

Strategic Opportunities in Water Technologies

Addressing the “Global Water Gap”

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Business Consulting in the Water Age

Strategic Opportunities in Water Technologies

Conference Objectives:

- Allow participants to understand the needs and challenges of the Global Water Market
- Learn about innovative technologies that can address the needs
- Provide an opportunity for novel technology companies, policy makers, and strategic investors to network, discuss and collaborate

In order to Maximize your Time here, make sure you:

- Meet as many people as you can
- Listen to Speakers
- Ask questions

Global Water Market Facts

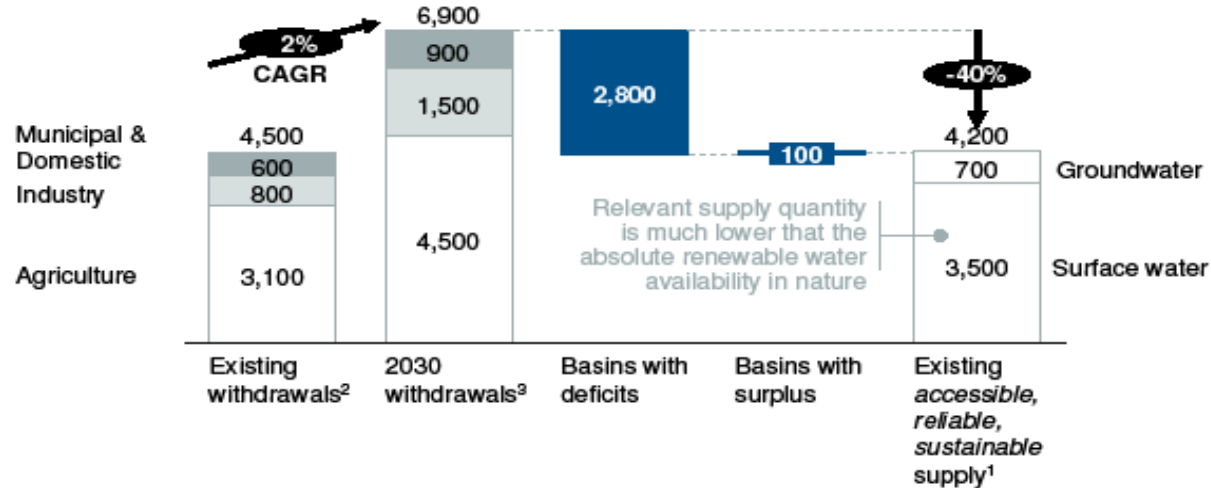
- Less than 1% of the water on earth is fresh and accessible.
- Over 1/2 of the global population does not have access to safe drinking water and little or no wastewater treatment.
- Existing water withdrawals exceed available sustainable demand by 10% now and will increase to 40% by 2030
- Current water supply and treatment methods are unsustainable and will require innovation and capital to meet the growing demand for water.
- Per Capita expenditure on water will double in western countries and increasing five fold in emerging countries over the next decade.
- An estimated \$2 trillion will be required for infrastructure alone
- Aging Infrastructure will drive expenditure in U.S.
- Population and industrial growth will drive demand in Asia.
- Innovative technology and service delivery solutions will be required to support anticipated needs globally

Defining the Global Water Gap (2030 Water Resources Group)

Exhibit 4

Aggregated global gap between existing accessible, reliable supply¹ and 2030 water withdrawals, assuming no efficiency gains

Billion m³, 154 basins/regions



¹ Existing supply which can be provided at 90% reliability, based on historical hydrology and infrastructure investments scheduled through 2010; net of environmental requirements

² Based on 2010 agricultural production analyses from IFPRI

³ Based on GDP, population projections and agricultural production projections from IFPRI; considers no water productivity gains between 2005-2030

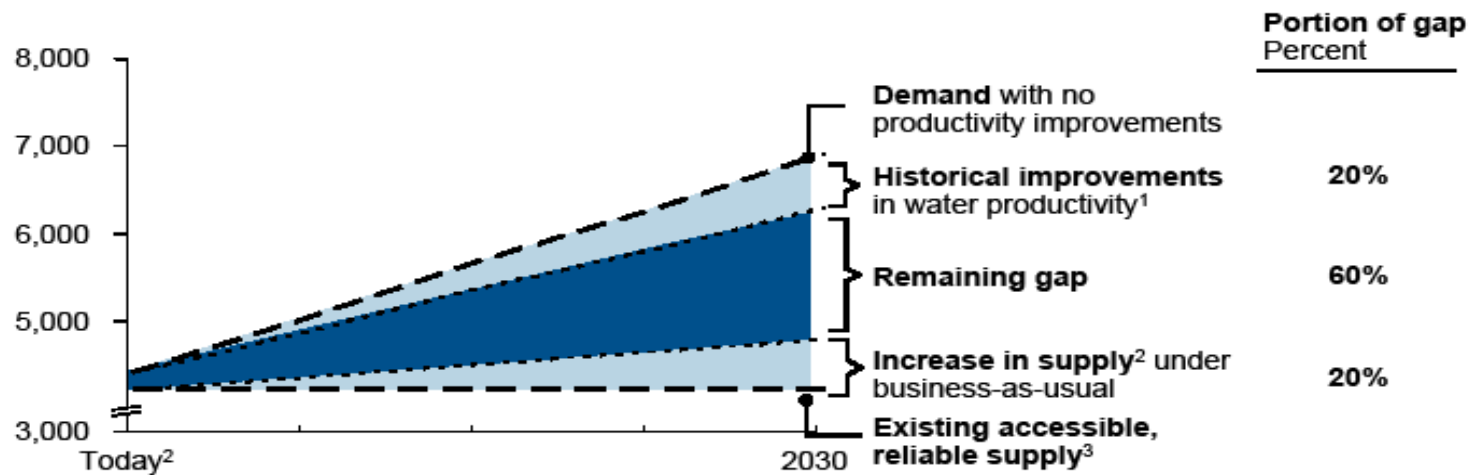
SOURCE: Water 2030 Global Water Supply and Demand model; agricultural production based on IFPRI IMPACT-WATER base case

Defining the Global Water Gap (2030 Water Resources Group)

Exhibit 6

Business-as-usual approaches will not meet demand for raw water

Billion m³



1 Based on historical agricultural yield growth rates from 1990-2004 from FAOSTAT, agricultural and industrial efficiency improvements from IFPRI

2 Total increased capture of raw water through infrastructure buildout, excluding unsustainable extraction

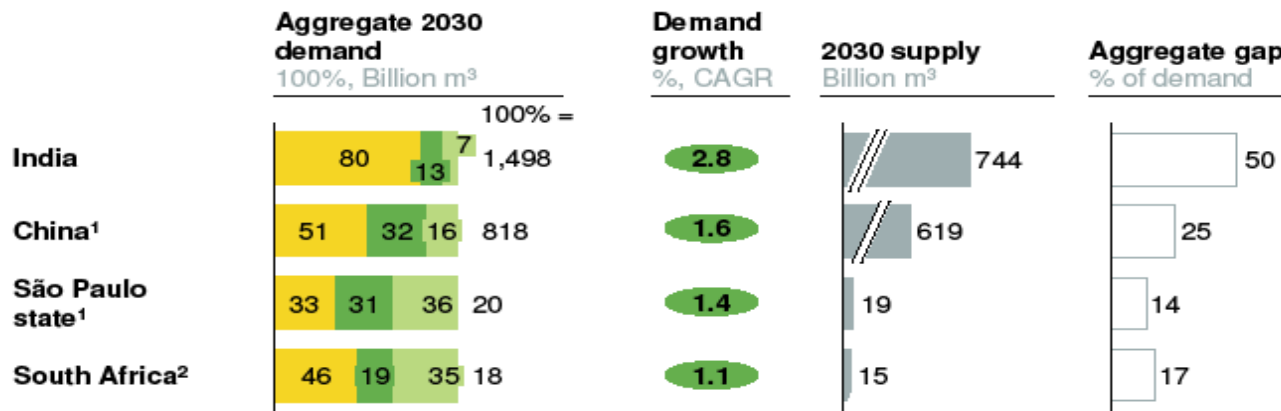
3 Supply shown at 90% reliability and includes infrastructure investments scheduled and funded through 2010. Current 90%-reliable supply does not meet average demand

SOURCE: 2030 Water Resources Group – Global Water Supply and Demand model; IFPRI; FAOSTAT

Regional Demand Gap (2030 Water Resources Group)

Exhibit 11

Base-case demand, supply, corresponding and gaps for the regional case studies



1 Gap greater than demand-supply difference due to mismatch between supply and demand at basin level
 2 South Africa agricultural demand includes a 3% contribution from afforestation

SOURCE: 2030 Water Resources Group

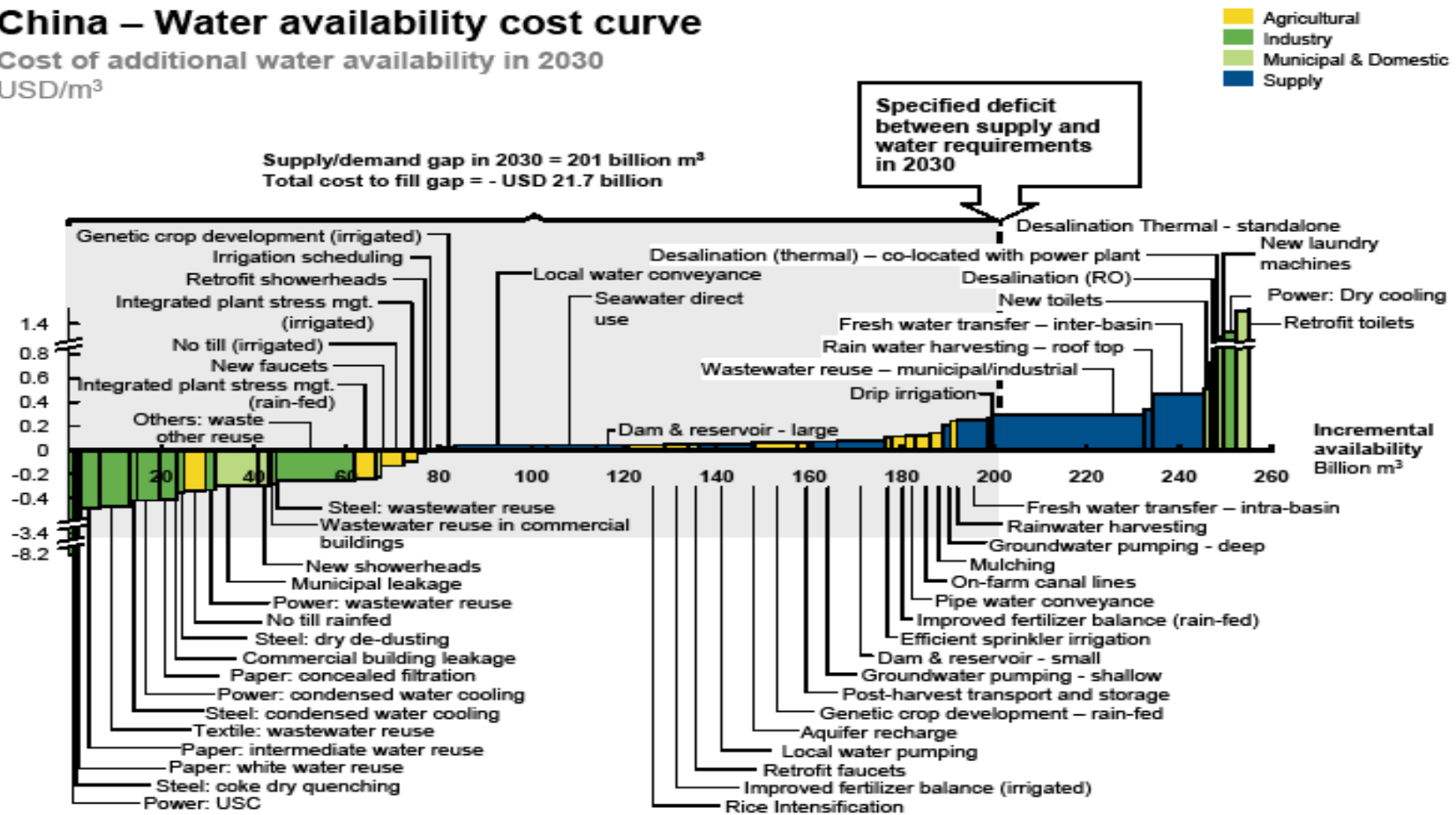
Example: Regional Case Study - China

Exhibit 24

China – Water availability cost curve

Cost of additional water availability in 2030

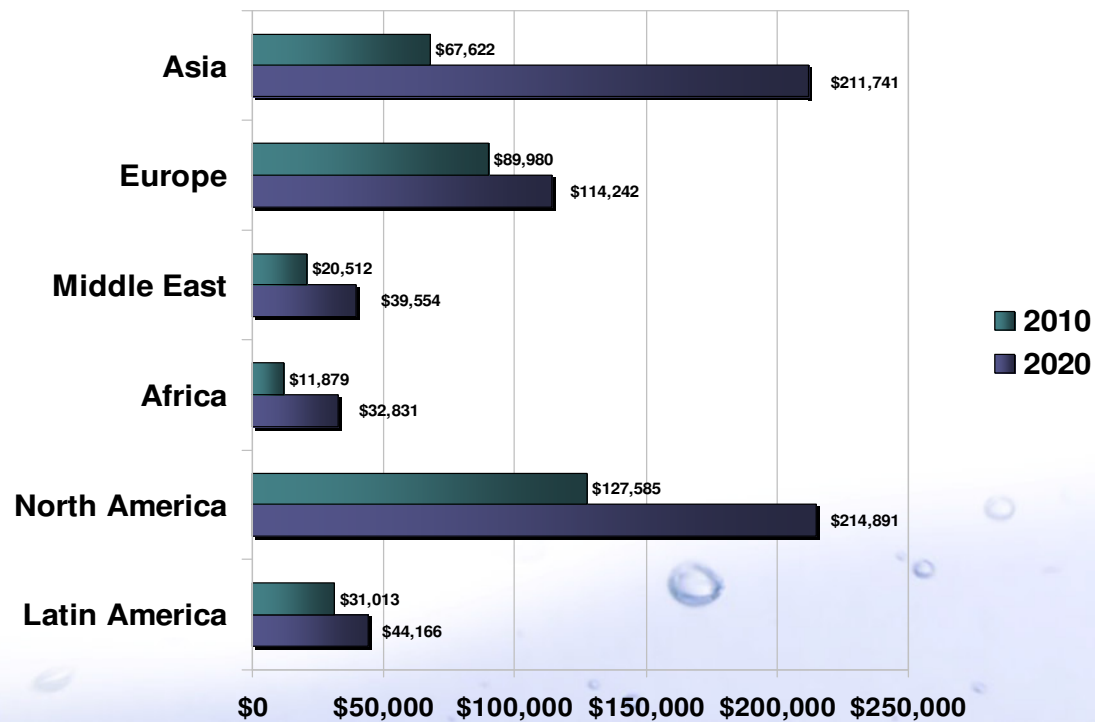
USD/m³



SOURCE: 2030 Water Resources Group

Per Capita Expenditures by Region

- ▶ Per capita expenditure on water and waste water treatment will double in North America and increase 5 fold in Asia over the next 10 years



Key Water Market Drivers

Deteriorating Water Quality & Limited Water Supply Sources

Drives Key Behaviors

Reduce
Water Use &
Supply Loss

Increase
Treatment

Recycle &
Reuse Water

Reduce
Wastewater
Discharge

Enabling Technologies

Alternative
Disinfection

Advanced
Separation

Monitoring &
Efficiency

Infrastructure
Build & Replace

DELIVERY SYSTEMS

Packaged Solutions & Asset Management

Technology / Needs Map by Region

Enabling Technology	Disinfection	Separation		Monitoring	Infrastructure	Packaged Solutions	Services
		Water	Wastewater				
Asia	3	3	3	3	3	1	1
Europe	1	1	2	3	2	1	3
Middle East	2	2	2	1	2	1	1
Africa	3	3	1	1	2	3	1
North America	1	1	2	3	3	3	3
Latin America	3	2	2	1	1	3	2

The background of the slide features a dynamic water splash at the top, with ripples and droplets. The lower portion of the slide is a light blue gradient with several water droplets of varying sizes scattered across it.

THANK YOU!

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