

# Watering the New Economy

## HOW AI-DRIVEN GROWTH IS RESHAPING WATER DEMAND

### What's driving new water demand?



DATA CENTERS



SEMICONDUCTOR MANUFACTURING



POWER GENERATION

The growth of AI is reshaping water demand across the **data**, **chip**, and **energy** value chain.

38% increase in water withdrawals since 2020.

23 trillion liters withdrawn in 2025 - enough to supply 500 million people for a year.

### How is water demand expected to grow?

AI's total water demand is projected to increase by

# 129%

by 2050 - approximately 30 trillion liters per year (from a 2025 baseline).

Growth rates across the AI value chain are uneven:

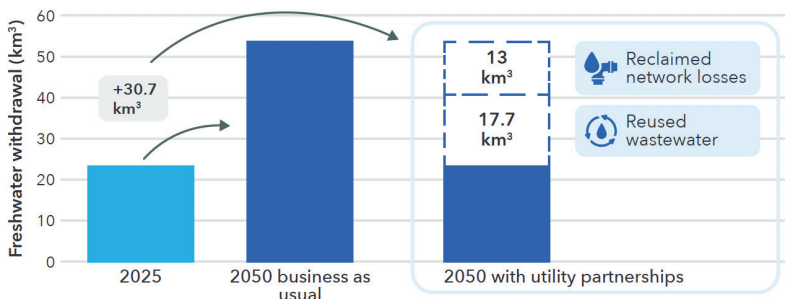
**+18%** POWER GENERATION

**+272%** DATA CENTERS

**+613%** SEMICONDUCTORS

Effective water management will shape the future of the AI economy.

### How can we limit freshwater withdrawals to today's levels?



**Network efficiency and reuse**  
Leakage reduction and integrated reuse can neutralize withdrawal growth.

**Boosting onsite efficiency**  
Applying best practices from leading chip fabs and data centers.

**Optimising the energy mix**  
Supporting renewable energy integration and shifts from coal to gas.

Collaboration on reuse, data, and resilience can make water a catalyst for shared progress across communities and industries.