GREAT BEER.
GREAT RESPONSIBILITY.
This is not a crisis affecting only communities and governments.

Private sector has an enormous stake in helping solve the water crisis.

*UN Global Compact*
Miller geographic skew
Coors geographic skew
Leaders on Water Efficiency

Carlsburg  SABMiller  Molson Coors  Heineken  InBev  Diageo

4.5  4.6  5.2  5.2  5.3  7.4
Leaders on Water Efficiency

<table>
<thead>
<tr>
<th>Company</th>
<th>Score</th>
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<tr>
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<td>Coors</td>
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</tbody>
</table>

Water
The MillerCoors Sustainable Development Priorities

- Discouraging irresponsible drinking
- Making more beer but using less water
- Reducing our energy and carbon footprint
- Packaging reuse and recycling
- Working toward zero waste operations
- Building supply chains that reflect our own values and commitments
- Benefiting communities
- Contributing to the reduction of AIDS/HIV
- Respecting human rights
- Transparency in our reporting progress
Sustainability Assessment Matrix (SAM)

- A four step ‘stairway’ is used to measure current performance in each priority
- GRI (G3) guidelines

1. Minimum Standard
2. Being Ready
3. Creating Opportunity
4. Being Admired

- The stairways create visibility and promote a learning and self-refreshing organization
Making more beer but using less water
‘5 Rs’ of Water Responsibility

Ecology

Brewery

Reduce

Re-use

Recycle

Community

Redistribute

PRotect
Water

Areas of focus for water management:

• Water usage and efficiency
• Wastewater quality and management
• Supplier relationships
• Community relationships
Community relationships

• Work with local boards and communities to develop long-term plans to increase local water supply and support water sustainability

• Help communities handle water treatment capacity issues

• Invest in water-related causes
  o Lake Michigan revitalization
  o Great Lakes Water Institute
  o Shenandoah Pure Water Forum
  o KAB-Albany Storm Drain Marker Program
  o Natural Heritage Water Education effort

• Volunteer and water clean-up efforts
Regional Water Cluster

Public Sector
- DNR
- UNDP
- MTS/GMC
- MWSD
- City of Milwaukee
- Water Council
- City of Milwaukee

Private Sector
- CH2M/HILL
- Veolia
- Miller Coors
- Procor
- Sanitary
- Aqua Sensors
- Thermo Fisher

Opportunities
- Environmental
  - Energy/Efficiency
  - Process/Processing/Softening
  - Analysis/Measuring/Control

Utilities
- DNR
- Veolia
- Miller Coors

Water User
- Utilities

Water Treatment
- Energy/Efficiency
- Process/Processing/Softening
- Analysis/Measuring/Control

Monitoring/Detection
- Fluid Transport/Civil & Ind. Engr.
- Biological

Academic Institutions
- UW-Madison
- Marquette
- UW-Whitewater
- UWM
- CEAS

Materials
- Chem & Bio.
- Fluid Transport/Civil & Ind. Eng.

Scientific Research
- Biogas
- Fluid Transport/Civil & Ind. Eng.
- Detection

Academics
- Chemistry
- Engineering
- Physics

Funding Agencies
- DOE
- NSF
- EPA
- NIH
- DoD
- USDA
- Interior
- World Bank
- Foundations
- NOAA/DOC

Institutional Partners
- National Laboratories
- International Partners
Community relationships

- Work with local boards and communities to develop long-term plans to increase local water supply and support water sustainability
- Help communities handle waste water treatment capacity issues
- Invest in water-related causes
  - Lake Michigan revitalization
  - Clearn Creek Watershed Foundation
  - Shenandoah Valley Pure Water Forum
  - KAB-Albany Storm Drain Marker Program
  - Dan River Basin Association
  - Three Valley Conservation
- Volunteer and water clean-up efforts
Community relationships

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  - Dan River Basin Association
  - Three Valley Conservation
- Volunteer and water clean-up efforts
• Partnered with River Network to work together to identify specific issues, such as source water protection, non-point pollution, restoration and conservation

• Will be sending out a call for proposals from river and watershed conservation groups in River Network’s partnership network

• Supporting up to eight organizations and communities
Community relationships

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  - Clear Creek Watershed Foundation
  - Shenandoah Valley Pure Water Forum
  - KAB-Albany Storm Drain Marker Program
  - Dan River Basin Association
  - Three Valley Conservation
- Volunteer and water clean-up efforts
• Conservation project focused on water quality improvement
• Clear Creek watershed on the Arapahoe National Forest
• Partnership with US Forest Service and the National Forest Foundation
• Built buck-and-rail fence to restore creek banks and clean up streams
• Widened the stream bed to help accommodate fish and toad spawning
• Replanted in an effort to halt erosion and curtail storm water runoff
Summary

• There are many challenges and many potential solutions

• With the urgency of the global implications of climate change, the right solutions need to be found as soon as possible

• Industry, NGO’s, government and researchers and academics must collaborate more closely to discuss issues, potential actions and outputs
ADDENDUM
Usage and Efficiency

- Eden introduced effluent in the wastewater treatment plant saving 50 gallons of city water/minute.

- Fort Worth reused all pasteurizer supply water and improved Clean in Place (CIP) procedures.

- Milwaukee installed a larger cooling tower reducing water usage by over 10%.

- Fort Worth historically reuses all pasteurizer supply water.
  - 80% is steam and returned to the boilers.
  - 400,000 gallons saved by reducing rinse cycles.
Water as a resource

- Irwindale and Fort Worth turn wastewater into renewable energy by generating biogas at on-site anaerobic waste water treatment plants.

- Eden, Trenton and Albany use aerobic wastewater treatment facilities and solids are sold as Farm-On t

- Golden Water Treatment Plant installed solar powered lake aeration system to maintain water quality and replace a 75-horsepower electric driven air compressor.

- Eden, Albany, Golden and Trenton use steam generated to produce electricity.
Supplier relationships

• Began water footprint pilot in partnership with the WWF

• Face-to-face meetings with Top 100 suppliers

• Goal is to work collaboratively to develop best practice standards and measurements in a way that we can become long term stewards of sustainable development