

# Water Use and Water Wars

## Managing a scarce natural resource



“A shortage of water resources could spell increased conflicts in the future. Population growth will make the problem worse. So will climate change. As the global economy grows, so will its thirst.”

..... Ban Ki Moon, UN Secretary General, World Economic Forum, 2008.



30%

Area of the earth's surface covered by land <sup>1</sup>

vs.

70%

Area of the earth's surface covered by water <sup>1</sup>

but

2%

Amount of all water that is fresh water in lakes, rivers and streams for human consumption <sup>1</sup>

### Factors influencing water consumption



#### URBANIZATION

By 2030, 6 in 10 people will live in modern cities. This is up from about 5 in 10 for 2010. <sup>2</sup>



#### POPULATION GROWTH

The world population is projected to be 9.6 billion by 2050. The current population is 7.2 billion. <sup>3</sup>



#### CLIMATE CHANGE

Unpredictable natural events will alter the distribution and availability of water. Populations will demand more services. <sup>3,6</sup>

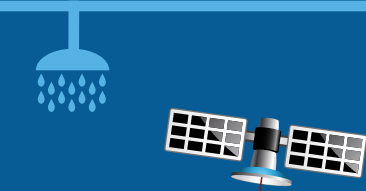
### Scarcity and inaccessibility



#### WATER CONFLICTS

In the last 50 years, there were 1800 water conflicts between countries. There are nine hotspot regions for future conflict. <sup>4,5</sup>

### Water management strategies



#### NEW WATER SOURCES

Use technologies such as remote sensing and scientific modelling to identify new and feasible groundwater sources.



#### FACILITIES ASSET MANAGEMENT

Use technologies such as geographical information systems and data management to improve facilities management efficiencies.



#### REDUCE, RECYCLE AND REUSE

Use awareness, legislation and enforcement at local, regional and global levels to encourage reduction, recycle and reuse.

#### Sources:

[1] <http://ga.water.usgs.gov/edu/earthhowmuch.html>; [2] <http://www.bloomberg.com/news/2012-12-10/u-s-intelligence-agencies-see-a-different-world-in-2030.html>; [3] <http://www.un.org/en/>; [4] [http://en.wikipedia.org/wiki/Water\\_conflict](http://en.wikipedia.org/wiki/Water_conflict); [5] <http://transhumanity.net/articles/entry/water-wars-nine-thirsty-regions-where-h2o-conflict-is-threatening>; [6] IPCC Assessment Report, 2007; [Globe] [http://commons.wikimedia.org/wiki/File:Globe\\_Atlantic.svg](http://commons.wikimedia.org/wiki/File:Globe_Atlantic.svg).



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