5 Barriers to Corporate Water Stewardship

CDP Supply Chain Webinar
February 2016
5 Barriers to Corporate Water Stewardship

Why Antea Group

Experience
Screened over 4,000 global facilities for water risks and opportunities

Knowledge
Executed nearly 350 source vulnerability assessments and planning workshops in 60 countries

Application
Water stewardship advisor and partner to leading companies for over a decade.
Barrier #1

No Single Recipe
Water and YOUR Business

Water-related business risks and opportunities and company strategy depend upon your business perspective!

Source: Maps are from the WRI Aqueduct Water Risk Atlas
5 Barriers to Corporate Water Stewardship

Strategy Through Implementation

Risk and Opportunity Screening
Understanding the connection of water to YOUR business

- Physical, Regulatory, and Social/Reputational Risks
  - High Risk Facilities
  - Uncertain Risk
  - Low Risk Facilities

Corporate Reporting & Disclosure
Annual Sustainability/CSR Reports, CDP Water Disclosure Project, GRI, DJSI

Operational Context

Facility Optimization

Leading Framework

Strategic Priorities
5 Barriers to Corporate Water Stewardship

Defining Strategic Needs

Ceres Aqua Gauge

CEO Water Mandate Corporate Water Disclosure Guidelines (September 2014)

BIER Water Stewardship Definition and Principles
http://www.bieroundtable.com

2015 CDP Water Report
Barrier #2

The Pretty Fish in a Dry Pond
Understanding Operational Context

*Risks are unique to each location ...*

- Physical availability
- Water quality
- Infrastructure capacity
- Pricing
- Drought/floods
- Competing use
- Increasing demand
- Climate change
- Public policy - regulatory
- Water Rights
- Social aspects

*...but business continuity is often the first pressure point*
Local Business Resiliency

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Facility Operations

Community & Watershed

Supply Chain
Fit-for-Location Strategy

Facility A

Facility B

Available at:
www.bieroundtable.com
Barrier #3

Diamond Water Paradox
True Cost and Value of Water

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<thead>
<tr>
<th>TODAY</th>
<th>TOMORROW</th>
<th>FULL COST ACCOUNTING</th>
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<tr>
<td>What You THINK You Pay</td>
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<td>What You ACTUALLY Pay</td>
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<td>What You MIGHT Pay</td>
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<td>What You COULD Pay</td>
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**TRUE COST OF WATER**

“We never know the worth of water till the well is dry.”
— Thomas Fuller
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What You Actually Pay

Direct Costs +

- Treatment costs (pre-treatment, chemicals, filters)
- Electrical energy costs (cooling and moving water)
- Thermal energy costs (heating and steam generation)
- Yield loss costs (losses of water with embedded cost or value)
- Waste costs (sewer fees/surcharges, water to drain, wastewater)
- Regulatory costs (permits, fines, and compliance management)
- Operations and maintenance costs

Easily 2-4x Higher?
May Fix Itself

- The ultimate conundrum: higher costs drive conservation; conservation drives the need to increase costs.
- Infrastructure 40-50 years old in the U.S. with insufficient cost recovery.
- Projected to cost the U.S. $1 trillion over the next two decades.
- Water treatment technology and investments.

Opportunity vs Business Value

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www.bieroundtable.com
Barrier #4

A Frog...or the Titanic
Water is Fundamentally Important, Agree?

Nearly everything you make, do, or sell requires water.
Water is the Perfect Storm, Agree?

5 Barriers to Corporate Water Stewardship

Critical Resource

40% demand gap projected by 2030 globally, with key markets most stressed

Age of Transparency

Advanced publicly available risk data and corporate information

Corporate Expectations

Growing expectations for corporate water disclosure and local-level accountability and engagement
Bizarre weather patterns
Bizarre weather patterns

Frog or Titanic Reference

Barrier #5

Data
Enabling Informed Decisions

Positive Movement

- Incredible strides over the past decade
- Migration towards a common language (physical, regulatory, social & reputational)
- Free, user friendly water risk tools and global datasets
- Organizations are collaborating more than ever (Private, Public, NGO), including at the watershed level

Continued Challenges

- Insufficient and low integrity data beyond ‘physical’ (proxy measures)
- Inconsistent data collection, format, and availability
- Scalability and leveraging technology
- Invaluable data and insights going unused
What Are We Collectively Sitting On?

Not a matter of if any longer….it is how to leverage and share?
I Believe the Glass is Half Full...

But, it will take a collective effort to address the water challenges we all face.
Better Business, Better World℠

Our Global Water Stewardship Service Area Leads:
Management talent with business risk and opportunity acumen:

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