



Consultative Workshop on Water Footprint, Neutrality and Efficiency

1- 3 June 2010, Osaka, Japan



Corporate Water Accounting

Methods and Tools for industry applications

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Ongoing work focusing on industry applications

Overall Objective:

Develop a knowledge water management and capacity building platform for Water Accounting and Management in and water-intensive industries

Key Partner:

CEO Water Mandate by working closely with the UN Global Compact Office and the Pacific Institute that functions as its coordinator and extended Secretariat



The CEO Water Mandate



Pacific
Institute



Planned activities

- 1. Collection and assessment of existing approaches to water footprinting / neutrality and water-related management tools.**
2. Scientific research for the development of the platform.
3. Development of the capacity platform.
4. Organisation of regional capacity building and training of trainers on the use of the water footprint management tools.
5. Applying water footprinting, related concepts and management tools in selected industry sectors.



Report on corporate water accounting

CORPORATE WATER ACCOUNTING

An Analysis of Methods and Tools for Measuring Water Use and Its Impacts



Overarching objective:

Stocktaking exercise to clarify commonalities and differences among existing and emerging water accounting methods and tools in private sector

Elucidate applicability, strengths, and weaknesses

Identify gaps and challenges

Suggest benefits from harmonization and testing



The CEO Water Mandate



A Framework for Corporate Action to Mitigate Water Risk

1. **Measure** corporate water use, wastewater discharge, and related impacts
2. **Assess** the physical, regulatory & reputational risks; align assessment with climate & energy risk
3. **Engage** key stakeholders
4. **Integrate** water issues into strategic business planning & governance
5. **Disclose** water performance & associated risks

Source: *Water Scarcity & Climate Change*, Ceres and Pacific Institute 2009



Relationship Between Stewardship and Accounting

Accounting:

understanding

**Volume
Accounting**

**Life Cycle
Analysis**

Stewardship:

responding

Response

Communication

Reward

Impacts



Accounting Methods and Tools

Focus on four key accounting methods/tools:

1. The Water Footprint Network's "water footprint"
2. Life Cycle Assessment (LCA)
3. WBCSD Global Water Tool
4. GEMI Water Sustainability Planner/Tool



Applications of Corporate Water Accounting

Corporate water accounting can be seen as serving four general purposes:

1. Operational efficiency, product eco-design, sustainable manufacturing
2. Water risk assessment
3. Managing social and environmental impacts and response
4. Communicating with stakeholders



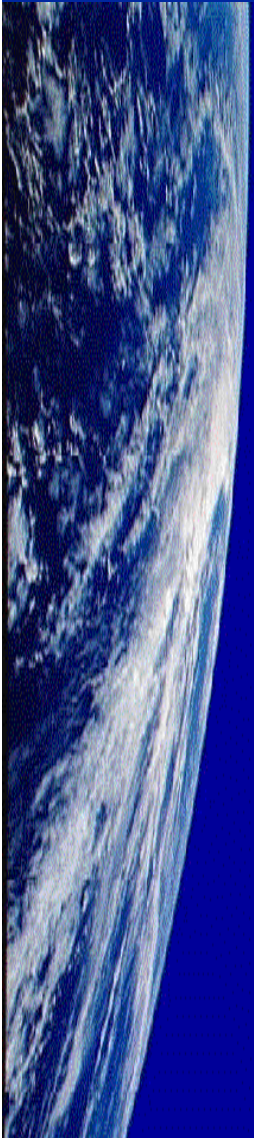
Overarching Conclusions

1. Terminology confusion

- In particular, we must reach a shared understanding of the term “water footprint”

2. Shift toward external factor

- Increased focus on understanding social, political, environmental conditions of the watersheds in which companies operate





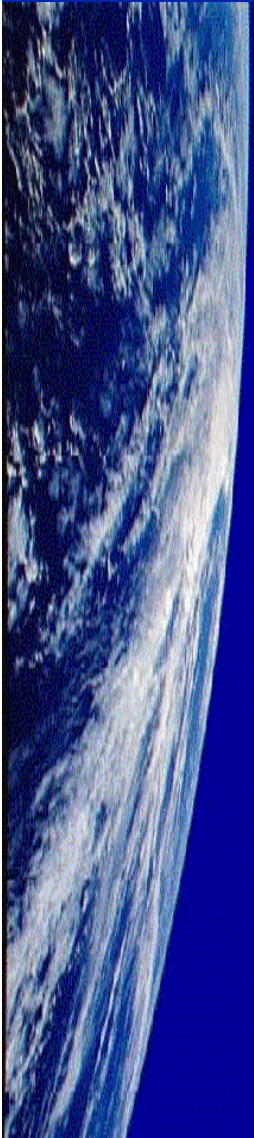
Overarching Conclusions (cont.)

3. Lack of harmonization

- The approaches used to measure and report risks and impacts vary among companies and industry sectors
- It is often difficult to compare water risks and impacts across a company's different facilities, over time, and between different companies

4. Supply chain issues underemphasized

- Much of a company's water use, discharge, and impacts occur in the supply chain
- Measuring suppliers is difficult due to the challenge of managing data from a vast array of suppliers and tracking water issues related to their suppliers





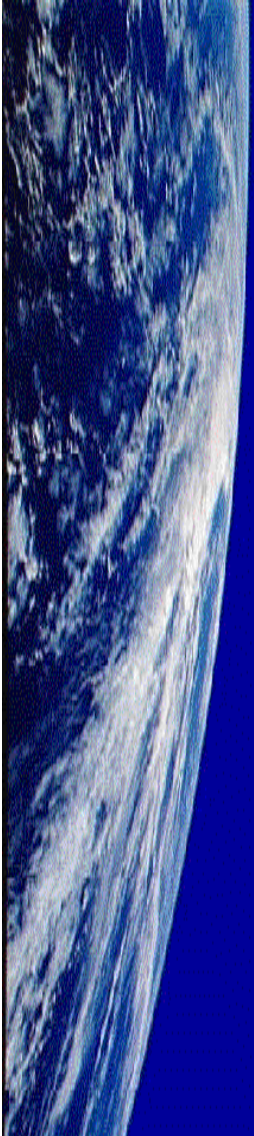
Overarching Conclusions (cont)

5. Inadequate data

- Most often due to inadequate databases, lack of access to existing data, lack of measurement protocol or mechanisms, or insufficient granularity of data.

6. The water-energy-carbon nexus

- Water-related impacts and risks are inextricably linked to their energy use and carbon emissions
- Accounting methods are only beginning to assess and highlight these linkages.





Findings on Methods and Tools

	WFN Water Footprinting	Life Cycle Assessment	WBCSD Global Water Tool	GEMI Water Sustainability Tools
<u>General Strengths</u>	<ul style="list-style-type: none"> • Good tool for “big picture” strategic planning purposes • Easily understood by non-technical audiences • Best for volume assessments, as opposed to water quality 	<ul style="list-style-type: none"> • Uniquely well-suited for cross-media environmental assessments • Mature science-based methods for assessing water quality impacts 	<ul style="list-style-type: none"> • Good first-tier risk screen • Inexpensive, fast, and does not require company expertise • Simple inventory for companies to compile their water data 	<ul style="list-style-type: none"> • Useful for companies just beginning to think about water stewardship • Inexpensive, fast, does not require expertise
<u>General Weaknesses</u>	<ul style="list-style-type: none"> • Generic, aggregated blue-green-grey WF figures are misleading • Grey WF deemed ineffective by companies 	<ul style="list-style-type: none"> • No universally accepted method of assessing water use impacts • Results can be difficult to communicate to nontechnical audiences 	<ul style="list-style-type: none"> • Does not address water quality/discharge-related risks • Does not address impacts • Assessments provide only rough estimates of risk 	<ul style="list-style-type: none"> • Rudimentary assessment of relative risks • No quantified results



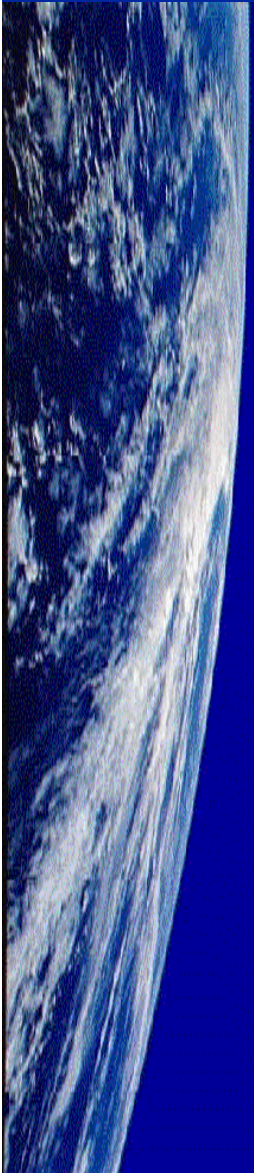
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