

SUPPLY CHAIN MATTERS

Getting to the heart of supply chain



[Home](#) [Innovation](#) [Efficiency](#) [Sustainability](#) [Insights](#)



WATER

Share

H2 woe

Water shortages are about more than just hosepipe bans or dried-up rivers. They could eventually impact every business...

Attention-grabbing headlines about the scarcity of oil are all too common, but the world is facing another environmental crisis, the consequences of which could prove far more damaging than any fuel shortage. With the world's population set to double this century coupled with the growth of urbanization, demand for water is growing fast.

Already, 80% of the global population lives in areas where freshwater supply is rated as not secure, and The Water Resources Group predicts that the world will face a 40% shortfall in water supply by 2030.

Governments worldwide are realizing that water is a serious business and are taking action to mitigate future shortages. The Gulf states have spent \$21bn on water desalination plants in the past four decades as they attempt to fight a growing drought crisis in the region. The UK government has set a target of reducing average daily water consumption per person from 150 litres to 130 litres by 2030, and is also pressuring the food and drink sector to achieve a 20% cut in water use by 2020.

The consequences of water shortages for those living in undeveloped countries and for the agriculture and beverage industries are obvious, but water underpins many other manufacturing processes. A water crisis is bad news for businesses – as Nestlé Chairman Peter Brabeck-Letmathe recognized when he claimed: "I am convinced that if we carry on as we are, we will run out of water before we run out of oil."

A recent report by non-profit environmental organization Ceres, in association with the Pacific Institute, evaluated risks in eight water-intensive sectors: technology, beverage, food, electric power/energy, apparel, pharmaceuticals, forest products and mining. "Our conclusion is that each of these sectors faces serious near- and long-term economic risks related to their water dependence," says Ceres President Mindy Lubber.

Manufacturing is an intensive user of water. The water footprint of everyday items is startling. The Water Footprint Network estimates that one sheet of A4 paper uses 10 litres of water to produce, while a cotton T-shirt requires 2,700 litres and one cup of fresh coffee 140 litres. Silicon chips, the backbone of the technology industry, need huge amounts of highly purified water to produce: an IBM plant in Vermont, USA at one point used 3.2m gallons of water a day, enough to supply a medium-sized city.

But many businesses are rethinking their processes to reduce their water footprint. At IBM, a global water strategy has reduced usage by 2.8% a year since 2005, while at the Vermont plant, initiatives like tracking water use with sensors have resulted in a 30% drop in consumption over the past decade and an annual US\$3m reduction in bills. Coca-Cola aims to be water-neutral in its bottling operations by 2012, offsetting its manufacturing operations by recycling waste water within its plants among other

Water: the key numbers

40%: the shortfall the world will face in water by 2030

70%: the amount of global water consumption accounted for by agriculture. The rest is made up by manufacturing (22%) and domestic use (8%)

200 litres: the amount of water the average European uses every day

US\$225bn: how much America must spend in the next five years to prevent deterioration of water infrastructure

1.2bn: the number of people worldwide who live in areas with inadequate water supply

11,000 litres: the amount of water it takes to make one pair of jeans

Sources: Water Resources Network, World Business Council for Sustainable Development, Protected Water Fund, American Society of Civil Engineers, [International Water Management Institute](#)

Sustainability

[DHL UK Foundation](#)

[Water](#)

[Envirosolutions](#)

[Going green](#)

[Energy management](#)

Poll

Which areas of the supply chain do you think will be most affected by inflation over the next 12 months?

- Inbound raw materials
- Global freight
- In-house manufacture
- Outbound (local) transport
- Reverse logistics
- Inbound products for re-sale

[Vote](#)

Subscribe

Keep up to date with DHL Supply Chain Matters - sign up to receive our newsletter

[Sign up](#)

initiatives, while brewing giant SAB Miller has floated the idea of a brewery on a ship that can travel to areas where water is most plentiful.

Although companies have traditionally focused on cutting water use in their operations - through reducing and recycling water used in the manufacturing process - looking at the supply chain can also help cut the water footprint. This may mean making agreements with suppliers that include water standards, setting reduction targets, benchmarking and reporting.

Industry expert Lubber warns that despite water's importance and the efforts of some companies, few businesses are "thinking strategically about the profound business risks they will face in a world where climate change is likely to exacerbate already-diminishing water supplies." It may seem reassuringly abundant, but as Lubber says: "Businesses must revamp how they use the most essential ingredient of life."

Related reading

[Water UK Blog](#)

[The Guardian Environment's Water Blog](#)

[Utility Week Water](#)

Deutsche Post DHL

[Contact](#)

[Terms & Conditions](#)

[Subscribe](#)

2011 © DHL.de. All rights reserved