CDP AECOM Bloomberg Philanthropies

WHO'S TACKLING URBAN WATER CHALLENGES?

Water is at the heart of our new sustainable economy.
This infographic analyses the data disclosed to CDP by cities and companies, highlighting how to improve water security for all.

Water is a growing risk for cities and companies.

CLIMATE CHANGE

CITIES

63% of cities disclosing to CDP report climate change as a substantial water supply risk

- Africa 80%
- Asia and Oceania 56%
- Europe 34%
- Latin America 78%
- North America 65%

WATER RISKS

COMPANIES

43% of companies are disclosing that their organisation is exposed to water risks which have the potential to impact their business, strategy and operations

- Asia and Oceania 74%
- Europe 41%
- Latin America 44%
- North America 48%

Cumulative economic impacts of US$14 billion per year, including direct costs, such as loss of production, in 2015.

The top three water risks are identified as:

DECLINING WATER QUALITY

132 cities REPORT DECLINING WATER QUALITY

80% report these cities are currently or will soon be facing extremely serious

54% are currently or will soon be facing this risk

80% of wastewater flows back into the environment untreated

INCREASED WATER STRESS AND SCARCITY

196 cities VULNERABLE TO WATER STRESS

83% report these cities are currently or will soon be facing this risk

59% are currently or will soon be facing this risk

FLOODING

103 cities REPORT FLOODING RISK

83% report these cities are currently or will soon be facing this risk

76% are currently or will soon be facing this risk

Our vision is to achieve a secure and sustainable water supply by 2030.

This is in line with the UN Sustainable Development Goal 6.

WATER GOVERNANCE

How will we achieve a water-secure world?

Cities and companies will need to substantially increase water recycling and safe reuse by 2030.

They will need to change the way they operate to ensure water security.

VISION

CITIES

COMPANIES

However, there's a big gap between our vision and reality.

GROWING PRESSURE

RISING POPULATION

2.5bn people will be added to urban areas by 2050

90% of this increase will be in Asia and Africa

DECREASE IN SUPPLY

The UN projects a 40% global water demand gap by 2030.

RISING DEMAND

Global water demand is increasing at 1% per year.

55% of the world's population live in Asia, Europe, Latin America and the Caribbean, Oceania, North America and Africa.

+400% Asia and Oceania

+140% Africa

+130% Latin America

GROWING WATER DEMAND

LONDON, ENGLAND

London's population is forecast to grow by an extra 1.5 million people by 2025.

Demand will increase just as we need to reduce water use. By 2025 London could see a daily deficit of 520 million litres if no action is taken.

+3m

520m liters deficit per day

And the gap is getting bigger.

CLIMATE CHANGE

Climate change increases the frequency of severe weather events from droughts, extreme rainfall and flooding.

London, England: An example of growing water demand.

Water is crucial in building our new sustainable economy.

CLIMATE ACTIONS

SUSTAINABLE ECONOMY

29% of US $100 billion climate mitigation investment in water-related projects depend on a stable course of good quality water.

24% of company GHG emissions reduction potential in the food and beverage sector depend on a stable course of good quality water.

Water plays a vital role in the transition to a sustainable economy.

Companies and cities must consider the ways in which low carbon activities are water dependent.

EMISSIONS REDUCTION ACTIVITIES THAT DEPEND ON OR IMPACT WATER

Eco-disciplined spaces

- Wastewater heat recovery
- Water efficiency improvements
- Carbon capture and storage
- Low carbon fuels
- Low carbon cars
- Wastewater to energy
- Heat pump manufacturing
- Renewable energy
- Water-recycling and consumption

So, what's the solution and who's going to manage it?

ACTIONS BEING TAKEN

THE WAY FORWARD

Cities and companies are taking action to reduce the impacts of water risks

- **Investment** in seeking water supply infrastructure — 1102 cities — 137 companies
- **Education** in conservation awareness — 141 cities — 137 companies
- **Technology** investments to improve water efficiency — 123 companies
- **Targets** for site-specific action — 108 companies
- **Diversification** of water supply — 87 cities
- **Management** of storm water — 87 cities
- **Preservation** of watershed ecosystems — 65 cities — 18 companies

Successful water governance means working together.

COLLABORATION

THE WAY FORWARD

Communities, Companies, Regions, Investors, States, Cities

234 CITIES AND NON-STATE REPORTED THEY THEY WORK WITH ANY STAKEHOLDERS ON A RESPONSE STRATEGY TO WATER RISKS

353 CITIES COMMUNITY ENGAGEMENT ON WATER AND CLIMATE CHANGE ISSUES.

Learning from the droughts in California.

COLLOBORATIVE ACTION

CALIFORNIA, USA

In January 2015, Governor Jerry Brown declared a state of emergency in response to the lack of the region's winter droughts on record.

Cities and companies in California are working together to overcome the challenges faced from drought.

- Water purification technology
- Water efficient labels
- Water conservation practice
- "Lawn to Garden" rebates
- Personal behavior change
- Drought tolerant landscaping
- Supply chain water risk analysis

What actions can a city or company take to increase water security?

ACTION 1 Set ambitious water efficiency targets

54% of companies that set targets to better manage water reduction

ACTION 2 Capitalise on opportunities to reduce and recycle water

318 companies of reporting on reuse and recycling projects

ACTION 3 Invest in water management projects

North America	11 projects, Total cost of projects US$2.7bn
Europe	13 projects, Total cost of projects US$1.7bn
Latin America	20 projects, Total cost of projects US$6.7bn
Asia and Oceania	44 projects, Total cost of projects US$27.4bn
Africa	5 projects, Total cost of projects US$6.1bn

OPPORTUNITY TO INVEST IN URBAN WATER MANAGEMENT PROJECTS

50 CITIES 89 WATER MANAGEMENT PROJECTS WORTH US$9.5 BILLION

Cities and companies are joining together to create a water-secure world by 2030.

Find out who's acting on water and how:

@cdp

www.cdp.net/cities

About CDP

CDP focuses investors, companies, and cities on taking urgent action to build a truly sustainable economy by measuring and understanding their environmental impact.

81% of the 500 companies of the Global Fortune Index 500 are disclosing through CDP and the North American Sustainable Business Council.

571 cities across the globe disclosed to CDP in 2015, which collectively represent 1.1bn people and US$4.5 trillion in GDP. CDP cities data is provided to support and inform the Carbon Disclosure Project's cities work.

7,400 companies disclosed to CDP in 2015, representing more than 60% of global emissions. CDP's Climate & Water Portfolio represents US$ 100 trillion in assets, and is working to build low carbon infrastructure in the world.

718% increase in the number of cities disclosing to CDP since the inaugural CDP cities disclosure in 2011.

© 2016 CDP Worldwide. All rights reserved. Reproduction and distribution of this publication for commercial purposes is prohibited. For permission to use this publication, please contact permissions@cdp.net