

PATHWAY // WATER & SANITATION

**WE CAN  
KEEP  
WATER  
FLOWING  
FOR ALL**

**WATER IS ESSENTIAL TO ALL LIFE AND SITS AT THE HEART OF OUR EFFORTS TO FEED AND POWER OUR SOCIETIES AND ECONOMIES GLOBALLY.**

Access to water around the world relies on natural cycles as well as built infrastructure that enables water to be extracted, treated, distributed, collected, and recycled for domestic, industrial and agricultural use. This pathway also focuses on sanitation, where water and health intersect – for example through good hygiene and proper disposal and treatment of human waste.



# **OUR 2050 VISION**

## **FOR WATER & SANITATION**

### **THRIVING AQUATIC ECOSYSTEMS THAT SUPPORT FOOD, ENERGY AND PUBLIC HEALTH FOR ALL**

#### **WATER AND SANITATION ARE AVAILABLE FOR ALL**

Safe, reliable drinking water and adequate sanitation and hygiene services are universally available and play an important role in protecting health and wellbeing. Open defecation has been eliminated and robust waste management systems are in place for all.

#### **WATER IS APPROPRIATELY VALUED**

Water is recognized, and appropriately valued, as being critical for socio-economic development, and as playing a key role in strengthening the resilience of social, economic and environmental systems. Recognizing the true value of water, users adopt highly water-efficient behaviors and solutions, and they actively contribute to minimizing and addressing water pollution.

#### **WATER AND SANITATION RESOURCES ARE MANAGED IN A CIRCULAR FASHION**

Water is managed efficiently and equitably. It is used, reused and recycled in efficient, fit-for-purpose ways across industries, cities and rural areas. International cooperation and capacity-building programs have been expanded to support water harvesting, efficiency, treatment, recycling and reuse worldwide. Sanitation resources (including wastewater and sewage) are used, reused and upcycled efficiently and safely into renewable resources such as energy, power, nutrients, proteins and high-value chemicals.

#### **WATER QUALITY AND ECOSYSTEMS ARE PROTECTED**

All wastewater is treated and upcycled for reuse. Pollution has declined to minimal levels while the dumping and release of hazardous chemicals and materials have been eliminated. Environmental flows of water are maintained, and water-related ecosystems are thriving and conserved. The quality of water bodies is closely monitored globally.

# KEY TRANSITIONS

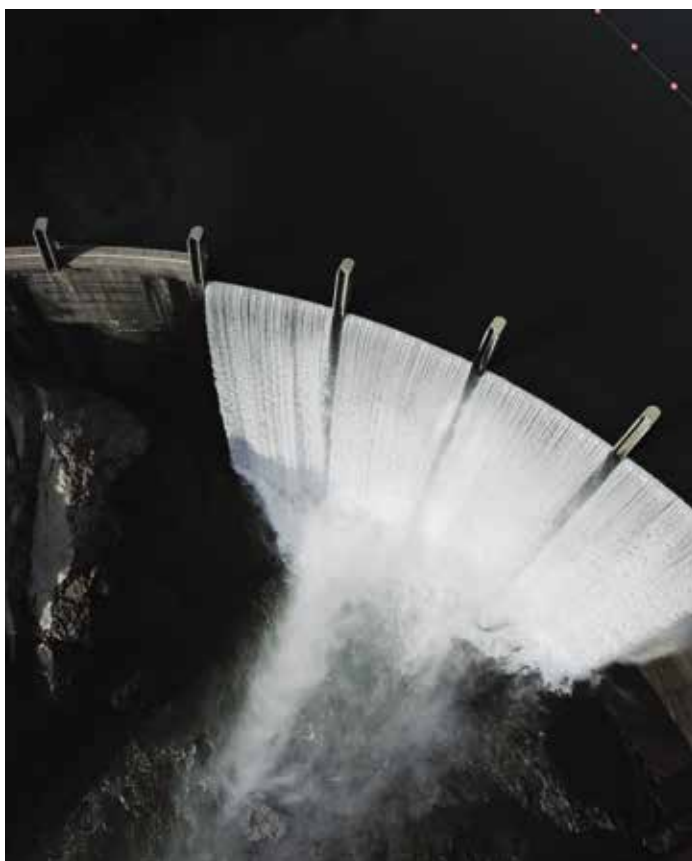
## INFRASTRUCTURE AND TECHNOLOGY ARE DEPLOYED FASTER TO ENSURE UNIVERSAL ACCESS TO WATER

- Sufficient clean and safe drinking water is made accessible and affordable for all, including previously under-served and vulnerable groups.
- Strong governance systems and international public-private collaborations drive improvements in water-related infrastructure facilitating the supply, conveyance and storage of water globally.
- Sustainable technological solutions scale up to increase water availability where it is needed by tapping non-traditional water resources and making water infrastructure smarter.
- Water reuse and recycling help to meet water demand without increasing water stress, especially in urban areas relying on more distant water sources. Wastewater is treated to a stricter and globally harmonized quality standard that is safe and adequate to users' needs.



## THE TRUE VALUE OF WATER IS RECOGNIZED BY ALL

- The social, cultural, aesthetic, environmental, economic, recreational and educational value of freshwater and water-related ecosystems is universally recognized and accounted for, ensuring a high level of engagement in preservation and restoration efforts from a range of stakeholders.
- Water valuation becomes a key driver of corporate behavior, informing water allocation to the most productive purposes and minimizing water-related negative externalities.
- Water-related challenges and risks attract widespread attention among institutional investors and are integrated into portfolio management practices.
- Supportive policies and advancements in technology and product design align to shift domestic water usage toward much higher efficiency, especially in areas with lower water availability. Water-efficient household appliances and water-saving behaviors receive significant investment and innovation, and become commonplace.
- Consumers become increasingly aware of the value of water and embrace less water-intensive products and practices.





**INTEGRATED WATER RESOURCE MANAGEMENT APPROACHES ARE WIDELY IMPLEMENTED**

- Integrated water resource management approaches ensure water withdrawals respect basin-level thresholds, including through transboundary cooperation where relevant. This helps to limit water stress levels across the globe.
- Businesses transition from water and wastewater management to water stewardship. They embrace new stakeholder-inclusive processes that include both site- and catchment-based actions.
- Water, land and related resources are managed in a coordinated way in the context of food and agriculture. This maximizes economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.
- Solutions are adapted to local hydrologic, geopolitical, social and environmental contexts. They take into account local institutional and infrastructure legacies, financial and other resource constraints, and social impacts.

**TARGET-SETTING, MEASUREMENT AND DISCLOSURE DRIVE WATER STEWARDSHIP ACROSS SECTORS**

- Science-based targets for water are embraced as key to meeting or exceeding sustainable freshwater quantity and quality thresholds in the catchments in which companies operate, source or sell.
- Businesses implement standardized processes for measuring, managing and disclosing their dependencies and impacts on water, and actively engage with value chain partners and investors to improve performance.



**CIRCULAR WATER MANAGEMENT BECOMES THE NORM**

- All sectors embrace strategies, initiatives and emerging technologies to reduce, reuse and recycle water, while also recovering resources and replenishing watersheds.
- Innovation in resource recovery from wastewater scales rapidly. The recovery of resources such as energy, chemical nutrients and metals generates important inputs into the wider circular economy.
- Companies leverage opportunities for collaboration. They use treated wastewater to help meet water demand from other industries, as well as their own operations.



## RELIABLE SANITATION AND HYGIENE SERVICES BECOME AVAILABLE FOR ALL AS THE SANITATION ECONOMY THRIVES

- Safely managed, physically accessible and culturally acceptable sanitation services reach the entirety of the population, helping to eliminate open defecation.
- All companies ensure their employees have access to water and sanitation, and promote safe hygiene practices at work and beyond.
- Businesses collaborate with governments on new sanitation systems that recover costs for governments and generate revenues for the private sector. New product categories and service models help to deliver sanitation at scale for all contexts and incomes.
- Circular economy approaches are increasingly applied to sanitation as new technologies enable resource recovery and reuse. Biological waste becomes a valuable resource as it is processed to recover nutrients and water, and to create value-added products such as renewable energy, organic fertilizers and proteins.
- Digitalized sanitation systems help to optimize data for operating efficiencies and maintenance, while also providing insights into consumer and public health. Dissemination of digital and genomic technologies throughout the sanitation system, from toilets to treatment, contribute to substantial improvements in personal and public health surveillance and infectious disease monitoring.

## COLLABORATIVE EFFORTS REGENERATE WATER-BASED ECOSYSTEMS AND MINIMIZE WATER POLLUTION

- International cooperation and capacity-building efforts ensure that water-related ecosystems are protected and restored.
- Uncontrolled point source pollution ceases, ensuring discharges do not reduce the quality of water bodies or the health of associated ecosystems and people.
- Non-point source pollution from diffuse sources, such as agriculture, is abated. Actions are taken to limit fertilizer and agrochemical runoff through adequate field application technologies, improved land management practices and water source protection. Water pollutants are eliminated through concerted efforts across value chains.
- Stakeholders along global value chains come together to tackle the issue of marine plastics, cleaning up areas where plastic waste is concentrated and stemming the flow of waste at source.

## RELEVANT SDGs



- 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality.
- 3.2** By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.
- 3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
- 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
- 6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
- 6.3** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
- 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity.
- 6.5** By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.
- 6.6** By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.
- 12.2** By 2030, achieve the sustainable management and efficient use of natural resources.
- 12.4** By 2020, achieve the environmentally-sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.
- 12.8** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.
- 14.1** By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.
- 14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience. Take action for their restoration in order to achieve healthy and productive oceans.
- 15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

# WATER & SANITATION

## ACTION AREAS FOR BUSINESS 2020 – 2030

01

Establish appropriate water targets at the corporate level that are informed by science and help to drive context-specific watershed actions.

02

Strengthen corporate disclosure of water-related dependencies and impacts, referring to the true value of water.

03

Implement water stewardship approaches that drive socially and culturally equitable, environmentally sustainable and economically productive water use.

04

Safely treat all wastewater and increase water recycling and reuse while reducing pollution and eliminating the release of hazardous chemicals and materials.

05

Enhance consumer awareness of appropriate water behaviors and innovate around products that help reduce water use in day-to-day activities.

06

Advance water-smart agriculture solutions to support production in the context of growing water scarcity.

07

Take action to ensure access to safe drinking water and adequate sanitation, while also raising awareness about hygiene practices, throughout company operations and supply chains.

08

Collaborate with governments to advance the policies, safety standards and blended finance solutions needed to build water and sanitation-related infrastructure in under-served regions and stimulate a thriving sanitation economy.

09

Come together with peers and wider stakeholder groups to consolidate and enhance water and sanitation-related data availability.

10

Collaborate on, and invest in, efforts to clean up, restore and monitor water-related ecosystems.