
Propelling Water Stewardship in a Water Stressed Future - Executive Summary
Mexico City, Mexico – April 24, 2019

Background

There is no question that the world faces a growing water crisis. The [United Nations](#) data indicates that over 2.1 billion people lack access to BASIC drinking water service and over 4.4 billion people lack access to BASIC sanitation. [FAO](#) data indicates that agriculture in 2050 will need to produce almost 50% more food, feed and biofuels than it did in 2012. It also indicates that there will be a higher incidence of droughts that will impact small holder farmers that produce ~60% of the world's agricultural output. [OECD](#) data indicates that by 2050, global water withdraws are projected to increase by 55%. Water security is essential to public health, economic growth, political stability, environmental stability and disaster risk reduction. It is clear the time for action is now. Leading companies, think-tank experts and banks gathered in Mexico City, Mexico to discuss current global and local trends and best practices.

Participants

Hosts and Sponsors

- Francisco Suárez, Coca-Cola FEMSA
- Emilio Tenuta, Ecolab
- Dow Chemical
- Jose Ramón Ardaín, CESPEDES
- Lori Michelin, World Environment Center

Speakers and Moderators

- Marguerite Clark, Ecolab
- Marcela Cristo, Modelo/AB-Inbev
- Saúl del Campo, Biopappel
- Greg Koch, ERM
- Oscar Gálvez Guzmán, Heineken
- Cristian García de Paz, Agrobioméxico
- Alan Gómez, Citibanamex

Speakers and Moderators

- Víctor Lichtinger, Mexico Water Advisory Council
- Jorge Luis López, Mexico Agricultural Business Council
- Nick Martin, BIER
- Jason Morrison, UN CEO Water Mandate
- Ruy Pérez, Arca Continental
- Exequiel Rolón, Fresnillo
- Omar Sabag, Nestlé
- Isabel Studer, Nature Conservancy
- Cecilia Valdes, Mexichem
- Alejandra Vázquez-Langle, Bimbo
- Eduardo Vázquez, Agua Capital
- Mariano Montero Zubillaga, FEMSA Foundation

Participants

The event was also attended by representatives from: Helvex, PetStar, Grupo Gin, Cemex, Merck Group, Boehringer-Ingelheim, Mondelez, C Brands, BASF, Colgate-Palmolive, Veolia, GOB, Gis, Sigma-Alimentos, Alen, Walmart, Ford, GEPP, Aetna, Bayer, Geon and WRI.

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Key Points

- (1) Water insecurity is costly.** Water insecurity causes conflicts, since 2011 the number of annual water conflict events have increased from ~10 to nearly 70 per year. Water pollution causes deaths, the [Lancet Commission](#) indicates that there were 1.8 million deaths annually due to water pollution. Women and girls spend 200 million hours every day collecting water, for every \$1 invested in water and sanitation, \$4.30 is generated in economic returns. [IRAC, Earth Security Group](#) indicates that 21 of 37 of the world's largest groundwater aquifers are being depleted at unsustainable rates, resulting in reduced supply, salinization, higher financial costs and land subsidence. Ninety percent of natural disasters are water related, between 2003 and 2013 natural disasters cost \$1.5 trillion in damages, 1.1 million deaths and affected 2 billion people.
- (2) Water is a business risk.** Companies face physical, reputational and regulatory risks. There may be insufficient supply of water, too much water or water that is not fit for use. Regulatory policies may change, be ineffective and/or be poorly implemented. Companies may face reputational risks due to community and stakeholder perception that they are not acting responsibly. This can translate into higher operating costs, supply chain disruption, constraints on growth, community and/or stakeholder opposition along with brand damage. The [WEF Global Risk Report](#) has identified water crisis as a top five risk for the last four years. Participants also confirmed they face all three of these risks in Mexico.
- (3) Water price is not reflective of actual cost or value.** Water is a subsidized commodity around the world whose price does not reflect the cost of imbedded energy nor its potential value in the market place. World water prices vary from \$7.38 per cubic meter in Copenhagen to \$0.10 in Cairo. The subsidy disguises the real value and the situation is further complicated by limited governmental investment in water and wastewater infrastructure. The [Water Risk Monetizer](#) is a financial modeling tool that provides a way for businesses to factor water scarcity into decisions that support business growth and help ensure the availability of fresh water for future generations.
- (4) Companies should understand and mitigate water risk associated with own operations.** Many companies have completed risk assessments that consider water stress and its relationship to % of their total production and % of their production at the country level. The [WRI Aqueduct tool](#) is often used for this purpose. Mitigation plans should be developed on a site by site basis, with more intensive action at the highest risk sites. Leading companies are also assessing risk in their upstream supply chains to ensure continuity of supply and reduce their water footprint.
- (5) The Ecolab Smart-Water Navigator enables companies to build facility level roadmaps that will help mitigate water risk.** The Ecolab Smart Water Navigator is a practical roadmap to better water management in an era of ever-scarcer water resources. Based on a straightforward, 13-question assessment, companies will be able to see exactly how each of their facilities is doing when it

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comes to water management. The Smart Water Navigator also delivers a guide tailored for each individual facility, with a series of specific action steps to improve its water management practices. The new online tool is free-of-charge and publicly available at www.smartwaternavigator.com. It can be used by any company, regardless of industry, whether it manages one site or hundreds, and will help corporations save water and money.

- (6) **Treatment enables water reuse.** Companies shared leading practices including:
 - a. Treatment of own wastewater for reuse in production processes
 - b. Treatment of community wastewater for reuse in production processes
 - c. Treatment of by-product process streams for reuse in production processes, see [Nestlé's Caring for Water, Zero Waste Factory](#)
 - d. Treatment of wastewater to drinking water levels with return to the community.
- (7) **Community partnership and consultation ensures water security for all.** When building a new operation, it is important to consult and develop a solution that offers mutual benefit to both the company and the community. Installation of rainwater harvesting systems was cited as a solution that can offer benefits to indigenous communities.
- (8) **Contextual water targets consider impact at the water basin level.** A contextual water target sets a specific-time bound goal that considers both the company's performance and the water basin's conditions. Click [here](#) to more about contextual water targets.
- (9) **Collective action is the key to solving problems at the at the water basin level.** To solve problems at the water basin level it is essential to understand current and future risks and conditions (e.g., withdrawals, pollution load, treatment and recharge). Once risks are known, prioritization, alignment and collaboration are essential to ensure water security. The [CEO Water Mandate's Water Action Hub](#) provides a platform to find and engage in projects at the basin level.
- (10) **Water Funds are an important mechanism that facilitates collective action in Latin America.** More specifically, 24 [Water Funds](#) across eight countries have benefited 6,000 families and built nearly 500,000 acres of green infrastructure. Water Funds frequently invest in cost-effective natural solutions to provide catchment and treatment of water. Water Funds are also providing companies with offsets for water used.
- (11) **Actual benefit at the water basin level should guide investment decisions.** Typically, companies will focus on water conservation within their own operations, however, this may not create the highest impact within their water basin. Companies should consider activities across the entire water basin with other stakeholders to determine if other types of investments increase water security for all (see examples below).
- (12) **Innovation and technology will reduce water consumption and increase yield in the agricultural sector.** The agricultural sector in Mexico consumes over 70% of the available water, as most small

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farmers use “flooding” of fields. Drip irrigation is a high impact solution—for example, 60% more rice can be grown with 1/3 of the water. In addition, use of draught tolerant bioengineered crops can reduce water consumption and increase yield. Use of these technologies are currently impeded by lack of capital and skill with in the small farmer community in Mexico.

(13) Over 40% of the water in Mexico is lost due to leakage in distribution systems. Installation of pipe lining systems can dramatically reduce losses and help restore water levels of aquifers and reservoirs. Use of this solution is impeded by lack of investment in infrastructure at both3 the national and local level.

(14) Banks are analyzing social and environmental risks of their investments. TCFD is engaging banks in analysis of climate and water risks in their portfolio. This is becoming an essential task given drought exposure is growing 10X and this is expected to impact over 80% of food and agricultural company’s performance.

With “Together we can make a difference” as the theme of the day, the World Environment Center, the UN CEO Water Mandate and CESPEDES invited companies to:

- Implement a peer practice by engaging and connecting with interested participants
- Reduce water and energy use by taking advantage of available tools including the Water Risk Monetizer and the Smart Water Navigator to self-assess and develop plan for continuous improvement.
- Protect water sheds by engaging directly with a local initiative like the Water Funds
- Commit to water stewardship by joining the CEO Water Mandate
- Sharpen focus by identifying three high impact actions that are business relevant.

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You can read the full press release in English [here](#). Haga [clic](#) para leer en español.