to a virtuous cycle for water sector management



Source: PPIAF and WSP 2002.



Addressing water insecurity will require a crisis, significant investments … and a change in approach

Demand had to be reduced: first by rationing, then through demand management measures

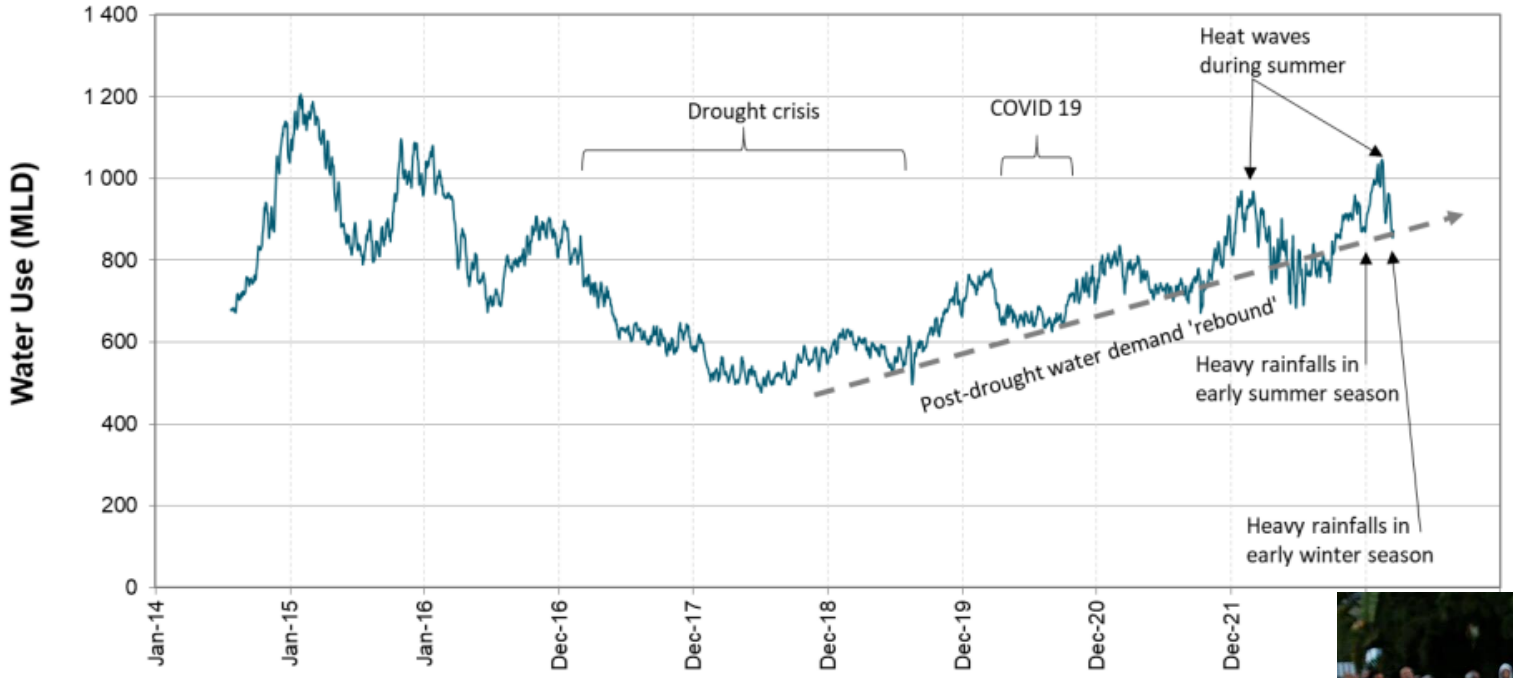


Figure 5 *Overall Water Use by the City of Cape Town (Million litres per day)*

Water Demand Management

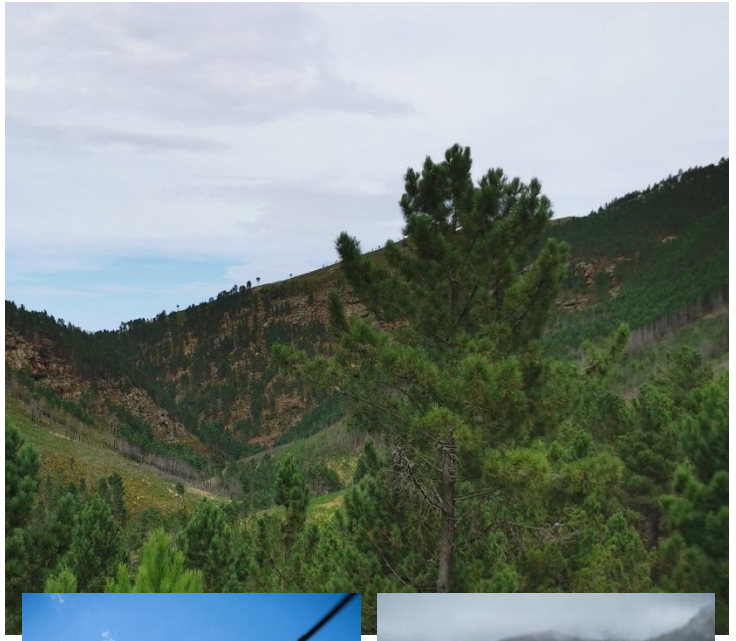
Investment plans had to be adjusted and include nature-

Waste-water Reuse

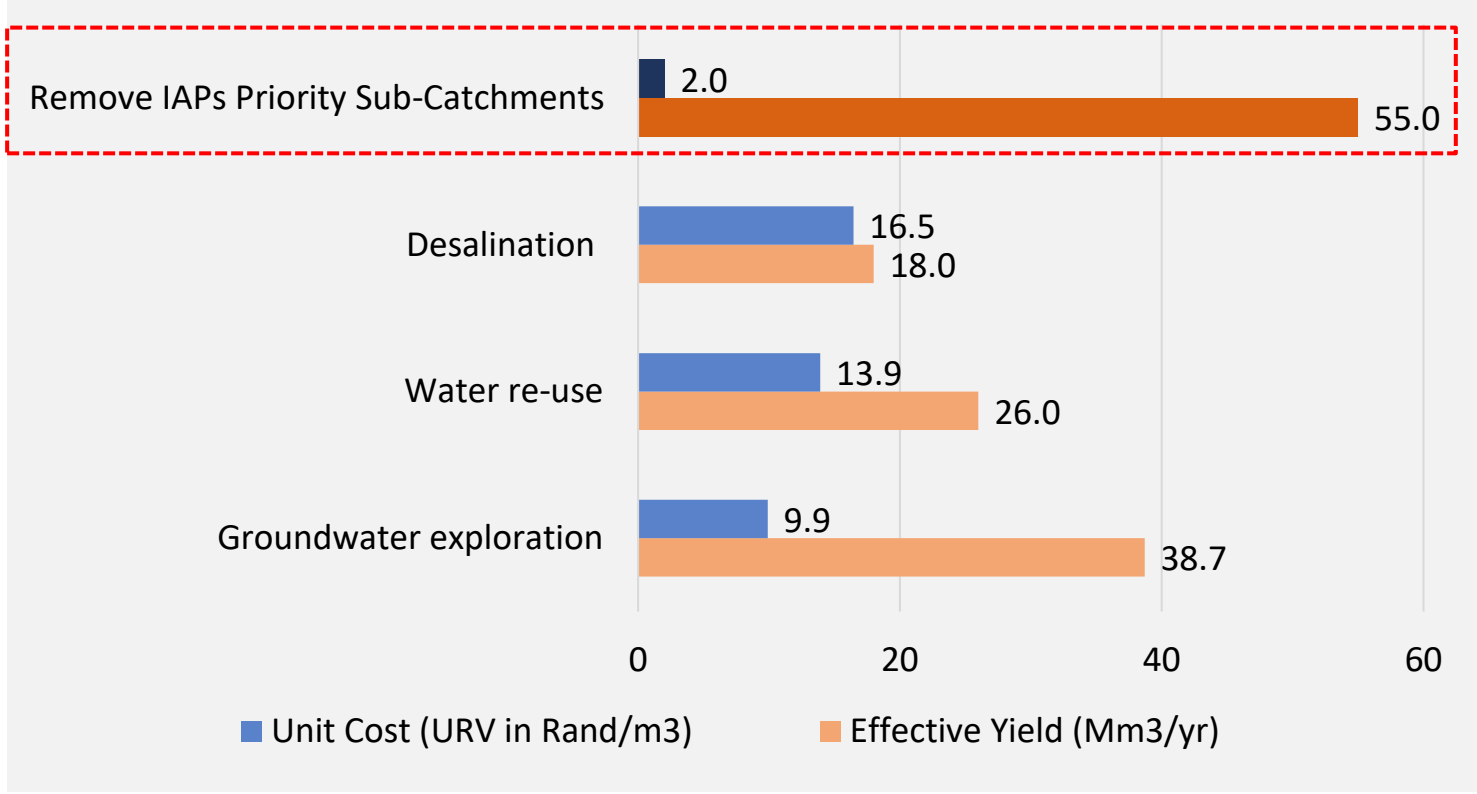
Seawater Desalination

Deep Aquifer drilling (TMGA)

Nature Based Solution: removing invasive alien plants (IAP)



Nature-Based Solution (NBS) was cheapest water augmentation option



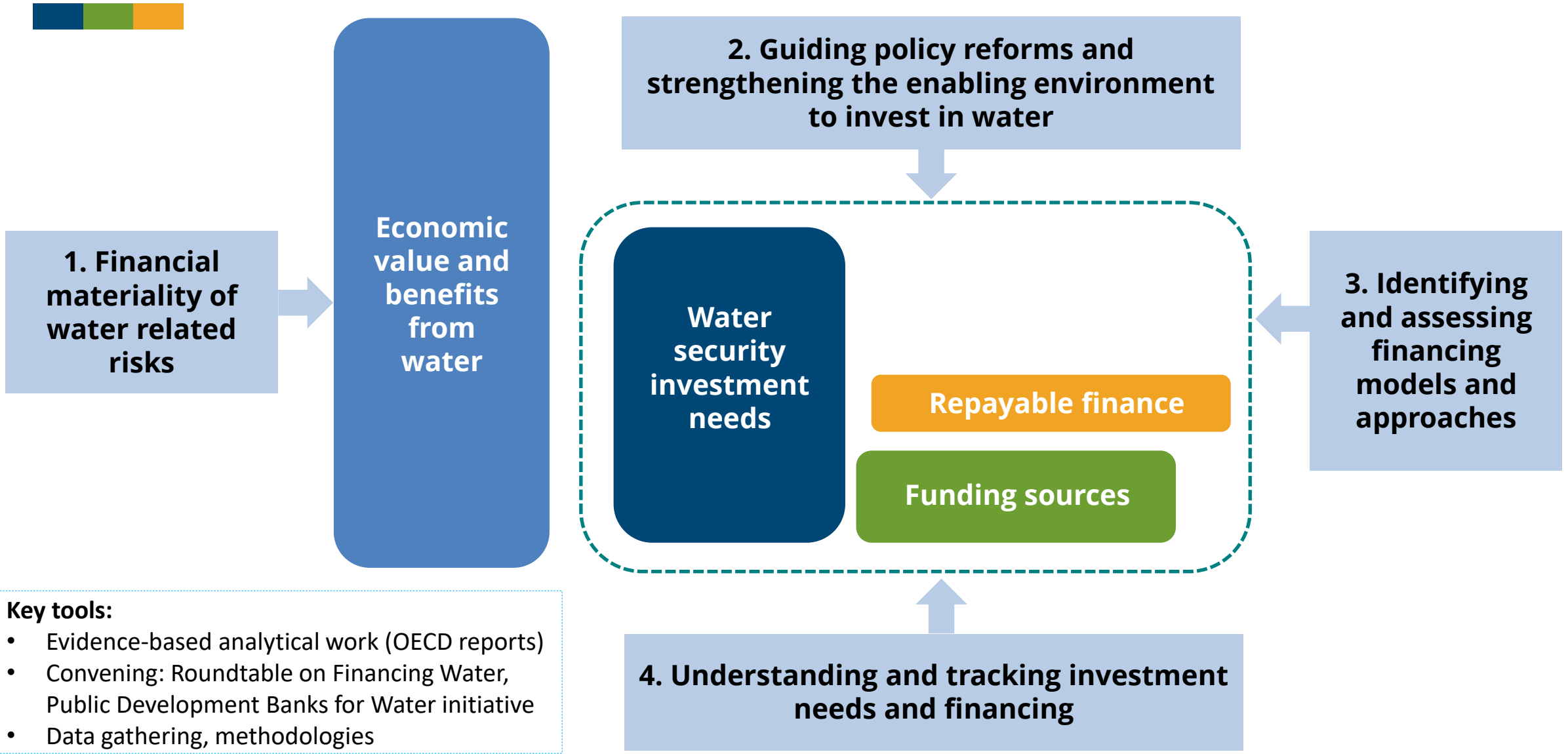
Increases dry season water availability by **24%**

Additional Benefits

- Green Job opportunities
- Restore biodiversity
- Reduce negative wildfire impacts
- Climate resilience
- Food security
- Economic benefits

Photo credit: Roshni Lodhia

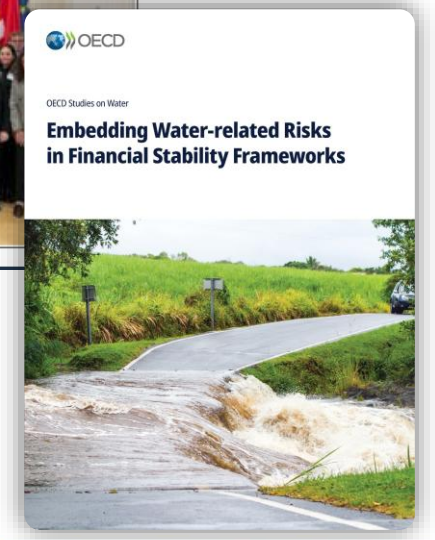
OECD work on water financing: addressing key bottlenecks



Key tools:

- Evidence-based analytical work (OECD reports)
- Convening: Roundtable on Financing Water, Public Development Banks for Water initiative
- Data gathering, methodologies

1. Financial materiality of water-related risks



The challenge

- Growing evidence that water-related risks are financially material across the financial system, with implications for macro-financial stability
- These risks are not fully captured by current assessment approaches or reflected in financial supervision

What we are doing

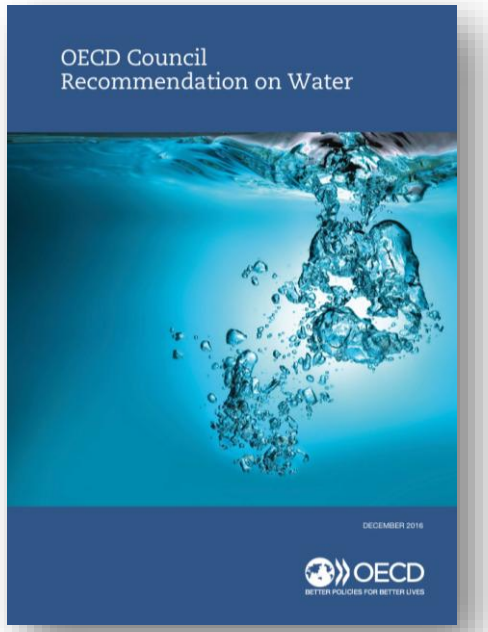
- **Research and analysis:** Working with central banks and supervisors to understand how risks are characterised and measured
- **Guidance development:** Identifying tools and approaches to integrate these risks into financial supervision
- **Policy recommendations:** Supporting central banks and financial supervisors, policymakers, academia and private sector to address water-related financial risks.

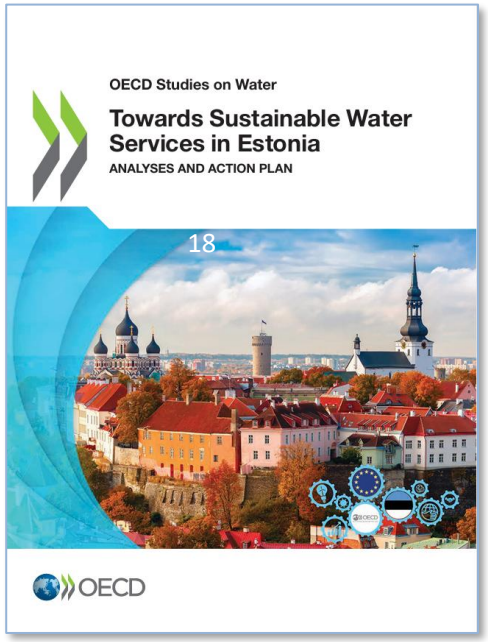
2. Guiding policy reforms and strengthening the enabling environment to invest in water

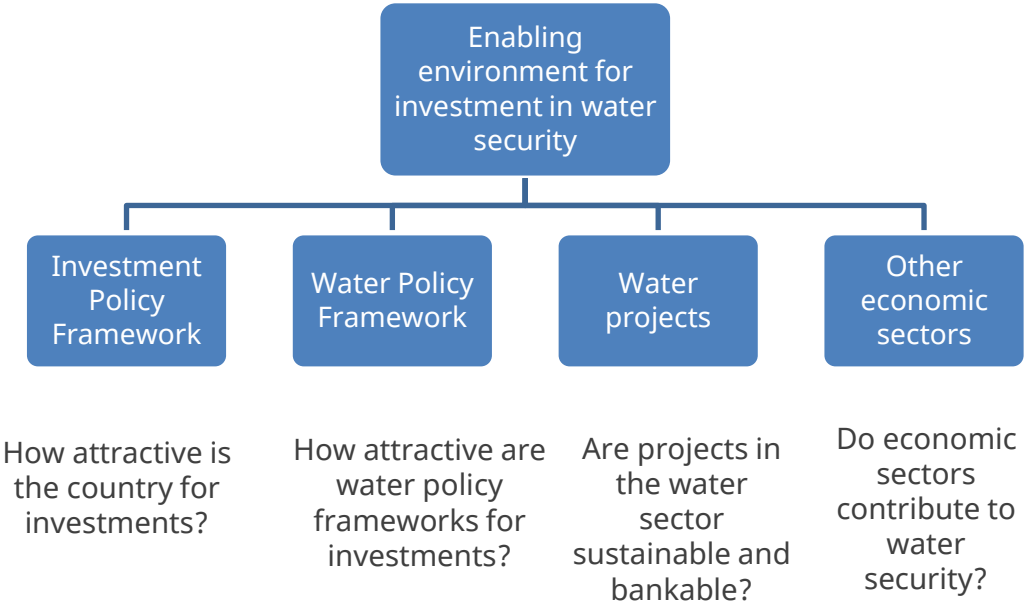
OECD Council Recommendation on Water
A concise and coherent legal instrument adopted by the OECD Council to provide high-level policy guidance on a range of topics relevant for water management

National Policy Dialogues
Structured process for stakeholder engagement supported by robust and tailored analytical work and lessons learnt from international experience

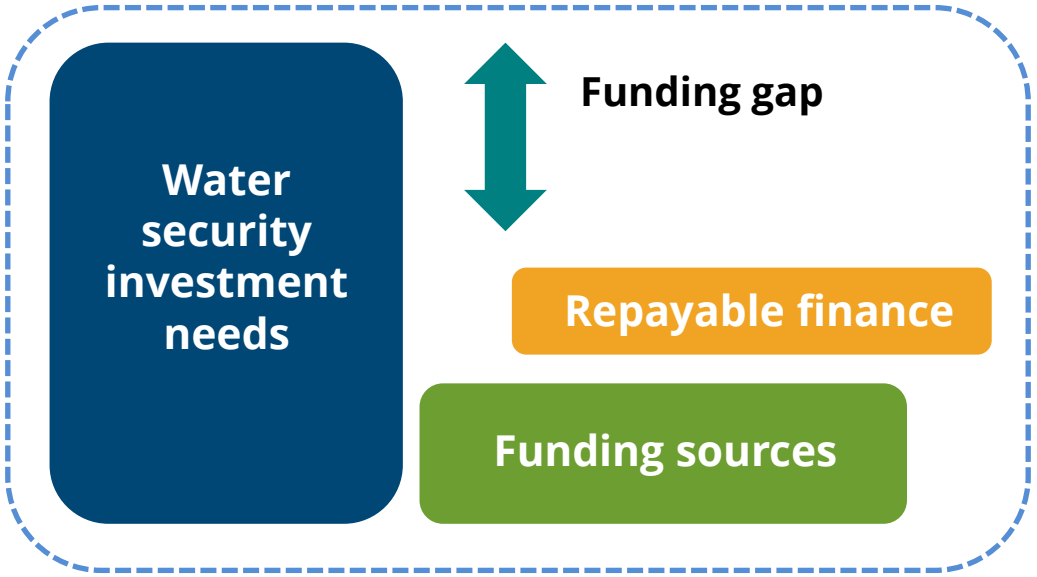
Scorecard on the enabling environment
Tool to help optimise the use of existing funds, provide a basis for benchmarking, track country progress over time, provide evidence-based policy and policy recommendations at country level







3. Identifying and assessing financing models and approaches



Examine their application to address specific policy issues: upcoming Roundtables

- Financing freshwater ecosystem conservation and restoration
- Investing in ways that address inequalities in access and exposure to water-related risks

OECD analyses of financing models

- Making **blended finance** work for water and sanitation (2019)
- Social consequences of **tariffs** (2020)
- The role of **intermediaries** to facilitate water-related investment (2021)
- **Cost recovery** for water services (2024)
- **Strengthening the sustainability** of water investments: alternative models (forthcoming 2026):
  - **Bond finance** for sustainable water investments
  - **Results-based finance** in the water sector: use, rationale and conditions for success
  - Revisiting **Public-Private Partnerships (PPPs)** for water and sanitation: balancing risks, achieving results
  - Mobilising **Islamic finance** for water

4. Understanding and tracking investment needs and financing: The Global Observatory on Water Finance

The challenge

- Water investments are not adequately tracked in a comparable and coordinated manner
- Water investment needs and corresponding investment gap is not assessed reliably, resulting in confusion and lack of visibility

What we aim to do (subject to funding)

- **Define a draft typology** of water investments, based on stakeholder consultation and partnership-building
- **Prepare a detailed concept note and proposed operationalization plan** for a data hub on water investments, to be submitted at 2026 UN Water Conference.
- **Advocate for endorsement of a need for a data hub** on water investments in the 2026 UN Water Conference outcome document

Longer term objectives

Consolidate data on water investment and finance

- Build a harmonised, comprehensive picture of water-related expenditure across sub-sectors by integrating existing databases, applying a common tracking framework, and addressing key data gaps, including domestic public and private flows.

Produce analytical content based on robust data

- Generate regular monitoring and in-depth analyses to assess trends, investment gaps, financing efficiency, and risk-opportunity dynamics, informing better targeting and scaling of water investments.

Inform the global agenda

- Provide credible, evidence-based insights to support global convenings and decision-making, guiding policies, financing strategies, and cross-sector alignment with the SDGs, climate objectives, and broader sustainability priorities.

THANK YOU

Sophie.TREMOLET@oecd.org

Key link(s)

https://www.oecd.org/en/topics/sub-issues/water.html

OECD
BETTER POLICIES FOR BETTER LIVES