

An Auspicious Moment for Water Challenges and Opportunities in Asia



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Setting the Context

- **Water Resources Management in Asia**
- **A Global View of Water Challenges**
- **Addressing the Challenges at Home**
- **High Tech Water Jobs and Economic Opportunity**

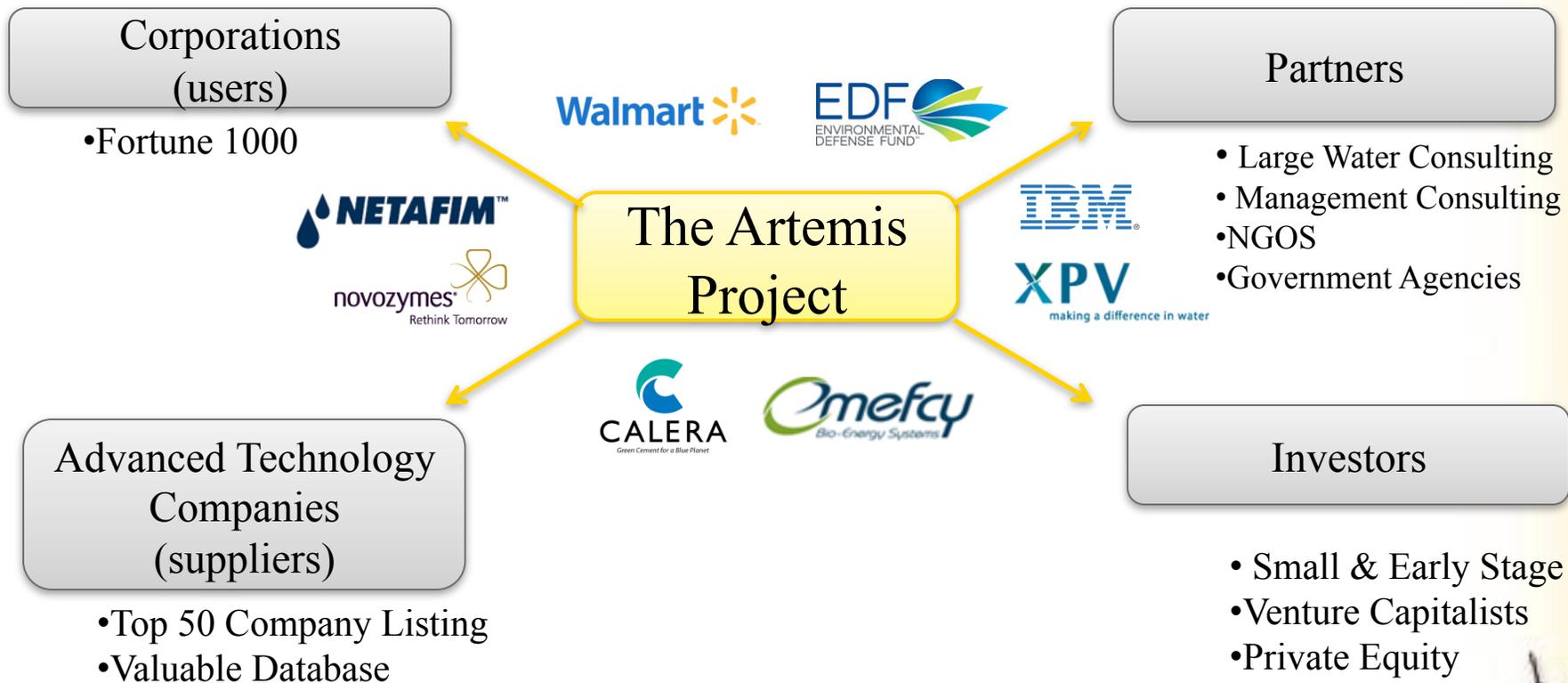


The Artemis Project:

Strategic Consulting for a Water-Constrained World

- **Helping business thrive in a world of increasing water challenge**
 - **Working with global corporations to achieve sustainable competitive advantage through operational excellence in water management**
- **Helping advanced tech water companies penetrate key markets**
- **Top 50 Competition, BlueTech Forum, Webinars, Task Forces**

The Artemis Project Ecosystem



A View of the Challenge



Chemical waste from Jiangsu Taixing Chemical Industrial District (江苏泰兴化工园区) dumped on top of the Yangtze River bank. May 15, 2009



Immediate and Long-Term Costs of Manufacturing Economy



Henan Anyang iron and steel plant's (河南安阳钢铁厂) sewage flowed into Anyang River. March 25, 2008



“World Class Challenge”



In Ma'anshan, Anhui province (安徽马鞍山), along the Yangtze River there are many small-scaled Iron selection factories and plastic processing plants. Large amounts of sewage discharged into the Yangtze River June 18, 2009



Water—Source of Life for Humans and also for Disease

- **Life**

- **Health**
- **Business**
- **Recreation**

- **Disease**

- **Disease/Disinfection**
- **Infrastructure**
- **Energy Use**

Priced as a public or a precious resource?



Cost of Centralized Infrastructure

- **Dollars' worth of assets water utilities require in order to generate one dollar of revenue**
 - **Tokyo water works \$7.20**
 - **US top 300 utilities \$8.20**
 - **Thames Water (UK) \$4.60**
 - **Chennai Metro (India) \$10.50**

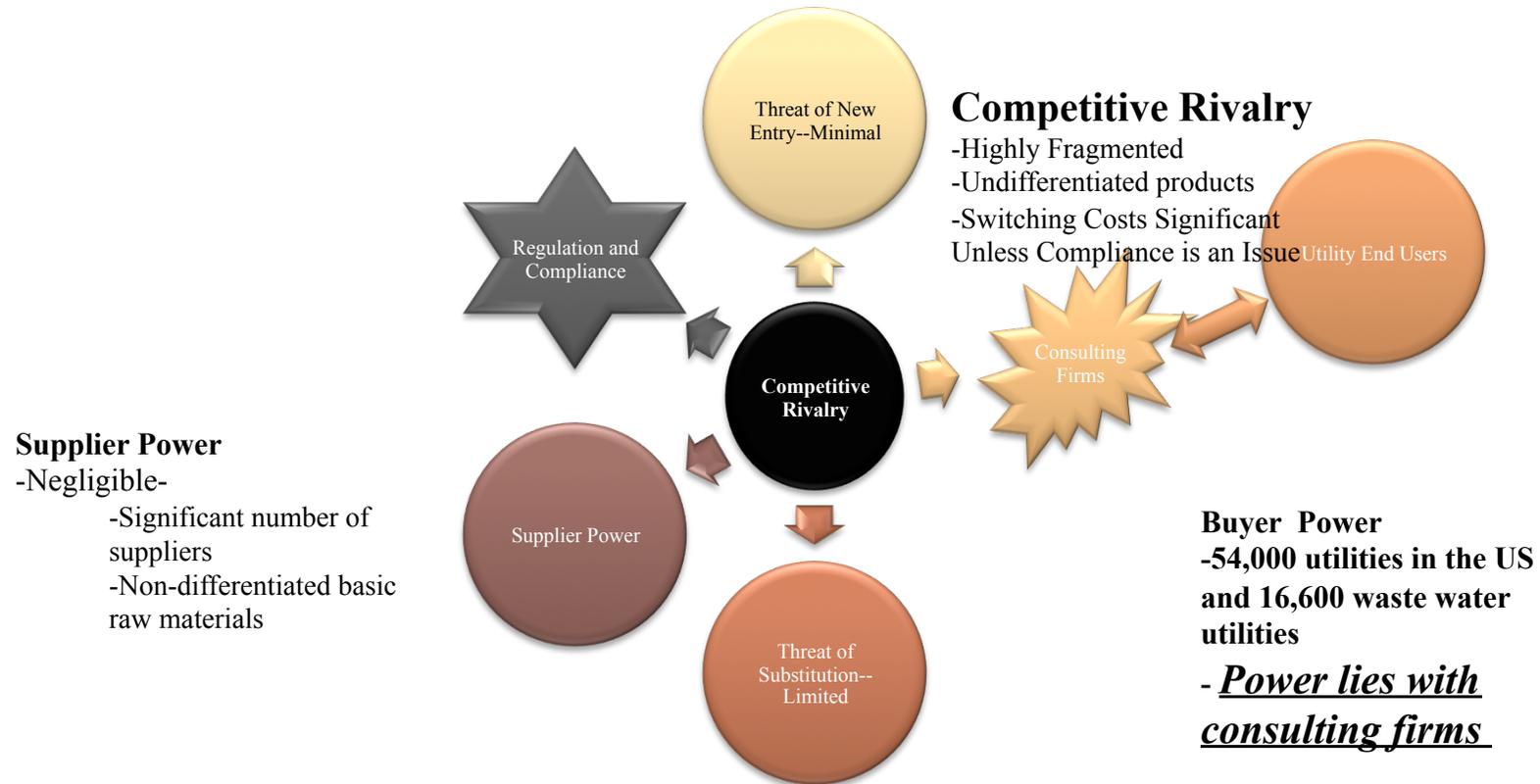
**Compare with: Dow Chemical and British Telecom
at \$1 of fixed assets per dollar of revenue**

(Source: Global Water Intelligence)



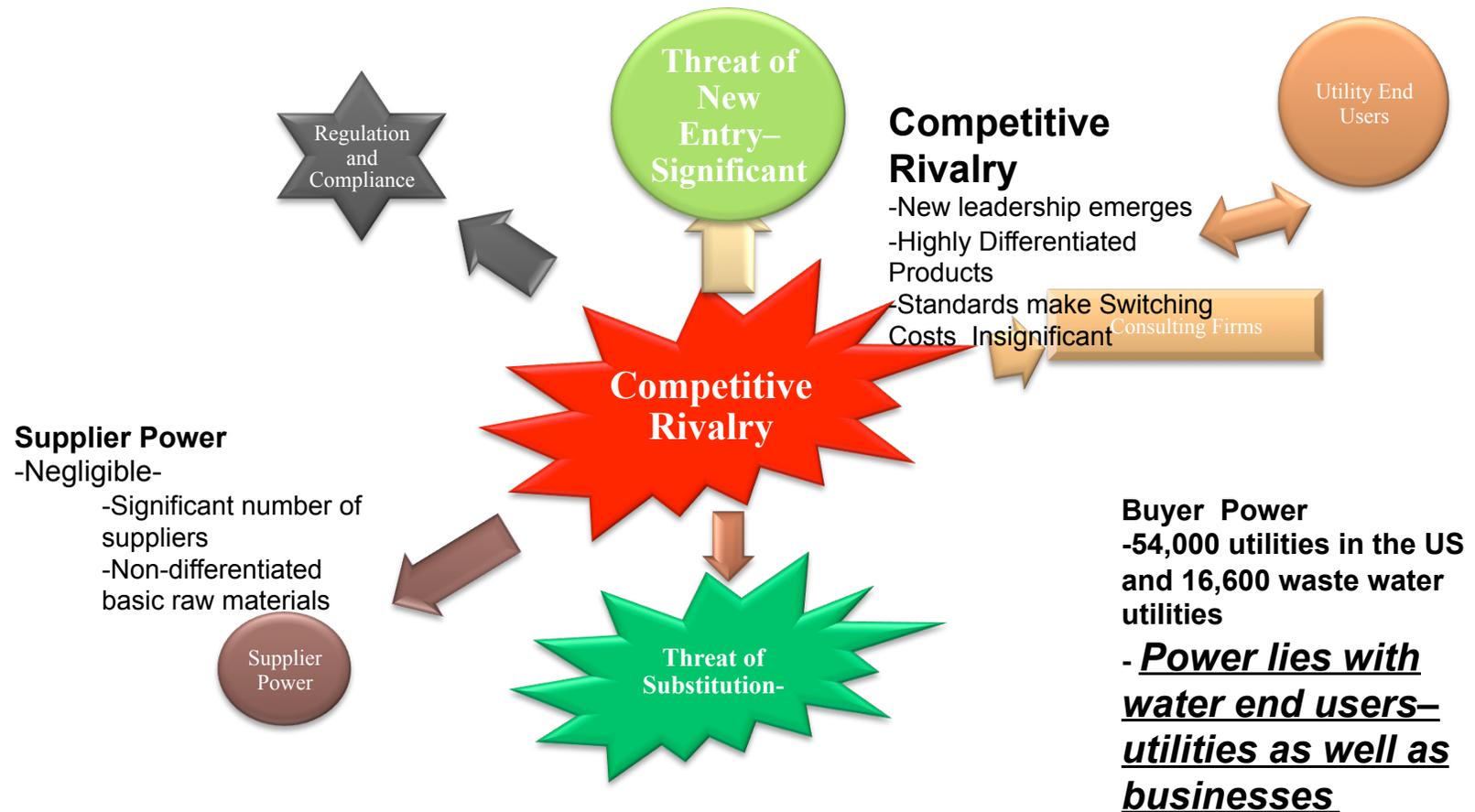
The Water Industry

Historic Competitive Dynamic



- Safety is paramount for water when supply of water as well as disposal is unlimited.
- Outside expert opinion is crucial for ensuring the safest solutions for water treatment and sewage disposal.
- Independent utilities each require a custom system for their needs, but also prefer proven approaches.

Industry Potential Given Demanding National Water Quality Standards

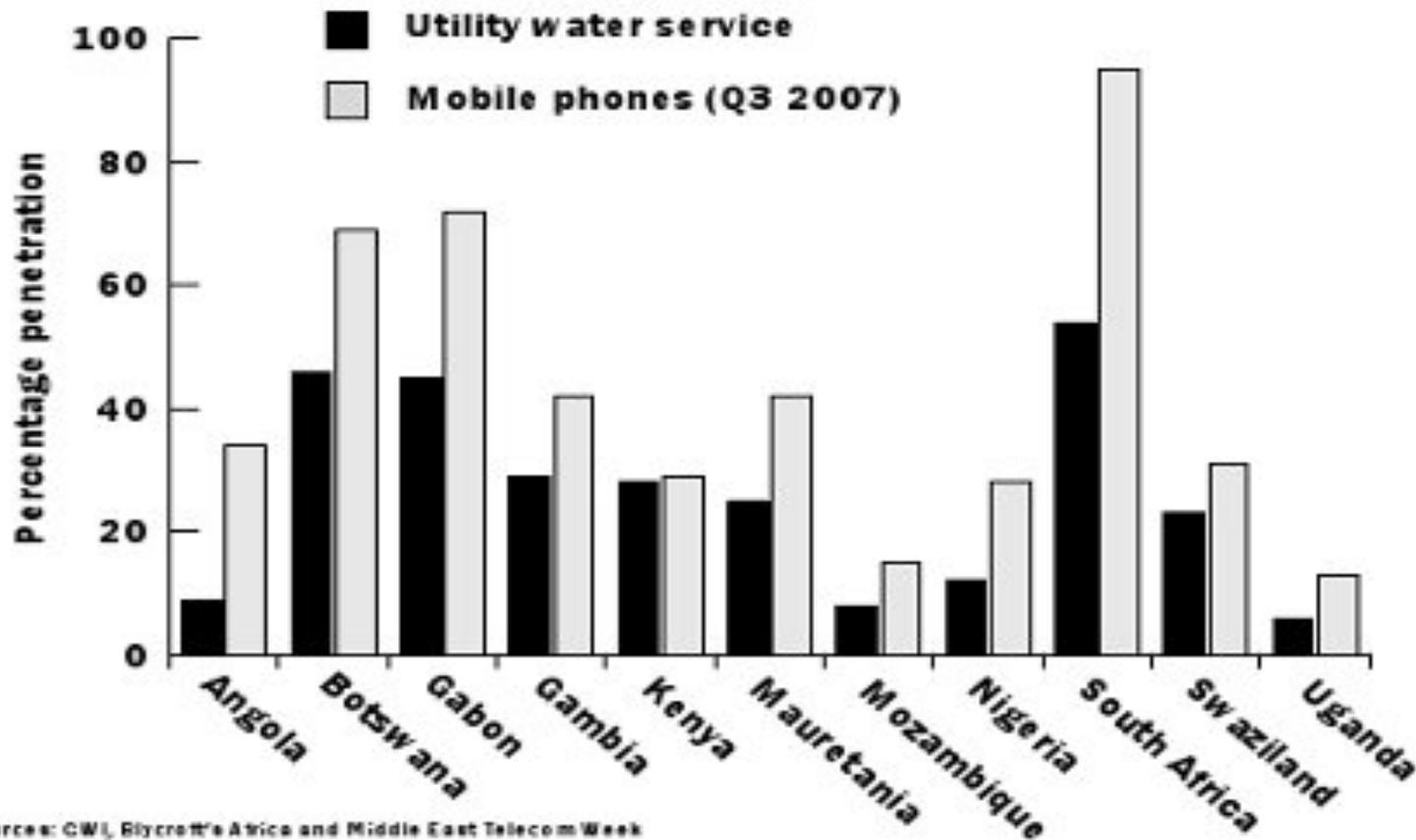


- Resource management becomes critical for water supply and quality
- Expert opinion is incorporated into products rather than projects
- New mass markets emerge, justifying significant investment in advanced, user-friendly products

An Efficient Market vs. An Inefficient Market: Cell Phones to Water Infrastructure

On Location Rugged Products Bring Telephony to Rural Areas Outside The Grid

Water services versus mobile phones in Africa



Sources: CWI, Blycroft's Africa and Middle East Telecom Week